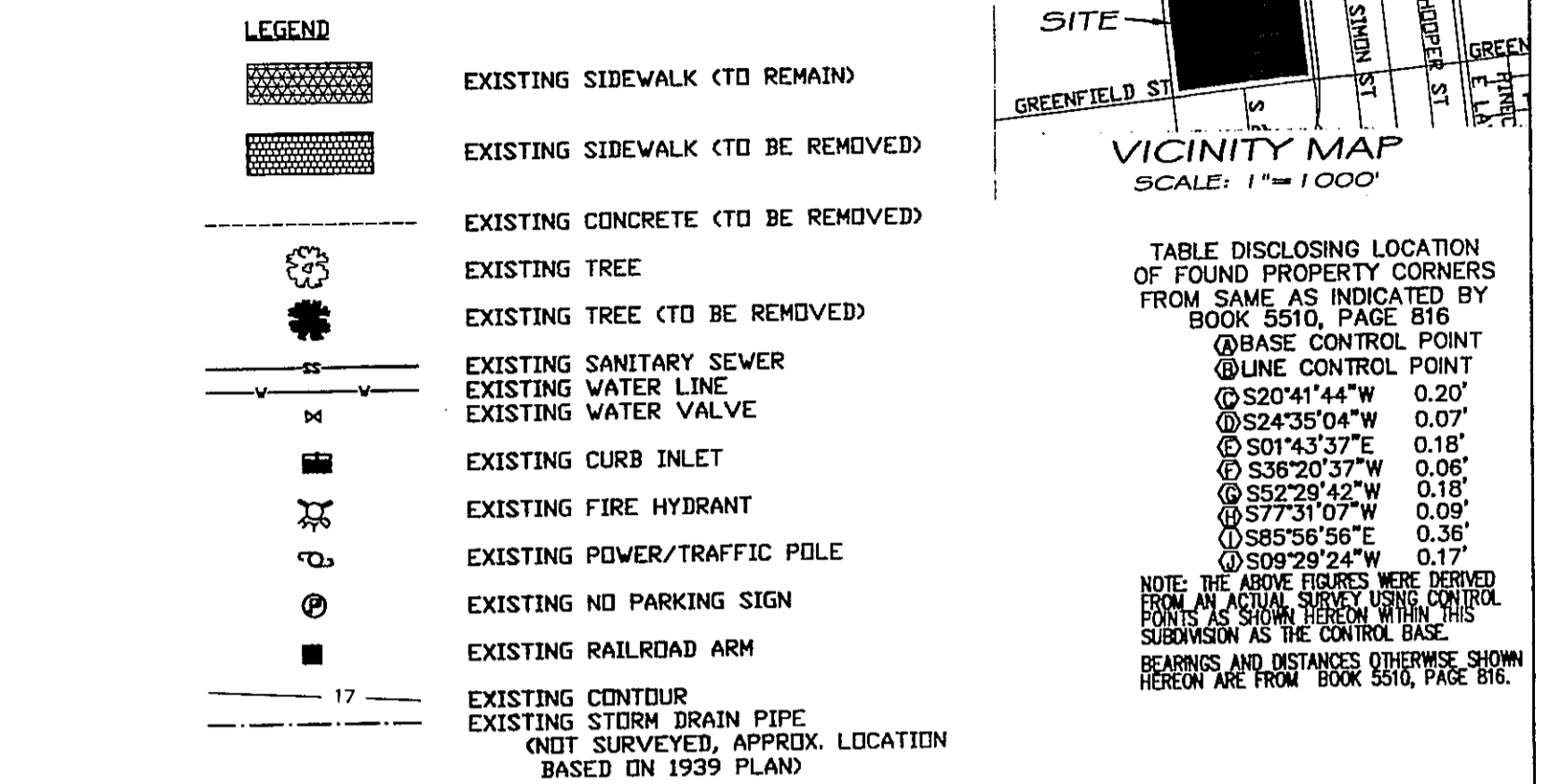


- NOTES**
- ASBUILT SURVEY PROVIDED BY ARNOLD W. CARSON PLS. P.C.
  - CONTRACTOR SHALL OVERLAY EXISTING DRIVE ISLES AND PARKING AREAS THAT ARE TO REMAIN WITH 1" OF SP50A ASPHALT. PROPOSED GRADES ARE BASED ON 1" ASPHALT OVERLY ON TOP OF EXISTING GRADES.
  - CONTRACTOR & DEVELOPER SHALL CONTACT PERVIOUS CONCRETE MANUFACTURER FOR PROPER INSTALLATION OF PERVIOUS CONCRETE (PERVIOUS CONCRETE THICKNESS AS SHOWN PER OWNER).
  - CONTRACTOR SHALL ENSURE THE PATH FROM EACH HANDICAP PARKING SPACE TO THE UNIT ASSOCIATED WITH THE RESPECTIVE SPACE MEETS ADA SPECIFICATIONS.
  - MALPASS ENGINEERING, P.C. IS NOT RESPONSIBLE FOR ANY WATER OR SEWER LINE LOCATIONS OR SEPARATIONS.
  - MALPASS ENGINEERING, P.C. IS NOT RESPONSIBLE FOR WALL, FENCE, OR GATE DESIGNS.
  - OLD BOILER ROOM IN COMMUNITY BUILDING SHALL BE UPFITTED TO HOUSE BICYCLE & SCOTTER STORAGE (MINIMUM OF 25 SPACES).
  - PARKING SPACES SHALL BE NO CLOSER THAN 15' TO BUILDING ENTRY (EXCLUDING VEHICLE OVERHANG).
  - SANITARY SEWER MANHOLE LOCATIONS WERE TAKEN FROM AN AUGUST 10, 1939 PLAN TITLED "USHA, PROJECT NO. NC. 1-18" AND ARE APPROXIMATE, UNLESS NOTED AS "ASBUILT". ALL SANITARY SEWER INVERTS & SIZES WERE TAKEN FROM ABOVE REFERENCED PLAN AND ARE APPROXIMATE. SANITARY SEWER LOCATIONS, INVERTS, & SIZES SHALL BE FIELD VERIFIED AS NECESSARY.
  - NO EQUIPMENT IS ALLOWED ON THE SITE UNTIL ALL TREE PROTECTION FENCING AND SILT FENCING HAS BEEN INSTALLED AND APPROVED.
  - NO LAND DISTURBANCE INCLUDING TREE REMOVAL IS TO OCCUR OUTSIDE THE LIMITS OF DISTURBANCE SHOWN ON THE PLANS.
  - PROTECTIVE FENCING IS TO BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.
  - LAND CLEARING AND CONSTRUCTION CONTRACTORS SHALL RECEIVE ADEQUATE INSTRUCTION IN TREE PROTECTION REQUIREMENTS AND METHODS.
  - IF AN IRRIGATION SYSTEM IS INSTALLED IT SHALL BE EQUIPPED WITH A RAIN SENSOR.
  - INTERIOR LANDSCAPING ISLANDS ADJACENT TO CURB CUTS SHALL BE DEPRESSED TO RECEIVE FLOW FROM PARKING LOT.
  - ALL GATES USED FOR VEHICULAR INGRESS AND/OR EGRESS SHALL BE SIREN ACTIVATED.
  - REPLACE SANITARY SEWER & WATER MAIN WITH D.I.P. 10" ON EITHER SIDE OF STORM DRAIN CROSSING.
  - DOWNSPUT PIPING SHOWN ON PLAN IS FOR INFORMATIONAL PURPOSES ONLY. DOWNSPUT PIPING (SIZE, LOCATION, ETC) SHALL BE DESIGNED BY OTHERS. HOWEVER, DOWNSPUTS SHALL DISCHARGE INTO INFILTRATION BASINS, INFILTRATION TRENCHES, AND PERVIOUS CONCRETE SECTIONS AS SHOWN ON PLAN. THE INVERT OF DOWNSPUT PIPING THAT DISCHARGES TO PERVIOUS CONCRETE SHALL MATCH THE TOP OF PERVIOUS CONCRETE ELEVATION AT THE DISCHARGE POINT.
  - THE PROPOSED LIMITS OF DISTURBANCE AREA SHALL INCLUDE ALL THE AREA WITHIN THE LIMITS OF DISTURBANCE LINE EXCEPT FOR THE BUILDING FOOTPRINTS AND STOODS FOR BUILDINGS #1-22 & 25.
  - EXISTING STORM DRAIN PIPES SHOWN ON AUGUST 10, 1939 PLAN TITLED "USHA, PROJECT NO. NC. 1-18" WITH A REVISION DATE OF MAY 1, 1961. LOCATION OF THESE STORM DRAIN PIPES & INVERTS ARE APPROXIMATE AND PIPE SIZES ARE BASED ON THE ABOVE REFERENCED PLAN.
  - LOCATION OF TREE PROTECTION FENCING SHOWN ON PLAN IS APPROXIMATE. TREE PROTECTION FENCING SHALL BE INSTALLED IN ACCORDANCE WITH DETAIL SD 15-00 ON SHEET 21, EXCEPT WHERE SITE IMPROVEMENTS ARE TO OCCUR AS SHOWN ON PLAN.
  - SILT FENCE SHALL BE INSTALLED AS SHOWN ON THE PLAN & ANYWHERE ELSE SEDIMENT HAS THE ABILITY TO LEAVE THE SITE UNTIL ALL TREE PROTECTION FENCING AND SILT FENCING HAS BEEN INSTALLED AND APPROVED.
  - HANDICAP RAMPS SHALL BE PROVIDED AT ALL PARKING AREAS TO SIDEWALK CONNECTIONS INTERNAL TO THE SITE.
  - ANY PARKING SPACES LESS THAN 8'5" IN WIDTH BY 18' IN LENGTH SHALL BE SIGNED ALERTING DRIVERS TO THE LIMITED SIZE.
  - CONSTRUCTION ENTRANCE AT GREENFIELD STREET DRIVEWAY SHALL BE INSTALLED ONLY IF ASPHALT IS REMOVED AND DRIVEWAY IS USED AS AN ENTRANCE.
  - ROOF LEADER PIPING SHALL HAVE A CLEANOUT AT EACH BEND.
  - PROPOSED SIDEWALK ADJACENT TO PARKING SPACES #1-8, 211-213, 299-298, & 300-300 SHALL BE TURNDOWN SIDEWALK.
  - LANDSCAPE ISLANDS WITH CURB CUTS SHALL BE GRASS & DEPRESSED.
  - JUSTIFIED AREAS WITHIN RIGHT-OF-WAY OF GREENFIELD ST. & SOUTH FRONT ST. SHALL IMMEDIATELY BE SEED & STABILIZED WITH MULCH PRIOR TO ANY RAINFALL EVENT.

30. Fencing options must be approved by zoning prior to installation.

**INDEX**

1 OF 5	EXISTING CONDITIONS MAP
2A OF 5	SITE PLAN
2B OF 5	GRADING & EROSION CONTROL PLAN
2C OF 5	GRADING & EROSION CONTROL PLAN
2D OF 5	DRAINAGE AREA MAP
2E OF 5	PARKING DIMENSION PLAN
2F OF 5	STORMWATER DETAIL SHEET
2G OF 5	DETAIL SHEET
2H OF 5	DETAIL SHEET
2I OF 5	DETAIL SHEET
2J OF 5	WATER & SEWER DETAIL SHEET
3 OF 5	EXISTING OPEN SPACE MAP
4 OF 5	PROPOSED OPEN SPACE, INTERIOR SHADING, & STREET YARD MAP
5 OF 5	EXISTING IMPERVIOUS AREA TO REMAIN & NEW IMPERVIOUS AREA MAP
L1	LANDSCAPE PLAN
L2	LANDSCAPE PLAN
	TREE INVENTORY MAP



**SITE INVENTORY NOTES**

- SOILS ON SITE PER THE NEW HANOVER COUNTY SOIL SURVEY ARE Bn (BAYHEADED) AND U- (URBAN LAND).
- THIS PROPERTY IS NOT IMPACTED BY ANY AED PER LAND MANAGEMENT GROUP, INC.
- THERE ARE NO CONSERVATION OVERLAY RESOURCES AFFECTING THIS PROPERTY PER LAND MANAGEMENT GROUP, INC.
- THIS SITE IS LOCATED WITHIN THE WILMINGTON NATIONAL REGISTER DISTRICT PER LAND MANAGEMENT GROUP, INC.
- NO INDIVIDUAL CEMETERIES, BURIAL SITES, OR BURIAL GROUNDS WERE IDENTIFIED ON THIS SITE PER LAND MANAGEMENT GROUP, INC.
- THERE ARE NO SIGNIFICANT FOREST RESOURCES OR ASSOCIATED FOREST HABITAT REMAINING ON THIS SITE PER LAND MANAGEMENT GROUP, INC.
- THERE ARE NO ACCE REGULATED 404 WETLANDS OR SECTION 10 WATERS ON THIS SITE PER LAND MANAGEMENT GROUP, INC.
- THERE IS NO EVIDENCE OF ENDANGERED SPECIES OR HABITAT ISSUES ON THIS SITE PER LAND MANAGEMENT GROUP, INC.
- THIS TRACT IS WITHIN A FLOOD AREA ZONE "X" & AE EL 9 ACCORDING TO FEMA FLOOD INSURANCE RATE MAP, COMMUNITY-PANEL NUMBER 372031700 K DATE 6/2/06 (INFORMATION PROVIDED BY ARNOLD W. CARSON PLS. P.C.)
- RESEARCH IN THE CITY OF WILMINGTON'S TRANSPORTATION PLANNING WEBSITE RESULTED IN NO FINDINGS OF PROPOSED THROUGHFARES, BIKE ROUTES, PEDESTRIAN SIDEWALKS OR TRAILS, OR TRANSIT FACILITIES AFFECTING THIS PROJECT.
- THE TRACT IS WITHIN THE CAPE FEAR RIVER BASIN & DRAINS TO GREENFIELD CREEK (SC60).
- CAMA LAND USE CLASSIFICATION PER THE 2006 CAMA PLAN UPDATE LAND CLASSIFICATION MAP IS URBAN (495,553.24 SF = 11.376 ACRES) & CONSERVATION AREA (74,677.67 SF = 1.714 ACRES)

**SITE DATA**

PROPERTY OWNER: SOUTH FRONT LLC  
 PROJECT ADDRESS: 1400 S. 2ND ST.  
 PIN NUMBER: R05413-035-002-000  
 ZONING DISTRICT: NE-1  
 FLOOD AREA ZONE: "X" & AE EL 9 ACCORDING TO THE FEMA FLOOD INSURANCE RATE MAP, COMMUNITY-PANEL NUMBER 372031700 K DATE 6/2/06 (INFORMATION PROVIDED BY ARNOLD W. CARSON PLS. P.C.)  
 BUILDING SETBACKS: REAR-25', INTERIOR SIDE-20', CORNER LOT SIDE-30'  
 BUILDING SETBACKS, EXISTING (MIN): FRONT-19.57', REAR-18.71', INTERIOR SIDE-18.74', CORNER LOT SIDE-19.95'  
 TOTAL SITE AREA: 570,230.91 SF = 13.09 ACRES  
 EXISTING BUILDING AREA: 103,444.75 SF = 2.37 ACRES  
 EXISTING BUILDING FOOTPRINT COVERAGE: 103,444.75 / 570,230.91 = 100% = 18.14%  
 EXISTING NUMBER OF UNITS: 261 (1 BEDROOM-193 UNITS, 2 BEDROOM-96 UNITS, 3 BEDROOM-32 UNITS)  
 NUMBER OF EXISTING BUILDINGS: RESIDENTIAL-24 (94,437.66 SF), NON-RESIDENTIAL-1 (9,007.69 SF)  
 NUMBER OF EXISTING BUILDINGS TO REMAIN: RESIDENTIAL-22 (80,477.50 SF), NON-RESIDENTIAL-1 (9,007.69 SF)  
 BUILDING SIZE, EXISTING:

BUILDING	SQUARE FOOTAGE	NUMBER OF EXISTING UNITS	NUMBER OF BEDROOMS (1/2/3)	USE (RESIDENTIAL/NONRESIDENTIAL)	KEEP/REMOVE	BUILDING ADDRESS
1	3,883.30	10	4/3/3	RESIDENTIAL	KEEP	1402-1 S. 2ND ST.
2	3,883.30	10	4/6/0	RESIDENTIAL	KEEP	1402-2 S. 2ND ST.
3	3,883.30	10	4/6/0	RESIDENTIAL	KEEP	1402-3 S. 2ND ST.
4	3,907.51	10	4/3/3	RESIDENTIAL	KEEP	1402-4 S. 2ND ST.
5	2,792.76	8	4/4/0	RESIDENTIAL	KEEP	1402-5 S. 2ND ST.
6	3,907.53	10	4/3/3	RESIDENTIAL	KEEP	1402-6 S. 2ND ST.
7	3,578.27	10	4/6/0	RESIDENTIAL	KEEP	1402-7 S. 2ND ST.
8	3,581.33	10	4/6/0	RESIDENTIAL	KEEP	1402-8 S. 2ND ST.
9	3,898.79	10	4/3/3	RESIDENTIAL	KEEP	1402-9 S. 2ND ST.
10	3,791.10	8	4/4/0	RESIDENTIAL	KEEP	1402-10 S. 2ND ST.
11	2,789.50	8	4/4/0	RESIDENTIAL	KEEP	1402-11 S. 2ND ST.
12	2,787.83	8	4/4/0	RESIDENTIAL	KEEP	1402-12 S. 2ND ST.
13	3,891.30	10	4/3/3	RESIDENTIAL	KEEP	1402-13 S. 2ND ST.
14	3,663.88	10	4/3/1	RESIDENTIAL	KEEP	1402-14 S. 2ND ST.
15	3,673.34	10	4/5/1	RESIDENTIAL	KEEP	1402-15 S. 2ND ST.
16	3,886.97	10	4/3/3	RESIDENTIAL	KEEP	1402-16 S. 2ND ST.
17	4,550.24	12	4/6/2	RESIDENTIAL	KEEP	1402-17 S. 2ND ST.
18	4,573.19	12	4/6/2	RESIDENTIAL	KEEP	1402-18 S. 2ND ST.
19	3,895.71	10	4/3/3	RESIDENTIAL	KEEP	1402-19 S. 2ND ST.
20	3,691.50	10	4/5/1	RESIDENTIAL	KEEP	1402-20 S. 2ND ST.
21	3,628.05	10	4/5/1	RESIDENTIAL	KEEP	1402-21 S. 2ND ST.
22	3,914.72	10	4/3/3	RESIDENTIAL	KEEP	1402-22 S. 2ND ST.
23	6,314.94	25	25/0/0	RESIDENTIAL	REMOVE	1402-23 S. 2ND ST.
24	7,644.62	20	20/0/0	NON-RESIDENTIAL	REMOVE	1402-24 S. 2ND ST.
TOTAL	103,444.75	261	133/96/32			

NUMBER OF STORIES & SQUARE FEET PER FLOOR & STORIES (SEE ABOVE CHART). SAME FOR BOTH STORIES.  
 TOTAL AMOUNT & PERCENT OF IMPERVIOUS SURFACE AREAS:

BEFORE DEVELOPMENT	AFTER DEVELOPMENT	% OF SITE
BUILDINGS	103,444.75	18.14
BUILDING STOODS	13,750.95	2.41
PARKING & DRIVEWAYS	84,195.16	14.77
SIDEWALKS	62,150.83	10.90
ISLES	1,083.00	0.19
TOTAL	269,689.79	47.30

OFF STREET PARKING CALCULATIONS:  
 EXISTING OPEN SPACE: 297,201.90 SF = 6.824 ACRES (SEE EXISTING OPEN & RECREATION SPACE MAP)  
 THIS SITE IS NOT WITHIN A SPECIAL HIGHWAY OVERLAY DISTRICT OR ANY OTHER ZONING OVERLAY DISTRICT PER THE CITY OF WILMINGTON ZONING MAP (MAP 3117-4)  
 WITHIN CITY OF WILMINGTON 1945 CORPORATE LIMITS

**EXISTING CONDITIONS MAP**  
 1400 S. 2ND STREET  
**SOUTH FRONT APARTMENTS**  
 WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

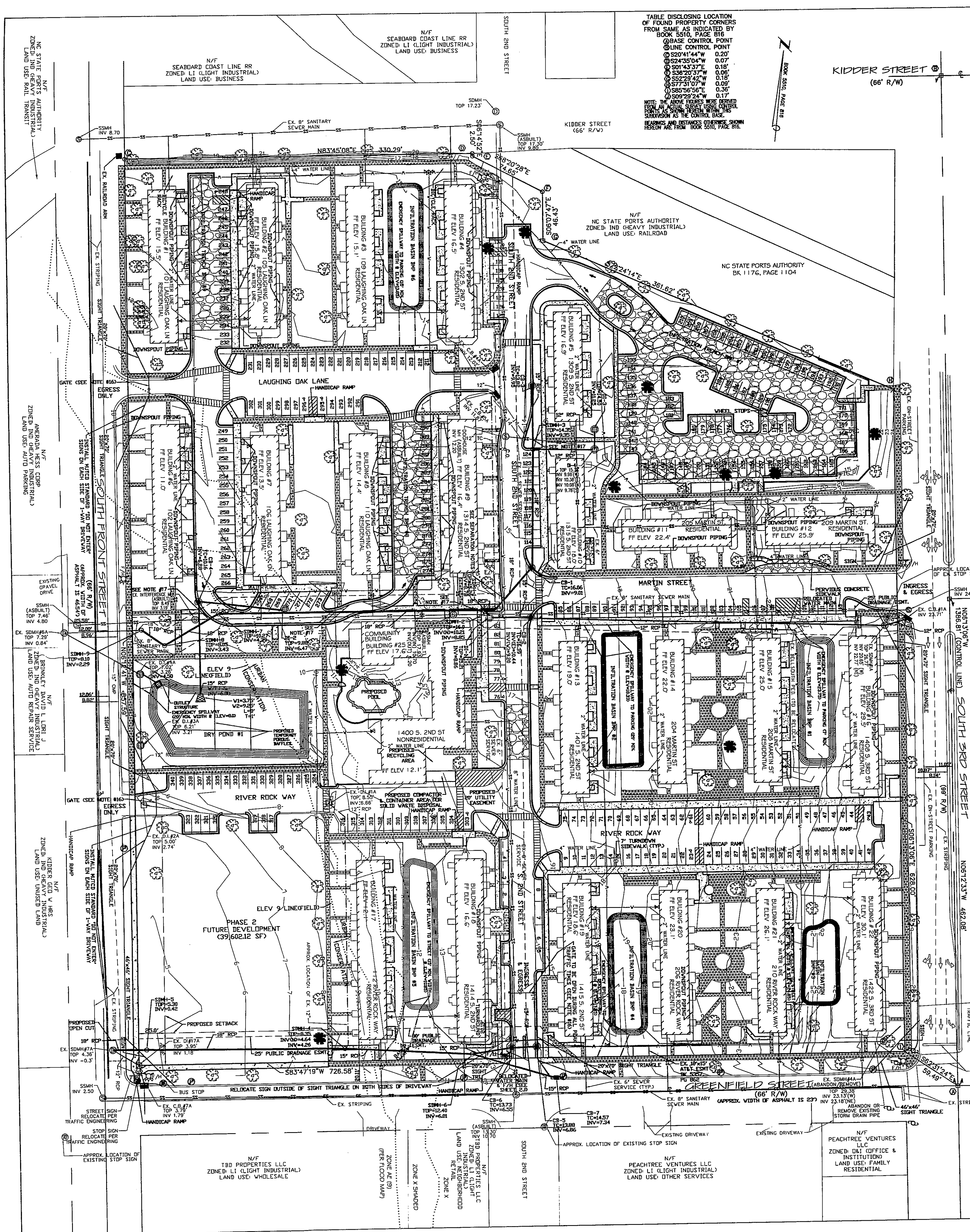
**MALPASS ENGINEERING, P.C.**  
 1134 SHEPARD BOULEVARD  
 WILMINGTON, NORTH CAROLINA 28412  
 Phone 910-292-8243  
 Fax 910-292-5203 License No. C-52629

Owner: SOUTH FRONT LLC  
 1510-A SOUTH THIRD STREET  
 WILMINGTON, NC 28401  
 PHONE: 910-251-5030

**APPROVED**  
 CITY OF WILMINGTON  
 ENGINEERING DEPARTMENT  
 DATE 8/15/11 PERMIT # 2011022  
 SIGNED [Signature]

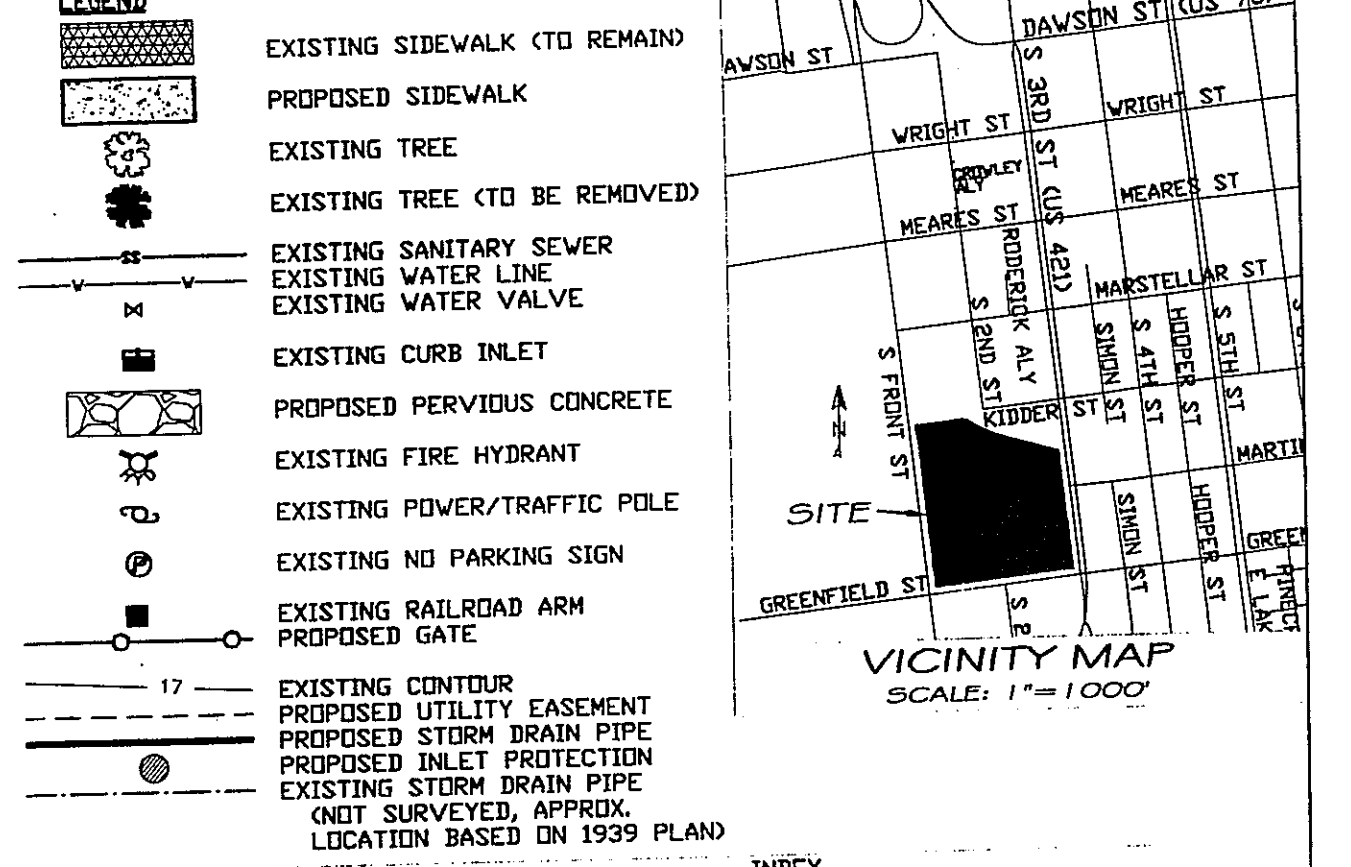
**GRAPHIC SCALE**  
 (IN FEET)  
 1 inch = 50 ft

DATE: 1-19-11  
 SCALE: 1"=50'  
 DRAWN: JCB  
 CHECKED: JEM  
 PROJECT NO: 198  
 SHEET NO: 1  
 OF: 5



- CITY OF WILMINGTON STANDARD NOTES**
- PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING MUST BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES AND NO CONSTRUCTION WORKERS, TOOLS, MATERIALS, OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.
  - ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS.
  - INCE STREETS ARE OPEN TO TRAFFIC, CONTACT TRAFFIC ENGINEERING TO REQUEST INSTALLATION OF TRAFFIC STREET MARKINGS. TRAFFIC CONTROL DEVICES 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 CHANGES ON UNIFORM TRAFFIC CONTROL DEVICES STANDARD.
  - CALL TRAFFIC ENGINEERING AT 341-7888 FORTY-EIGHT HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT OF WAY.
  - ANY BROKEN OR MISSING SIDEWALK PANELS WILL BE REPLACED.
  - CONTACT KAREN DIXON AT 341-7888 TO DISCUSS TRAFFIC LIGHTING OPTIONS.
  - PROJECT SHALL COMPLY WITH CITY OF WILMINGTON CROSS CONNECTION CONTROL REQUIREMENTS. WATER METERS CANNOT BE RELEASED UNTIL ALL REQUIREMENTS ARE MET AND THE STATE HAS GIVEN THEIR FINAL APPROVAL. CALL 343-3910 FOR INFORMATION.
  - IF THE CONTRACTOR DESIRES CITY WATER FOR CONSTRUCTION HE SHALL APPLY IN ADVANCE FOR THIS SERVICE & MUST PROVIDE A REDUCED PRESSURE ZONE (RPZ) BACKFLOW PREVENTION DEVICE ON THE DEVELOPER'S SIDE OF THE WATER METER BOX.
  - ANY IRRIGATION SYSTEM SUPPLIED BY CITY WATER SHALL COMPLY WITH THE CITY'S CROSS CONNECTION CONTROL REGULATIONS. CALL 343-3910 FOR INFORMATION.
  - ANY BACKFLOW PREVENTION DEVICES REQUIRED BY THE CITY WILL NEED TO BE ON THE LIST OF APPROVED DEVICES BY USFCDCHOR OR ASSE.
  - ALL TRAFFIC CONTROL SIGNS & MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER.
  - ALL PAVEMENT MARKINGS REGULATING TRAFFIC FLOW MUST BE THERMOPLASTIC.
  - A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET.
  - TRAFFIC ENGINEERING MUST APPROVE OF PAVEMENT MARKING LAYOUT PRIOR TO ACTUAL STRIPING.
  - OF WILMINGTON TRAFFIC ENGINEERING DIVISION. ALL TRAFFIC CONTROL SIGNS & MARKINGS TO 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.

