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# SITE DEVELOPMENT PLAN

## THE VILLAS AT CATTAIL CREEK

### ZONING: RC-DEO

TAX MAP No: 21      GRID No. 2      PARCEL No: 229

## FOURTH ELECTION DISTRICT,      HOWARD COUNTY, MARYLAND

- GENERAL NOTES**
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MEHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
  - THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS / BUREAU OF ENGINEERING / CONSTRUCTION INSPECTION DIVISION AT 4100 BRIDGEMAN AT LEAST 72 HOURS PRIOR TO THE START OF WORK.
  - THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
  - TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
  - 2 FOOT CONTOUR TOPOGRAPHY AND EXISTING CONDITIONS BASED ON AERIAL TOPOGRAPHIC SURVEY PREPARED BY AERIAL MAPPING CO., INC. - FLOWN IN 1998.
  - THE COORDINATES SHOWN HEREON ARE BASED UPON HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM, HOWARD COUNTY MONUMENT Nos. 21E2 AND 21E3 WERE USED FOR THIS PROJECT.      21E2 N 583,095.3000      21E3 N 584,593.4765  
E 1302748.435      E 1302748.590
  - WATER SERVICE IS PRIVATE VIA A "CENTRAL USE SYSTEM" APPROVED UNDER SDP 01-15.
  - SEWER SERVICE IS PRIVATE VIA A "MULTI-USE SEWAGE DISPOSAL SYSTEM" APPROVED UNDER SDP 01-15.
  - THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY THE TRAFFIC GROUP, INC. (APPROVED UNDER 598-091).
  - BACKGROUND INFORMATION:
    - SUBDIVISION NAME: VILLAS AT CATTAIL CREEK
    - TAX MAP NO.: 21
    - PARCEL NO.: 229
    - ELECTION DISTRICT: FOURTH
    - TOTAL TRACT AREA: 58.0 AC. ±
    - NO. OF BUILDABLE UNITS: 93 SINGLE FAMILY AND COMMON DINING BUILDING.
    - BUILDABLE SINGLE FAMILY DETACHED (SDP-01-15) = 25 UNITS.
    - BUILDABLE SINGLE FAMILY ATTACHED (SDP-99-148) = 68 UNITS.
    - NO. OF PRESERVATION PARCELS: N/A
    - PRELIMINARY PLAN APPROVAL DATE: N/A
    - PREVIOUS FILE NOS.: SDP 01-15, BA 97-54E, BA 423-D AND BA 00-10E. - A SPECIAL EXCEPTION FOR HOUSING FOR ELDERLY AND/OR HANDICAPPED PERSONS (SECTION 161200). NOTE THAT BA 00-10E IS RELATED TO SDP 01-15 AND NOT THIS PLAN. IN ADDITION, SEE P-99-148 FOR ACCESS TO THIS SITE AND NOTE 30 BELOW.

**ADDRESS CHART**

UNIT NO.	ADDRESS	UNIT NO.	ADDRESS
1	15110 PLAYERS WAY	63	CALLAWAY COURT
2	15112 PLAYERS WAY	64	CALLAWAY COURT
3	15114 PLAYERS WAY	65	CALLAWAY COURT
4	15116 PLAYERS WAY	66	CALLAWAY COURT
5	15118 PLAYERS WAY	67	CALLAWAY COURT
6	15120 PLAYERS WAY	68	CALLAWAY COURT
7	15122 PLAYERS WAY	69	CALLAWAY COURT
8	15124 PLAYERS WAY	70	CALLAWAY COURT
9	15126 PLAYERS WAY	71	CALLAWAY COURT
10	15128 PLAYERS WAY	72	CALLAWAY COURT
11	15130 PLAYERS WAY	73	CALLAWAY COURT
12	15132 PLAYERS WAY	74	CALLAWAY COURT
13	15134 PLAYERS WAY	75	CALLAWAY COURT
14	15136 PLAYERS WAY	76	CALLAWAY COURT
15	15138 PLAYERS WAY	77	CATTAIL GREENS COURT
16	15140 PLAYERS WAY	78	CATTAIL GREENS COURT
17	15142 PLAYERS WAY	79	CATTAIL GREENS COURT
18	15144 PLAYERS WAY	80	CATTAIL GREENS COURT
19	15146 PLAYERS WAY	81	CATTAIL GREENS COURT
20	15148 PLAYERS WAY	82	CATTAIL GREENS COURT
21	15150 PLAYERS WAY	83	CATTAIL GREENS COURT
22	15152 PLAYERS WAY	84	CATTAIL GREENS COURT
23	15154 PLAYERS WAY	85	CATTAIL GREENS COURT
24	15156 PLAYERS WAY	86	CATTAIL GREENS COURT
25	15158 PLAYERS WAY	87	CATTAIL GREENS COURT
26	15160 PLAYERS WAY	88	CATTAIL GREENS COURT
27	15162 PLAYERS WAY	89	CATTAIL GREENS COURT
28	15164 PLAYERS WAY	90	CATTAIL GREENS COURT
29	15230 CALLAWAY COURT	91	CATTAIL GREENS COURT
30	15232 CALLAWAY COURT	92	CATTAIL GREENS COURT
31	15234 CALLAWAY COURT	93	15269 CALLAWAY COURT
32	15236 CALLAWAY COURT	94	15267 CALLAWAY COURT
33	15238 CALLAWAY COURT	95	15265 CALLAWAY COURT
34	15240 CALLAWAY COURT	96	15263 CALLAWAY COURT
35	15242 CALLAWAY COURT	97	15261 CALLAWAY COURT
36	15244 CALLAWAY COURT	98	15259 CALLAWAY COURT
37	15246 CALLAWAY COURT	99	15257 CALLAWAY COURT
38	15248 CALLAWAY COURT	100	15255 CALLAWAY COURT
39	15250 CALLAWAY COURT	101	15253 CALLAWAY COURT
40	15252 CALLAWAY COURT	102	15251 CALLAWAY COURT
41	15254 CALLAWAY COURT	103	15249 CALLAWAY COURT
42	15256 CALLAWAY COURT	104	15247 CALLAWAY COURT
43	15258 CALLAWAY COURT	105	15245 CALLAWAY COURT
44	15260 CALLAWAY COURT	106	15243 CALLAWAY COURT
45	CALLAWAY COURT	107	15241 CALLAWAY COURT
46	CALLAWAY COURT	108	15239 CALLAWAY COURT
47	CALLAWAY COURT	109	15129 PLAYERS WAY
48	CALLAWAY COURT	110	15127 PLAYERS WAY
49	CALLAWAY COURT	111	15125 PLAYERS WAY
50	CALLAWAY COURT	112	15123 PLAYERS WAY
51	CALLAWAY COURT	113	15121 PLAYERS WAY
52	CALLAWAY COURT	114	15119 PLAYERS WAY
53	CALLAWAY COURT	115	15117 PLAYERS WAY
54	CALLAWAY COURT	116	15115 PLAYERS WAY
55	CALLAWAY COURT		
56	CALLAWAY COURT		
57	CALLAWAY COURT		
58	CALLAWAY COURT		
59	CALLAWAY COURT		
60	CALLAWAY COURT		
61	CALLAWAY COURT		
62	CALLAWAY COURT		

**\* NOTE:**  
Unit numbers 45-92 are not applicable & are replaced by units 1-25 on SDP 01-15. SDP 99-148 contains 68 SFA units