- NOTES**
- ASBUILT SURVEY PROVIDED BY ARNOLD W. CARSON PLS. P.C.
  - CONTRACTOR SHALL OVERLAY EXISTING CONCRETE DRIVE ISLES AND PARKING AREAS THAT ARE BASED ON A 1" ASPHALT OVERLAY WITH 1" OF STRENGTH ASPHALT. PROPOSED GRADES ARE BASED ON A 1" ASPHALT OVERLAY ON TOP OF EXISTING GRADES.
  - CONTRACTOR & DEVELOPER SHALL CONTACT PERVIOUS CONCRETE MANUFACTURER FOR PROPOSED THICKNESS AS SHOWN PER OWNER.
  - CONTRACTOR SHALL ENSURE THE PATH FROM EACH HANDICAP PARKING SPACE TO THE UNIT ASSOCIATED WITH THE RESIDENTIVE SPACE MEETS ADA SPECIFICATIONS.
  - MALPASS ENGINEERING, P.C. IS NOT RESPONSIBLE FOR WALL, FENCE, OR GATE DESIGNS.
  - OLD BOILER ROOM IN COMMUNITY BUILDING SHALL BE UPFITTED TO HOUSE BICYCLE & SCOOTER STORAGE (MINIMUM 35 SPACES).
  - PARKING SPACES SHALL BE NO CLOSER THAN 15' TO BUILDING ENTRY (EXCLUDING VEHICLE OVERHAND).
  - REGULAR SEWER MANHOLE LOCATIONS WERE TAKEN FROM AN AUGUST 10, 1939 PLAN TITLED "U.S.H.A. PROJECT NO. NC. 1-10" AND ARE APPROXIMATE, UNLESS NOTED AS "ASBUILT". ALL SANITARY SEWER INVERTS & SIZES WERE TAKEN FROM ABOVE REFERENCED PLAN AND ARE APPROXIMATE. SANITARY SEWER LOCATIONS, INVERTS, & SIZES SHALL BE FIELD VERIFIED AS NECESSARY.
  - NO EQUIPMENT IS ALLOWED ON THE SITE UNTIL ALL TREE PROTECTION FENCING AND SILT FENCING HAS BEEN INSTALLED AND APPROVED.
  - NO LAND DISTURBANCE INCLUDING TREE REMOVAL IS TO OCCUR OUTSIDE THE LIMITS OF REGULATIONS SHOWN ON THE PLANS.
  - PROTECTIVE FENCING IS TO BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.
  - LAND CLEARING AND CONSTRUCTION CONTRACTORS SHALL RECEIVE ADEQUATE INSTRUCTION ON TREE PROTECTION REQUIREMENTS AND METHODS.
  - ALL GATES USED FOR VEHICULAR INGRESS AND/OR EGRESS SHALL BE SILENT ACTIVATED.
  - REPAIR SANITARY SEWER & WATER MAINS IN THE 10' IN EITHER SIDE OF STORM DRAIN CROSSING.
  - DOWNPOUT PIPING SHOWN ON PLAN IS FOR INFORMATIONAL PURPOSES ONLY. DOWNPOUTS SHALL DISCHARGE INTO INFILTRATION BASINS, INFILTRATION TRENCHES, AND PERVIOUS CONCRETE SECTIONS AS SHOWN ON PLAN. THE DISCHARGE SHALL MATCH THE TOP OF PERVIOUS CONCRETE ELEVATION AT THE DISCHARGE POINT.
  - THE PROPOSED LIMITS OF DISTURBANCE AREA SHALL INCLUDE ALL THE AREA WITHIN THE BUILDINGS #1-22 & 25.
  - NO EQUIPMENT SHALL BE SHOWN ON PLAN THAT WERE NOT SURVEYED (SEE LEGEND FOR BUILDINGS #1-22 & 25).
  - EXISTING STORM DRAIN PIPES SHOWN ON PLAN THAT WERE NOT SURVEYED (SEE LEGEND FOR BUILDINGS #1-22 & 25).
  - FOR LINE TYPES WERE TAKEN FROM AN AUGUST 10, 1939 PLAN TITLED "U.S.H.A. PROJECT NO. NC. 1-10" WITH A REVISION DATE OF MAY 1, 1961. LOCATION OF THESE STORM DRAIN PIPES & INVERTS ARE APPROXIMATE AND PIPE SIZES ARE BASED ON THE ABOVE REFERENCED PLAN.
  - LOCATION OF TREE PROTECTION FENCING SHOWN ON PLAN IS APPROXIMATE. TREE PROTECTION FENCING SHALL BE INSTALLED IN ACCORDANCE WITH DETAIL SD 15-08 ON SHEET 21, EXCEPT WHERE SITE IMPROVEMENTS ARE TO OCCUR AS SHOWN ON PLAN.
  - SILT FENCE SHALL BE INSTALLED AS SHOWN ON THE PLAN & ANYWHERE ELSE SEDIMENT RECEIVE FROM PARKING LOT.
  - HANDICAP RAMPS SHALL BE PROVIDED AT ALL PARKING AREAS TO SIDEWALK CONNECTIONS INTERNAL TO THE SITE.
  - ANY PARKING SPACE LESS THAN 8'5" IN WIDTH BY 10' IN LENGTH SHALL BE SIGNED ALERTING DRIVERS TO THE LIMITED SIZE.
  - CONSTRUCTION ENTRANCE AND DRIVEWAY STREET DRIVEWAY SHALL BE INSTALLED ONLY IF ASPHALT IS REMOVED AND DRIVEWAYS IS USED AS AN ENTRANCE.
  - ROOF LEADER PIPING SHALL HAVE A CLEANOUT AT EACH END.
  - PROPOSED SIDEWALK ADJACENT TO PARKING SPACES #1-6, 211-213.
  - LANDSCAPE ISLANDS WITH CURB CUTS SHALL BE GRASS & DEPRESS.
  - DISTURBED AREAS WITH CURB CUTS SHALL BE GRASS & DEPRESS.
  - BE IMMEDIATELY SEEDED & STABILIZED WITH MULCH PRIOR TO ANY RAINFALL EVENT.



**INDEX**

1	OF 5 EXISTING CONDITIONS MAP
2A	OF 5 SITE PLAN
2B	OF 5 GRADING & EROSION CONTROL PLAN
2C	OF 5 GRADING & EROSION CONTROL PLAN
2D	OF 5 DRAINAGE AREA MAP
2E	OF 5 PARKING DIMENSION PLAN
2F	OF 5 PARKING DIMENSION PLAN
2G	OF 5 STORMWATER DETAIL SHEET
2H	OF 5 DETAIL SHEET
2I	OF 5 DETAIL SHEET
2J	OF 5 WATER & SEWER DETAIL SHEET
2K	OF 5 EXISTING OPEN SPACE MAP
2L	OF 5 PROPOSED OPEN SPACE MAP
2M	OF 5 EXISTING PERVIOUS AREA TO REMAIN & NEW INTERVIEW AREA MAP
2N	OF 5 EXISTING PERVIOUS AREA TO REMAIN & NEW INTERVIEW AREA MAP
2O	OF 5 EXISTING PERVIOUS AREA TO REMAIN & NEW INTERVIEW AREA MAP
2P	OF 5 EXISTING PERVIOUS AREA TO REMAIN & NEW INTERVIEW AREA MAP
2Q	OF 5 EXISTING PERVIOUS AREA TO REMAIN & NEW INTERVIEW AREA MAP
2R	OF 5 EXISTING PERVIOUS AREA TO REMAIN & NEW INTERVIEW AREA MAP
2S	OF 5 EXISTING PERVIOUS AREA TO REMAIN & NEW INTERVIEW AREA MAP
2T	OF 5 EXISTING PERVIOUS AREA TO REMAIN & NEW INTERVIEW AREA MAP
2U	OF 5 EXISTING PERVIOUS AREA TO REMAIN & NEW INTERVIEW AREA MAP
2V	OF 5 EXISTING PERVIOUS AREA TO REMAIN & NEW INTERVIEW AREA MAP
2W	OF 5 EXISTING PERVIOUS AREA TO REMAIN & NEW INTERVIEW AREA MAP
2X	OF 5 EXISTING PERVIOUS AREA TO REMAIN & NEW INTERVIEW AREA MAP
2Y	OF 5 EXISTING PERVIOUS AREA TO REMAIN & NEW INTERVIEW AREA MAP
2Z	OF 5 EXISTING PERVIOUS AREA TO REMAIN & NEW INTERVIEW AREA MAP
3	OF 5 TREE INVENTORY MAP

**WATER & SEWER CAPACITY**

WATER	261 UNITS x 400 GPD/UNIT = 104,400 GPD (CURRENT USE)
WATER	216 UNITS x 400 GPD/UNIT + 63 SHIFTS x 25 GAL/SHIFT = 86,475 GPD (PROPOSED USE)
SEWER	261 UNITS x 240 GPD/UNIT + 32 x 350 GPD = 66,480 GPD (CURRENT USE)
SEWER	216 UNITS x 240 GPD/UNIT + 3 SHIFTS x 25 GAL/SHIFT = 51,975 GPD (PROPOSED USE)

**SITE DATA**

PROPERTY OWNER SOUTH FRONT LLC  
PROJECT ADDRESS 1400 S. 2ND ST.  
PIN NUMBER 0205413-025-000-000  
ZONING DISTRICT MF-4  
FLOOD AREA ZONE "A" & AE EL 9 ACCORDING TO FEMA FLOOD INSURANCE RATE MAP, COMMUNITY-PAE  
FLOOD AREA ZONE "A" DATE 6/2/06 (INFORMATION PROVIDED BY ARNOLD W. CARSON PLS. P.C.)  
BUILDING SETBACKS, REQUIRED FRONT-30', REAR-25', INTERIOR SIDE BY CORNER LOT SIDE-30', BUILDING SETBACKS, EXISTING TO REMAIN (PHASE 1) FRONT-15.97', REAR-21.48', INTERIOR SIDE-24.13', BUILDING SETBACKS, EXISTING TO REMAIN (PHASE 2) REAR-25', CORNER LOT SIDE-30'  
TOTAL SITE AREA: 570,230.91 SF = 13.09 ACRES  
TOTAL ON-SITE AREA TO BE DISTURBED: 468,939.59 SF = 10.77 ACRES  
TOTAL AREA TO BE DISTURBED: 475,149.59 SF = 10.91 ACRES  
EXISTING BUILDING AREA: 103,444.75 SF = 2.37 ACRES  
AFTER DEVELOPMENT BUILDING AREA: 69,485.19 SF = 1.59 ACRES  
EXISTING BUILDING FOOTPRINT COVERAGE: 103,444.75 SF = 100% = 181.4%  
AFTER DEVELOPMENT BUILDING FOOTPRINT COVERAGE: 69,485.19 SF = 67.2% = 15.69%  
AFTER DEVELOPMENT BUILDING LOT COVERAGE: 103,444.75 SF = 18.14%  
NUMBER OF PROPOSED UNITS (1 BEDROOM-184 UNITS, 2 BEDROOM-32 UNITS)  
NUMBER OF EXISTING BUILDINGS: RESIDENTIAL-24 (94,437.06 SF), NONRESIDENTIAL-1 (9,007.69 SF)  
NUMBER OF EXISTING BUILDINGS TO REMAIN: RESIDENTIAL-22 (80,477.50 SF), NONRESIDENTIAL-1 (9,007.69 SF)  
BUILDING SIZE, AFTER DEVELOPMENT:

BUILDING	SQUARE FOOTAGE	NUMBER OF UNITS	NUMBER OF BEDROOMS (1/2)	USE (RESIDENTIAL/NONRESIDENTIAL)	EXISTING/FUTURE	BUILDING ADDRESS
1	3,883.30	10	7/3	RESIDENTIAL	EXISTING	101 LAUGHING OAK LN
2	3,591.65	10	10/0	RESIDENTIAL	EXISTING	105 LAUGHING OAK LN
3	3,577.22	10	10/0	RESIDENTIAL	EXISTING	109 LAUGHING OAK LN
4	3,572.92	10	7/2	RESIDENTIAL	EXISTING	1302 S. 2ND ST.
5	3,572.92	10	7/3	RESIDENTIAL	EXISTING	102 LAUGHING OAK LN
6	3,507.93	10	8/0	RESIDENTIAL	EXISTING	105 LAUGHING OAK LN
7	3,576.87	10	10/0	RESIDENTIAL	EXISTING	1314 S. 2ND ST.
8	3,581.33	10	10/0	RESIDENTIAL	EXISTING	1309 S. 2ND ST.
9	3,598.79	10	7/3	RESIDENTIAL	EXISTING	1414 S. 2ND ST.
10	2,790.11	8	8/0	RESIDENTIAL	EXISTING	205 MARTIN ST.
11	2,789.90	8	8/0	RESIDENTIAL	EXISTING	204 MARTIN ST.
12	2,787.83	8	8/0	RESIDENTIAL	EXISTING	204 MARTIN ST.
13	3,591.30	10	7/3	RESIDENTIAL	EXISTING	1408 S. 3RD ST.
14	3,661.98	10	7/3	RESIDENTIAL	EXISTING	208 MARTIN ST.
15	3,673.34	10	7/3	RESIDENTIAL	EXISTING	1408 S. 3RD ST.
16	3,806.97	10	7/3	RESIDENTIAL	EXISTING	112 RIVER ROCK WAY
17	4,550.24	12	10/2	RESIDENTIAL	EXISTING	1414 S. 2ND ST.
18	4,573.19	12	10/2	RESIDENTIAL	EXISTING	1415 S. 2ND ST.
19	3,895.71	10	7/3	RESIDENTIAL	EXISTING	206 RIVER ROCK WAY
20	3,631.50	10	9/1	RESIDENTIAL	EXISTING	210 RIVER ROCK WAY
21	3,652.35	10	9/1	RESIDENTIAL	EXISTING	210 RIVER ROCK WAY
22	3,914.72	10	7/3	RESIDENTIAL	EXISTING	1422 S. 3RD ST.
23	-	-	-	-	-	-
24	-	-	-	-	-	-
25	9,007.69	-	-	NONRESIDENTIAL	EXISTING	1400 S. 2ND ST.
TOTAL	89,485.19	216	184/32	-	-	-

**NUMBER OF STORIES & SQUARE FEET PER FLOOR 2 STORIES (SEE ABOVE CHART) SAME FOR BOTH STORIES**

BEFORE DEVELOPMENT	AFTER DEVELOPMENT
BUILDINGS	BUILDINGS
AREA (SF)	AREA (SF)
% OF SITE	% OF SITE
103,444.75	69,485.19
18.14	15.69
13,750.95	19,999.23
2.41	3.40
84,195.16	140,728.32
14.77	24.68
62,150.83	52,958.32
10.90	9.29
6,148.10	7,057.26
1.08	1.24
269,689.79	35,614.90
47.30	6.25
TOTAL	345,270.22
60.55	

**OFF STREET PARKING CALCULATIONS:**  
EXISTING PARKING SPACES = APPROXIMATELY 192 SPACES BASED ON INFORMATION PROVIDED BY VHA  
MINIMUM PARKING REQUIRED (PHASE 1) = (1.5 \* 184 UNITS) + (2 \* 32 UNITS) = 340 SPACES  
MAXIMUM PARKING REQUIRED (PHASE 1) = 2.5 \* 216 UNITS = 540 SPACES  
NUMBER OF PROPOSED PARKING SPACES (PHASE 1) = 340 SPACES  
MINIMUM NUMBER OF REQUIRED HANDICAPPED SPACES PER ADA STANDARDS FOR ACCESSIBLE DESIGN (301 TO 400 TOTAL PARKING SPACES) = 8 SPACES  
NUMBER OF PROPOSED HANDICAPPED SPACES = 10 SPACES  
**BICYCLE PARKING CALCULATIONS:**  
MINIMUM SPACES REQUIRED = 5 \* ((340-25) PARKING SPACES / 100 PARKING SPACES)  
MINIMUM NUMBER OF PROPOSED BICYCLE/SCOOTER PARKING SPACES IN COMMUNITY BUILDING = 35 SPACES  
MINIMUM USE CLASSIFICATION: URBAN (495,533.24 SF = 11.376 ACRES) &  
CONSERVATION AREA (74,657.57 SF = 1.71 ACRES)  
THIS SITE IS NOT WITHIN A SPECIAL HIGHWAY OVERLAY DISTRICT OR ANY OTHER ZONING OVERLAY DISTRICT  
THIS SITE IS WITHIN THE CITY OF WILMINGTON ZONING MAP (MAP 3117-4)  
THIS SITE IS WITHIN THE CITY OF WILMINGTON 1945 CORPORATE LIMITS

**Approved Construction Plan**

Name: *[Signature]* Date: 8/15/11

Planning: *[Signature]*

Public Utilities: *[Signature]*

Traffic: *[Signature]*

Fire: *[Signature]*

**STORMWATER MANAGEMENT PLAN APPROVED**

**CITY OF WILMINGTON ENGINEERING DEPARTMENT**

DATE 8/15/11 PERMIT # 2011022

SIGNED *[Signature]*

**UTILITY SEPARATION NOTES**

- WATER MAINS SHALL HAVE A MINIMUM COVER OF 3'.
- SANITARY SEWER MAINS SHALL HAVE A MINIMUM COVER OF 3' OR D.I.P. SHALL BE USED.
- HORIZONTAL SEPARATION BETWEEN WATER AND SANITARY SEWER SHALL BE 10' BETWEEN EDGE OF PIPES.
- VERTICAL SEPARATION BETWEEN WATER AND SANITARY SEWER WATER OVER SANITARY SEWER 3/8" OR USE D.I.P. ON BOTH SIDES OF CROSSING.
- SANITARY SEWER OVER WATER USE D.I.P. ON BOTH SIDES OF CROSSING.
- A 24" VERTICAL SEPARATION SHALL BE PROVIDED BETWEEN STORM SEWER AND SANITARY SEWER OR USE D.I.P. ON SANITARY SEWER 10' ON EITHER SIDE OF CROSSING.
- VERTICAL SEPARATION BETWEEN WATER AND STORM SEWER WATER OVER STORM SEWER 3/8" OR USE D.I.P. ON WATER 10' ON EITHER SIDE OF CROSSING.
- STORM SEWER OVER WATER USE D.I.P. ON WATER 10' ON EITHER SIDE OF CROSSING.
- ALL SANITARY SEWER MANHOLES SHALL BE 30" OR GREATER SHALL HAVE AN INSIDE DIAMETER OF 5' WITH AN INSIDE DROP STRUCTURE.
- GRAVITY SANITARY SEWER WITHIN 50' OF WETLANDS SHALL BE D.I.P. AND MEET WATER MAIN MATERIALS, TESTING METHODS AND ACCESSIBILITY STANDARDS OUTSIDE EDGE.
- SANITARY SEWER MANHOLES MUST BE GREATER THAN 50' FROM WETLANDS, AS MEASURED TO THE CLOSEST OUTSIDE EDGE.

**GRAPHIC SCALE**

(IN FEET)

1 inch = 50 ft.

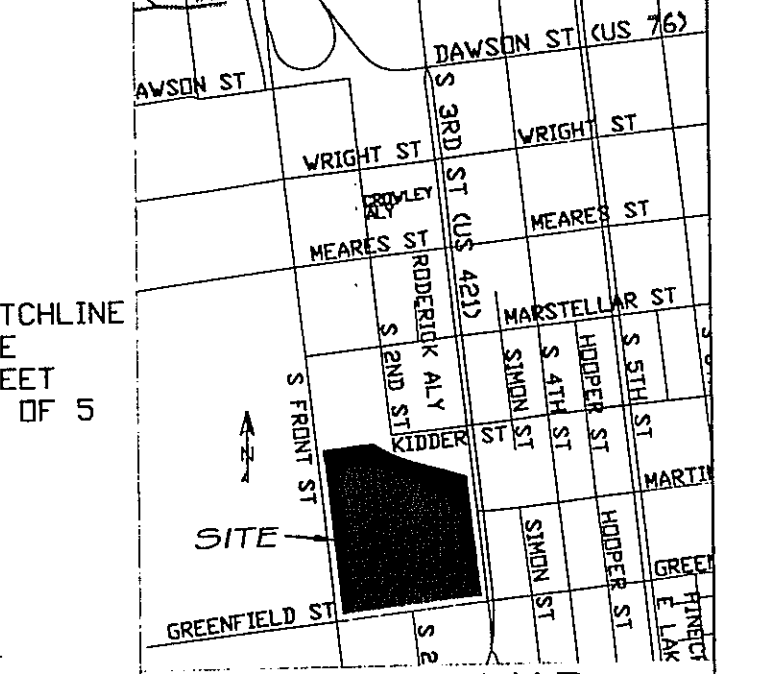
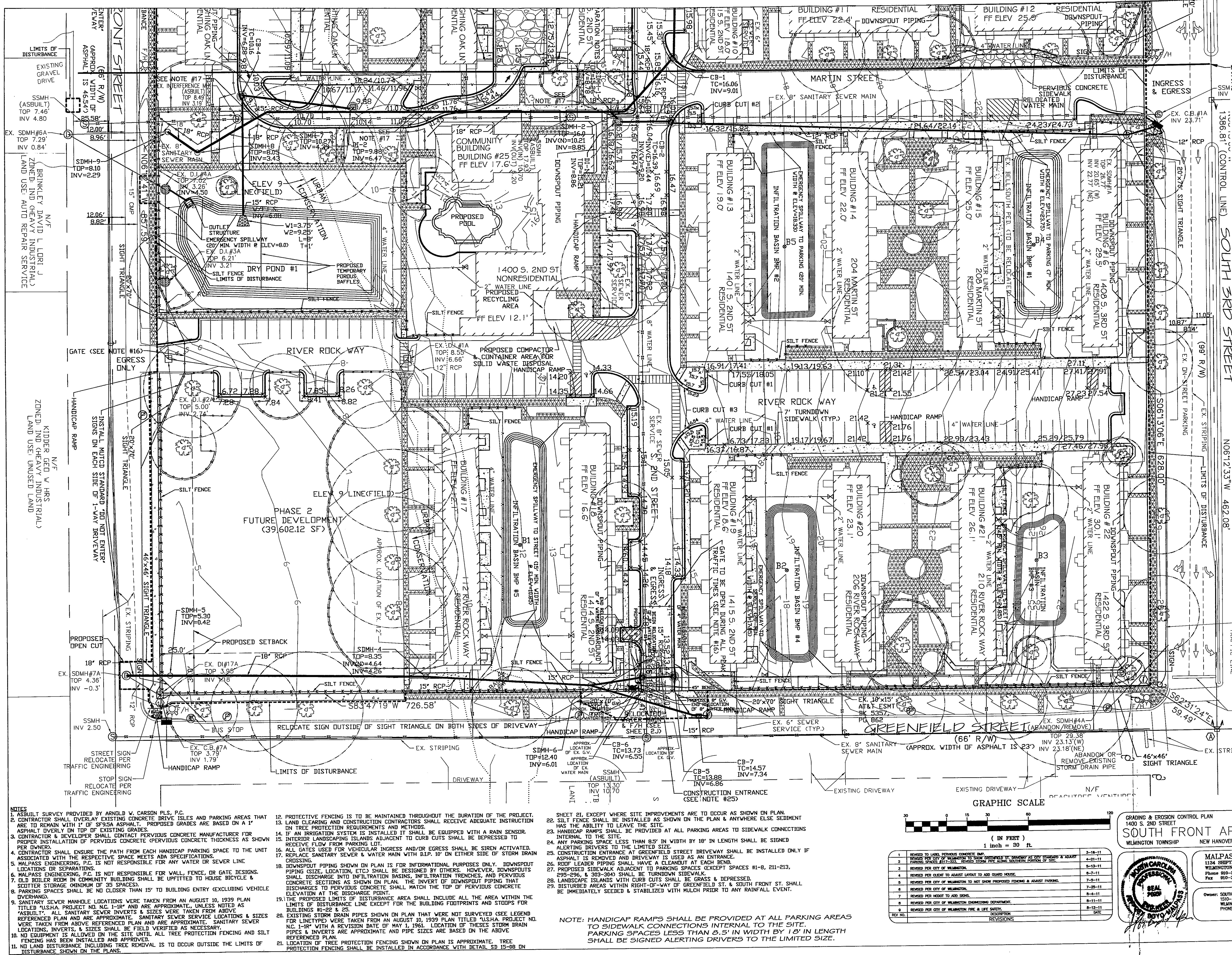
**SITE PLAN 1400 S. 2ND STREET SOUTH FRONT APARTMENTS**

WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

**MALPASS ENGINEERING, P.C.**  
1154 SHEPPARD BOULEVARD  
WILMINGTON, NORTH CAROLINA 28412  
Phone 910-392-5243  
Fax 910-392-5203

Owner: SOUTH FRONT LLC  
1504 S. 3RD STREET  
WILMINGTON, NC 28401  
PHONE: 910-251-5530

DATE: 1-19-11  
SCALE: 1"=50'  
DRAWN: JCB  
CHECKED: JEM  
PROJECT NO: 198  
SHEET NO. 2A OF 5



- LEGEND**
- EXISTING SIDEWALK (TO REMAIN)
  - PROPOSED SIDEWALK
  - EXISTING TREE
  - EXISTING TREE (TO BE REMOVED)
  - EXISTING SANITARY SEWER
  - EXISTING WATER VALVE
  - EXISTING CURB INLET
  - PROPOSED PERVIOUS CONCRETE
  - EXISTING FIRE HYDRANT
  - EXISTING POWER/TRAFFIC POLE
  - EXISTING NO PARKING SIGN
  - EXISTING RAILROAD ARM
  - PROPOSED GATE
  - EXISTING CONTOUR
  - PROPOSED STORM DRAIN PIPE
  - PROPOSED SPOT ELEVATION
  - PROPOSED INLET PROTECTION
  - CRITICAL ROOT ZONE
  - PROPOSED LIMITS OF DISTURBANCE (SEE NOTE #19)
  - EXISTING SOIL BURNING LOCATION (INDICATES BURNING #)
  - PROPOSED TREE PROTECTION FENCING
  - PROPOSED SILT FENCE
  - EXISTING STORM DRAIN PIPE (NOT SURVEYED, APPROX. LOCATION BASED ON 1939 PLAN)

**TABLE DISCLOSING LOCATION OF FOUND PROPERTY CORNERS FROM SAME AS INDICATED BY BOOK 550, PAGE 818**

BASE CONTROL POINT	LINE CONTROL POINT	BEARING	DISTANCE
0204144' W	0204144' W	0.20'	
0243504' W	0243504' W	0.07'	
0201457' E	0201457' E	0.18'	
0362037' W	0362037' W	0.08'	
0273107' W	0273107' W	0.09'	
0385656' E	0385656' E	0.25'	
0385656' E	0385656' E	0.25'	

NOTE: THE ABOVE BEARINGS WERE OBTAINED FROM THE 1939 PLAN. THE DISTANCES WERE OBTAINED FROM THE 1939 PLAN. THE BEARINGS AND DISTANCES OBTAINED FROM THE 1939 PLAN ARE APPROXIMATE.