**PARKING TABULATION:**

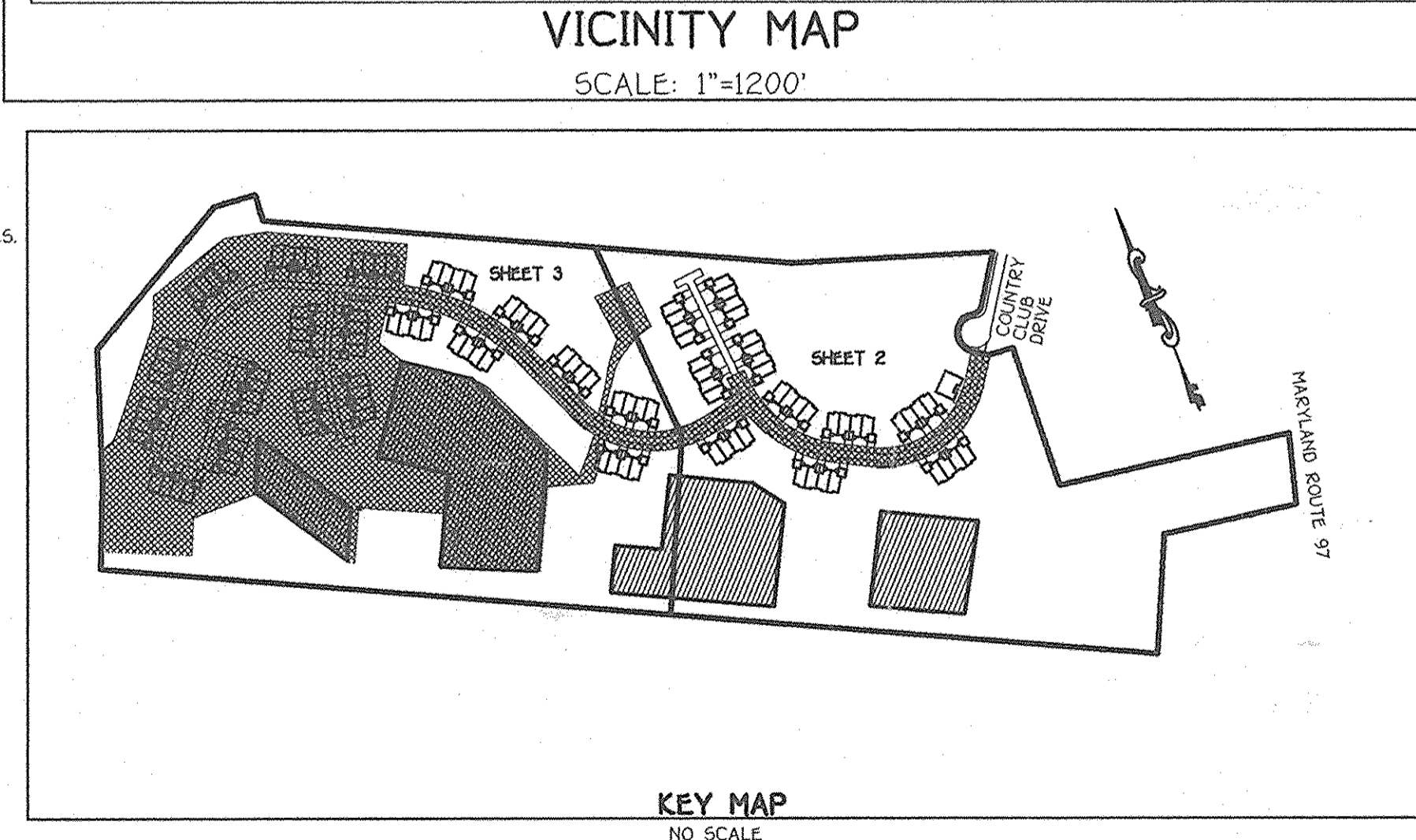
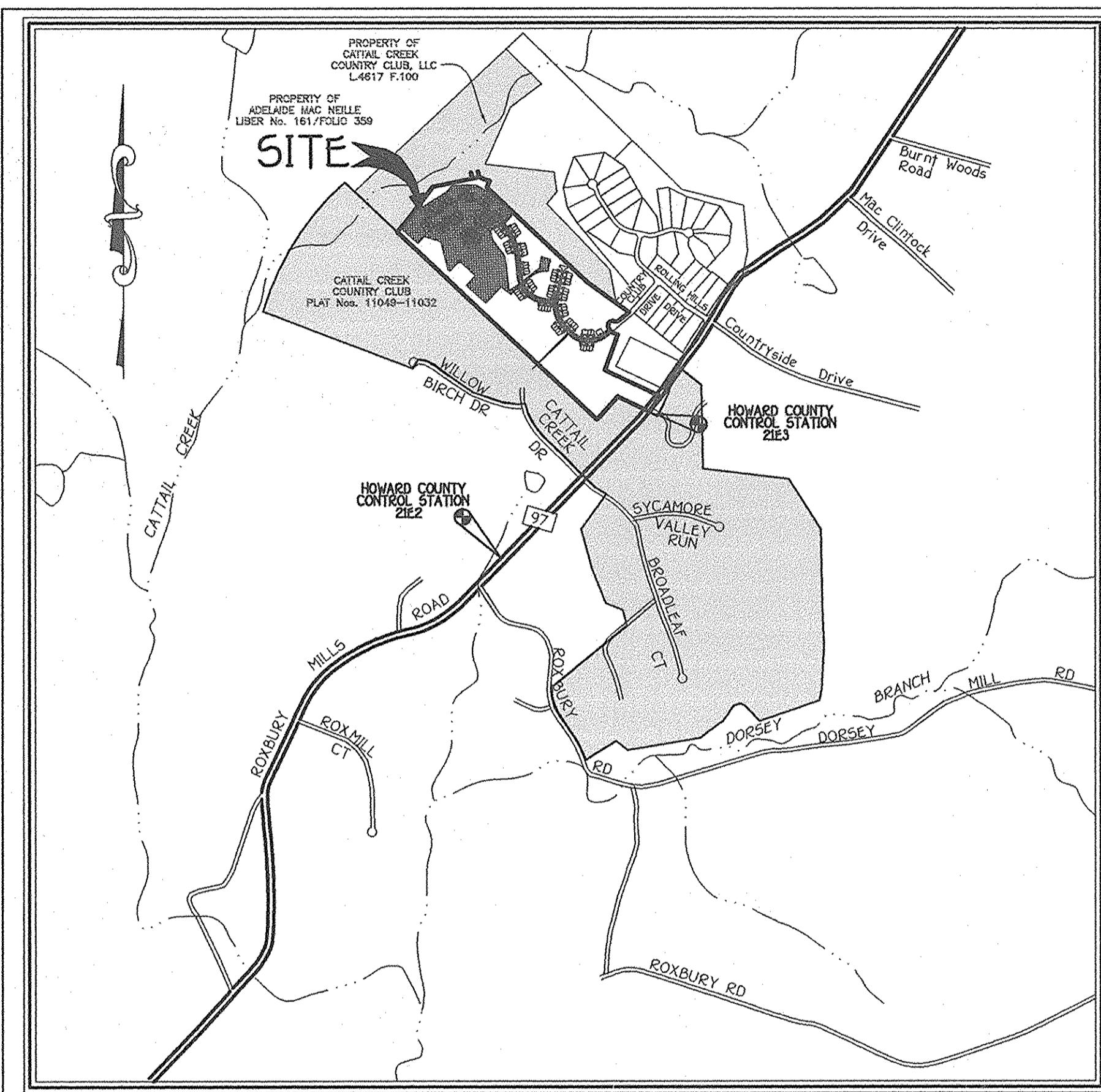
- RESIDENTIAL TABULATION:**
- NUMBER OF PROPOSED RESIDENTIAL BUILDABLE UNITS: 93 \*  
25 SINGLE FAMILY DETACHED UNITS (SDP-01-15)  
68 SINGLE FAMILY ATTACHED UNITS (SDP-99-148)
  - NUMBER OF RESIDENTIAL PARKING SPACES REQUIRED: 106 SPACES  
93 UNITS X 2 SPACES PER UNIT.
  - NUMBER OF RESIDENTIAL PARKING SPACES PROVIDED:  
25 SINGLE FAMILY DETACHED UNITS (SDP-01-15) = 100 SPACES  
(2 FOR EACH GARAGE + 2 IN DRIVEWAY + 25 UNITS)
  - 68 SINGLE FAMILY ATTACHED = 204 SPACES  
1 FOR EACH GARAGE INTERIOR UNITS + 1 IN DRIVEWAY + 34 UNITS = 68 SPACES  
2 FOR EACH GARAGE (END UNIT) + 2 IN DRIVEWAY + 34 UNITS = 136 SPACES  
NUMBER OF RESIDENTIAL VISITOR PARKING SPACES = 58 SPACES
  - TOTAL NUMBER OF RESIDENTIAL SPACES PROVIDED = 362 SPACES

**COMMON DINING BUILDING:**

- NUMBER OF PARKING SPACES REQUIRED FOR COMMON DINING BUILDING: 10 SPACES.  
2,870 SQUARE FEET X 3.3 SPACES PER 1,000 SQ. FT. = 9.4.
- NUMBER OF PARKING SPACES PROVIDED: 13 SPACES