**Approved Construction Plan**

Name: Malpass Engineering, P.C. Date: 8/1/11

Planning: [Signature]

Public Utilities: [Signature]

Traffic: [Signature]

Fire: [Signature]

**STORMWATER MANAGEMENT PLAN APPROVED**

CITY OF WILMINGTON  
ENGINEERING DEPARTMENT  
DATE: 8/1/11 PERMIT # 2011022  
SIGNED: [Signature]

- NOTES**
- AS-BUILT SURVEY PROVIDED BY ARNOLD V. CARSON PLS, P.C.
  - CONTRACTOR SHALL OVERLAY EXISTING CONCRETE DRIVE ISLES AND PARKING AREAS THAT ARE TO REMAIN WITH 1" OF SP95A ASPHALT. PROPOSED GRADES ARE BASED ON A 1" ASPHALT OVERLAY ON TOP OF EXISTING GRADES.
  - CONTRACTOR & DEVELOPER SHALL CONTACT PERVIOUS CONCRETE MANUFACTURER FOR PROPER INSTALLATION OF PERVIOUS CONCRETE (PERVIOUS CONCRETE THICKNESS AS SHOWN PER OWNER).
  - CONTRACTOR SHALL ENSURE THE PATH FROM EACH HANDICAP PARKING SPACE TO THE UNIT ASSOCIATED WITH THE RESPECTIVE SPACE MEETS ADA SPECIFICATIONS.
  - MALPASS ENGINEERING, P.C. IS NOT RESPONSIBLE FOR ANY WATER OR SEWER LINE LOCATIONS OR SEPARATIONS.
  - MALPASS ENGINEERING, P.C. IS NOT RESPONSIBLE FOR WALL, FENCE, OR GATE DESIGNS.
  - OLD BOILER ROOM IN COMMUNITY BUILDING SHALL BE UPFITTED TO HOUSE BICYCLE & SCOOTER STORAGE (MINIMUM OF 25 SPACES).
  - PARKING SPACES SHALL BE NO CLOSER THAN 15' TO BUILDING ENTRY (EXCLUDING VEHICLE OVERHAND).
  - SANITARY SEWER MANHOLE LOCATIONS WERE TAKEN FROM AN AUGUST 10, 1939 PLAN TITLED "U.S.H.A. PROJECT NO. 1-R" AND ARE APPROXIMATE, UNLESS NOTED AS "AS-BUILT". ALL SANITARY SEWER INVERTS & SIZES WERE TAKEN FROM ABOVE REFERENCED PLAN AND ARE APPROXIMATE. SANITARY SEWER SERVICE LOCATIONS & SIZES REFERENCED PLAN AND ARE APPROXIMATE. SANITARY SEWER LOCATIONS, INVERTS, & SIZES SHALL BE FIELD VERIFIED AS NECESSARY.
  - NO EQUIPMENT IS ALLOWED ON THE SITE UNTIL ALL TREE PROTECTION FENCING AND SILT FENCING HAS BEEN INSTALLED AND APPROVED.
  - NO LAND DISTURBANCE INCLUDING TREE REMOVAL IS TO OCCUR OUTSIDE THE LIMITS OF DISTURBANCE SHOWN ON THE PLANS.
  - PROTECTIVE FENCING IS TO BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.
  - LAND CLEARING AND CONSTRUCTION CONTRACTORS SHALL RECEIVE ADEQUATE INSTRUCTION ON TREE PROTECTION REQUIREMENTS AND METHODS.
  - IF AN IRRIGATION SYSTEM IS INSTALLED IT SHALL BE EQUIPPED WITH A RAIN SENSOR.
  - INTERIOR LANDSCAPING ISLANDS ADJACENT TO CURB CUTS SHALL BE DEPRESSED TO RECEIVE FLOW FROM PARKING LOT.
  - ALL GATES USED FOR VEHICULAR INGRESS AND/OR EGRESS SHALL BE SIREN ACTIVATED.
  - REPLACE SANITARY SEWER & WATER MAIN WITH D.I.P. 10" IN EITHER SIDE OF STORM DRAIN CROSSING.
  - DOWNPOUT PIPING SHOWN ON PLAN IS FOR INFORMATIONAL PURPOSES ONLY. DOWNPOUT PIPING (SIZE, LOCATION, ETC) SHALL BE DESIGNED BY OTHERS. HOWEVER, DOWNPOUTS SHALL DISCHARGE INTO INFILTRATION BASINS, INFILTRATION TRENCHES, AND PERVIOUS CONCRETE SECTIONS AS SHOWN ON PLAN. THE INVERT OF DOWNPOUT PIPING THAT DISCHARGES TO PERVIOUS CONCRETE SHALL MATCH THE TOP OF PERVIOUS CONCRETE ELEVATION AT THE DISCHARGE POINT.
  - THE PROPOSED LIMITS OF DISTURBANCE AREA SHALL INCLUDE ALL THE AREA WITHIN THE LIMITS OF DISTURBANCE LINE EXCEPT FOR THE BUILDING FOOTPRINTS AND STOODS FOR BUILDINGS #1-22 & 25.
  - EXISTING STORM DRAIN PIPES SHOWN ON PLAN THAT WERE NOT SURVEYED (SEE LEGEND FOR LINE TYPE) WERE TAKEN FROM AN AUGUST 10, 1939 PLAN TITLED "U.S.H.A. PROJECT NO. 1-R" WITH A REVISION DATE OF MAY 1, 1961. LOCATION OF THESE STORM DRAIN PIPES & INVERTS ARE APPROXIMATE AND PIPE SIZES ARE BASED ON THE ABOVE REFERENCED PLAN.
  - LOCATION OF TREE PROTECTION FENCING SHOWN ON PLAN IS APPROXIMATE. TREE PROTECTION FENCING SHALL BE INSTALLED IN ACCORDANCE WITH DETAIL SD 15-08 ON

- SHEET 21, EXCEPT WHERE SITE IMPROVEMENTS ARE TO OCCUR AS SHOWN ON PLAN.
  - SILT FENCE SHALL BE INSTALLED AS SHOWN ON THE PLAN & ANYWHERE ELSE SEDIMENT HAS THE ABILITY TO LEAVE THE SITE.
  - HANDICAP RAMP SHALL BE PROVIDED AT ALL PARKING AREAS TO SIDEWALK CONNECTIONS INTERNAL TO THE SITE.
  - ANY PARKING SPACE LESS THAN 8'5" IN WIDTH BY 18' IN LENGTH SHALL BE SIGNED ALERTING DRIVERS TO THE LIMITED SIZE.
  - CONSTRUCTION ENTRANCE AT GREENFIELD STREET DRIVEWAY SHALL BE INSTALLED ONLY IF ASPHALT IS REMOVED AND DRIVEWAY IS USED AS AN ENTRANCE.
  - ROOF LEADER PIPING SHALL HAVE A CLEANOUT AT EACH BEND.
  - PROPOSED SIDEWALK ADJACENT TO PARKING SPACES #1-8, 211-213, 295-296, & 303-304 SHALL BE TURNDOWN SIDEWALK.
  - LANDSCAPE ISLANDS WITH CURB CUTS SHALL BE GRASS & DEPRESSED.
  - DISTURBED AREAS WITHIN RIGHT-OF-WAY OF GREENFIELD ST. & SOUTH FRONT ST. SHALL BE IMMEDIATELY SEEDED & STABILIZED WITH MULCH PRIOR TO ANY RAINFALL EVENT.
- NOTE: HANDICAP RAMP(S) SHALL BE PROVIDED AT ALL PARKING AREAS TO SIDEWALK CONNECTIONS INTERNAL TO THE SITE. PARKING SPACES LESS THAN 8'5" IN WIDTH BY 18' IN LENGTH SHALL BE SIGNED ALERTING DRIVERS TO THE LIMITED SIZE.**

**GRAPHIC SCALE**

1 inch = 30 ft

NO.	REVISION	DATE
1	REVISED TO ADD PERVIOUS CONCRETE BMP	3-18-11
2	REVISED PER CITY OF WILMINGTON TO SHOW PROPOSED TREE REMOVAL AS CITY STANDARD & ADJUST PARKING SPACES 811-211, 210, 209, 208, 207, 206, 205, 204, 203, 202, 201, 200, 199, 198, 197, 196, 195, 194, 193, 192, 191, 190, 189, 188, 187, 186, 185, 184, 183, 182, 181, 180, 179, 178, 177, 176, 175, 174, 173, 172, 171, 170, 169, 168, 167, 166, 165, 164, 163, 162, 161, 160, 159, 158, 157, 156, 155, 154, 153, 152, 151, 150, 149, 148, 147, 146, 145, 144, 143, 142, 141, 140, 139, 138, 137, 136, 135, 134, 133, 132, 131, 130, 129, 128, 127, 126, 125, 124, 123, 122, 121, 120, 119, 118, 117, 116, 115, 114, 113, 112, 111, 110, 109, 108, 107, 106, 105, 104, 103, 102, 101, 100, 99, 98, 97, 96, 95, 94, 93, 92, 91, 90, 89, 88, 87, 86, 85, 84, 83, 82, 81, 80, 79, 78, 77, 76, 75, 74, 73, 72, 71, 70, 69, 68, 67, 66, 65, 64, 63, 62, 61, 60, 59, 58, 57, 56, 55, 54, 53, 52, 51, 50, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 39, 38, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1	4-21-11
3	REVISED PER CITY OF WILMINGTON	5-13-11
4	REVISED PER CLIENT TO ADJUST LAYOUT TO ADD GARAGE HOUSE	6-7-11
5	REVISED PER CITY OF WILMINGTON TO NOT SHOW PROPOSED FENCING & ADJUST PARKING	7-9-11
6	REVISED PER CITY OF WILMINGTON	7-29-11
7	REVISED PER NOTED TO ADD SIGN	8-4-11
8	REVISED PER CITY OF WILMINGTON ENGINEERING DEPARTMENT	8-11-11
9	REVISED PER CITY OF WILMINGTON	8-12-11
10	REVISED PER CITY OF WILMINGTON FIRE & LIFE SAFETY	8-12-11

**GRADING & EROSION CONTROL PLAN**

**SOUTH FRONT APARTMENTS**

WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

**MALPASS ENGINEERING, P.C.**  
1154 SHUFFARD BOULEVARD  
WILMINGTON, NORTH CAROLINA 28412  
Phone 910-392-5243 Fax 910-392-5200 License No. C-2820

Owner: SOUTH FRONT LLC  
150-A SOUTH THIRD STREET  
WILMINGTON, NC 28401  
Phone: 910-251-5030

DATE: 3-10-11  
SCALE: 1"=30'  
DRAWN: JCB  
CHECKED: JEM  
PROJECT NO: 198  
SHEET NO: 28  
OF: 5

N/F  
SEABOARD COAST LINE RR  
ZONED: LI (LIGHT INDUSTRIAL)  
LAND USE: BUSINESS

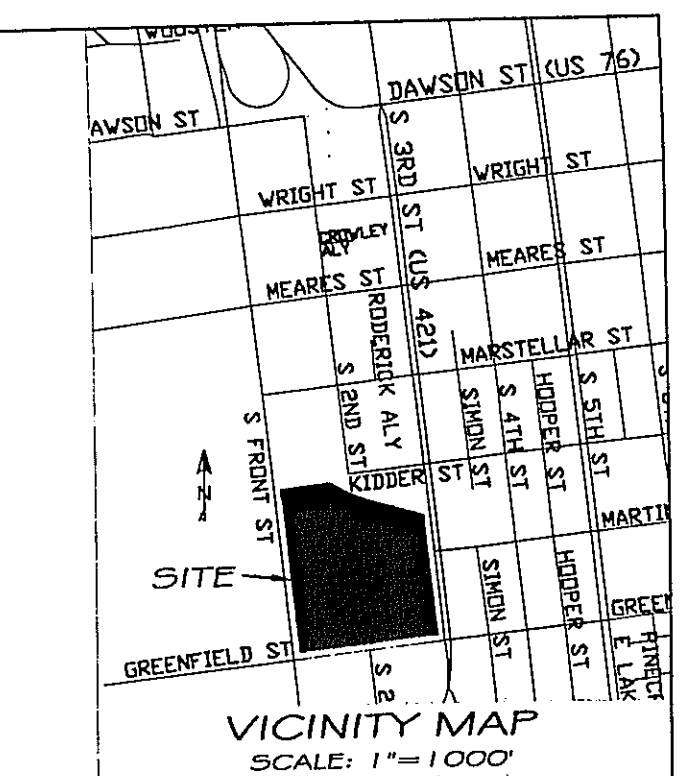
N/F  
SEABOARD COAST LINE RR  
ZONED: LI (LIGHT INDUSTRIAL)  
LAND USE: BUSINESS

TABLE DISCLOSING LOCATION  
OF FOUND PROPERTY CORNERS  
FROM SAME AS INDICATED BY  
BOOK 5510, PAGE 816

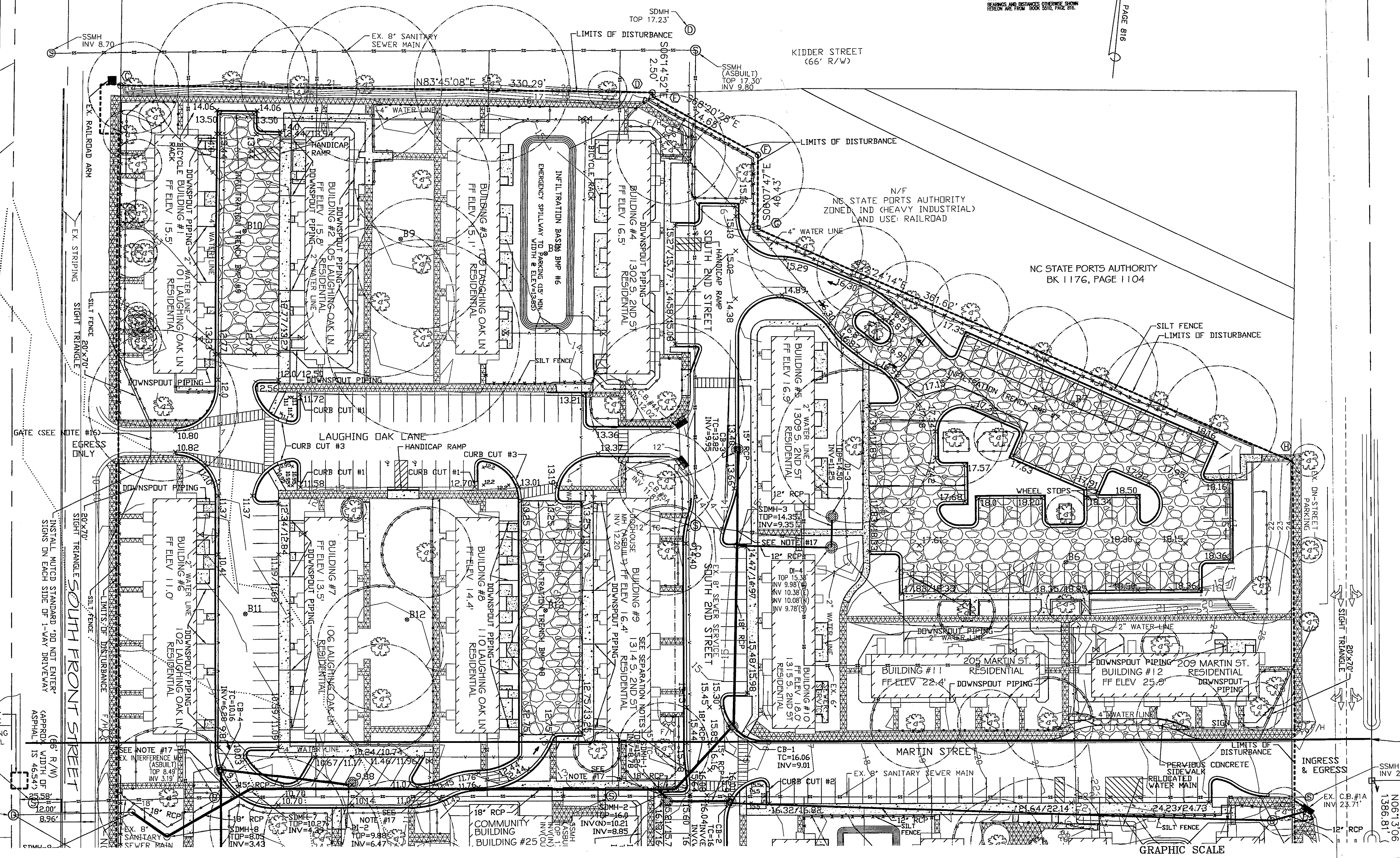
Q/1 LINE CONTROL POINT	0.20'
Q/2 LINE CONTROL POINT	0.07'
Q/3 LINE CONTROL POINT	0.18'
Q/4 LINE CONTROL POINT	0.06'
Q/5 LINE CONTROL POINT	0.18'
Q/6 LINE CONTROL POINT	0.06'
Q/7 LINE CONTROL POINT	0.36'
Q/8 LINE CONTROL POINT	0.17'

NOTE: THE WORK PERFORMED HEREIN  
IS A PROFESSIONAL SERVICE AND THE  
DESIGNER SHALL BE RESPONSIBLE FOR  
SUBMISSION AS THE CONTROL DATE.  
REVISIONS AND REVISIONS (OTHER THAN  
REVISIONS FROM BOOK 5510, PAGE 816)

KIDDER STREET  
(66' R/W)



- LEGEND**
- EXISTING SIDEWALK (TO REMAIN)
  - PROPOSED SIDEWALK
  - EXISTING TREE
  - EXISTING TREE (TO BE REMOVED)
  - EXISTING SANITARY SEWER
  - EXISTING WATER LINE
  - EXISTING WATER VALVE
  - EXISTING CURB INLET
  - PROPOSED PERVIOUS CONCRETE
  - EXISTING FIRE HYDRANT
  - EXISTING POWER/TRAFFIC POLE
  - EXISTING NO PARKING SIGN
  - EXISTING RAILROAD ARM
  - PROPOSED GATE
  - EXISTING CONTOUR
  - PROPOSED STORM DRAIN PIPE
  - PROPOSED SPOT ELEVATION
  - PROPOSED INLET PROTECTION
  - CRITICAL ROOT ZONE
  - PROPOSED LIMITS OF DISTURBANCE (SEE NOTE #19)
  - EXISTING SOIL BORING LOCATION (B INDICATES BORING #)
  - PROPOSED TREE PROTECTION FENCING
  - PROPOSED SILT FENCE
  - EXISTING STORM DRAIN PIPE (NOT SURVEYED, APPROX. LOCATION BASED ON 1939 PLAN)



**Approved Construction Plan**

Name: [Signature] Date: 8/15/11

Planning: [Signature] (Public Utilities in Relation)

Traffic: [Signature] 8/15/11

Fire: [Signature] 8/11/11

MATCHLINE SEE SHEET 2 OF 5

---

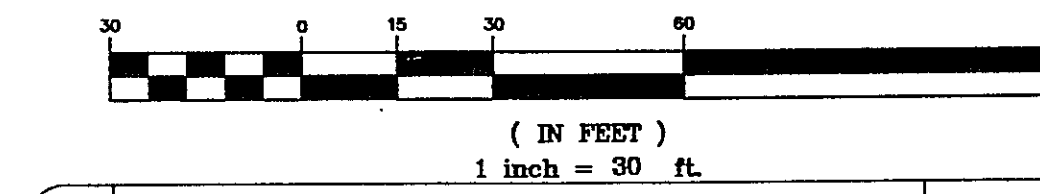
**STORMWATER MANAGEMENT PLAN**

**APPROVED**

CITY OF WILMINGTON  
ENGINEERING DEPARTMENT

DATE 8/11/11 PERMIT # 2011022

SIGNED [Signature]



REV. NO.	DESCRIPTION	DATE
1	REVISED TO LABEL PERVIOUS CONCRETE IMP.	3-16-11
2	REVISED PER CITY OF WILMINGTON TO ADJUST PARKING SPACES #133-210.	4-21-11
3	REVISED PER CITY OF WILMINGTON.	5-13-11
4	REVISED PER CLIENT TO ADJUST LAYOUT TO ADD GARAGE HOUSE.	6-2-11
5	REVISED PER CITY OF WILMINGTON TO NOT SHOW PROPOSED FENCING & ADJUST PARKING.	7-5-11
6	REVISED PER CITY OF WILMINGTON.	7-28-11
7	REVISED PER MEET TO ADD SIGNS.	8-4-11
8	REVISED PER CITY OF WILMINGTON ENGINEERING DEPARTMENT.	8-11-11
9	REVISED PER CITY OF WILMINGTON FIRE & LIFE SAFETY.	8-12-11

**GRADING & EROSION CONTROL PLAN**

1400 S. 2ND STREET  
**SOUTH FRONT APARTMENTS**  
WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

MALPASS ENGINEERING, P.C.  
1134 SHIPYARD BOULEVARD  
WILMINGTON, NORTH CAROLINA 28412  
Phone: 910-392-5245 Fax: 910-392-5203 License No. C-2820

Owner: SOUTH FRONT LLC  
1510-A SOUTH THIRD STREET  
WILMINGTON, NC 28401  
PHONE: 910-251-5030

DATE: 3-10-11  
SCALE: 1"=30'  
DRAWN: JCB  
CHECKED: JEM  
PROJECT NO: 193

SHEET No. 2C  
OF: 5

**NOTE: HANDICAP RAMPS SHALL BE PROVIDED AT ALL PARKING AREAS TO SIDEWALK CONNECTIONS INTERNAL TO THE SITE. PARKING SPACES LESS THAN 8.5' IN WIDTH BY 18' IN LENGTH SHALL BE SIGNED ALERTING DRIVERS TO THE LIMITED SIZE.**



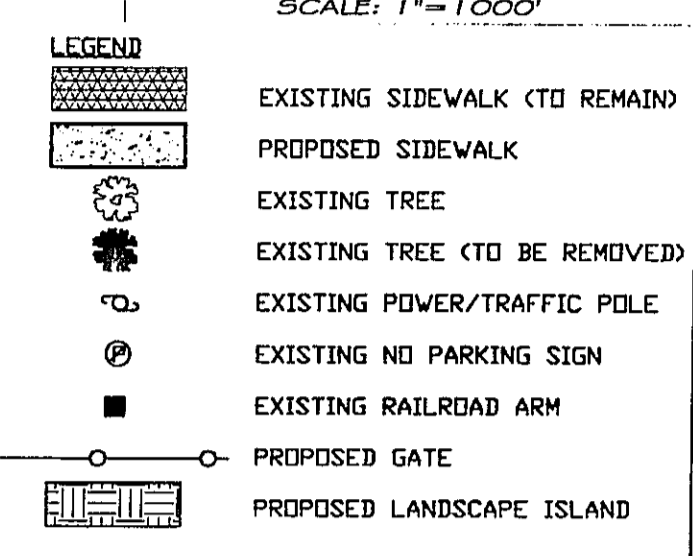
TABLE DISCLOSING LOCATION OF FOUND PROPERTY CORNERS FROM SAME AS INDICATED BY BOOK 5018, PAGE 818

BASE CONTROL POINT  
LINE CONTROL POINT  
S20°41'44"W 0.20'  
S24°35'04"W 0.07'  
S07°43'37"E 0.18'  
S36°20'37"W 0.06'  
S22°25'47"W 0.18'  
S23°10'07"W 0.00'  
S85°36'56"E 0.35'  
S89°29'24"W 0.17'

NOTE: THE ABOVE POINTS WERE DERIVED FROM A FIELD SURVEY OF THE PROPERTY CORNERS AND INSTANCES OF DISCREPANCY SHOWN HEREIN ARE FROM BOOK 5018, PAGE 818.

LANDSCAPE ISLAND	TOTAL AREA (SF)	IMPERVIOUS AREA (SF)	PERCENT IMPERVIOUS
LI-1	230.81	0	0
LI-2	408.44	59.64	14.60
LI-3	430.72	59.19	13.74
LI-4	392.56	0	0
LI-5	469.89	69.56	14.82
LI-6	219.05	0	0
LI-7	322.98	0	0
LI-8	325.54	44.83	13.73
LI-9	374.69	0	0
LI-10	502.72	40.03	7.96
LI-11	216.81	0	0
LI-12	216.21	0	0
LI-13	318.66	0	0
LI-14	345.10	0	0
LI-15	435.98	0	0
LI-16	302.57	0	0
LI-17	996.09	0	0
LI-18	475.55	0	0
LI-19	325.28	0	0
LI-20	250.18	0	0
LI-21	220.63	0	0
LI-22	293.82	0	0
LI-23	515.42	71.34	13.85
LI-24	330.54	47.30	14.31
LI-25	241.49	0	0
LI-26	218.44	0	0
LI-27	255.66	0	0
LI-28	218.06	0	0
LI-29	218.06	0	0
LI-30	343.08	36.43	10.62
LI-31	216.66	0	0
LI-32	245.39	0	0
LI-33	236.00	0	0
LI-34	545.09	64.15	11.77
LI-35	966.18	102.82	10.64
LI-36	418.83	0	0
LI-37	330.01	0	0
LI-38	322.39	0	0
LI-39	384.84	57.62	14.97
LI-40	224.71	0	0

SPACE #	DIMENSION
1-8	8.5' x 29'
9-23	8.5' x 18' (INCLUDES 2' OVERHANG)
24	9' x 18' (INCLUDES 2' OVERHANG)
24-42	8.5' x 18' (INCLUDES 2' OVERHANG)
43	9' x 18' (INCLUDES 2' OVERHANG)
44-60	8.5' x 18' (INCLUDES 2' OVERHANG)
61	9' x 18' (INCLUDES 2' OVERHANG)
62-75	8.5' x 18' (INCLUDES 2' OVERHANG)
76-77	9' x 18' (INCLUDES 2' OVERHANG)
78-108	8.5' x 18' (INCLUDES 2' OVERHANG)
109-131	8.5' x 18' (INCLUDES 2' OVERHANG)
132	9' x 18' (INCLUDES 2' OVERHANG)
133-143	8.5' x 18' (INCLUDES 2' OVERHANG)
144-210	8.5' x 18'
211-231	8.5' x 18'
232-247	8.5' x 18' (INCLUDES 2' OVERHANG)
248	9' x 18' (INCLUDES 2' OVERHANG)
249-290	8.5' x 18' (INCLUDES 2' OVERHANG)
291-294	8.5' x 18'
295-296	9' x 18'
297-302	8.5' x 18'
303	9' x 18'
304-316	8.5' x 18'
317-323	8.5' x 18'
324-340	8.5' x 18' (INCLUDES 3' OVERHANG)



NOTE: HANDICAP RAMPS SHALL BE PROVIDED AT ALL PARKING AREAS TO SIDEWALK CONNECTIONS INTERNAL TO THE SITE. PARKING SPACES LESS THAN 8.5' IN WIDTH BY 18' IN LENGTH SHALL BE SIGNED ALERTING DRIVERS TO THE LIMITED SIZE.