Gatehouse, Dining Area & Water Treatment Bldg 15104 Players Way

**NOTE:**  
SEE GENERAL NOTE NO. 11 FOR REFUSE COLLECTION RESPONSIBILITIES.



- THE AMENDED DESIGN AND ORDER DATE FOR BA-97-54E IS FEBRUARY 7, 2002 AND SUBJECT TO THE FOLLOWING CONDITIONS:
- THE SPECIAL EXCEPTION USE SHALL BE LIMITED TO THE EQUIVARIANT TYPE OF LANDSCAPE AS SPECIFIED IN SECTION 1604.07 OF THE ZONING REGULATIONS.
  - DEVELOPMENT OF THE SPECIAL EXCEPTION USE SHALL NOT COMMENCE UNTIL SUBDIVISION OF THE ENTIRE PROPERTY, INCLUDING THE PROVISION OF THE PUBLIC ROAD FROM MD 97 TO THE SITE, HAS BEEN COMPLETED TO THE SITE. THE PETITIONER SHALL INSTALL ALL NECESSARY TRAFFIC IMPROVEMENTS AND ENHANCEMENTS (ACCELERATION, DECELERATION, AND CENTER TURN LANE) TO PROVIDE SAFE ROAD ACCESS TO MD 97.
  - THE PETITIONER SHALL LIMIT USE OF THE ON-SITE COMMON DINING AREA TO ITS RESIDENTS.
  - ALL RESIDENTS SHALL MEET THE DEFINITION OF THE ELDERLY AND/OR HANDICAPPED AS SPECIFIED IN SECTION 1604.07 OF THE ZONING REGULATIONS.
  - THE NUMBER OF DWELLING UNITS ON THE 58-ACRE SITE SHALL NOT EXCEED 116.
  - THE PETITIONER SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND COUNTY LAWS AND REGULATIONS.
  - THE SPECIAL EXCEPTION FOR HOUSING FOR ELDERLY AND/OR HANDICAPPED PERSONS (BA 97-54E) WAS APPROVED ON SEPTEMBER 10, 1998 AND SUBJECT TO THE FOLLOWING CONDITIONS:
    - THE SPECIAL EXCEPTION USE SHALL BE BUFFERED WITH THE REQUIRED TYPE OF LANDSCAPE EDGE OR APPROVED EQUIVALENT AS REQUIRED BY THE LANDSCAPE MANUAL.
    - DEVELOPMENT OF THE SPECIAL EXCEPTION USE SHALL NOT COMMENCE UNTIL SUBDIVISION OF THE ENTIRE PROPERTY, INCLUDING THE PROVISION OF THE PUBLIC ROAD FROM MD 97 TO THE SITE, HAS BEEN COMPLETED TO THE SITE. THE PETITIONER SHALL INSTALL ALL NECESSARY TRAFFIC IMPROVEMENTS AND ENHANCEMENTS (ACCELERATION, DECELERATION, AND CENTER TURN LANE) TO PROVIDE SAFE ROAD ACCESS TO MD 97.
    - THE PETITIONER SHALL LIMIT USE OF THE ON-SITE COMMON DINING AREA TO ITS RESIDENTS.
    - ALL RESIDENTS SHALL MEET THE DEFINITION OF THE ELDERLY AND/OR HANDICAPPED AS SPECIFIED IN SECTION 1604.07 OF THE ZONING REGULATIONS.
    - THE NUMBER OF DWELLING UNITS ON THE 58-ACRE SITE SHALL NOT EXCEED 116.
    - THE PETITIONER SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND COUNTY LAWS AND REGULATIONS.
  - REFUSE COLLECTION PROVIDED HOWARD COUNTY, HOWARD COUNTY OR ITS COLLECTION CONTRACTORS HAVE PERMISSION TO ENTER THE PRIVATE ROADWAYS FOR THE PURPOSE OF RECYCLING AND TRASH COLLECTIONS, AND WILL NOT BE HELD RESPONSIBLE FOR ANY DAMAGE OR FAILURE OF THE PAVEMENT OR ROADWAYS IN THE AREA.
  - SNOW REMOVAL AND ROAD MAINTENANCE TO BE PRIVATE.
  - NO CEMETERIES EXIST ON THE PROPERTY.
  - ALL FILL AREAS WITHIN ROADWAYS AND UNDER STRUCTURES SHALL BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF AASHTO T-99.
  - THE WETLAND AND FOREST STAND DELINEATION WAS PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. AND APPROVED UNDER 599-09.
  - NOISE STUDY WAS PREPARED BY WILDMAN ENVIRONMENTAL SERVICES AND APPROVED UNDER P99-02.
  - THE FOREST CONSERVATION EASEMENT HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 161200 OF THE HOWARD COUNTY FOREST CONSERVATION ACT. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, EXCEPT AS SHOWN ON AN APPROVED ROAD CONSTRUCTION DRAWING OR SITE DEVELOPMENT PLAN. HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.
    - THE TOTAL AREA OF THE SITE (SDP-99-148) IS 58 ACRES. THE TOTAL FOREST CONSERVATION OBLIGATION IS 15 ACRES. RETENTION AND 31 ACRES PLANTING. THE REQUIRED 15 ACRES OF FOREST IS RETAINED ON-SITE. 3.0 ACRES IS PLANTED ON P-99-148, CATTAIL RIDGE. 2 ACRES IS TO BE PLANTED ON NON-BUILDABLE PRESERVATION PARCEL 'B' ON A PLAT ENTITLED "AMENDED PLANT - GATHER HUNT, SECTION 1, AREA 1" IN FOREST CONSERVATION EASEMENT AREAS NUMBERED FCE 20, FCE 21, AND FCE 22. SURETY FOR THE 15 ACRES OF RETENTION ON-SITE IS \$1,000,000 (100,000 X 10) AND FOR THE 2 ACRES PLANTING IS \$1,250,000 (625,000 X 2). ACRES IS PROVIDED FOR THE FOREST CONSERVATION MAINTENANCE AGREEMENT FOR SDP-99-148.
    - AFFORESTATION IN THE AMOUNT OF 3.9 ACRES HAS BEEN PROVIDED OFF-SITE ON NON-BUILDABLE PRESERVATION PARCEL 'A' AND 'C' ON A PLAT ENTITLED "CATTAIL RIDGE" RECORDED AS PLAT NOS. 11556 THRU 11564 (002-70) IN THE PETITIONER'S EASEMENT AREAS NUMBERED FCE 10 AND FCE 11 SURETY IN THE AMOUNT OF \$84,942.00 (10,500 X 8) WAS INCLUDED IN THE FOREST CONSERVATION MAINTENANCE AGREEMENT FOR THE 19.5 ACRE SITE IDENTIFIED ON SDP-01-15 WHICH IS A PORTION OF THE TOTAL 58 ACRE SITE ADDRESS UNDER SDP-99-148.
    - THE PETITIONER SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND COUNTY LAWS.
  - STORM WATER MANAGEMENT FOR THIS PROPERTY IS PROVIDED UNDER P-99-145, CATTAIL RIDGE, LOCATED ON THE ADJACENT PROPERTY TO THE NORTHEAST.
  - THE PROJECT IS IN CONFORMANCE WITH THE HOWARD COUNTY MASTER WATER AND SEWER PLAN AS DETERMINED BY HOWARD COUNTY GOVERNMENT AND THE MARYLAND DEPARTMENT OF THE ENVIRONMENT. THE PROJECT WILL BE LISTED IN THE COUNTY MASTER WATER AND SEWER PLAN DURING THE JULY 1999 CYCLE.
  - A FINAL DETERMINATION ON THE GROUND WATER DISCHARGE PERMIT HAS BEEN MADE AND PUBLISHED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT. THE DECISION WAS TO APPROVE THE PERMIT.
  - THE GROUND WATER APPROPRIATION PERMIT (H97020) WAS ISSUED AND EFFECTIVE ON SEPTEMBER 1, 1998. THE PERMIT WAS ISSUED FOR A CENTRAL WATER SUPPLY FOR 116 UNITS, CATTAIL CREEK CONDOMINIUM COMPLEX.
  - THE FINANCIAL PLAN AGREEMENT FOR THE OPERATION AND MAINTENANCE OF THE WATER AND SEWER UTILITIES BY THE CONDOMINIUM WILL BE COMPLETED PRIOR TO THE ISSUANCE OF BUILDING PERMITS.
  - THE FACILITIES WILL BE OPERATED AND MAINTAINED BY A CERTIFIED WATER AND WASTE WATER TREATMENT OPERATOR.
  - EXISTING UTILITIES SHOWN ARE BASED ON CONTRACT DRAWING P-99-145 AND SDP 01-15.
  - THE EXISTING 100 YEAR FLOODPLAIN DELINEATION SHOWN IS BASED ON THE HOWARD COUNTY FLOODPLAIN STUDY FOR CATTAIL CREEK, APPROVED UNDER P-99-02, CATTAIL RIDGE, DATED FEBRUARY 8, 1999.
  - ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
  - ALL ROADWAYS WITHIN THIS SUBDIVISION ARE PRIVATE.
  - NO DEVELOPER'S AGREEMENT FOR BARRIERS, STORM DRAINS OR SWM IS NEEDED FOR THIS PROJECT. ONLY AN INSTALLATION AND MAINTENANCE AGREEMENT AND DEED OF FOREST CONSERVATION EASEMENT ARE NEEDED. FOR THE ADDITIONAL OFF-SITE 5.2 ACRE FOREST CONSERVATION PROGRAM OBLIGATION ON PRESERVATION PARCEL 'B' OF GATHER HUNT, SECTION ONE, AREA ONE (P09-14).
  - LANDSCAPE SURETY IN THE AMOUNT OF \$38,700.00 WAS INCLUDED IN THE GRADING PERMIT APPLICATION ASSOCIATED WITH SDP 01-15. THE BOND FOR 100 SHADE TREES AND 20 EVERGREEN TREES. ADDITIONAL LANDSCAPING FOR THIS SDP 99-148 WILL BE BONDED UNDER THE GRADING PERMIT IN THE AMOUNT OF \$29,400.00 FOR THE ADDITIONAL 55 SHADE AND 25 EVERGREEN TREES.
  - DEVELOPER'S BOND AREA OF SUBMISSION LIMITS FOR THE VILLAS AT CATTAIL CREEK (SDP-01-15).

For infrastructure improvements see SDP units, see SDP 01-15.