Approved Construction Plan

Planning Name: *[Signature]* Date: 8/15/11

Public Utilities: *[Signature]* 8/15/11

Traffic: *[Signature]* 8/15/11

Fire: *[Signature]* 8/15/11

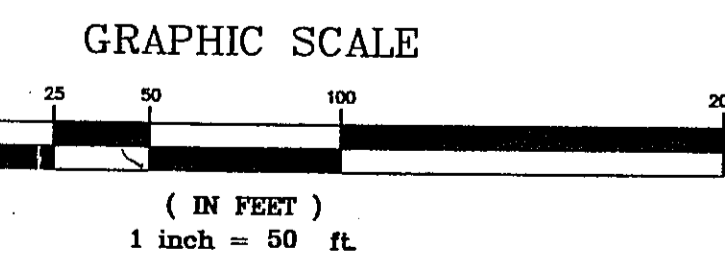
STORMWATER MANAGEMENT PLAN APPROVED

CITY OF WILMINGTON

ENGINEERING DEPARTMENT

DATE 8/15/11 PERMIT # 2010ZZ

SIGNED *[Signature]*



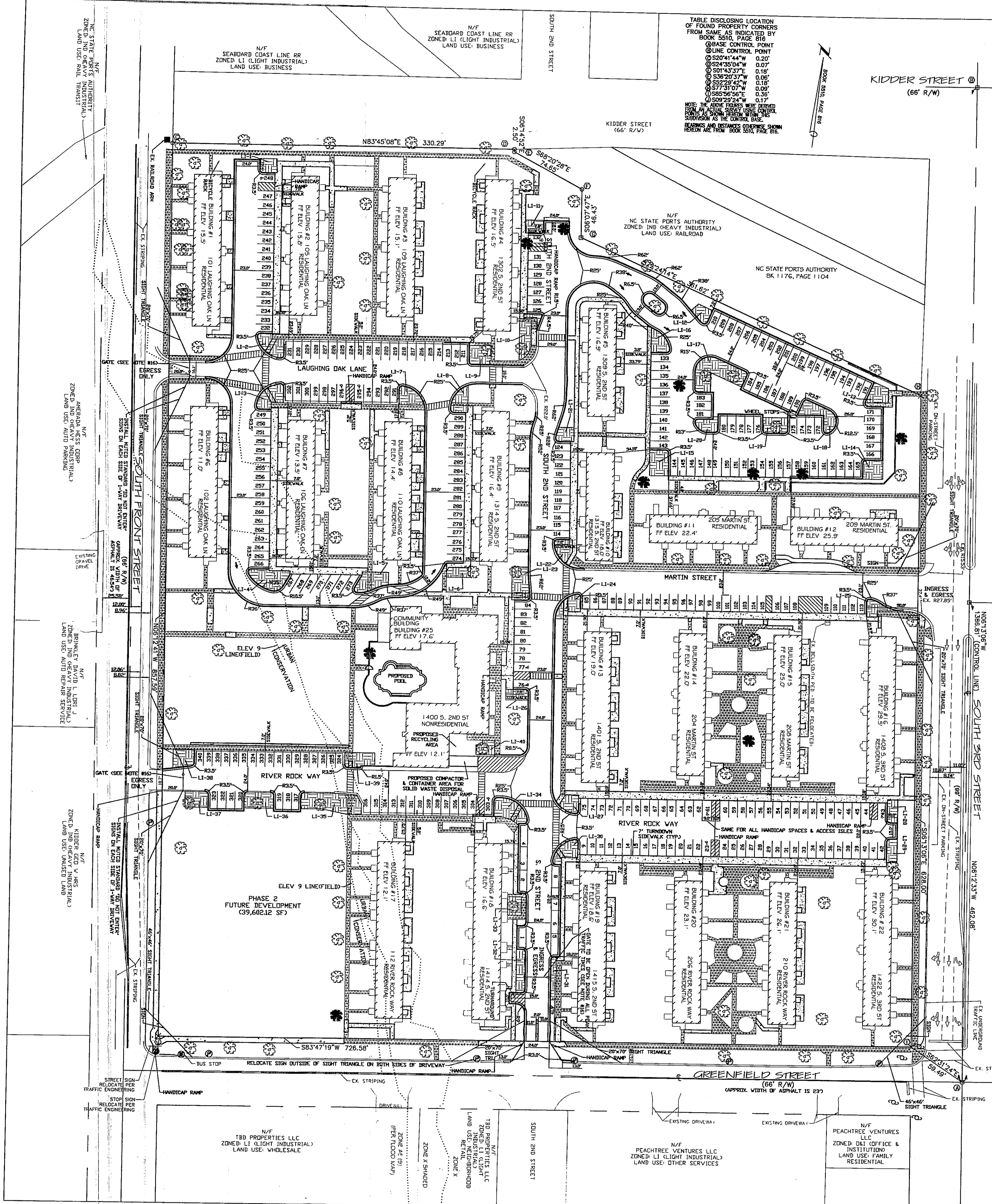
REV. NO.	REVISIONS	DATE
1	REVISED FOR CITY OF WILMINGTON TO SHOW GREENFIELD ST DRIVEWAY AS CITY STANDARD & ADJUST PARKING SPACES 4133-210 & 317-304	4-21-11
2	REVISED FOR CITY OF WILMINGTON	5-15-11
3	REVISED FOR CLIENT TO ADJUST DRIVEWAY TO ADD GARAGE HOUSE	6-4-11
4	REVISED FOR CITY OF WILMINGTON TO NOT SHOW PROPOSED FENCING & ADJUST PARKING	7-26-11
5	REVISED FOR CITY OF WILMINGTON	7-26-11
6	REVISED FOR MOODY TO ADD SIGN	8-4-11
7	REVISED FOR CITY OF WILMINGTON FIRE & LIFE SAFETY	8-12-11

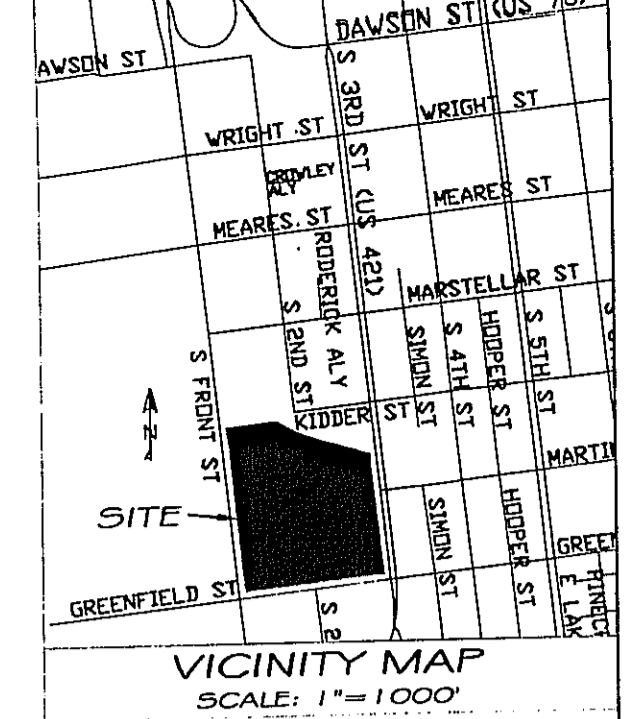
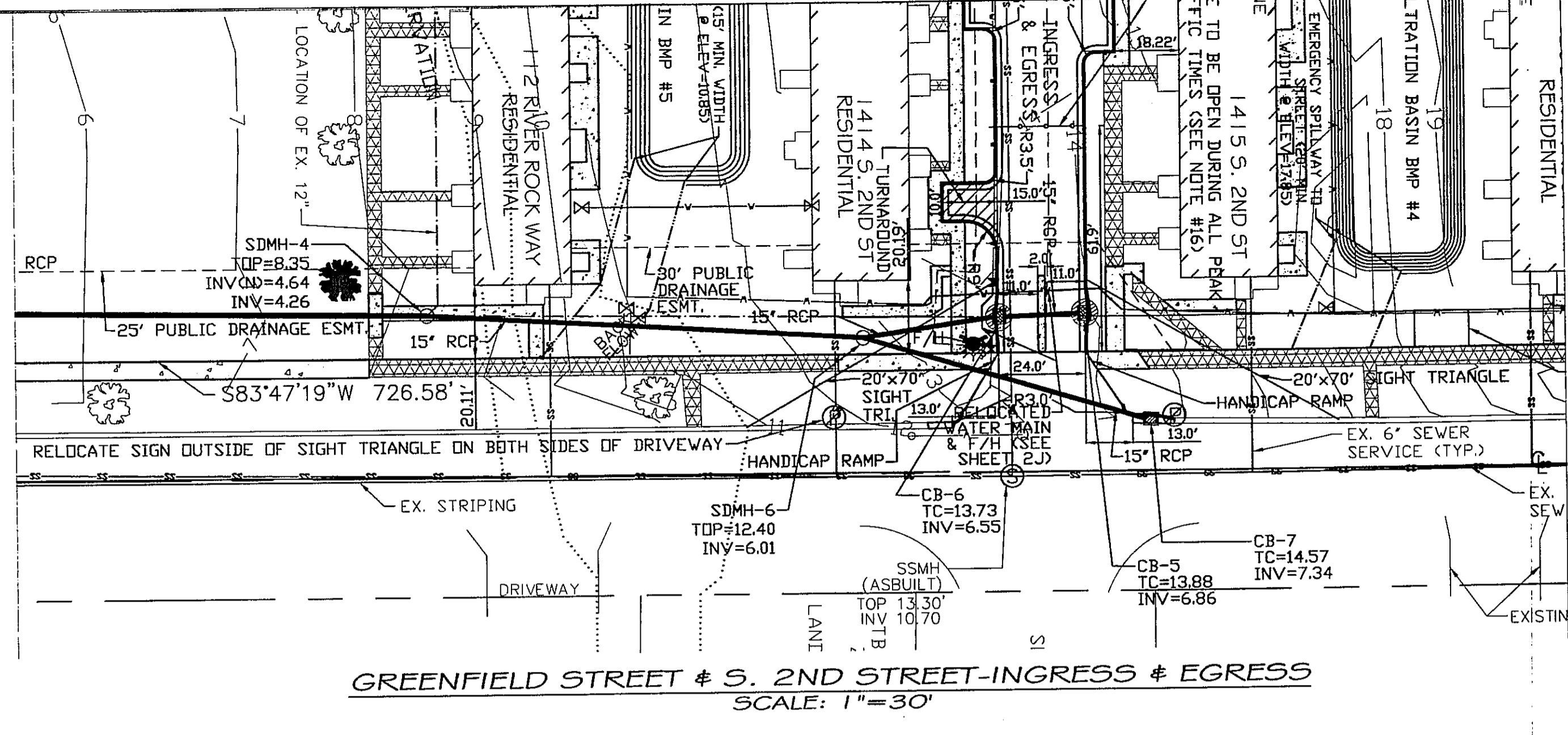
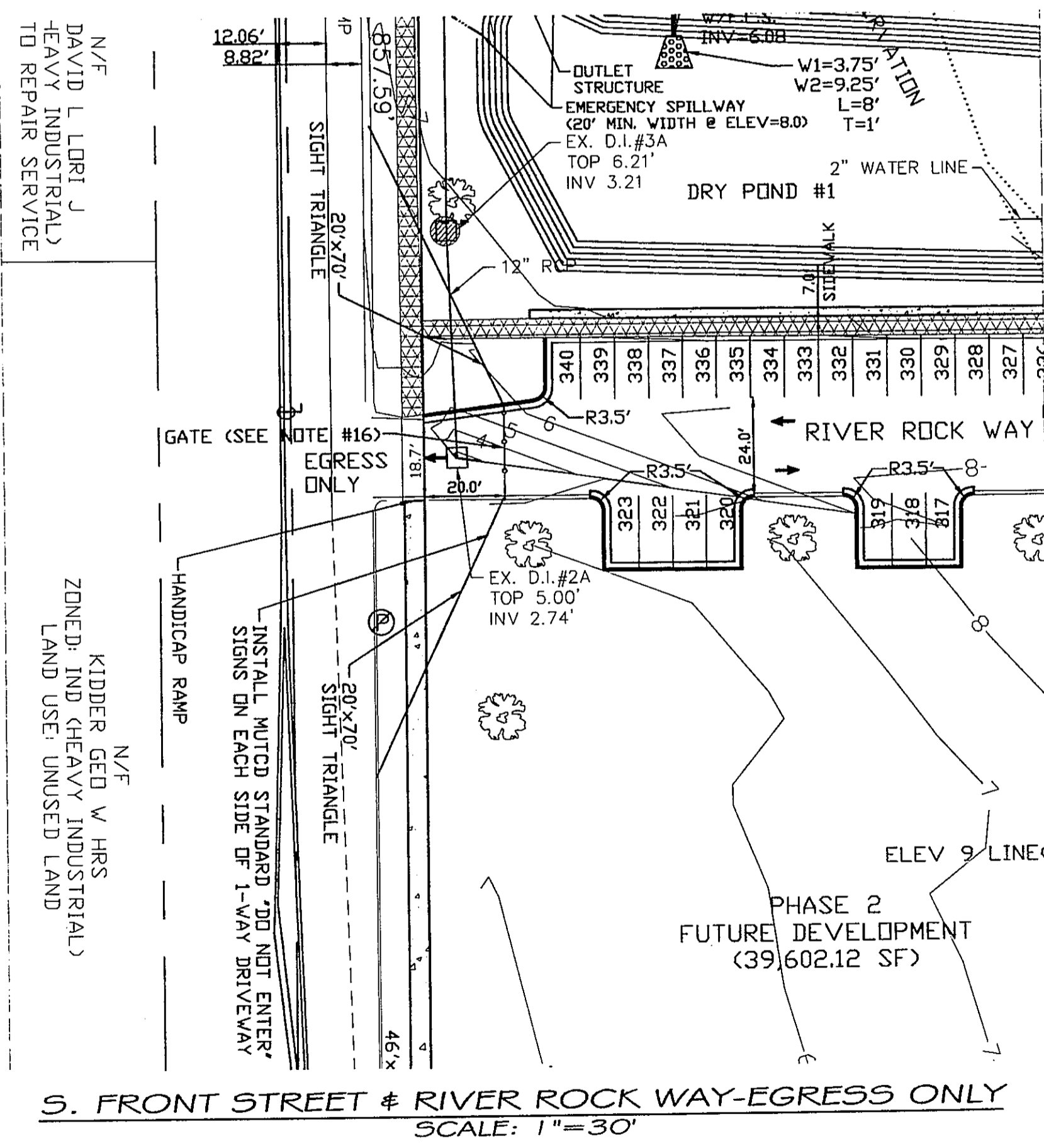
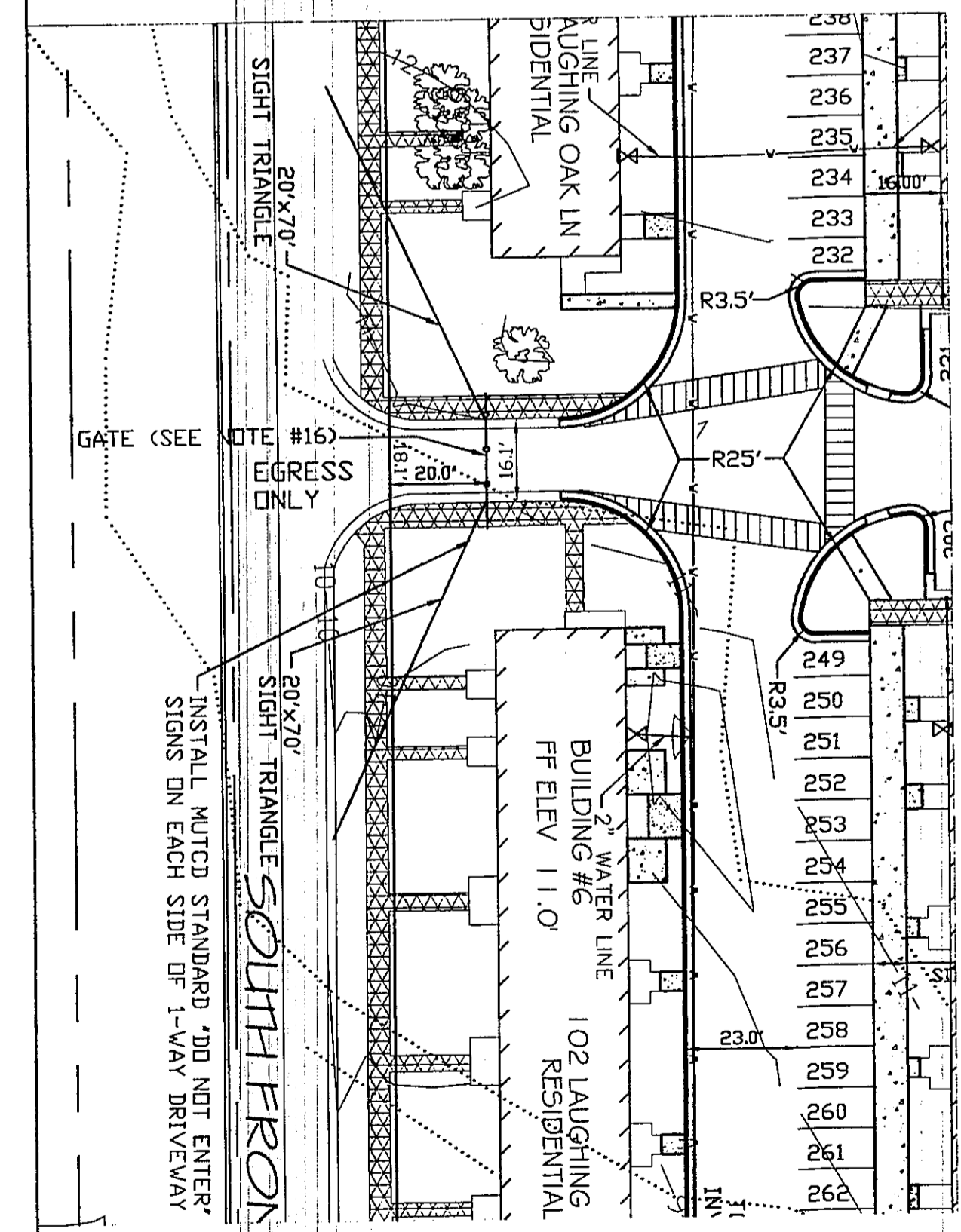
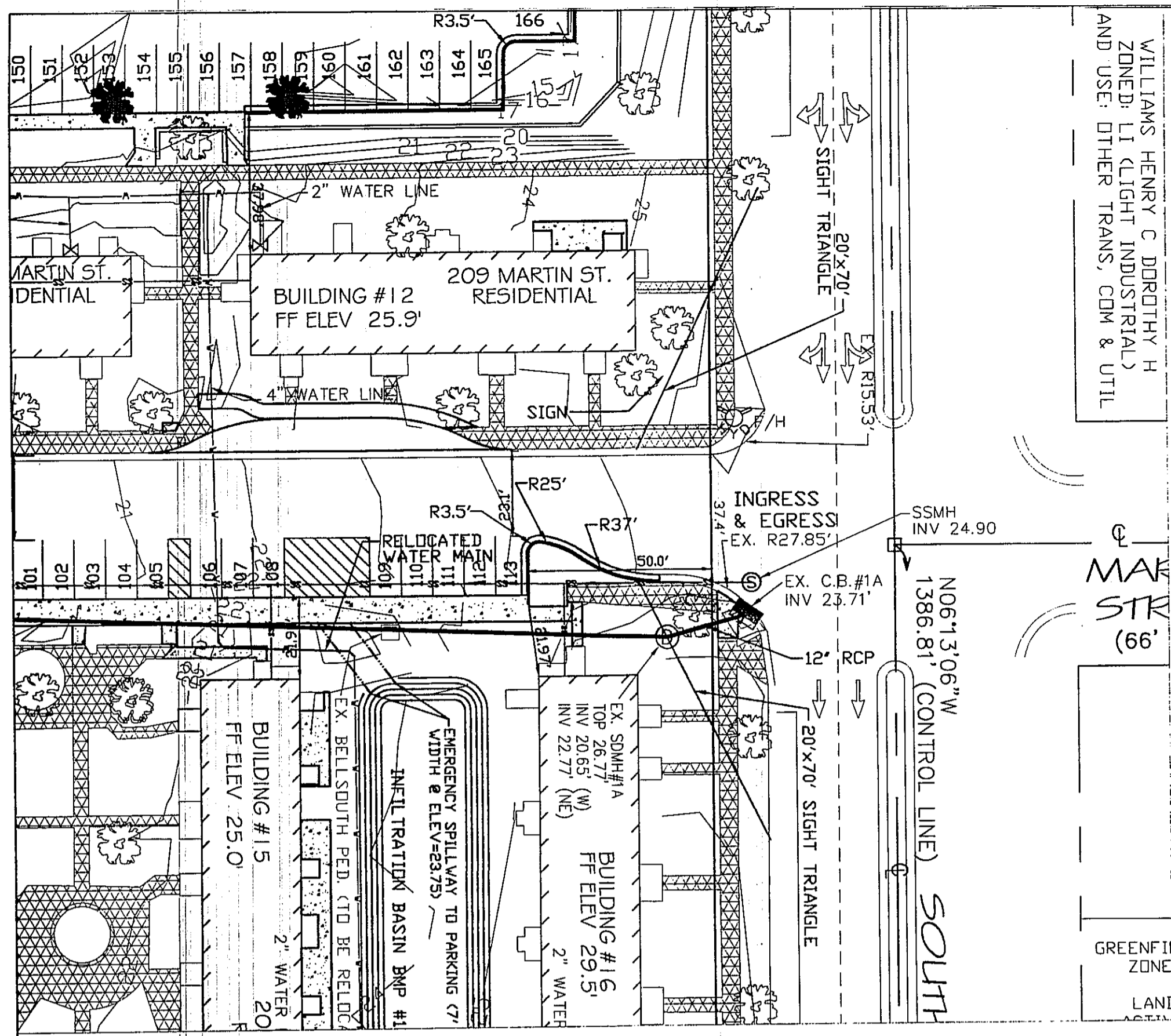
PARKING DIMENSION PLAN 1400 S. 2ND STREET SOUTH FRONT APARTMENTS WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

MALPASS ENGINEERING, P.C. 1134 SHIPYARD BOULEVARD WILMINGTON, NORTH CAROLINA 28412 Phone: 910-392-5843 Fax: 910-392-5203 License No. C-2320

Owner: SOUTH FRONT LLC 1510-A SOUTH THIRD STREET WILMINGTON, NC 28401 PHONE: 910-251-5030

DATE: 3-10-11 SCALE: 1"=50' DRAWN: JCB CHECKED: JEM PROJECT NO: 198 SHEET NO. 2E OF: 5





- LEGEND**
- EXISTING SIDEWALK (TO REMAIN)
  - PROPOSED SIDEWALK
  - EXISTING TREE
  - EXISTING TREE (TO BE REMOVED)
  - EXISTING SANITARY SEWER
  - EXISTING WATER LINE
  - EXISTING WATER VALVE
  - EXISTING CURB INLET
  - PROPOSED PERVIOUS CONCRETE
  - EXISTING FIRE HYDRANT
  - EXISTING POWER/TRAFFIC POLE
  - EXISTING NO PARKING SIGN
  - EXISTING RAILROAD ARM
  - PROPOSED GATE
  - EXISTING CONTOUR
  - PROPOSED UTILITY EASEMENT
  - PROPOSED STORM DRAIN PIPE
  - PROPOSED INLET PROTECTION
  - EXISTING STORM DRAIN PIPE (NOT SURVEYED, APPROX. LOCATION BASED ON 1939 PLAN)

**GRAPHIC SCALE**

( IN FEET )  
1 inch = 30 ft

REV NO.	DESCRIPTION	DATE
1	REVISED PER CITY OF WILMINGTON TO SHOW UNIMPROVED PORTION OF CITY STREETS & ADJACENT PARKING SPACES. EGRESS ONLY & 15' RCP. REMOVE SIGNAGE PER ALONG SOUTHERN PORTION OF SITE.	4-21-11
2	REVISED PER CITY OF WILMINGTON.	5-13-11
3	REVISED PER CLIENT TO ADJUST LAYOUT TO ADD CURVED DRIVE.	6-2-11
4	REVISED PER CITY OF WILMINGTON TO NOT SHOW PROPOSED FENCING & ADJUST PARKING.	7-25-11
5	REVISED PER CITY OF WILMINGTON.	7-25-11
6	REVISED PER CLIENT TO ADD SIGNAGE.	8-4-11
7	REVISED PER CITY OF WILMINGTON FIRE & LIFE SAFETY.	8-12-11

**PARKING DIMENSION PLAN**  
1400 S. 2ND STREET  
WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

**SOUTH FRONT APARTMENTS**

MALPASS ENGINEERING, P.C.  
1154 SHEPPARD BOULEVARD  
WILMINGTON, NORTH CAROLINA 28412  
Phone 910-362-5043 Fax 910-362-5293 License No. C-2520

Owner: SOUTH FRONT LLC  
1510-A SOUTH THIRD STREET  
WILMINGTON, NC 28401  
PHONE: 910-251-5030

DATE: 3-10-11  
SCALE: 1"=30'  
DRAWN: JCB  
CHECKED: JEM  
PROJECT NO: 198  
SHEET No. 2F  
OF: 5

**Approved Construction Plan**

Name: [Signature] Date: 8/15/11

Planning: [Signature] 8/15/11

Public Utilities: [Signature] 8/15/11

Traffic: [Signature] 8/15/11

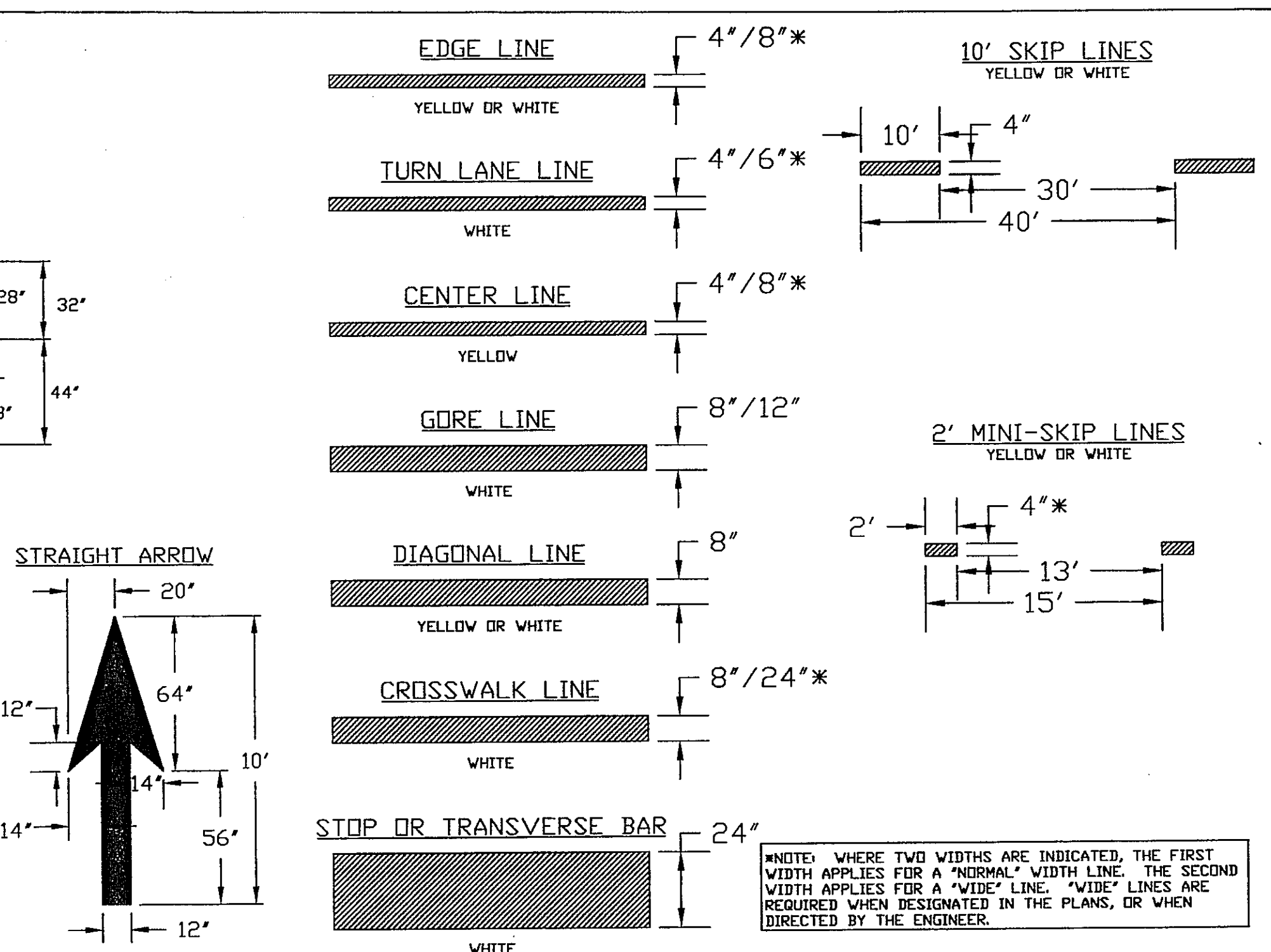
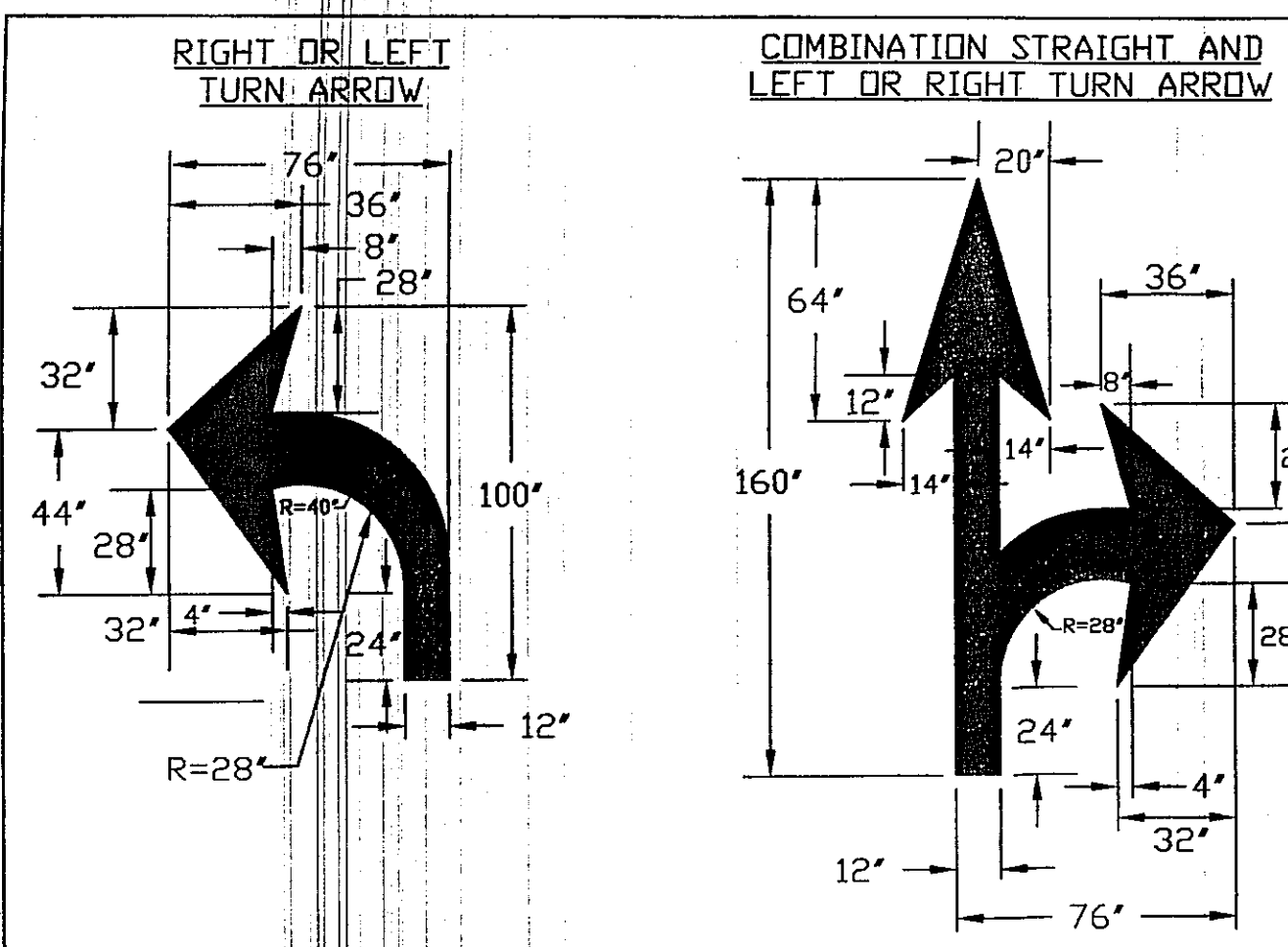
Fire: [Signature] 8/15/11

**STORMWATER MANAGEMENT PLAN**  
**APPROVED**  
CITY OF WILMINGTON  
ENGINEERING DEPARTMENT  
DATE 8/15/11 PERMIT # 2011022  
SIGNED: [Signature]

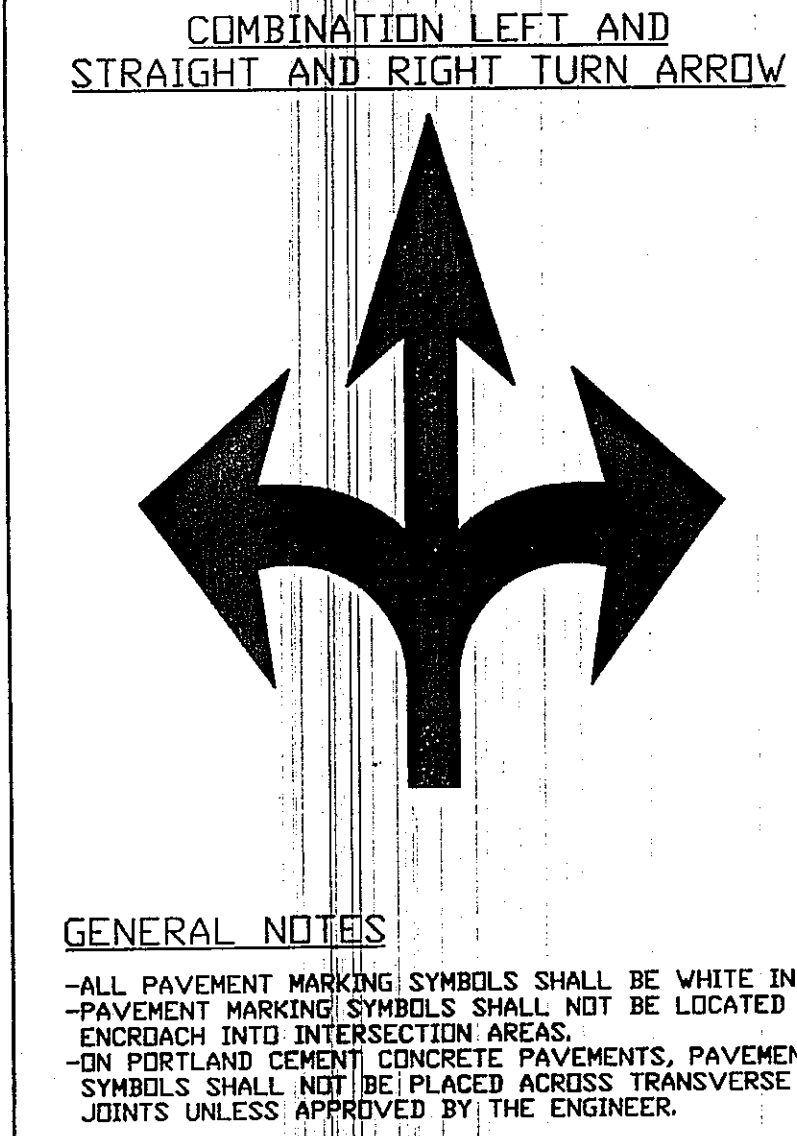
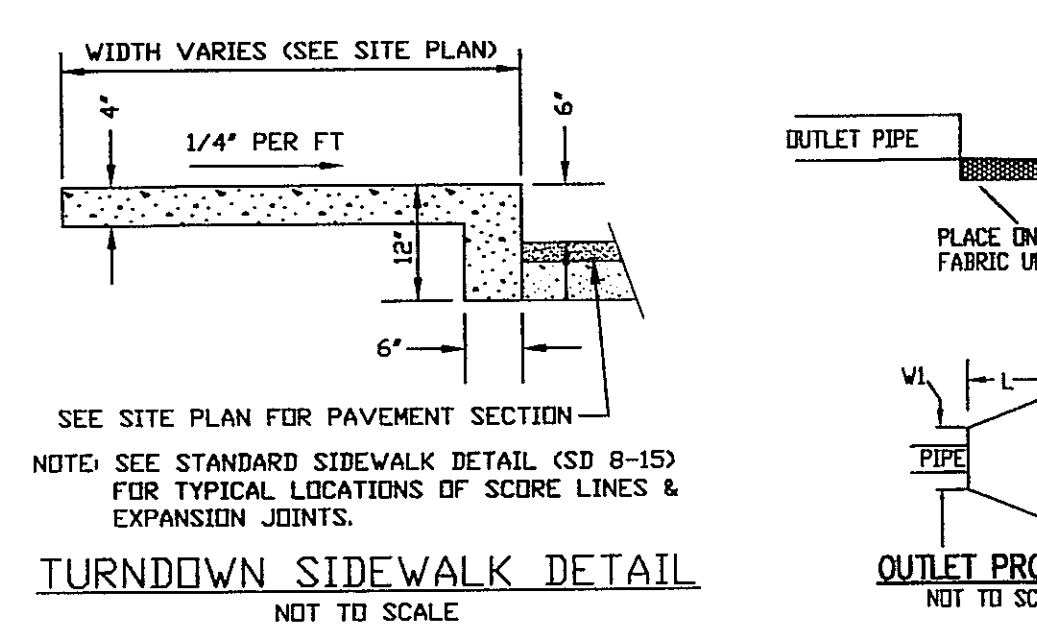






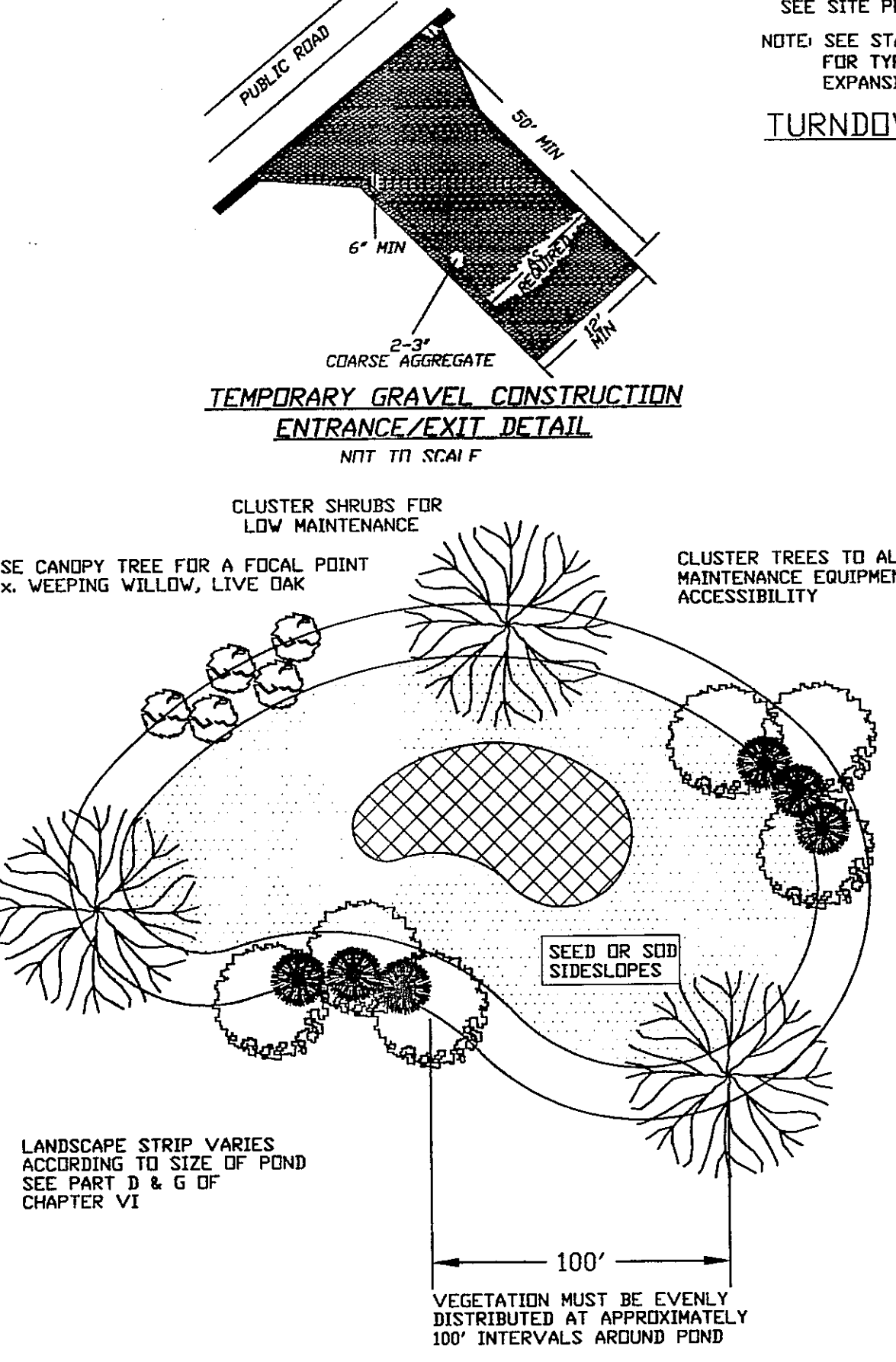
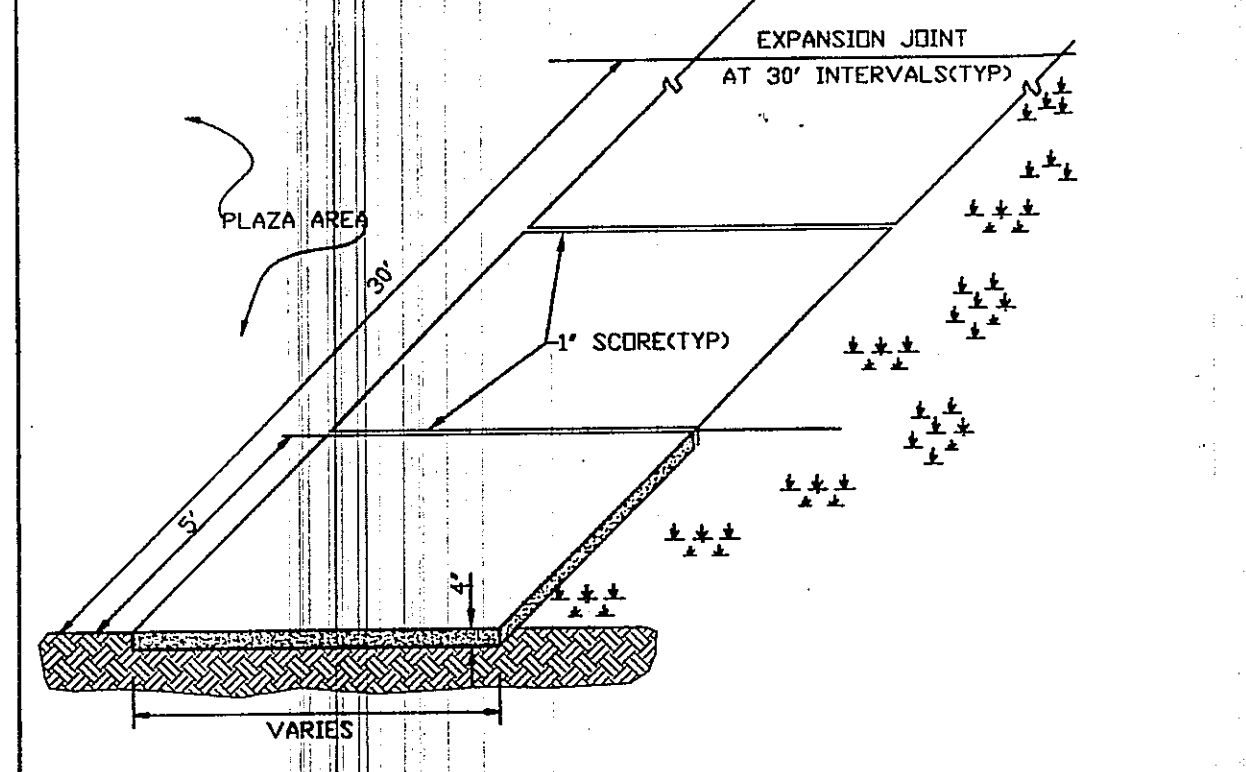


**PAVEMENT MARKINGS**  
LINE TYPES  
SD 11-01



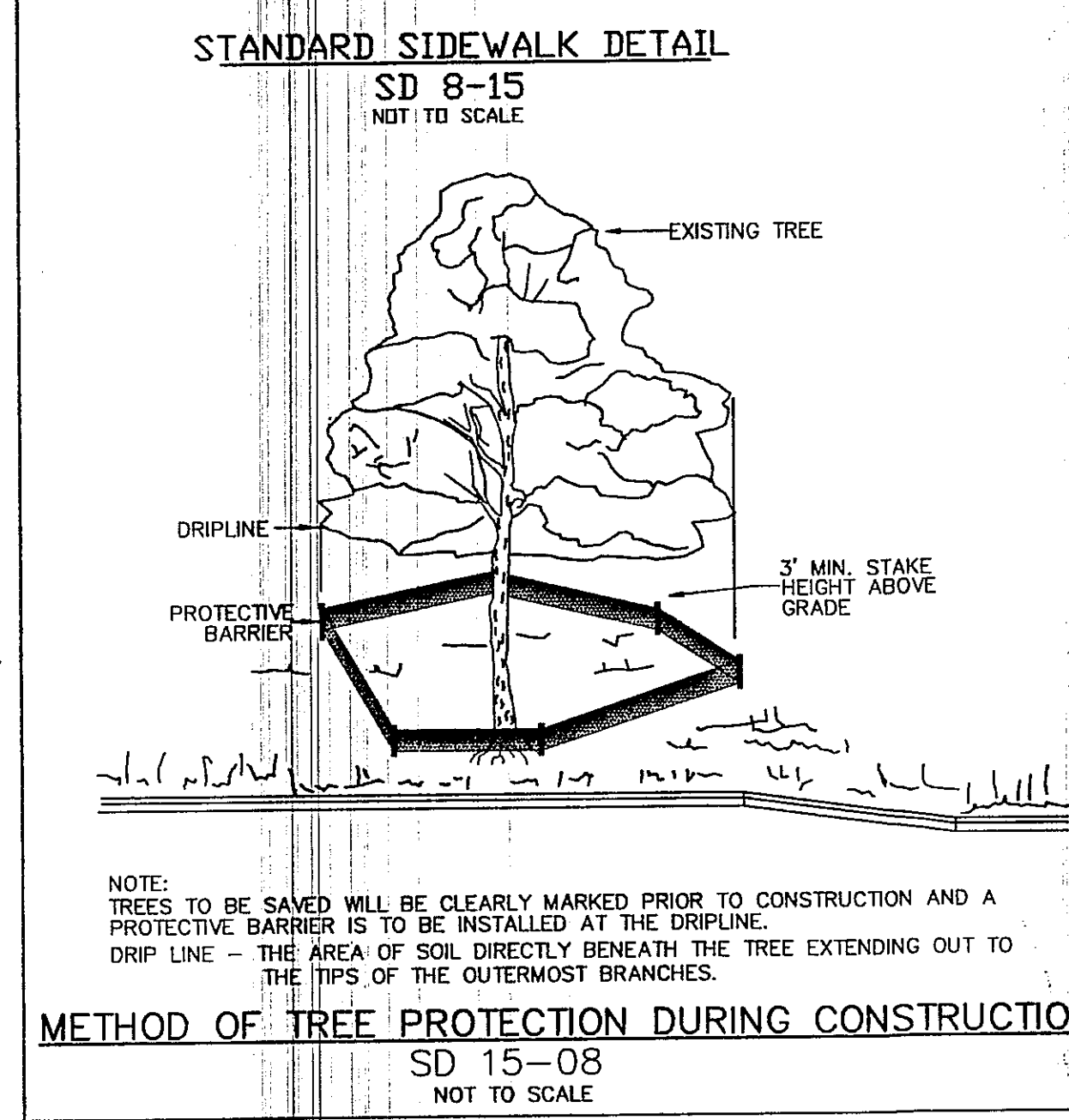
**PAVEMENT MARKINGS**  
ARROW SYMBOLS  
SD 11-03

**GENERAL NOTES**  
-ALL PAVEMENT MARKING SYMBOLS SHALL BE WHITE IN COLOR  
-PAVEMENT MARKING SYMBOLS SHALL NOT BE LOCATED AS TO ENDOUCH INTO INTERSECTION AREAS.  
-ON PORTLAND CEMENT CONCRETE PAVEMENTS, PAVEMENT MARKING SYMBOLS SHALL NOT BE PLACED ACROSS TRANSVERSE EXPANSION JOINTS UNLESS APPROVED BY THE ENGINEER.

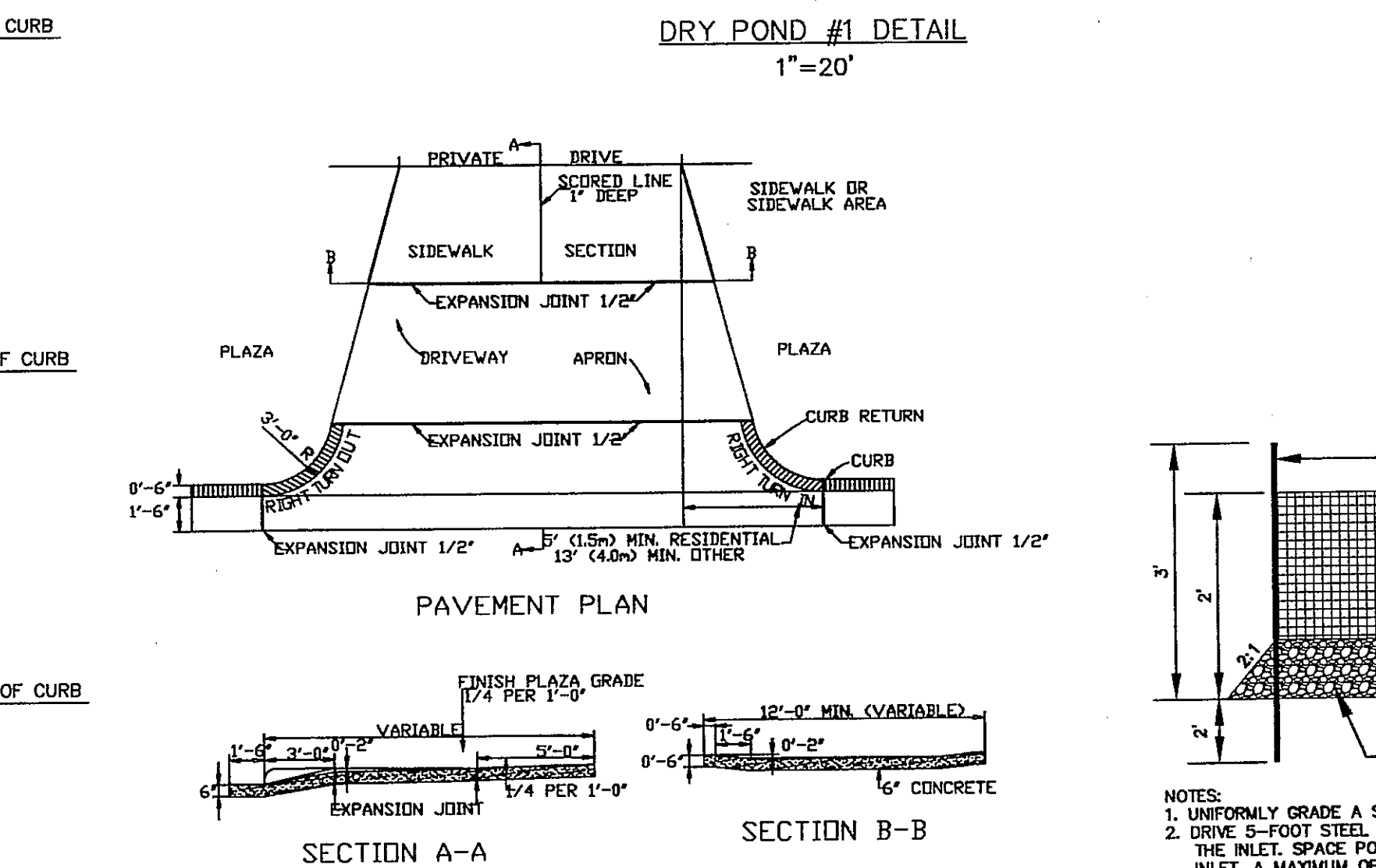
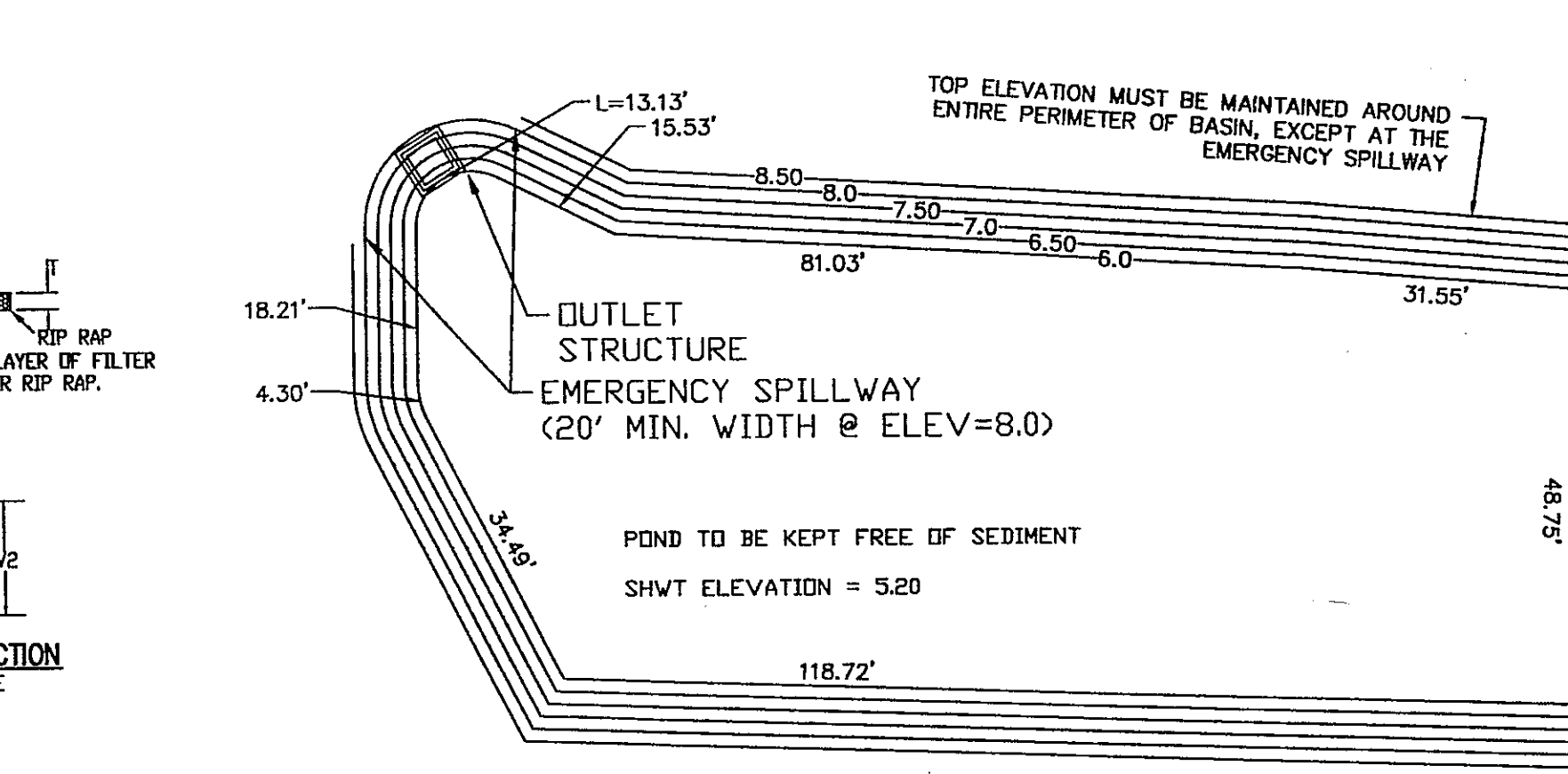
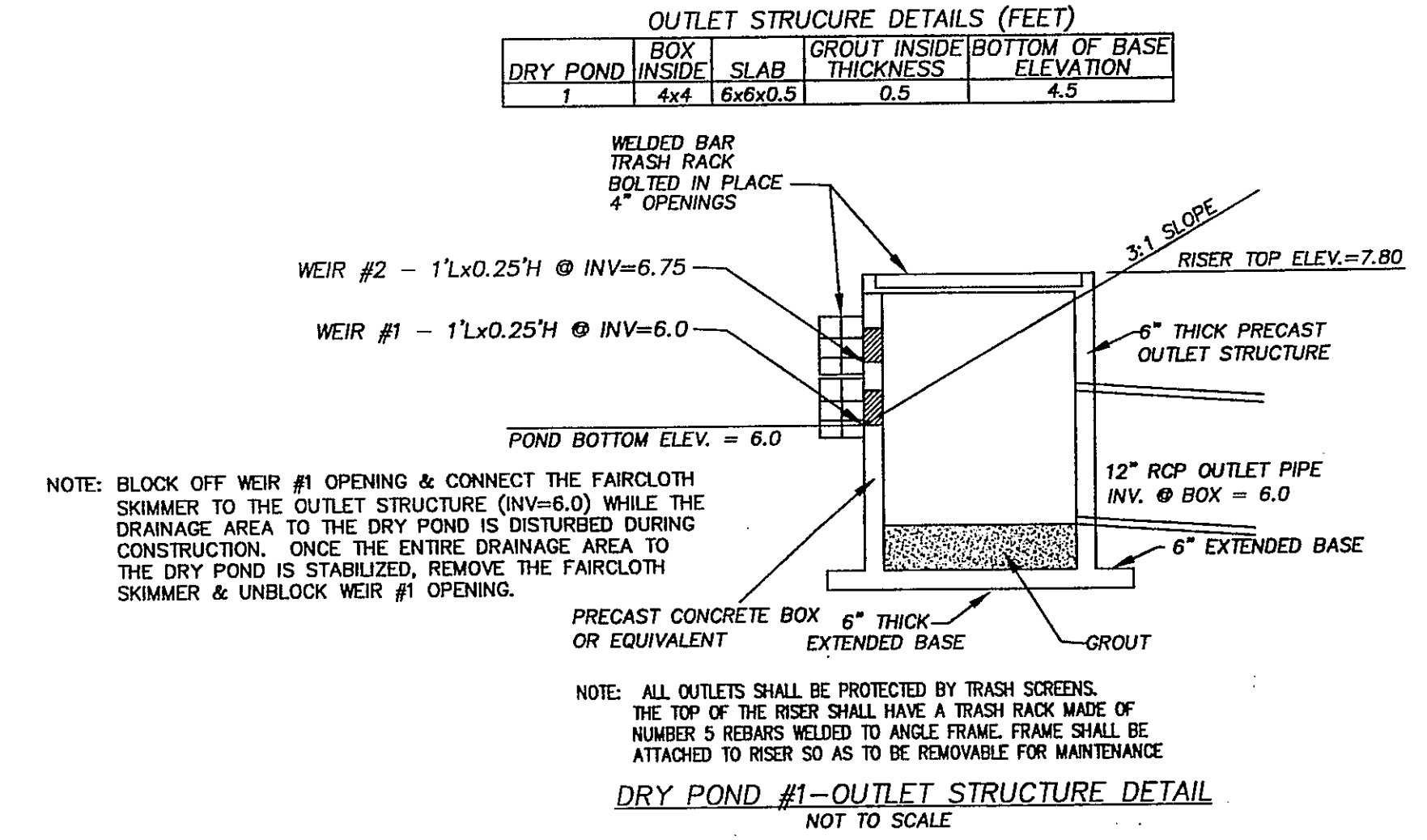


**Notes:**  
1. If possible, locate pond where vegetation exists.  
2. Suggest minimal clearing to conserve visual quality of site and minimize the additional of tree planting. An irregular shape provides a more natural appearance.  
3. Landscape strip shall be a maximum slope of 7:1 in order to plant vegetation.  
4. Provide a minimum of 3 inches of mulch around all vegetation.