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PARK  
GILKOTT CITY, MARYLAND 21042  
410.461.2955

**ENGINEER'S CERTIFICATE**  
I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.  
*John R. Rebuton* 8/19/02  
Signature of Engineer (Print name below signature) Date

**DEVELOPER'S CERTIFICATE**  
I/We certify that all development and construction will be done according to this plan and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.  
*John R. Rebuton* 8/12/02  
Signature of Developer (Print name below signature) Date

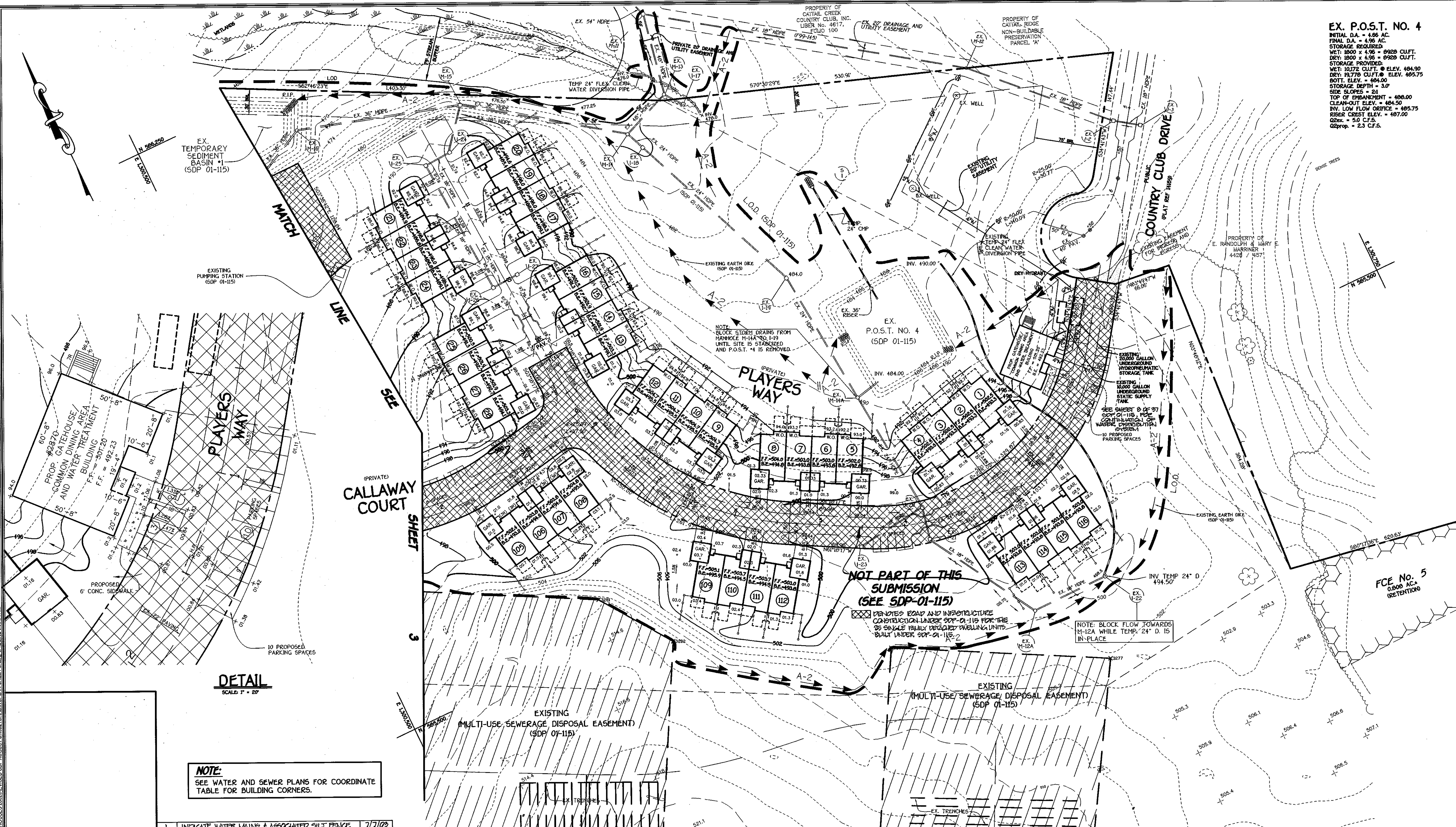
Reviewed for HOWARD SCD and meets Technical Requirements.  
*Jim Myra* 8/19/02  
U.S.A. - Natural Resources Conservation Service  
This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.  
*John R. Rebuton* 8/19/02  
Howard SCD  
**OWNER / DEVELOPER**  
VILLAS AT CATTAIL CREEK, L.L.C.  
c/o MR. J. THOMAS SCHWENKER  
8808 CENTRE PARK DRIVE  
SUITE 209  
COLUMBIA, MARYLAND 21045  
(410) 964-5522

APPROVED DEPARTMENT OF PLANNING AND ZONING  
*Lucy Beth* 9/27/02  
Director, Department of Planning and Zoning  
*Andy Harnish* 9/26/02  
Chief, Division of Land Development  
*John R. Rebuton* 8/24/02  
Chief, Development Engineering Division  
**PROJECT**  
THE VILLAS AT CATTAIL CREEK  
**SECTION/AREA** 1-116  
**UNITS** 1-116  
**DEED** L 4228, F.442  
**BLOCK NO.** 3  
**ZONE** RC-DEO  
**TAX/ZONE** 21  
**ELEC. DIST.** 4th  
**CENSUS TR.**  
**WATER CODE**  
**SEWER CODE**

**COVER SHEET**  
**SITE DEVELOPMENT PLAN**  
**THE VILLAS AT CATTAIL CREEK**  
ZONING: RC-DEO  
TAX MAP No: 21 GRID No. 2 PARCEL No: 229  
FOURTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
SCALE: AS SHOWN DATE: AUGUST 8, 2002  
SHEET 1 OF 9 **SDP 99-148**



**EX. P.O.S.T. NO. 4**  
 INITIAL D.A. = 4.96 AC.  
 STORAGE REQUIRED:  
 WET: 1800 x 4.98 = 9028 CUFT.  
 DRY: 1800 x 4.98 = 9028 CUFT.  
 STORAGE PROVIDED:  
 WET: 10172 CUFT. @ ELEV. 484.90  
 DRY: 19,770 CUFT. @ ELEV. 465.75  
 BOTT. ELEV. = 484.00  
 STORAGE DEPTH = 3.0'  
 SIDE SLOPES = 2:1  
 TOP OF EMBANKMENT = 488.00  
 CLEAN-OUT ELEV. = 484.50  
 INV. LOW FLOW ORIFICE = 485.75  
 RISER CREST ELEV. = 487.00  
 Q2ex = 5.0 C.F.S.  
 Q2prop = 2.3 C.F.S.



EX. TEMPORARY SEDIMENT BASIN #1 (SDP 01-115)

EXISTING PUMPING STATION (SDP 01-115)

**DETAIL**  
 SCALE: 1" = 20'

**NOTE:**  
 SEE WATER AND SEWER PLANS FOR COORDINATE TABLE FOR BUILDING CORNERS.

NO.	INDICATE WATER MAINS & ASSOCIATED SILT FENCE REVISION	DATE
1		7/7/02

**FISHER, COLLINS & CARTER, INC.**  
 CIVIL, ENGINEERING, CONSULTANTS & LAND SURVEYORS  
 CENTRAL SQUARE OFFICE PARK - 18272 BALTIMORE NATIONAL PIKE  
 ELICOTT CITY, MARYLAND 21042  
 (410) 481-2255

**ENGINEER'S CERTIFICATE**  
 I certify that this design and sediment control represents a practical and workable plan based on the knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.  
 Signature: *Jim Myers* Date: 8-12-02  
**DEVELOPER'S CERTIFICATE**  
 I/we certify that all development and construction will be done according to this plan and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.  
 Signature: *Howard E. Reusse, Jr.* Date: 8-12-02

Reviewed for HOWARD SCD and meets Technical Requirements.  
 Signature: *Jim Myers* Date: 8/19/02  
 Signature: *John R. Robertson* Date: 8/19/02  
**OWNER / DEVELOPER**  
 VILLAS AT CATTAIL CREEK, L.L.C.  
 c/o MR. J. THOMAS SCRIVNER  
 8808 CENTRE PARK DRIVE  
 SUITE 209  
 COLUMBIA, MARYLAND 21045  
 (410) 964-2522

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 Signature: *Chris Smith* Date: 9/26/02  
 Signature: *John R. Robertson* Date: 8/21/02  
 Signature: *John R. Robertson* Date: 8/27/02  
**PROJECT:** THE VILLAS AT CATTAIL CREEK  
**SECTION/AREA:** 1 - 116  
**DEED:** L. 4228, F. 442  
**BLOCK NO.:** 3  
**ZONE:** RC-DEO  
**TAX/ZONE:** 21  
**ELEC. DIST.:** 4th  
**CENSUS TR.:** ---  
**WATER CODE:** ---  
**SEWER CODE:** ---

**GRADING AND SEDIMENT CONTROL**  
**SITE DEVELOPMENT PLAN**  
**THE VILLAS AT CATTAIL CREEK**  
 ZONING: RC-DEO  
 TAX MAP No: 21 PARCEL: 3 GRID No: 2  
 FOURTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 50' DATE: AUGUST 8, 2002  
 SHEET 2 OF 9