**TYPICAL STORM WATER FACILITY**  
**LANDSCAPING PLAN**  
SD 15-16



**METHOD OF TREE PROTECTION DURING CONSTRUCTION**  
SD 15-08  
NOT TO SCALE



**PIPE SIZES - PROPOSED PIPES**

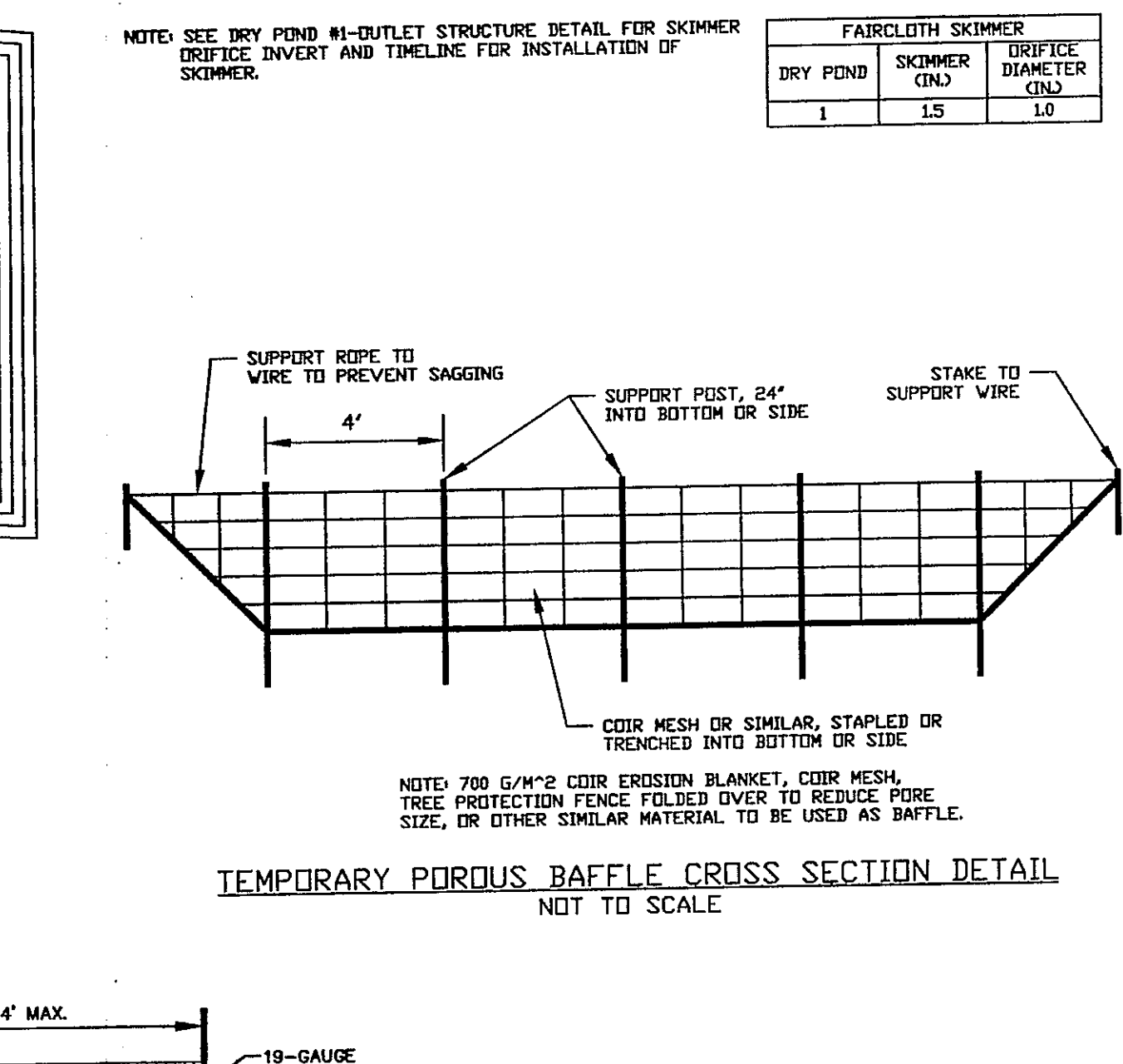
FROM	TO	SIZE (IN)	LENGTH (FT)	SLOPE (FT/FT)	U.S. INVERT (EL)	D.S. INVERT (EL)
DI-3	DI-4	12	17	0.06882	11.25	10.08
DI-4	SDMH-3	12	57	0.0111	9.98	9.35
CB-3	SDMH-3	15	59	.01017	9.95	9.35
SDMH-3	CB-1	18	112	0.00304	9.35	9.01
CB-1	SDMH-2	18	51	0.00314	9.01	8.55
SDMH-2	SDMH-1	18	11	0.0064	8.85	8.78
EX. CB#1A	EX. SDMH#1A	12	28	0.0427	23.71	22.77
EX. SDMH#1A	CB-2	12	371	0.0275	20.65	10.44
CB-2	DI-1	15	37	0.0092	9.20	8.86
DI-1	SDMH-1	15	8	0.01	8.86	8.78
SDMH-1	SDMH-7	18	253	0.0174	8.78	4.39
SDMH-7	SDMH-8	18	60	0.015	4.39	3.43
SDMH-8	SDMH-9	18	27	0.0422	3.43	2.29
DI-2	CB-4	15	50	0.0024	6.47	6.28
CB-4	DRY POND #1	15	86	0.0023	6.28	6.08
CB-7	SDMH-6	15	82	0.0162	7.34	6.01
CB-5	CB-6	15	21	0.0148	6.86	6.55
CB-6	SDMH-6	15	37	0.0146	6.55	6.01
SDMH-6	SDMH-4	15	121	0.0145	6.01	4.26
SDMH-4	SDMH-5	18	188	0.0024	4.26	0.42
SDMH-5	EX. SDMH#7A	18	32	0.0225	0.42	C-0.30

**1 1/2" Faircloth Skimmer® Cut Sheet**  
J. W. Faircloth & Son, Inc.  
www.FairclothSkimmer.com

- Skimmer can be attached to a straight 4" sch 40 pipe through the dam but the pipe may need to be anchored to the bottom at the connection so it is secure. Coupling can be removed and hose attached to outlet using the threaded 1 1/2" fitting. Typical methods used: on a metal structure a steel stubout welded on the side at the bottom side with a 1 1/2" threaded coupling or reducer; on a concrete structure with a hole or orifice at the bottom, use a steel plate with a hole cut in it and coupling welded to it that will fit over the hole in the concrete and bolted to the structure with sealant; grout a 4" PVC pipe in a hole in the concrete to connect the skimmer.
- Dimensions are approximate, not intended as plans for construction.
- Barrel (solid, not foam core pipe) should be 1.4 times the depth of water with a maximum length of 6' so the inlet can be pulled to the side for maintenance. Skimmer is made for small sediment "traps" with a maximum depth of 4'.
- Inlet is 3" pipe between the straps with aluminum screen door for access to the 1 1/2" inlet and orifice inside.
- Capacity 1,728 cubic feet per day maximum with 1 1/2" inlet and 1 1/2" head. Inlet can be reduced by installing a smaller orifice using the plug and cutter provided to adjust flow rate for the particular basin volume and drawdown time required.
- Shipped assembled. User glues inlet extension and barrel, installs vent, cuts orifice in plug and attaches to outlet pipe or structure. Includes flexible hose, rope, orifice cutter, etc.

1-5inchCut TM 11-07 November 14, 2007

DRY POND	SKIMMER (IN)	DRIFICE DIAMETER (IN)
1	1.5	1.0



**Approved Construction Plan**

Name: *[Signature]* Date: *8/15/11*

Planning: *[Signature]*

Traffic: *[Signature]*

Fire: *[Signature]*

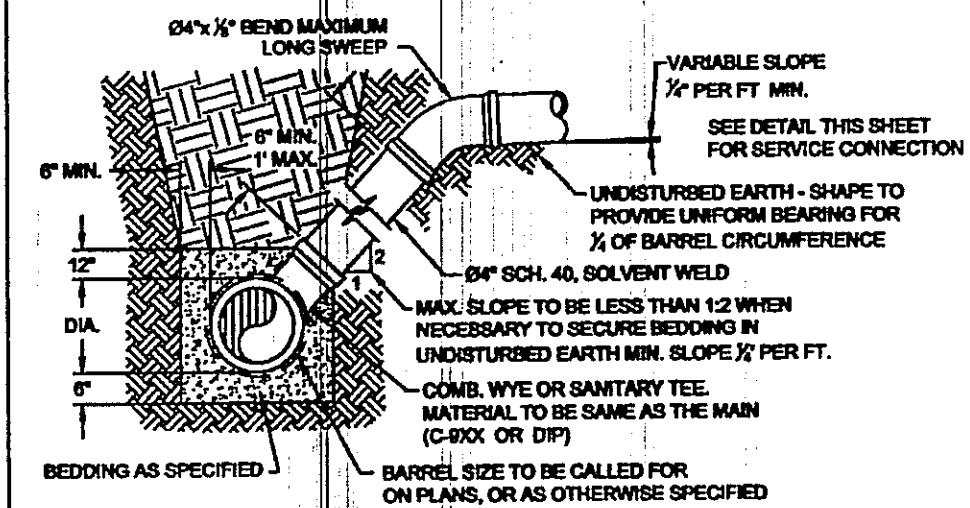
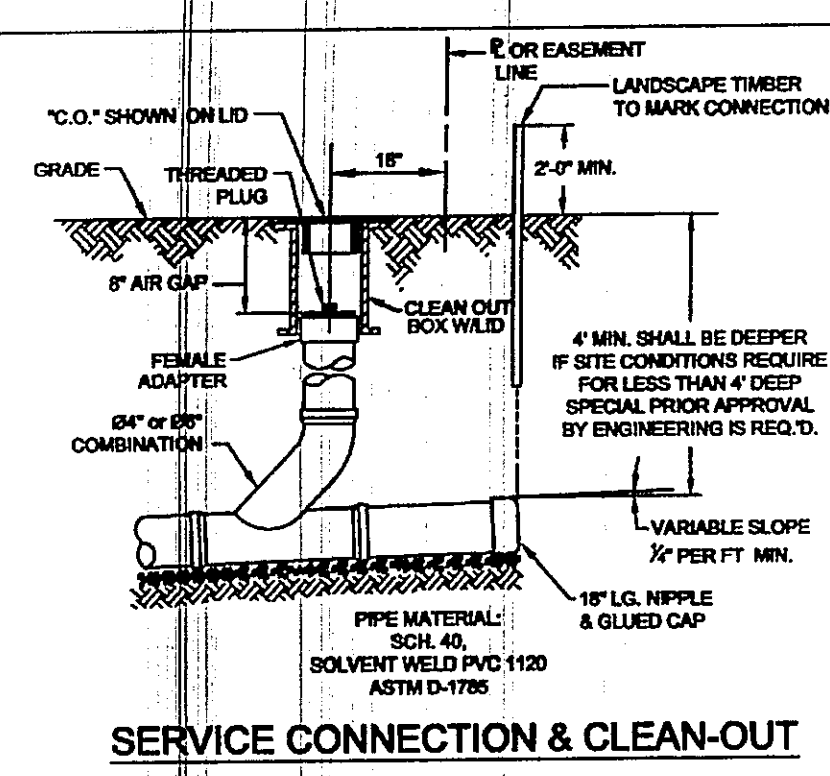
**STORMWATER MANAGEMENT PLAN**  
**APPROVED**  
CITY OF WILMINGTON  
ENGINEERING DEPARTMENT  
DATE *8/15/11* PERMIT # *2011022*  
SIGNED *[Signature]*

**SOUTH FRONT APARTMENTS**  
WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

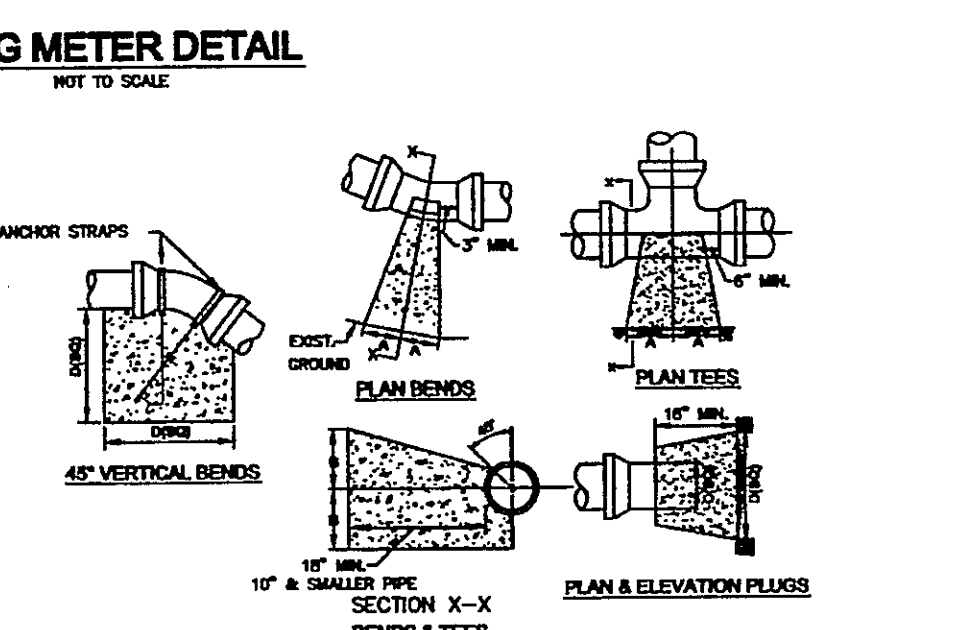
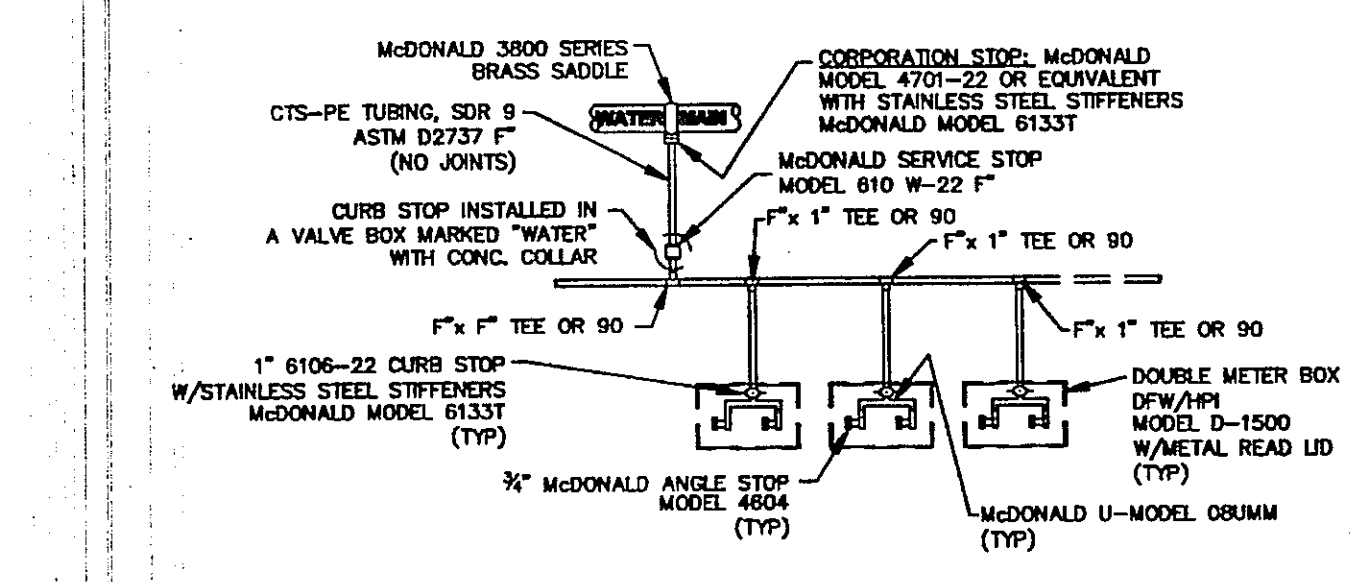
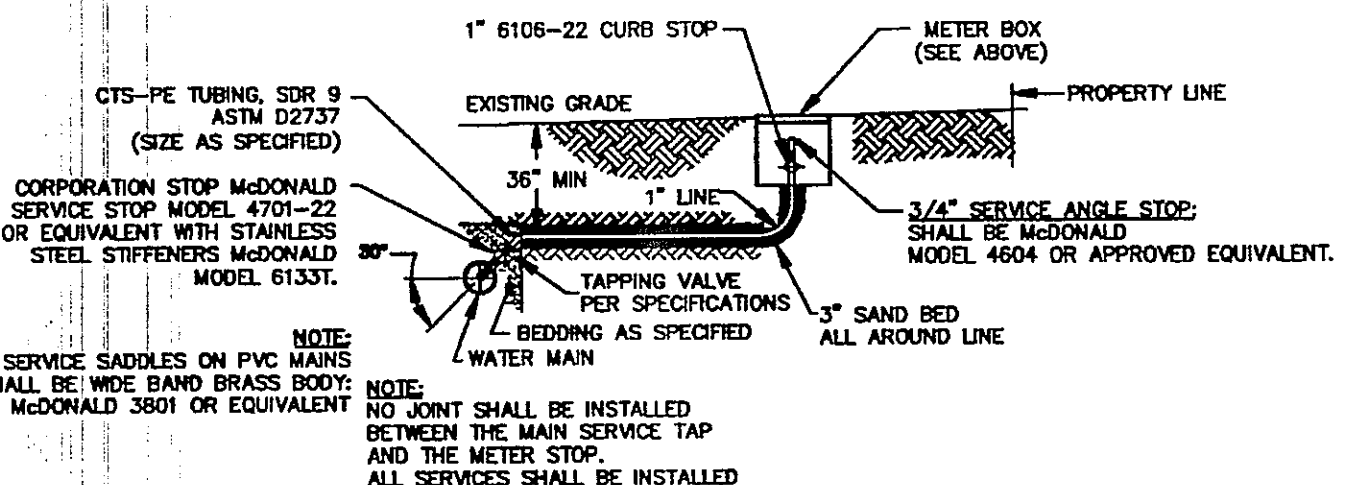
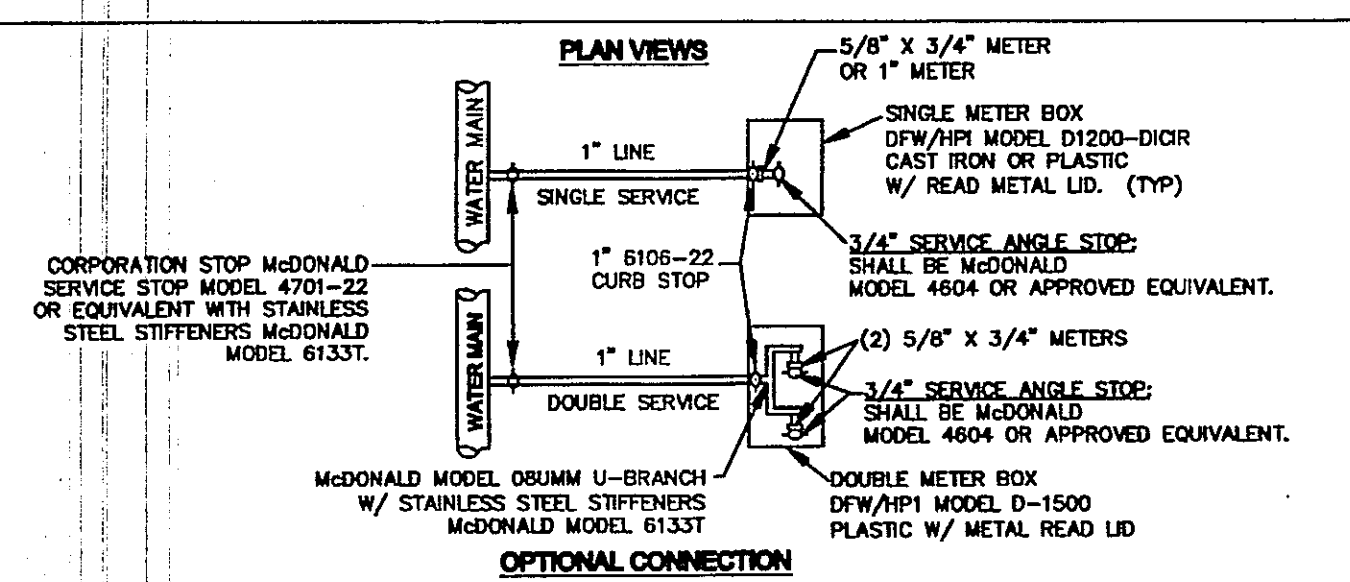
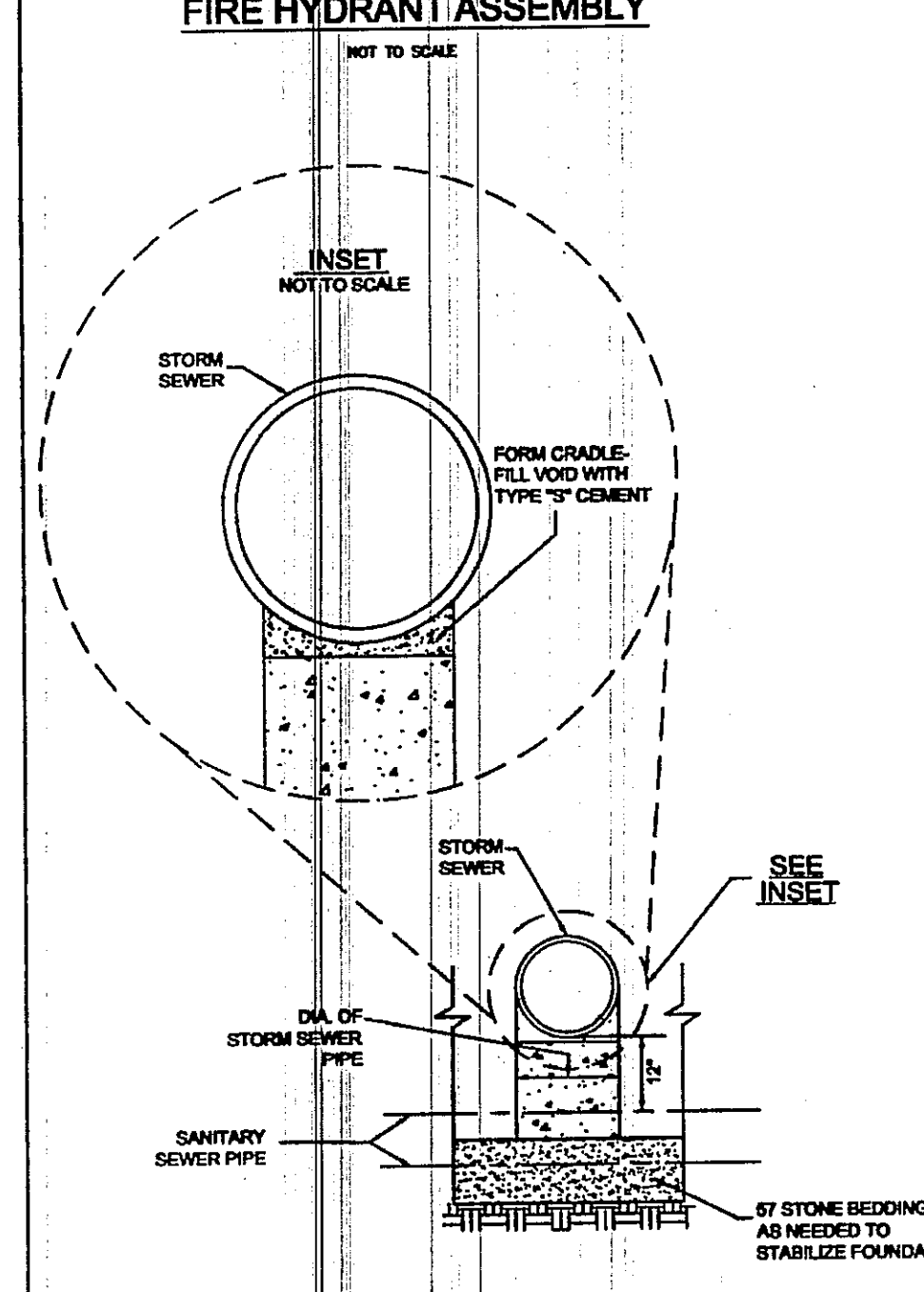
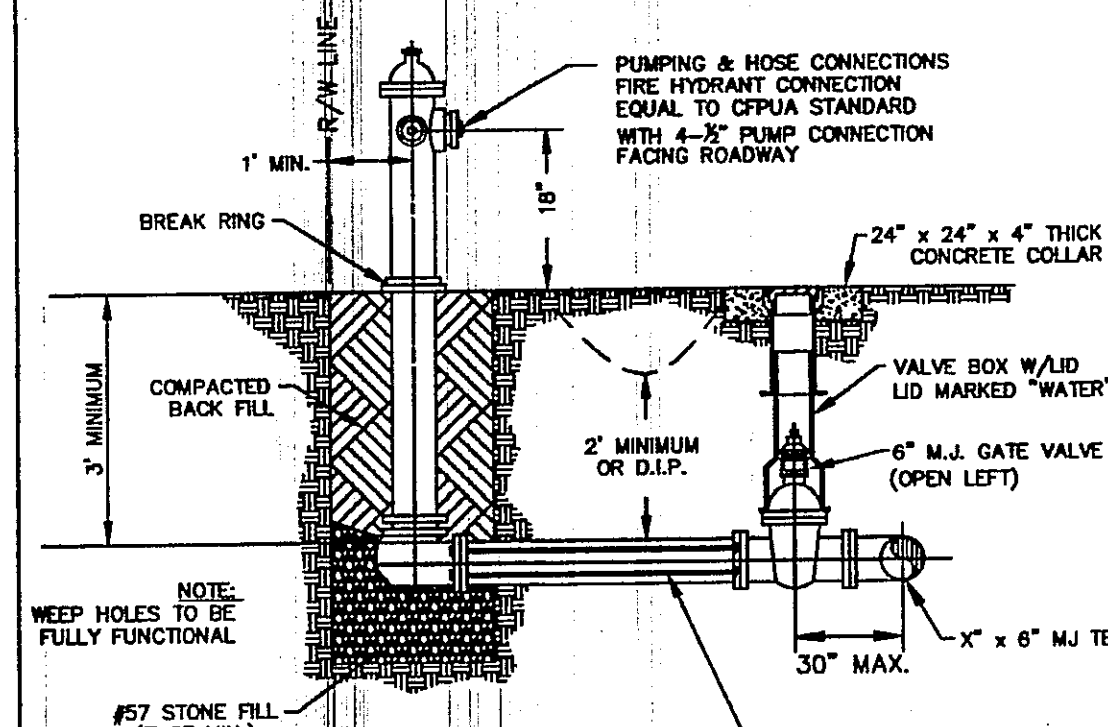
**MALPASS ENGINEERING, P.C.**  
1134 SHEPPARD BOULEVARD  
WILMINGTON, NORTH CAROLINA 28412  
Phone 910-382-8243 Fax 910-382-8203 License No. C-2500