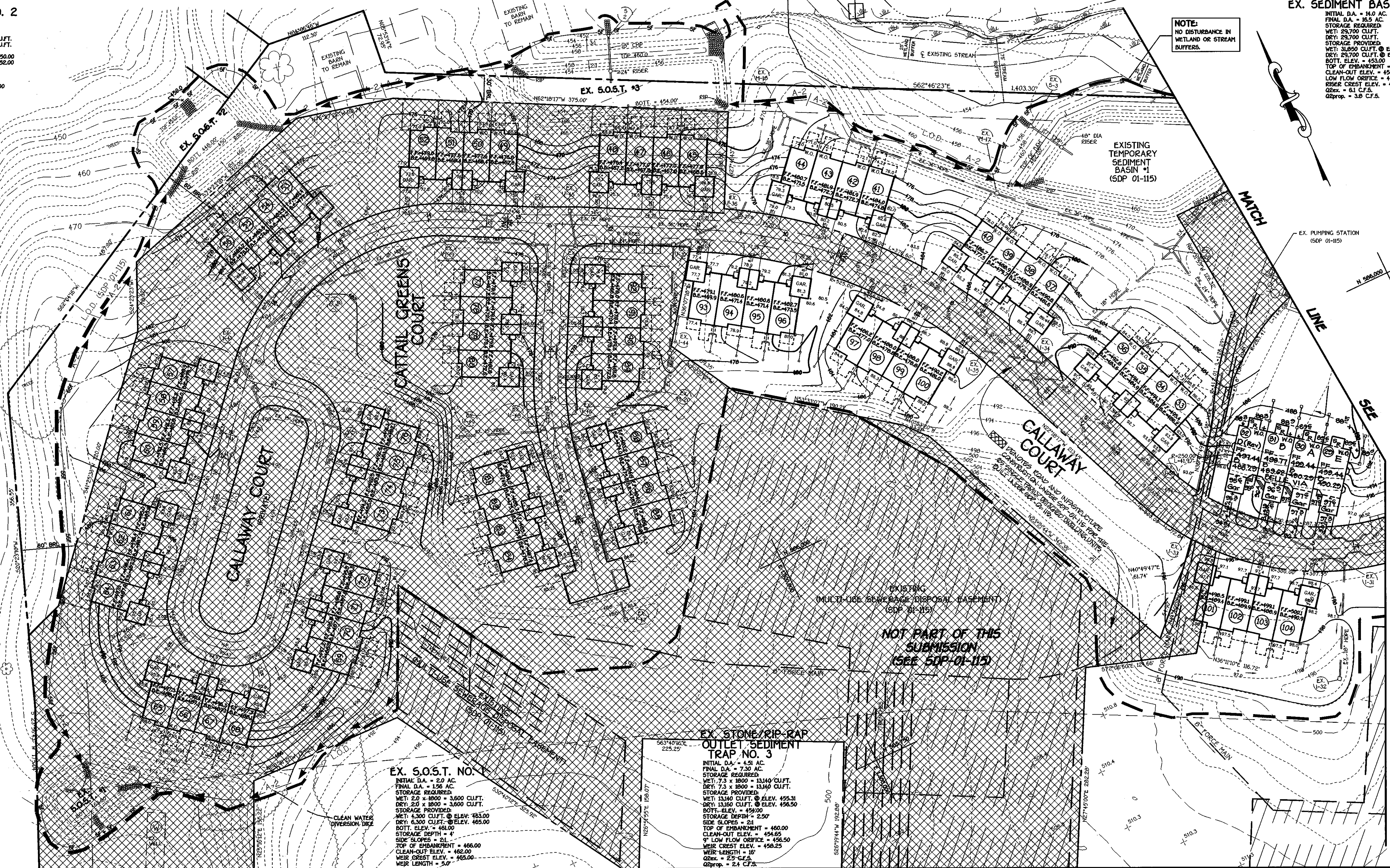
SDP 99.178



**EX. 5.0.S.T. NO. 2**  
 INITIAL D.A. = 3.00 AC.  
 FINAL D.A. = 1.60 AC.  
 STORAGE REQUIRED:  
 WET: 3.00 x 1000 = 6,904 CUFT.  
 DRY: 3.00 x 1000 = 6,904 CUFT.  
 STORAGE PROVIDED:  
 WET: 7,000 CUFT. @ ELEV. 450.00  
 DRY: 9,000 CUFT. @ ELEV. 452.00  
 BOT. ELEV. = 448.00  
 STORAGE DEPTH = 4'  
 SIDE SLOPES = 2:1  
 TOP OF EMBANKMENT = 453.00  
 CLEAN-OUT ELEV. = 449.00  
 WEIR CREST ELEV. = 452.00  
 WEIR LENGTH = 10.0'

**EX. SEDIMENT BASIN NO. 1**  
 INITIAL D.A. = 4.0 AC.  
 FINAL D.A. = 16.5 AC.  
 STORAGE REQUIRED:  
 WET: 29,700 CUFT.  
 DRY: 29,700 CUFT.  
 STORAGE PROVIDED:  
 WET: 31,850 CUFT. @ ELEV. 455.25  
 DRY: 29,700 CUFT. @ ELEV. 456.75  
 BOT. ELEV. = 453.00  
 TOP OF EMBANKMENT = 462.00  
 CLEAN-OUT ELEV. = 454.42  
 LOW FLOW ORIFICE = 457.30  
 RISER CREST ELEV. = 458.50  
 ORIF. = 61 C.F.S.  
 ORIF. = 3.8 C.F.S.

NOTE:  
 NO DISTURBANCE IN  
 WETLAND OR STREAM  
 BUFFERS.



**EX. 5.0.S.T. NO. 1**  
 INITIAL D.A. = 2.0 AC.  
 FINAL D.A. = 1.56 AC.  
 STORAGE REQUIRED:  
 WET: 2.0 x 1000 = 3,600 CUFT.  
 DRY: 2.0 x 1000 = 3,600 CUFT.  
 STORAGE PROVIDED:  
 WET: 4,300 CUFT. @ ELEV. 453.00  
 DRY: 6,300 CUFT. @ ELEV. 455.00  
 BOT. ELEV. = 451.00  
 STORAGE DEPTH = 4'  
 SIDE SLOPES = 2:1  
 TOP OF EMBANKMENT = 456.00  
 CLEAN-OUT ELEV. = 452.00  
 WEIR CREST ELEV. = 453.00  
 WEIR LENGTH = 5.0'

**EX. STONE/RIP-RAP  
 OUTLET SEDIMENT  
 TRAP NO. 3**  
 INITIAL D.A. = 4.51 AC.  
 FINAL D.A. = 7.30 AC.  
 STORAGE REQUIRED:  
 WET: 7.3 x 1000 = 13,140 CUFT.  
 DRY: 7.3 x 1000 = 13,140 CUFT.  
 STORAGE PROVIDED:  
 WET: 13,140 CUFT. @ ELEV. 455.31  
 DRY: 13,160 CUFT. @ ELEV. 456.50  
 BOT. ELEV. = 454.00  
 STORAGE DEPTH = 2.50'  
 SIDE SLOPES = 2:1  
 TOP OF EMBANKMENT = 460.00  
 CLEAN-OUT ELEV. = 454.65  
 9" LOW FLOW ORIFICE = 456.50  
 WEIR CREST ELEV. = 458.25  
 WEIR LENGTH = 16'  
 ORIF. = 25 C.F.S.  
 ORIF. = 24 C.F.S.

NOT PART OF THIS  
 SUBMISSION  
 (SEE SDP 01-115)

**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
 CLLETT CITY, MARYLAND 21041  
 (410) 661-2855

No	Revision	Date
1	Changed house types for Units 29-32 to the Belle Via model per new architectural plans	2-9-04

**ENGINEER'S CERTIFICATE**  
 I certify that this plan and sediment control represents a practical and workable plan based on a study of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.  
 Signature of *John K. Carter* Date *8/12/02*

**DEVELOPER'S CERTIFICATE**  
 I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.  
 Signature of Developer *Donald R. Carter, Jr.* Date *8/02/02*

Reviewed for HOWARD SCD and meets Technical Requirements.  
 U.S.D. - Natural Resources Conservation Service  
 Signature of *John K. Carter* Date *8/19/02*  
 Signature of *John K. Carter* Date *8/19/02*

**OWNER / DEVELOPER**  
 VILLAS AT CATTAIL CREEK, L.L.C.  
 c/o MR. J. THOMAS SCHWEHR  
 8906 GENTLE PARK DRIVE  
 SUITE 209  
 COLUMBIA, MARYLAND 21045  
 (410) 964-2522

APPROVED DEPARTMENT OF PLANNING AND ZONING  
 Chief, Division of Land Development  
 Chief, Development Engineering Division  
 Director, Department of Planning and Zoning

Signature of *John K. Carter* Date *8/26/02*  
 Signature of *John K. Carter* Date *8/21/02*  
 Signature of *John K. Carter* Date *8/27/02*