Owner: SOUTH FRONT LLC  
1510-A SOUTH THIRD STREET  
WILMINGTON, NC 28401  
PHONE: 910-251-5000

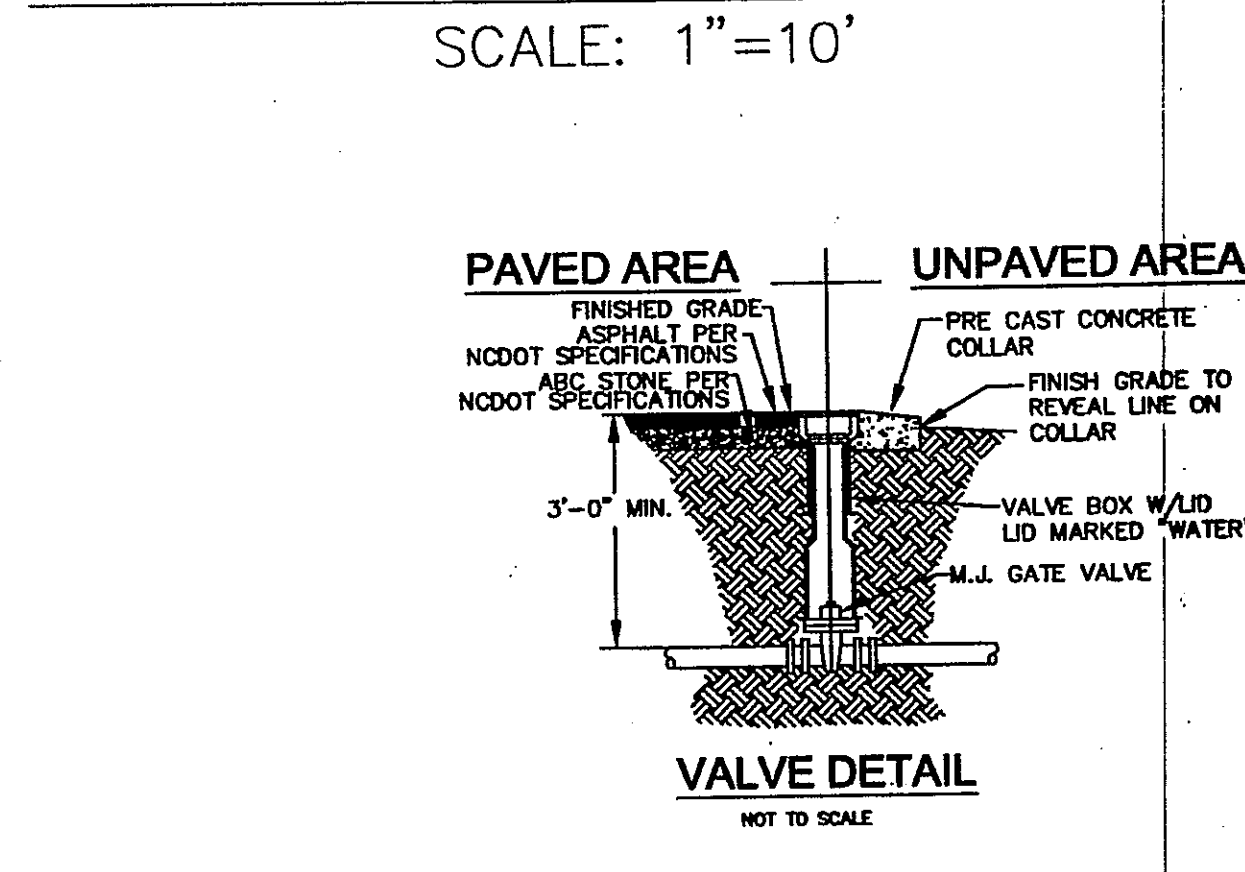
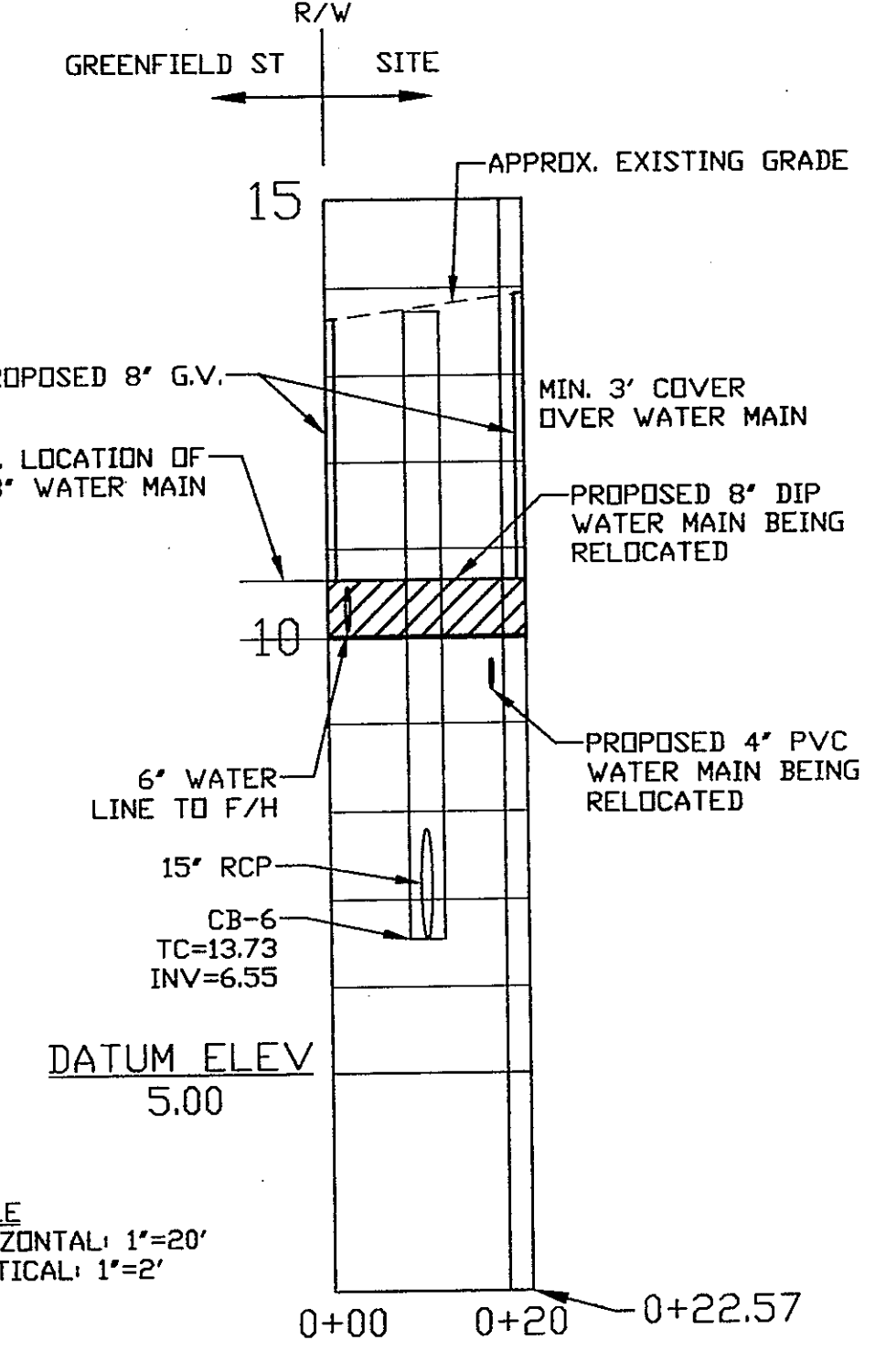
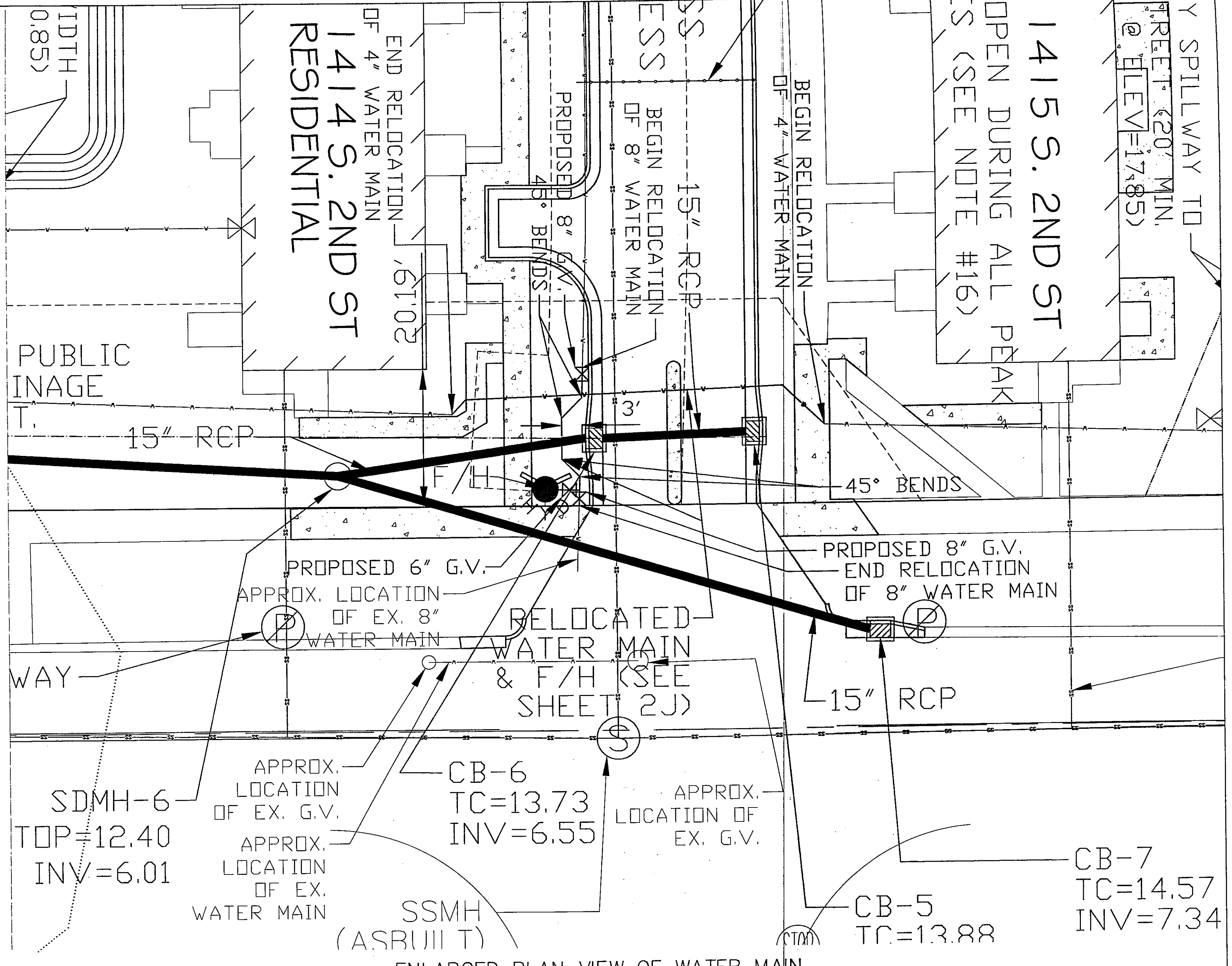
DATE: 3-10-11  
SCALE: N.T.S.  
DRAWN: JCB  
CHECKED: JSM  
PROJECT NO: 198  
SHEET NO: 21  
OF: 5



- STANDARD SEWER NOTES**
- SEWER GUARDS REQUIRED AT ALL MANHOLES. STAINLESS STEEL GUARDS REQUIRED AT MANHOLES LOCATED IN TRAFFIC AREAS.
  - SERVICES SHALL BE PERPENDICULAR TO MAIN AND TERMINATE AT ROW LINE. SERVICES IN CUL-DE-SACS ARE REQUIRED TO BE PERPENDICULAR OR MUST ORIGINATE IN MANHOLE AND TERMINATE AT RIGHT-OF-WAY LINE.
  - ALL SERVICES TYPING INTO DUCTILE IRON MAINS SHALL BE CONSTRUCTED OF 1/2" SCH. 40 WITH PROTECTED 401 CERAMIC EPOXY LINING.
  - 10" UTILITIES EASEMENT PROVIDED ALONG THE FRONTAGE OF ALL LOTS AND AS SHOWN.
  - NO FLEXIBLE COUPLINGS SHALL BE USED.

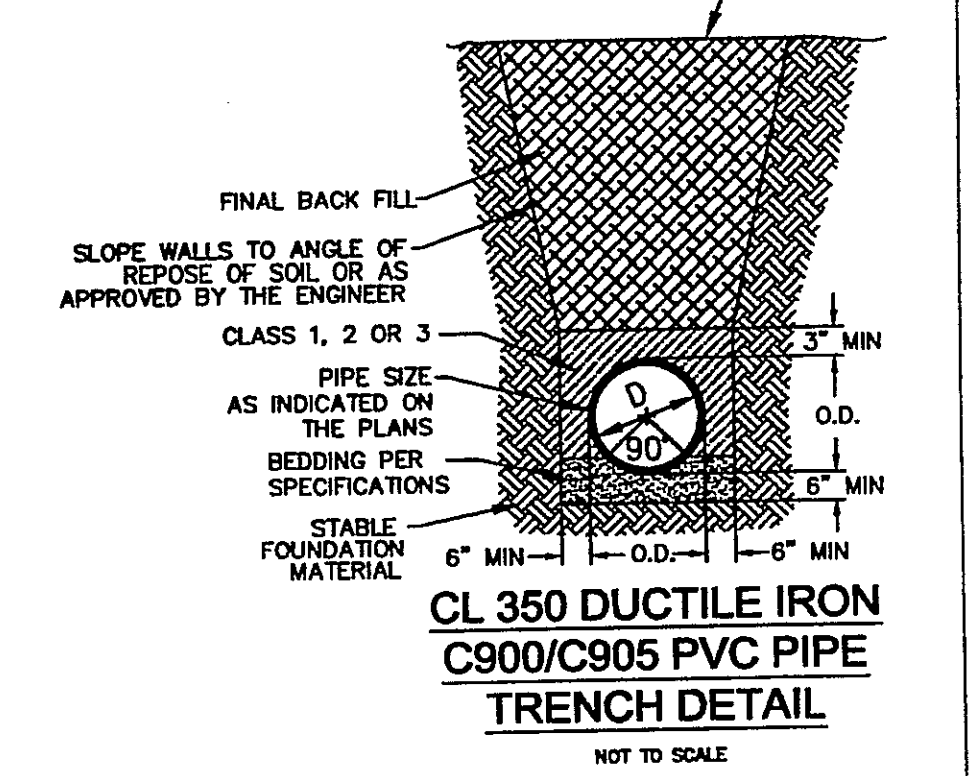


SIZE	90° BENDS		45° BENDS		22 1/2° BENDS		TEES/PLUGS		45° VERT. BENDS
	A	B	A	B	A	B	A	B	
3"	8"	6"	5"	6"	3"	7"	8"	8"	27"
4"	8"	9"	5"	9"	3"	11"	8"	9"	28"
6"	14"	11"	9"	9"	8"	8"	12"	9"	36"
8"	16"	16"	12"	12"	10"	13"	14"	13"	42"
10"	18"	22"	15"	14"	14"	16"	18"	15"	50"
12"	20"	28"	18"	17"	16"	16"	22"	18"	62"
14"	26"	29"	21"	19"	18"	18"	28"	20"	72"
16"	33"	29"	25"	21"	20"	21"	32"	21"	83"
18"	40"	30"	28"	24"	22"	23"	36"	24"	89"



- GENERAL NOTES:**
- NO EXCAVATED MATERIAL SHALL BE PLACED IN ANY STREAM, DITCH OR DRAINAGE-WAY.
  - THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES BEFORE ANY CONSTRUCTION BEGINS.
  - THE CONTRACTOR IS RESPONSIBLE FOR TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES WHILE CONSTRUCTION IS IN PROGRESS.
  - THE CONTRACTOR IS RESPONSIBLE FOR STABILIZATION OF ALL DISTURBED AREAS.
  - THE CONTRACTOR IS RESPONSIBLE FOR LAY DOWN & STOCKPILE AREAS (TO ARRANGE AND INSURE COMPLIANCE WITH ALL LOCAL AND STATE REGULATIONS).

REV. NO.	DESCRIPTION	DATE
1	REVISED PER CPUPA	8-12-11



WATER & SEWER DETAIL SHEET

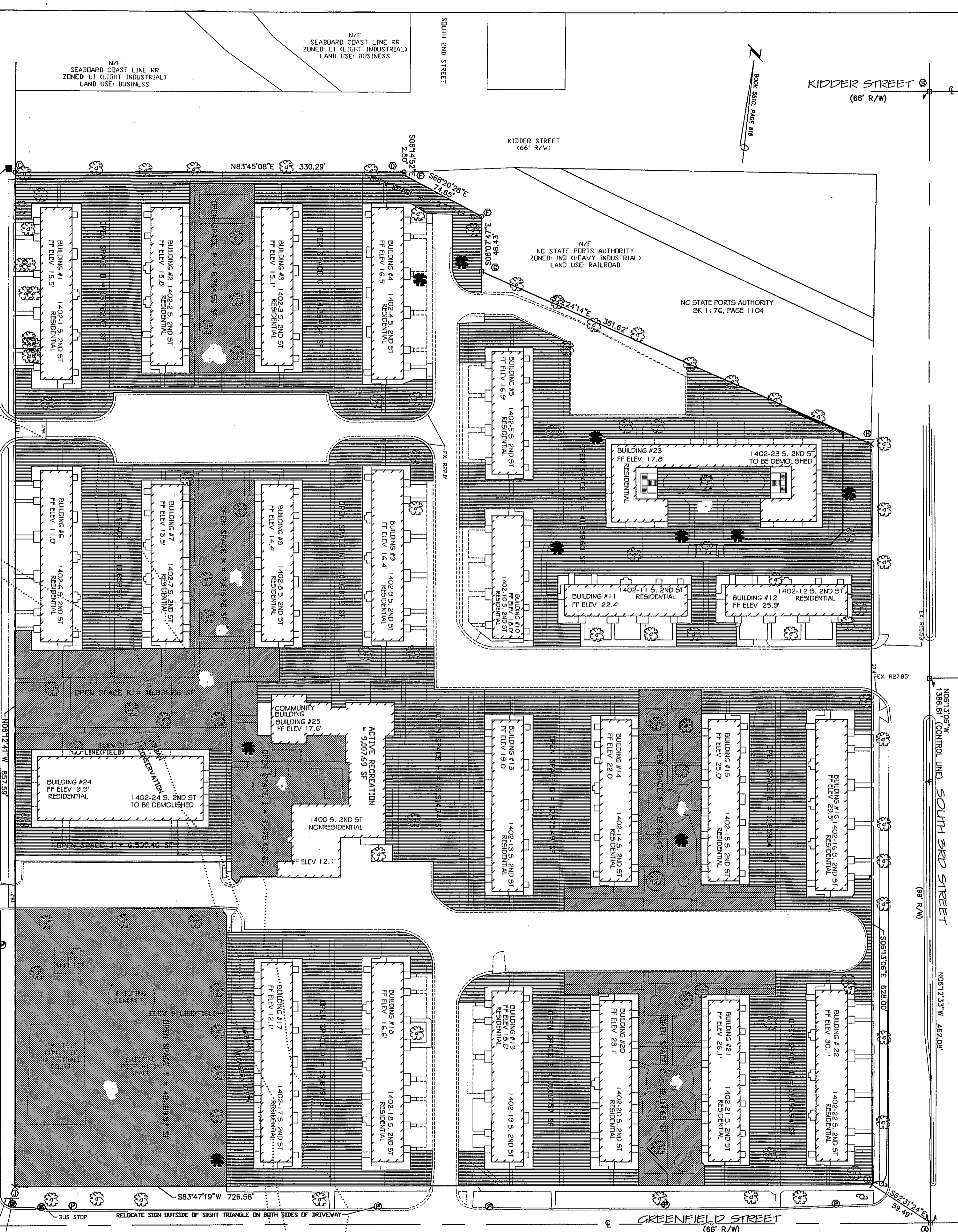
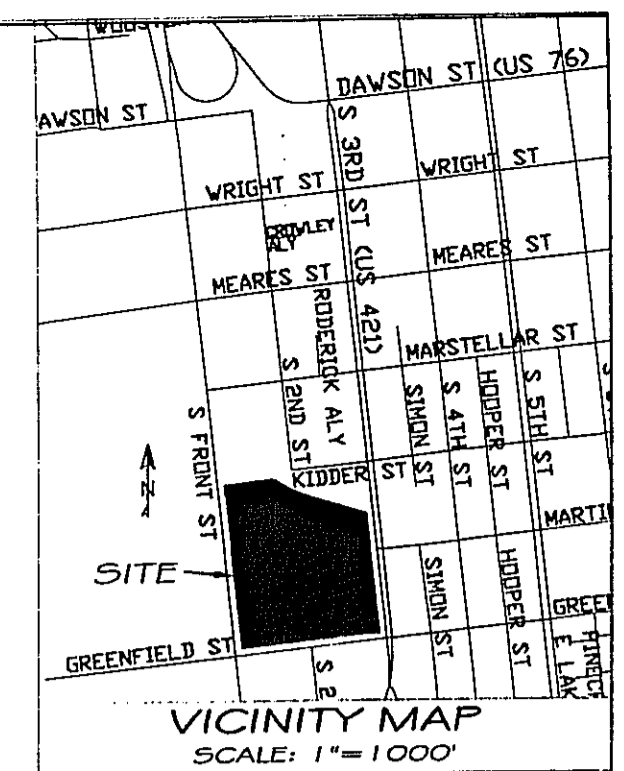
**SOUTH FRONT APARTMENTS**  
WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

DATE: 6-7-11  
SCALE: N.T.S.  
DRAWN: JEM  
CHECKED: JEM  
PROJECT NO: 198

MALPASS ENGINEERING, P.C.  
1154 SHEPARD BOULEVARD  
WILMINGTON, NORTH CAROLINA 28412  
Phone 910-392-5243  
Fax 910-392-5233 License No. C-2820

Owner: SOUTH FRONT LLC  
1510-A SOUTH THIRD STREET  
WILMINGTON, NC 28401  
PHONE: 910-251-5000

SHEET NO. 2J  
OF 5



- LEGEND**
- EXISTING OPEN SPACE (ACTIVE RECREATION SPACE)
  - EXISTING OPEN SPACE (RECREATION SPACE)
  - EXISTING OPEN SPACE
  - EXISTING TREE
  - EXISTING TREE (TO BE REMOVED)

**OPEN SPACE (EXISTING)**

- OPEN SPACE A = 19,879.75 SF = 0.456 ACRES
- OPEN SPACE B = 11,077.27 SF = 0.253 ACRES
- OPEN SPACE C = 12,114.63 SF = 0.278 ACRES (RECREATION SPACE)
- OPEN SPACE D = 11,995.94 SF = 0.285 ACRES
- OPEN SPACE E = 11,659.14 SF = 0.268 ACRES
- OPEN SPACE F = 12,391.43 SF = 0.284 ACRES (RECREATION SPACE)
- OPEN SPACE G = 10,573.49 SF = 0.252 ACRES
- OPEN SPACE H = 19,514.74 SF = 0.448 ACRES
- OPEN SPACE I = 9,475.42 SF = 0.218 ACRES (ACTIVE RECREATION SPACE)
- OPEN SPACE J = 6,539.46 SF = 0.150 ACRES
- OPEN SPACE K = 16,836.26 SF = 0.387 ACRES (RECREATION SPACE)
- OPEN SPACE L = 10,559.97 SF = 0.249 ACRES
- OPEN SPACE M = 7,816.75 SF = 0.179 ACRES (RECREATION SPACE)
- OPEN SPACE N = 10,820.32 SF = 0.248 ACRES
- OPEN SPACE O = 15,782.47 SF = 0.362 ACRES
- OPEN SPACE P = 8,764.59 SF = 0.201 ACRES (RECREATION SPACE)
- OPEN SPACE Q = 14,284.64 SF = 0.328 ACRES
- OPEN SPACE R = 3,373.13 SF = 0.078 ACRES
- OPEN SPACE S = 41,839.63 SF = 0.951 ACRES
- OPEN SPACE T = 42,189.57 SF = 0.969 ACRES (ACTIVE RECREATION SPACE)

TOTAL EXISTING OPEN SPACE = 297,251.89 SF = 6.824 ACRES  
 % OF SITE AS EXISTING OPEN SPACE = 297,251.89 / 570,230.91 \* 100% = 52.13%

TOTAL EXISTING OPEN SPACE AS RECREATION SPACE = 109,588.64 SF = 2.516 ACRES  
 % OF EXISTING OPEN SPACE AS RECREATION SPACE = 109,588.64 / 297,251.89 \* 100% = 36.87%

EXISTING ACTIVE RECREATION SPACE INSIDE = 9,007.69 SF = 0.207 ACRES  
 TOTAL EXISTING ACTIVE RECREATION SPACE = 9,007.69 + 42,189.57 + 9,475.42 = 60,672.68 SF = 1.393 ACRES  
 % OF EXISTING ACTIVE RECREATION SPACE INSIDE = 9,007.69 / 60,672.68 \* 100% = 14.83%

TOTAL EXISTING RECREATION SPACE = 109,588.64 + 9,007.69 = 118,596.33 SF = 2.722 ACRES  
 % OF EXISTING RECREATION SPACE AS ACTIVE OR PASSIVE = 60,672.68 / 118,596.33 \* 100% = 51.16%

**Approved Construction Plan**

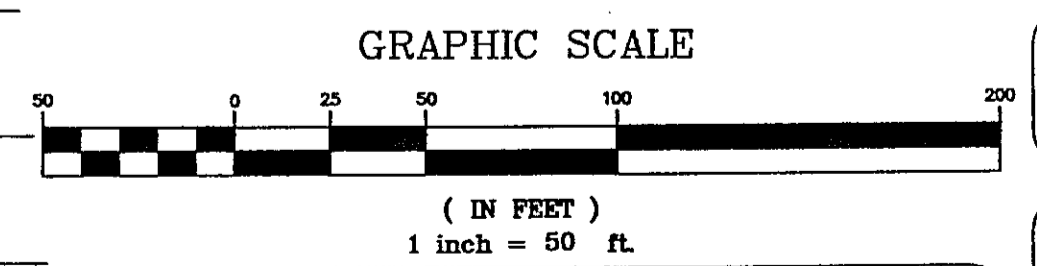
Name: \_\_\_\_\_ Date: 8/15/11

Planning: *[Signature]*

Public Utilities: \_\_\_\_\_

Traffic: *[Signature]* 8/15/11

Fire: *[Signature]* 8/15/11



REV. NO.	DESCRIPTION	DATE
1	REVISED PER CITY OF WILMINGTON TRC	3-4-11
2	REVISED TO ADJUST TREES TO BE REMOVED	4-21-11
3	REVISED TO MATCH OPEN SPACE L	5-15-11

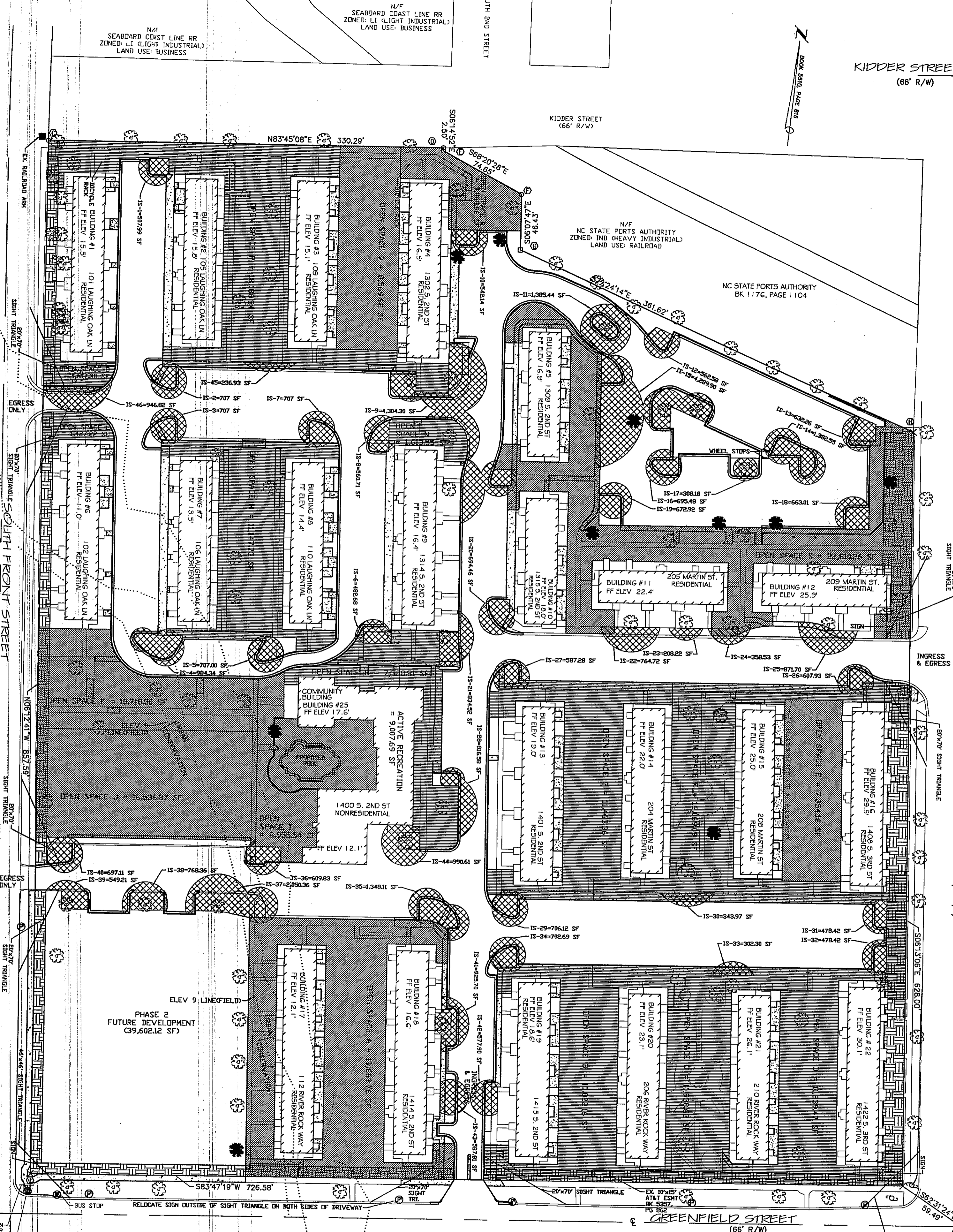
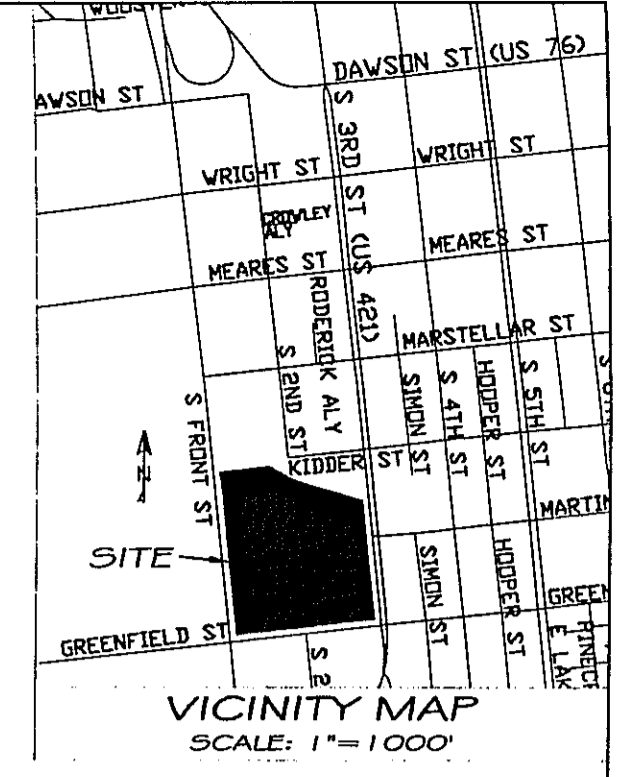
EXISTING OPEN SPACE MAP  
 1400 S. 2ND STREET  
**SOUTH FRONT APARTMENTS**  
 WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