PROJECT: THE VILLAS AT CATTAIL CREEK SECTION/AREA: 1-116 LOT NO.:  
 DEED: L. 4228, F. 442 BLOCK NO.: 3 ZONE: RC-DEO TAX/ZONE: 21 ELEC. DIST.: 4th CENSUS TR.:  
 WATER CODE: SEWER CODE:

**GRADING AND SEDIMENT CONTROL**  
**SITE DEVELOPMENT PLAN**  
**THE VILLAS AT CATTAIL CREEK**  
 ZONING: RC-DEO  
 TAX MAP No: 21 PARCEL: 3 GRID No: 2  
 FOURTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 50' DATE: AUGUST 8, 2002  
 SHEET 3 OF 9 **SDP 99-118**

K:\Drawings\400321\_Villas At Cattail Creek (SDP)\SDP\GRADES\PLAN SHEET 3.dwg, 8/9/2002 7:20:16 AM

SDP 99-118



CORNER NUMBER	NORTH	EAST
1	N 585586.9762	E 130278.2853
2	N 585559.3929	E 130850.6073
3	N 585580.7291	E 130821.9086
4	N 585637.6271	E 130095.516
5	N 585698.6625	E 130094.318
6	N 585765.8176	E 130093.047
7	N 585795.5747	E 130093.8706
8	N 585986.003	E 130092.5049
9	N 585959.2032	E 130095.659
10	N 586076.6345	E 130092.3033
11	N 586087.6257	E 130078.0101
12	N 585947.1974	E 1300723.5756
13	N 585903.3463	E 130078.2366
14	N 585782.988	E 1300725.6023
15	N 585622.5824	E 130090.6415
16	N 585615.2304	E 130089.6259
17	N 585500.2268	E 130086.0253
18	N 585430.6984	E 130099.1753
19	N 585349.7736	E 130029.3273
20	N 585369.5878	E 130328.3425

SEWER SERVICE CHART			
STATION	UNIT	ELEV. * SYFORM BLDG.WALL	MFL SERVICE ELEVATION
MH 210 TO MH 215			
0 + 41 RT	41	464.54	467.04
0 + 64 RT	42	464.81	467.11
1 + 01 RT	43	464.80	467.32
1 + 05 LT	96	464.94	467.44
1 + 23 RT	44	464.89	467.39
1 + 27 LT	95	465.11	467.64
MH 215 TO MH 220			
0 + 41 LT	94	465.46	467.96
0 + 63 LT	93	465.59	468.08
MH 220 TO MH 225			
0 + 10 RT	10	465.26	467.74
0 + 14 RT	14	465.26	467.74
0 + 18 RT	18	465.26	467.74
0 + 22 RT	22	465.26	467.74
0 + 26 RT	26	465.26	467.74
0 + 30 RT	30	465.26	467.74
0 + 34 RT	34	465.26	467.74
0 + 38 RT	38	465.26	467.74
0 + 42 RT	42	465.26	467.74
0 + 46 RT	46	465.26	467.74
0 + 50 RT	50	465.26	467.74
0 + 54 RT	54	465.26	467.74
0 + 58 RT	58	465.26	467.74
0 + 62 RT	62	465.26	467.74
0 + 66 RT	66	465.26	467.74
0 + 70 RT	70	465.26	467.74
0 + 74 RT	74	465.26	467.74
0 + 78 RT	78	465.26	467.74
0 + 82 RT	82	465.26	467.74
0 + 86 RT	86	465.26	467.74
0 + 90 RT	90	465.26	467.74
0 + 94 RT	94	465.26	467.74
0 + 98 RT	98	465.26	467.74
1 + 02 RT	102	465.26	467.74
1 + 06 RT	106	465.26	467.74
1 + 10 RT	110	465.26	467.74
1 + 14 RT	114	465.26	467.74
1 + 18 RT	118	465.26	467.74
1 + 22 RT	122	465.26	467.74
1 + 26 RT	126	465.26	467.74
1 + 30 RT	130	465.26	467.74
1 + 34 RT	134	465.26	467.74
1 + 38 RT	138	465.26	467.74
1 + 42 RT	142	465.26	467.74
1 + 46 RT	146	465.26	467.74
1 + 50 RT	150	465.26	467.74
1 + 54 RT	154	465.26	467.74
1 + 58 RT	158	465.26	467.74
1 + 62 RT	162	465.26	467.74
1 + 66 RT	166	465.26	467.74
1 + 70 RT	170	465.26	467.74
1 + 74 RT	174	465.26	467.74
1 + 78 RT	178	465.26	467.74
1 + 82 RT	182	465.26	467.74
1 + 86 RT	186	465.26	467.74
1 + 90 RT	190	465.26	467.74
1 + 94 RT	194	465.26	467.74
1 + 98 RT	198	465.26	467.74
2 + 02 RT	202	465.26	467.74
2 + 06 RT	206	465.26	467.74
2 + 10 RT	210	465.26	467.74
2 + 14 RT	214	465.26	467.74
2 + 18 RT	218	465.26	467.74
2 + 22 RT	222	465.26	467.74
2 + 26 RT	226	465.26	467.74
2 + 30 RT	230	465.26	467.74
2 + 34 RT	234	465.26	467.74
2 + 38 RT	238	465.26	467.74
2 + 42 RT	242	465.26	467.74
2 + 46 RT	246	465.26	467.74
2 + 50 RT	250	465.26	467.74
2 + 54 RT	254	465.26	467.74
2 + 58 RT	258	465.26	467.74
2 + 62 RT	262	465.26	467.74
2 + 66 RT	266	465.26	467.74
2 + 70 RT	270	465.26	467.74
2 + 74 RT	274	465.26	467.74
2 + 78 RT	278	465.26	467.74
2 + 82 RT	282	465.26	467.74
2 + 86 RT	286	465.26	467.74
2 + 90 RT	290	465.26	467.74
2 + 94 RT	294	465.26	467.74
2 + 98 RT	298	465.26	467.74
3 + 02 RT	302	465.26	467.74
3 + 06 RT	306	465.26	467.74
3 + 10 RT	310	465.26	467.74
3 + 14 RT	314	465.26	467.74
3 + 18 RT	318	465.26	467.74
3 + 22 RT	322	465.26	467.74
3 + 26 RT	326	465.26	467.74
3 + 30 RT	330	465.26	467.74
3 + 34 RT	334	465.26	467.74
3 + 38 RT	338	465.26	467.74
3 + 42 RT	342	465.26	467.74
3 + 46 RT	346	465.26	467.74
3 + 50 RT	350	465.26	467.74
3 + 54 RT	354	465.26	467.74
3 + 58 RT	358	465.26	467.74
3 + 62 RT	362	465.26	467.74
3 + 66 RT	366	465.26	467.74
3 + 70 RT	370	465.26	467.74
3 + 74 RT	374	465.26	467.74
3 + 78 RT	378	465.26	467.74
3 + 82 RT	382	465.26	467.74
3 + 86 RT	386	465.26	467.74
3 + 90 RT	390	465.26	467.74
3 + 94 RT	394	465.26	467.74
3 + 98 RT	398	465.26	467.74
4 + 02 RT	402	465.26	467.74
4 + 06 RT	406	465.26	467.74
4 + 10 RT	410	465.26	467.74
4 + 14 RT	414	465.26	467.74
4 + 18 RT	418	465.26	467.74
4 + 22 RT	422	465.26	467.74
4 + 26 RT	426	465.26	467.74
4 + 30 RT	430	465.26	467.74
4 + 34 RT	434	465.26	467.74
4 + 38 RT	438	465.26	467.74
4 + 42 RT	442	465.26	467.74
4 + 46 RT	446	465.26	467.74
4 + 50 RT	450	465.26	467.74
4 + 54 RT	454	465.26	467.74
4 + 58 RT	458	465.26	467.74
4 + 62 RT	462	465.26	467.74
4 + 66 RT	466	465.26	467.74
4 + 70 RT	470	465.26	467.74
4 + 74 RT	474	465.26	467.74
4 + 78 RT	478	465.26	467.74
4 + 82 RT	482	465.26	467.74
4 + 86 RT	486	465.26	467.74
4 + 90 RT	490	465.26	467.74
4 + 94 RT	494	465.26	467.74
4 + 98 RT	498	465.26	467.74
5 + 02 RT	502	465.26	467.74
5 + 06 RT	506	465.26	467.74
5 + 10 RT	510	465.26	467.74
5 + 14 RT	514	465.26	467.74
5 + 18 RT	518	465.26	467.74
5 + 22 RT	522	465.26	467.74
5 + 26 RT	526	465.26	467.74
5 + 30 RT	530	465.26	467.74
5 + 34 RT	534	465.26	467.74
5 + 38 RT	538	465.26	467.74
5 + 42 RT	542	465.26	467.74
5 + 46 RT	546	465.26	467.74
5 + 50 RT	550	465.26	467.74
5 + 54 RT	554	465.26	467.74
5 + 58 RT	558	465.26	467.74
5 + 62 RT	562	465.26	467.74
5 + 66 RT	566	465.26	467.74
5 + 70 RT	570	465.26	467.74
5 + 74 RT	574	465.26	467.74
5 + 78 RT	578	465.26	467.74
5 + 82 RT	582	465.26	467.74
5 + 86 RT	586	465.26	467.74
5 + 90 RT	590	465.26	467.74
5 + 94 RT	594	465.26	467.74
5 + 98 RT	598	465.26	467.74
6 + 02 RT	602	465.26	467.74
6 + 06 RT	606	465.26	467.74
6 + 10 RT	610	465.26	467.74
6 + 14 RT	614	465.26	467.74
6 + 18 RT	618	465.26	467.74
6 + 22 RT	622	465.26	467.74
6 + 26 RT	626	465.26	467.74
6 + 30 RT	630	465.26	467.74
6 + 34 RT	634	465.26	467.74
6 + 38 RT	638	465.26	467.74
6 + 42 RT	642	465.26	467.74
6 + 46 RT	646	465.26	467.74
6 + 50 RT	650	465.26	467.74
6 + 54 RT	654	465.26	467.74
6 + 58 RT	658	465.26	467.74
6 + 62 RT	662	465.26	467.74
6 + 66 RT	666	465.26	467.74
6 + 70 RT	670	465.26	467.74
6 + 74 RT	674	465.26	467.74
6 + 78 RT	678	465.26	467.74
6 + 82 RT	682	465.26	467.74
6 + 86 RT	686	465.26	467.74
6 + 90 RT	690	465.26	467.74
6 + 94 RT	694	465.26	467.74
6 + 98 RT	698	465.26	467.74
7 + 02 RT	702	465.26	467.74
7 + 06 RT	706	465.26	467.74
7 + 10 RT	710	465.26	467.74
7 + 14 RT	714	465.26	467.74
7 + 18 RT	718	465.26	467.74
7 + 22 RT	722	465.26	467.74
7 + 26 RT	726	465.26	467.74
7 + 30 RT	730	465.26	467.74
7 + 34 RT	734	465.26	467.74
7 + 38 RT	738	465.26	467.74
7 + 42 RT	742	465.26	467.74
7 + 46 RT	746	465.26	467.74
7 + 50 RT	750	465.26	467.74
7 + 54 RT	754	465.26	467.74
7 + 58 RT	758	465.26	467.74
7 + 62 RT	762	465.26	467.74
7 + 66 RT	766	465.26	467.74
7 + 70 RT	770	465.26	467.74
7 + 74 RT	774	465.26	467.74
7 + 78 RT	778	465.26	467.74
7 + 82 RT	782	465.26	467.74
7 + 86 RT	786	465.26	467.74
7 + 90 RT	790	465.26	467.74
7 + 94 RT	794	465.26	467.74
7 + 98 RT	798	465.26	467.74
8 + 02 RT	802	465.26	467.74
8 + 06 RT	806	465.26	467.74
8 + 10 RT	810	465.26	467.74
8 + 14 RT	814	465.26	467.74
8 + 18 RT	818	465.26	467.74
8 + 22 RT	822	465.26	467.74
8 + 26 RT	826	465.26	467.74
8 + 30 RT	830	465.26	467.74
8 + 34 RT	834	465.26	467.74
8 + 38 RT	838	465.26	467.74
8 + 42 RT	842	465.26	467.74
8 + 46 RT	846	465.26	467.74
8 + 50 RT	850	465.26	467.74
8 + 54 RT	854	465.26	467.74
8 + 58 RT	858	465.26	467.74
8 + 62 RT	862	465.26	467.74
8 + 66 RT	866	465.26	467.74
8 + 70 RT	870	465.26	467.74
8 + 74 RT	874	465.26	467.74
8 + 78 RT	878	465.26	467.74
8 + 82 RT	882	465.26	467.74
8 + 86 RT	886	465.26	467.74
8 + 90 RT	890	465.26	467.74
8 + 94 RT	894	465.26	467.74
8 + 98 RT	898	465.26	467.74
9 + 02 RT	902	465.26	467.74
9 + 06 RT	906	465.26	467.74
9 + 10 RT	910	465.26	467.74
9 + 14 RT	914	465.26	467.74
9 + 18 RT	918	465.26	467.74
9 + 22 RT	922	465.26	467.74
9 + 26 RT	926	465.26	467.74
9 + 30 RT	930	465.26	467.74
9 + 34 RT	934	465.26	467.74
9 + 38 RT	938	465.26	467.74
9 + 42 RT	942	465.26	467.74
9 + 46 RT	946	465.26	467.74
9 + 50 RT	950	465.26	467.74
9 + 54 RT			



BUILDING CORNER LOCATIONS (THIS SHEET)		
CORNER NUMBER	NORTH	EAST
1	N 505634.051	E 1300616.985
2	N 505907.752	E 1300917.064
3	N 505956.809	E 1300946.286
4	N 506686.179	E 1300950.799
5	N 50641.351	E 1300423.733
6	N 50627.147	E 1300366.402
7	N 50633.361	E 1300290.257
8	N 50643.004	E 1300200.804
9	N 50646.636	E 1300176.727
10	N 50636.786	E 1300200.804
11	N 50639.809	E 1300200.804
12	N 50643.734	E 1300200.804
13	N 50646.757	E 1300200.804
14	N 50649.780	E 1300200.804
15	N 50652.803	E 1300200.804
16	N 50655.826	E 1300200.804
17	N 50658.849	E 1300200.804
18	N 50661.872	E 1300200.804
19	N 50664.895	E 1300200.804
20	N 50667.918	E 1300200.804
21	N 50670.941	E 1300200.804
22	N 50673.964	E 1300200.804
23	N 50676.987	E 1300200.804
24	N 50679.010	E 1300200.804
25	N 50682.033	E 1300200.804
26	N 50685.056	E 1300200.804
27	N 50688.079	E 1300200.804
28	N 50691.102	E 1300200.804
29	N 50694.125	E 1300200.804
30	N 50697.148	E 1300200.804
31	N 50700.171	E 1300200.804
32	N 50703.194	E 1300200.804
33	N 50706.217	E 1300200.804
34	N 50709.240	E 1300200.804
35	N 50712.263	E 1300200.804
36	N 50715.286	E 1300200.804
37	N 50718.309	E 1300200.804
38	N 50721.332	E 1300200.804
39	N 50724.355	E 1300200.804
40	N 50727.378	E 1300200.804
41	N 50730.401	E 1300200.804
42	N 50733.424	E 1300200.804
43	N 50736.447	E 1300200.804
44	N 50739.470	E 1300200.804
45	N 50742.493	E 1300200.804
46	N 50745.516	E 1300200.804
47	N 50748.539	E 1300200.804
48	N 50751.562	E 1300200.804
49	N 50754.585	E 1300200.804
50	N 50757.608	E 1300200.804
51	N 50760.631	E 1300200.804
52	N 50763.654	E 1300200.804
53	N 50766.677	E 1300200.804
54	N 50769.700	E 1300200.804
55	N 50772.723	E 1300200.804
56	N 50775.746	E 1300200.804
57	N 50778.769	E 1300200.804
58	N 50781.792	E 1300200.804
59	N 50784.815	E 1300200.804
60	N 50787.838	E 1300200.804
61	N 50790.861	E 1300200.804
62	N 50793.884	E 1300200.804
63	N 50796.907	E 1300200.804
64	N 50799.930	E 1300200.804
65	N 50802.953	E 1300200.804
66	N 50805.976	E 1300200.804
67	N 50808.999	E 1300200.804
68	N 50812.022	E 1300200.804
69	N 50815.045	E 1300200.804
70	N 50818.068	E 1300200.804
71	N 50821.091	E 1300200.804
72	N 50824.114	E 1300200.804
73	N 50827.137	E 1300200.804
74	N 50830.160	E 1300200.804
75	N 50833.183	E 1300200.804
76	N 50836.206	E 1300200.804
77	N 50839.229	E 1300200.804
78	N 50842.252	E 1300200.804
79	N 50845.275	E 1300200.804
80	N 50848.298	E 1300200.804
81	N 50851.321	E 1300200.804
82	N 50854.344	E 1300200.804
83	N 50857.367	E 1300200.804
84	N 50860.390	E 1300200.804
85	N 50863.413	E 1300200.804
86	N 50866.436	E 1300200.804
87	N 50869.459	E 1300200.804
88	N 50872.482	E 1300200.804
89	N 50875.505	E 1300200.804
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91	N 50881.551	E 1300200.804
92	N 50884.574	E 1300200.804
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94	N 50890.620	E 1300200.804
95	N 50893.643	E 1300200.804
96	N 50896.666	E 1300200.804
97	N 50899.689	E 1300200.804
98	N 50902.712	E 1300200.804
99	N 50905.735	E 1300200.804
100	N 50908.758	E 1300200.804
101	N 50911.781	E 1300200.804
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103	N 50917.827	E 1300200.804
104	N 50920.850	E 1300200.804
105	N 50923.873	E 1300200.804
106	N 50926.896	E 1300200.804
107	N 50929.919	E 1300200.804
108	N 50932.942	E 1300200.804
109	N 50935.965	E 1300200.804
110	N 50938.988	E 1300200.804
111	N 50942.011	E 1300200.804
112	N 50945.034	E 1300200.804
113	N 50948.057	E 1300200.804
114	N 50951.080	E 1300200.804
115	N 50954.103	E 1300200.804