**MALPASS ENGINEERING, P.C.**  
 1134 SHEPHERD BOULEVARD  
 WILMINGTON, NORTH CAROLINA 28412  
 Phone: 910-392-5045  
 Fax: 910-392-5030 License No. C-2320

Owner: SOUTH FRONT LLC  
 1510-A SOUTH THIRD STREET  
 WILMINGTON, NC 28401  
 PHONE: 910-251-5030

**Professional Engineer Seal:** NORTH CAROLINA PROFESSIONAL ENGINEER, License No. 31111

SHEET NO. 3 OF 5



- LEGEND**
- OPEN SPACE (ACTIVE RECREATION SPACE)
  - OPEN SPACE (RECREATION SPACE)
  - OPEN SPACE
  - INTERIOR SHADING
  - STREET YARD
  - EXISTING TREE
  - EXISTING TREE (TO BE REMOVED)

**STREET YARD ALONG SOUTH 3RD STREET**  
 STREET FRONTAGE = 628 - 38.67 = 589.33 FT  
 REQUIRED STREET YARD = 18 x 589.33 = 10,607.94 SF  
 PROVIDED STREET YARD = 6,923.35 + 3,727.85 = 10,651.21 SF  
 IMPERVIOUS AREA = 421.27 + 1,172.58 = 1,593.85 SF  
 PERCENT IMPERVIOUS = 1,593.85 / 10,651.21 SF \* 100% = 14.97%

**STREET YARD ALONG GREENFIELD STREET**  
 STREET FRONTAGE = 728.58 - 25.0 = 703.58 FT  
 REQUIRED STREET YARD = 18 / 2 \* 681.05 = 6,129.45 SF  
 PROVIDED STREET YARD = 3,174.83 + 3,115.12 = 6,289.95 SF  
 IMPERVIOUS AREA = 329.06 + 841.3 + 413.19 SF  
 PERCENT IMPERVIOUS = 413.19 / 6,289.95 SF \* 100% = 6.57%

**STREET YARD ALONG SOUTH FRONT STREET**  
 STREET FRONTAGE = 857.59 - 21.15 - 15.45 - 9 = 807.99 FT  
 REQUIRED STREET YARD = 18 / 2 \* 807.99 = 7,271.91 SF  
 PROVIDED STREET YARD = 1,871.06 + 3,271.06 + 2,039.23 = 7,289.25 SF  
 IMPERVIOUS AREA = 570.55 + 436.44 = 1,006.99 SF  
 PERCENT IMPERVIOUS = 1,006.99 / 7,289.25 SF \* 100% = 13.83%

**OPEN SPACE**  
 REQUIRED OPEN SPACE = 0.35 \* 570,230.91 = 199,580.82 SF = 4.581 ACRES

**INTERIOR SHADING**  
 REQUIRED INTERIOR SHADING AREA = 177,219.19 SF  
 REQUIRED INTERIOR SHADING (IS) = 0.2 \* 177,219.19 SF = 35,443.84 SF

**TOTAL PROVIDED OPEN SPACE = 201,533.84 SF = 4.63 ACRES**  
 % OF SITE AS OPEN SPACE = 201,533.84 / 570,230.91 \* 100% = 35.34%

**TOTAL OPEN SPACE AS RECREATION SPACE = 98,477.69 SF = 2.26 ACRES**  
 % OF OPEN SPACE AS RECREATION SPACE = 98,477.69 / 201,533.84 \* 100% = 48.86%

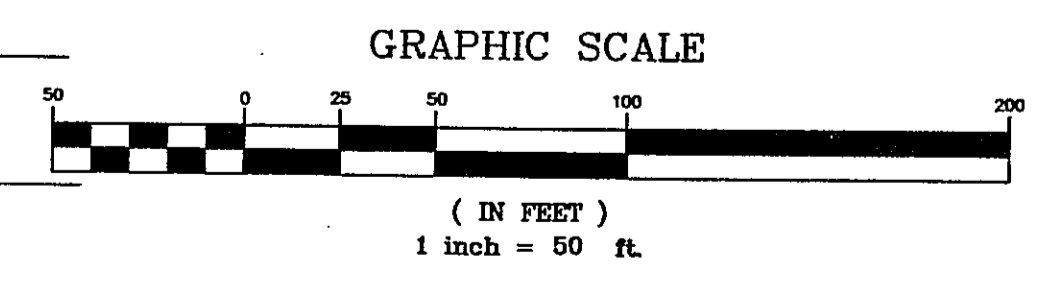
**ACTIVE RECREATION SPACE INSIDE = 9,007.69 SF = 0.207 ACRES**  
 TOTAL ACTIVE RECREATION SPACE = 9,007.69 + 7,354.18 + 8,955.54 + 16,536.87 + 10,718.50 + 8,569.62 = 61,142.40 SF = 1.404 ACRES  
 % OF ACTIVE RECREATION SPACE INSIDE = 9,007.69 / 61,142.40 \* 100% = 14.73%

**TOTAL RECREATION SPACE = 98,477.69 + 9,007.69 = 107,485.38 SF = 2.467 ACRES**  
 % OF RECREATION SPACE AS ACTIVE OR PASSIVE = 61,142.40 / 107,485.38 \* 100% = 56.88%

**INTERIOR SHADING**

IS-1	507.99 SF
IS-2	707.00 SF
IS-3	707.00 SF
IS-4	984.34 SF
IS-5	707.00 SF
IS-6	482.68 SF
IS-7	707.00 SF
IS-8	507.99 SF
IS-9	4,304.30 SF
IS-10	4,421.14 SF
IS-11	1,285.44 SF
IS-12	562.98 SF
IS-13	632.26 SF
IS-14	1,382.93 SF
IS-15	4,289.90 SF
IS-16	693.48 SF
IS-17	380.18 SF
IS-18	663.01 SF
IS-19	672.92 SF
IS-20	694.46 SF
IS-21	634.52 SF
IS-22	764.72 SF
IS-23	208.22 SF
IS-24	398.33 SF
IS-25	671.70 SF
IS-26	607.93 SF
IS-27	587.28 SF
IS-28	616.38 SF
IS-29	706.12 SF
IS-30	343.97 SF
IS-31	478.48 SF
IS-32	478.42 SF
IS-33	382.30 SF
IS-34	702.69 SF
IS-35	1,348.11 SF
IS-36	699.83 SF
IS-37	2,058.36 SF
IS-38	768.36 SF
IS-39	549.21 SF
IS-40	697.11 SF
IS-41	925.70 SF
IS-42	677.90 SF
IS-43	587.81 SF
IS-44	390.61 SF
IS-45	556.93 SF
IS-46	946.82 SF

**TOTAL PROVIDED INTERIOR SHADING = 39,847.09 SF**



**Approved Construction Plan**  
 Name: [Signature] Date: 8/15/11  
 (This plan is consistent with land use plan. These means and leads to traffic flow, safety, and fire.)  
 Traffic: [Signature] 8/15/11  
 Fire: [Signature] 8/15/11

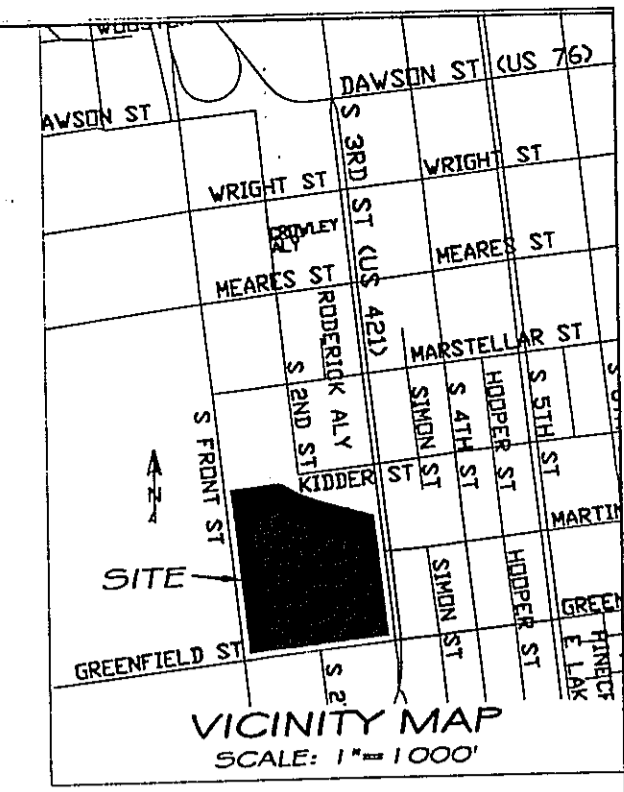
PROPOSED OPEN SPACE, INTERIOR SHADING, & STREET YARD MAP  
**SOUTH FRONT APARTMENTS**  
 WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

**MALPASS ENGINEERING, P.C.**  
 1124 TRIVYARD BOULEVARD  
 WILMINGTON, NORTH CAROLINA 28412  
 Phone 910-382-5245 Fax 910-382-5005 License No. C-2320

Owner: SOUTH FRONT LLC  
 1510-A SOUTH THIRD STREET  
 WILMINGTON, NC 28401  
 PHONE: 910-251-5030

DATE: 1-11-11  
 SCALE: 1"=50'  
 DRAWN: JCB  
 CHECKED: JGM  
 PROJECT NO: 198  
 SHEET NO: 4 OF 5

REV. NO.	DESCRIPTION	DATE
1	REVISED PER CITY OF WILMINGTON TITLE	3-10-11
2	REVISED PER CITY OF WILMINGTON TO SHOW GREENFIELD ST. DRIVEWAY AS CITY STANDARD. REVISED	4-21-11
3	REVISED PER CITY OF WILMINGTON TO ADD OPEN SPACE. REVISED	5-13-11
4	REVISED PER CITY OF WILMINGTON	6-7-11
5	REVISED PER CLIENT TO ADJUST LAYOUT TO ADD CURB HOUSE.	7-5-11
6	REVISED PER CITY OF WILMINGTON TO NOT SHOW PROPOSED FENCING & ADJUST PARKING.	7-25-11
7	REVISED PER CITY OF WILMINGTON FIRE & LIFE SAFETY.	8-12-11



- LEGEND**
- EXISTING IMPERVIOUS AREA TO REMAIN
  - NEW IMPERVIOUS AREA (100% IMPERVIOUS)
  - EXISTING TREE

**POST DEVELOPMENT**

**EXISTING IMPERVIOUS AREA TO REMAIN ON-SITE**  
 BUILDINGS = 89,485.19 SF  
 BUILDING STAIRS = 12,775.23 SF  
 PARKING & DRIVE ISLES = 64,837.21 SF  
 SIDEWALKS, CONCRETE/BRICK SURFACES = 31,557.22 SF  
 OTHER = 243.44 SF  
**TOTAL EXISTING IMPERVIOUS AREA TO REMAIN ON-SITE = 198,898.29 SF**

**NEW IMPERVIOUS AREA ON-SITE**  
 BUILDINGS = 0 SF  
 BUILDING STAIRS = 6,624 SF  
 PARKING & DRIVE ISLES = 75,891.11 SF  
 SIDEWALKS = 21,401.10 SF  
 OTHER = 6,803.82 SF  
**TOTAL NEW IMPERVIOUS AREA ON-SITE = 110,730.03 SF**

**TOTAL IMPERVIOUS AREA ON-SITE (EXISTING & NEW) = 309,628.32 SF**  
**50% OF TOTAL IMPERVIOUS AREA (EXISTING & NEW) = 0.5 = 309,628.32 = 154,814.16 SF**

**TOTAL ON-SITE IMPERVIOUS AREA TREATED IN INFILTRATION BASINS & TRENCHES = 114,341 SF**

**NEW IMPERVIOUS AREA OFF-SITE**  
 DRIVE ISLES = 791 SF  
 SIDEWALKS = 2,596 SF  
**TOTAL NEW IMPERVIOUS AREA OFF-SITE = 3,297 SF**

**Approved Construction Plan**

Name: \_\_\_\_\_ Date: 8/15/11

Planning: [Signature]

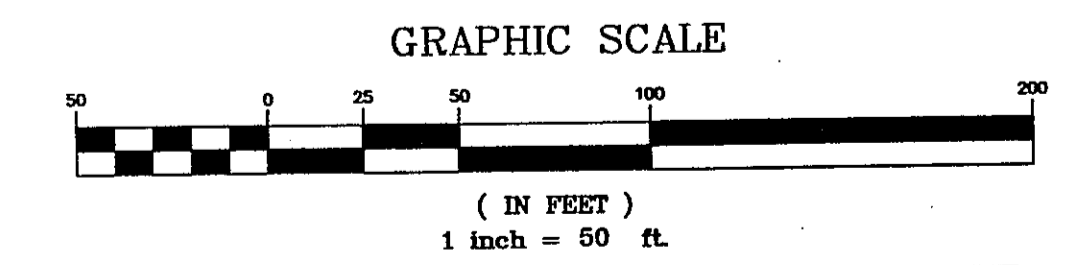
Public Utilities: \_\_\_\_\_

Traffic: [Signature] 08/15/11

Fire: [Signature] 8/11/11

**STORMWATER MANAGEMENT PLAN APPROVED**

CITY OF WILMINGTON  
 ENGINEERING DEPARTMENT  
 DATE 8/15/11 PERMIT # 2011022  
 SIGNED [Signature]



REV. NO.	DESCRIPTION	DATE
1	REVISED DUE TO REVISIONS PER CITY OF WILMINGTON TRM.	3-10-11
2	REVISED PER CITY OF WILMINGTON TO SHOW GREENFIELD ST. DRIVEWAY AS CITY STANDARDS & ADJUST POLE DIMENSIONS ACCORDINGLY.	4-21-11
3	REVISED PER CITY OF WILMINGTON.	5-13-10
4	REVISED PER CLIENT TO ADJUST LAYOUT TO ADD GUARD HOUSE.	8-7-11
5	REVISED PER CITY OF WILMINGTON TO NOT SHOW PROPOSED FENCING & ADJUST PARKING.	7-8-11
6	REVISED PER CITY OF WILMINGTON.	7-25-11
7	REVISED PER CITY OF WILMINGTON ENGINEERING DEPARTMENT.	8-11-11
8	REVISED PER CITY OF WILMINGTON FIRE & LIFE SAFETY.	8-12-11

EXISTING IMPERVIOUS AREA TO REMAIN & NEW IMPERVIOUS AREA MAP

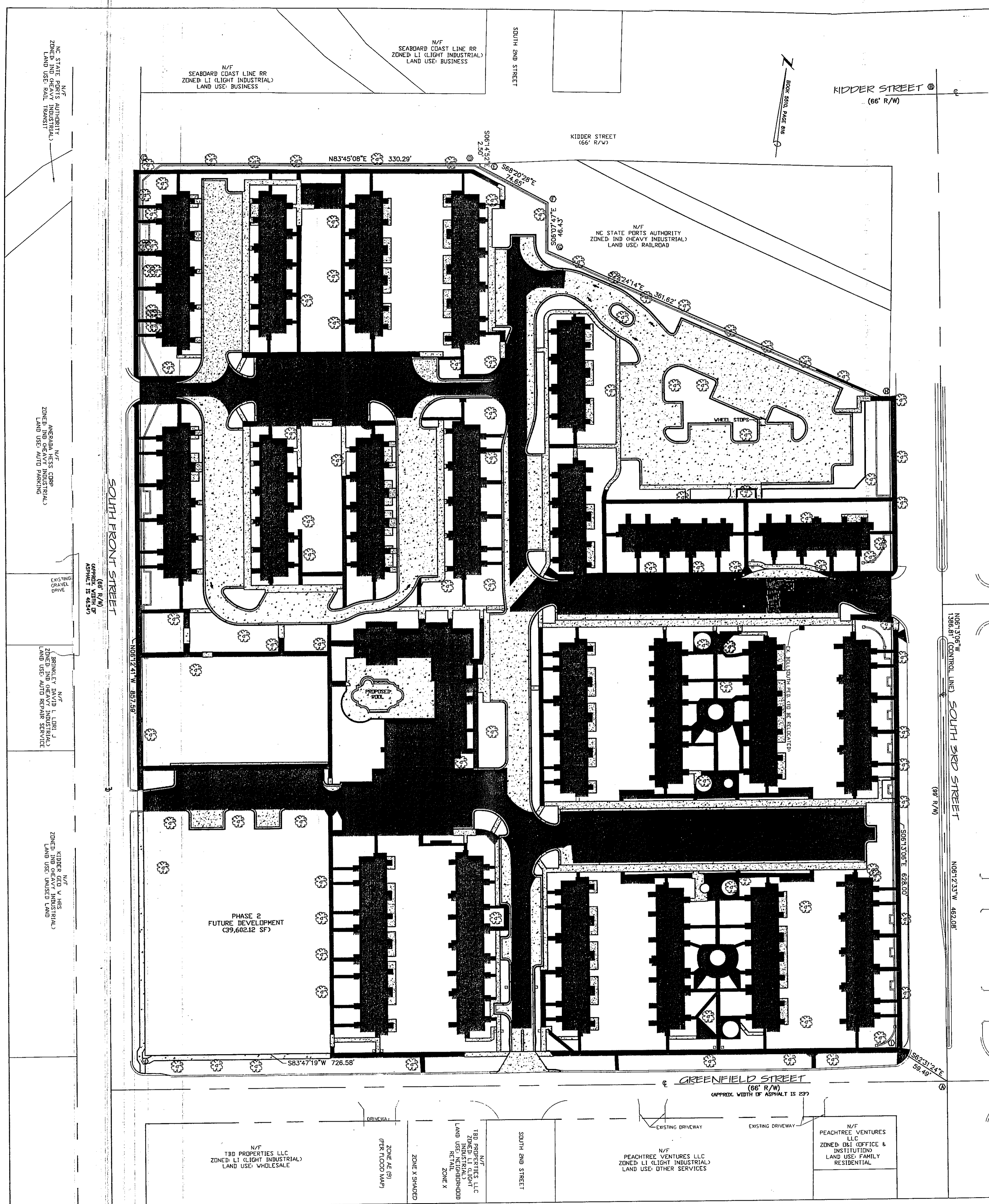
**SOUTH FRONT APARTMENTS**

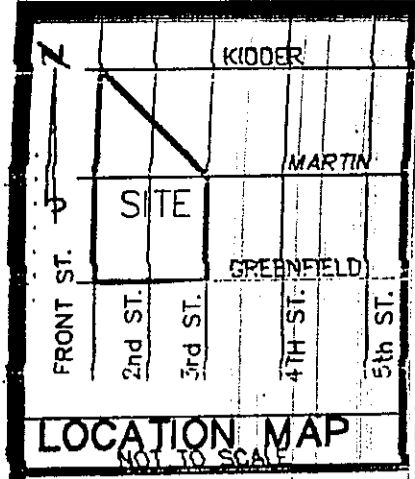
WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

**MALPASS ENGINEERING, P.C.**  
 1134 SHIPYARD BOULEVARD  
 WILMINGTON, NORTH CAROLINA 28412  
 Phone 910-292-5243  
 Fax 910-292-5253 License No. C-2220

Owner: SOUTH FRONT LLC  
 1510-A SOUTH THIRD STREET  
 WILMINGTON, NC 28401  
 PHONE: 910-251-5030

DATE: 1-19-11  
 SCALE: 1"=50'  
 DRAWING: JCB  
 CHECKED: JBM  
 PROJECT NO: 198  
 SHEET NO: 5  
 OF: 5





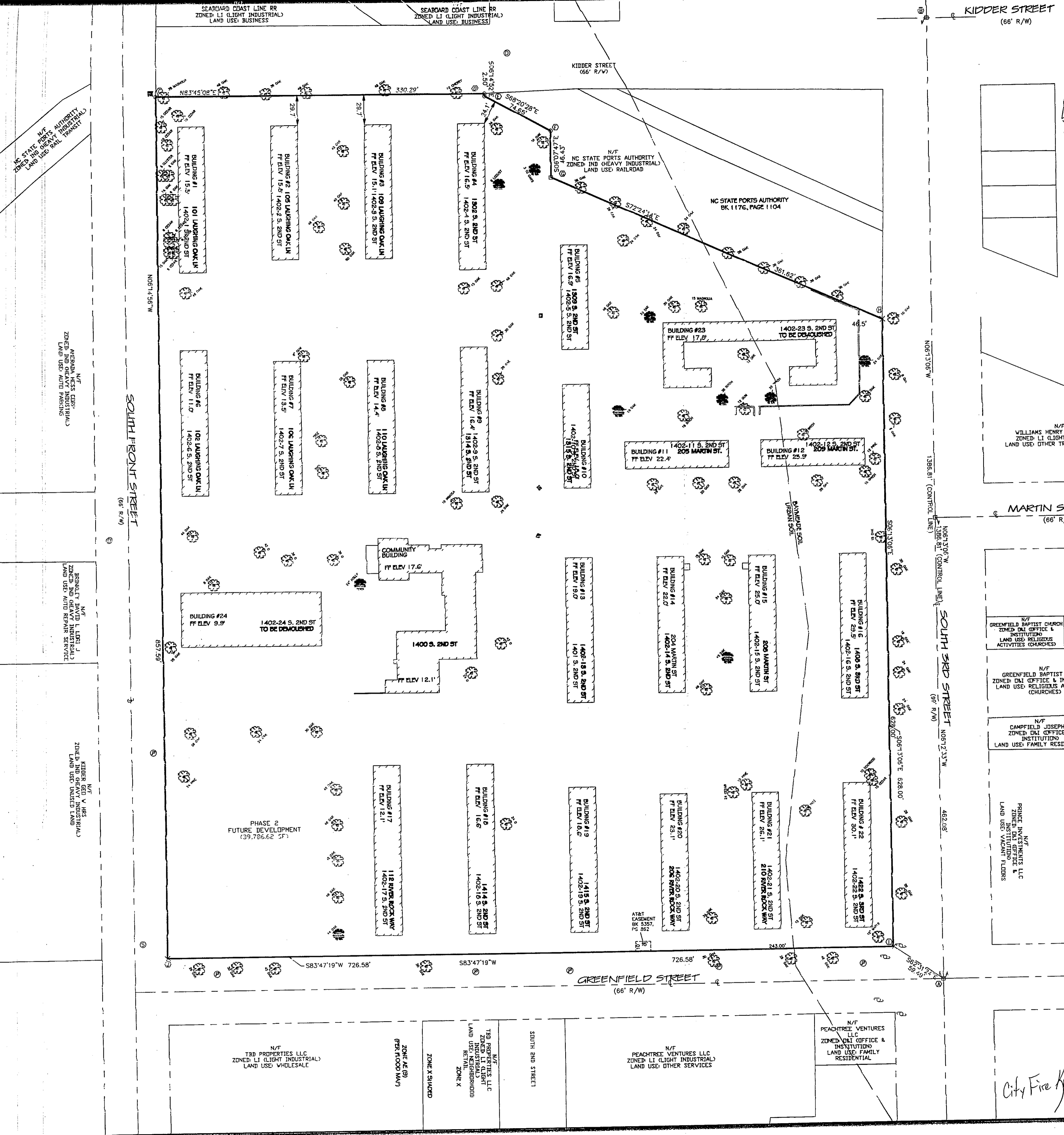
- LEGEND**
- EXISTING IRON CONC. MONUMENT (CONTROL POINT)
  - EXISTING "X"
  - TREE TO BE REMOVED
  - TREE TO BE REMAIN

TABLE DISCLOSING LOCATION OF FOUND PROPERTY CORNERS FROM SAME AS INDICATED BY BOOK 5510, PAGE 816

○ BASE CONTROL POINT  
 @ LINE CONTROL POINT

① S20°41'44" W 0.20'  
 ② S24°35'04" W 0.07'  
 ③ S01°43'37" E 0.18'  
 ④ S32°20'37" W 0.08'  
 ⑤ S22°29'42" W 0.18'  
 ⑥ S77°31'07" W 0.09'  
 ⑦ S85°58'56" E 0.36'  
 ⑧ S09°29'27" W 0.17'

NOTE: THE ABOVE TRACES WERE OBTAINED FROM AN ACTUAL SURVEY USING CONTROL POINTS AS SHOWN HEREON WITH THE SUBSTANTIATION AS THE CONTROL BASE. BEARINGS AND DISTANCES OTHERWISE SHOWN HEREON ARE FROM BOOK 5510, PAGE 816.



**TREE INVENTORY & CRETIS**

TREE SIZE	QUANTITY	REMOVED	SAVED	REASON FOR REMOVAL
12" BIRCH	1		1	
15" BIRCH	1		1	
16" BIRCH	1		1	
0" CEDAR	4		4	
10" CEDAR	1		1	
15" CEDAR	3		3	
24" CEDAR	1		1	
12" CHERRY	1		1	
10" DOGWOOD	1		1	
8" GUM	1		1	
12" GUM	1		1	
24" HOLLY	1		1	
15" MAGNOLIA	1		1	
28" MAGNOLIA	1		1	
12" MAPLE	1		1	
15" MAMOSA	1		1	
12" PINE	1		1	
15" PINE	1		1	
24" PINE	1		1	
6" OAK	1		1	
8" OAK	4		4	ESSENTIAL SITE IMPROVEMENTS
10" OAK	4	3	1	ESSENTIAL SITE IMPROVEMENTS
12" OAK	2		2	
15" OAK	3		3	
16" OAK	2		2	
20" OAK	2		2	
28" OAK	1	1		ESSENTIAL SITE IMPROVEMENTS
24" OAK	11	2	9	ESSENTIAL SITE IMPROVEMENTS
26" OAK	1		1	
28" OAK	14	1	13	HAZARD EXTENSIVE DECAY
30" OAK	5		5	
32" OAK	1		1	
34" OAK	2		2	
36" OAK	9		9	
40" OAK	1		1	
42" OAK	5		5	
44" OAK	2		2	
45" OAK	2		2	
48" OAK	12		12	HAZARD EXTENSIVE DECAY
60" OAK	1		1	ESSENTIAL SITE IMPROVEMENTS
26" BIRCH	1		1	
28" BIRCH	1		1	ESSENTIAL SITE IMPROVEMENTS
36" BIRCH	1		1	ESSENTIAL SITE IMPROVEMENTS
8" LOCUST	1		1	

**TREE INVENTORY MAP**  
**OF**  
**CHARLES T. NESBITT COURT**  
 BEING  
**BLOCKS 572, 573, 554 AND PART OF BLOCK 555**  
 OF THE  
**CITY OF WILMINGTON**

AS RECORDED IN MAP BOOK 314, PAGE 197 AND DEED BOOK 5510, PAGE 816  
 OF THE NEW HANOVER COUNTY REGISTRY  
 WILMINGTON TOWNSHIP WILMINGTON NEW HANOVER COUNTY NORTH CAROLINA  
 SCALE: 1" = 50'

EXCLUSIVELY FOR:  
**BILTMARK CORP.**  
 SOUTH FOURTH STREET  
 WILMINGTON, NC 28401

PREPARED BY:  
**ARNOLD W. CARSON PLS, PC (C-2138)**  
 406 NORTH THIRD STREET  
 WILMINGTON, NC 28401  
 PHONE: (910) 772-9115  
 FAX: (910) 772-9128

1. THIS LOT IS LOCATED IN ZONE L1 & L2 - AC-2 TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP, COMMUNITY-PANEL NUMBER 372031700 K DATED 6/2/06.

2. AREA= 13.09 AC.±

3. INFORMATION PROVIDED BY CLIENT AND MALPASS ENGINEERING.

4. CRITICAL TREE SPECIES SHOULD BE VERIFIED BY AN ARBORIST.

5. SOIL LINE PROVIDED BY MALPASS ENGINEERING WHICH THEY RETRIEVED FROM NEW HANOVER COUNTY GIS.

I CERTIFY THAT THIS MAP WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION (DEED DESCRIPTION RECORDED IN BOOK 5510 PAGE 816). THAT THE BOUNDARIES NOT SURVEYED ARE INDICATED AS DRAWN FROM INFORMATION SHOWN HEREON. THAT THE RATIO OF PRECISION IS 1:10,000; AND THAT THIS MAP MEETS THE REQUIREMENTS OF THE STANDARDS OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA (21 NCAC 56.1600). THIS 15TH DAY OF APRIL, 2011.

**ARNOLD W. CARSON PLS - L-3267**  
 4/18/11

*City Fire Dept*