No	Revision	Date
1	Changed house types for Units 29-32 to the Belle Via model per new architectural plans.	2-9-04

**ENGINEER'S CERTIFICATE**  
 I certify that the erosion and sediment control represents a practical and workable plan based on the knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.  
 Signature: *John R. Robinson* Date: 8-12-02  
 Title: *Professional Engineer*

**DEVELOPER'S CERTIFICATE**  
 I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.  
 Signature of Developer: *Donald R. Robinson Jr* Date: 8-12-02  
 Title: *Owner/Developer*

Reviewed for HOWARD SCD and meets Technical Requirements.  
 U.S. Natural Resources Conservation Service  
 Chief, Development Engineering Division  
 Approved for HOWARD SCD and meets Technical Requirements.  
 U.S. Natural Resources Conservation Service  
 Chief, Development Engineering Division  
 Approved for HOWARD SCD and meets Technical Requirements.  
 U.S. Natural Resources Conservation Service  
 Chief, Development Engineering Division

**OWNER / DEVELOPER**  
 VILLAS AT CATTAIL CREEK, L.L.C.  
 c/o MR. J. THOMAS SCRIVENER  
 8800 CENTRE PARK DRIVE  
 SUITE 209  
 COLUMBIA, MARYLAND 21045  
 (410) 964-5522

APPROVED DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development	Date: 9/29/02
Chief, Development Engineering Division	Date: 9/21/02
Director, Department of Planning and Zoning	Date: 9/27/02

PROJECT	SECTION/AREA	LOT NO.
THE VILLAS AT CATTAIL CREEK		1 - 116
DEED	BLOCK NO.	ZONE
L. 4228, F. 442	3	RC-DEO
TAX/ZONE	ELEC. DIST.	CENSUS TR.
21	4th	
WATER CODE	SEWER CODE	

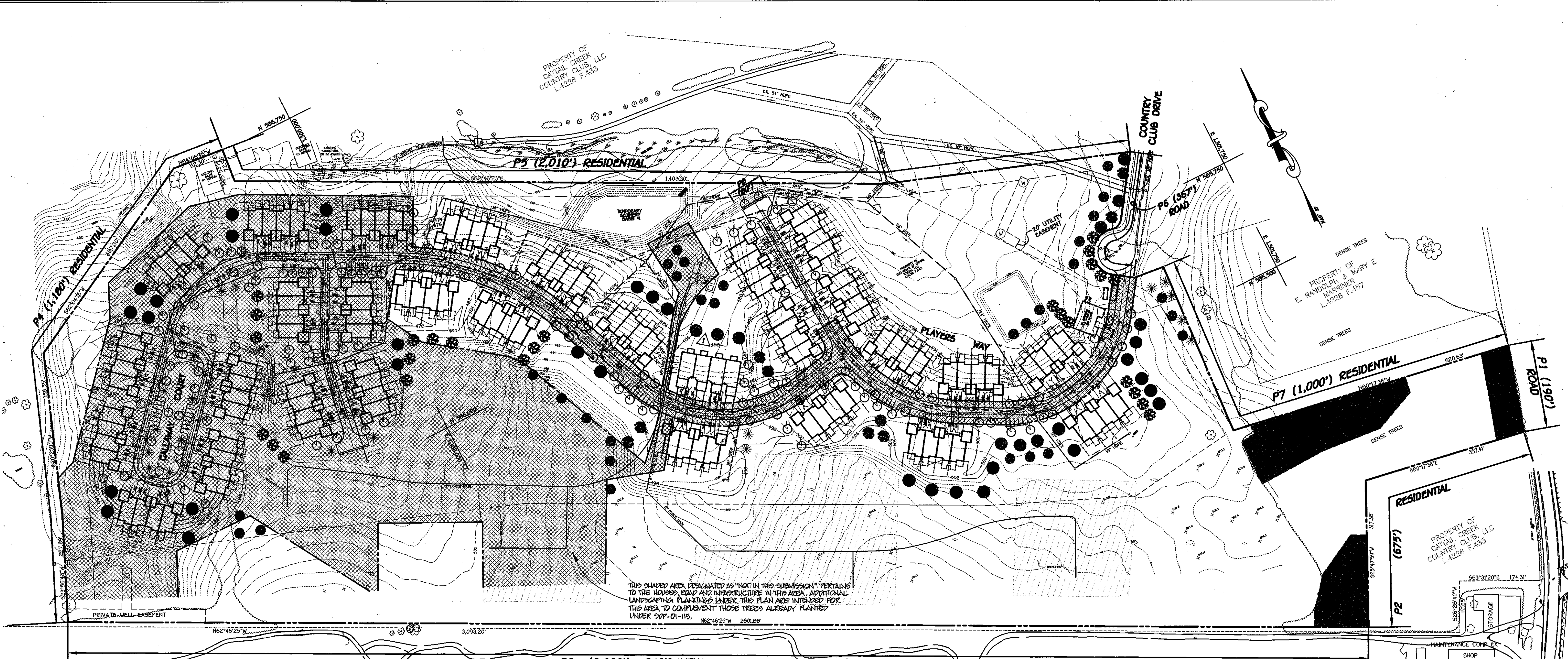
**WATER AND SEWER PLAN**  
**SITE DEVELOPMENT PLAN**  
**THE VILLAS AT CATTAIL CREEK**  
 ZONING: RC-DEO  
 TAX MAP No: 21 PARCEL: 3 GRID No: 2  
 FOURTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 50' DATE: AUGUST 8, 2002  
 SHEET 5 OF 9

K:\Drawings\4\8032\SP\TOWNHOUSES 2002\REVISED SDP AUGUST 04\0321.WAT & SEW PLAN 2 SHEET 5.dwg 8/20/02 7:33:31 AM  
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 K:\Drawings\4\8032\SP\TOWNHOUSES 2002\REVISED SDP AUGUST 04\0321.WAT & SEW PLAN 2 SHEET 5.dwg 8/20/02 7:33:31 AM

**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTRAL SQUARE OFFICE PARK - 10275 BALDRENE NATIONAL Pkwy  
 ELLSWORTH CITY, MARYLAND 21041  
 (410) 481 - 2955

SDP-99.148





THIS SHADED AREA DESIGNATED AS "NOT IN THIS SUBMISSION" PERTAINS TO THE HOUSES, ROAD AND INFRASTRUCTURE IN THIS AREA. ADDITIONAL LANDSCAPING PLANTINGS UNDER THIS PLAN ARE INTENDED FOR THIS AREA TO COMPLEMENT THOSE TREES ALREADY PLANTED UNDER 997-01-115.

PLANT LIST			
QTY.	KEY	NAME	SIZE
119		ACER RUBRUM 'RED SUNSET' RED MAPLE	2 1/2" - 3" CAL.
20		CUPRESSOCYPARIS LEYLANDI LEYLANDI CYPRESS	5' - 6" HT.
30		ACER PLATANOIDES 'EMERALD GREEN' EMERALD GREEN NORWAY MAPLE	2 1/2" - 3" CAL.
16		CORNUS FLORIDA WHITE FLOWERING DOGWOOD	2 1/2" - 3" CAL.
9		CORNUS FLORIDA 'YUBRA' RED FLOWER DOGWOOD	2 1/2" - 3" CAL.
30		FRAXINUS AMERICANA 'AUTUMN PURPLE' AUTUMN PURPLE WHITE ASH	2 1/2" - 3" CAL.
26		CUPRESSOCYPARIS LEYLANDI LEYLANDI CYPRESS	5' - 6" HT.

NOTES: TREES PROVIDED FOR AND BOUND UNDER 997-01-115 EX. BOUND TO REMAIN.

SCHEDULE C RESIDENTIAL DEVELOPMENT INTERNAL LANDSCAPING	
NUMBER OF DWELLING UNITS	116
NUMBER OF TREES REQUIRED (3:0U SFA: 1:3 DU APTS)	116
NUMBER OF TREES PROVIDED SHADE TREES	116
OTHER TREES (2:4 SUBSTITUTION)	

SCHEDULE A PERIMETER LANDSCAPE EDGE							
PERIMETER	CATEGORY (PROPERTIES/ ROADWAYS)	LANDSCAPE TYPE	LINEAR FEET OF ROADWAY FRONTAGE PERIMETER	CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	CREDIT FOR TREES PLANTED UNDER SOP 01-115 SHADE EVERGREEN TREES	NUMBER OF PLANTS REQUIRED AND PROVIDED UNDER THIS PLAN SHADE EVERGREEN TREES SHRUBS
P-1	SFA TO ROAD	NONE	190'	YES (090')	NO	0	0
P-2	SFA TO RESIDENTIAL	A	675'	YES (200')	NO	0	0
P-3	SFA TO OTHER	A	2800'	NO	YES (2800' FOR DISTANCE)	47	0
P-4	SFA TO OTHER	A	1120'	NO	NO	20	0
P-5	SFA TO OTHER	A	2010'	NO	NO	34	0
P-6	SFA SIDE/REAR TO ROAD	C	367'	NO	NO	8	10
P-7	SFA SIDE/REAR TO ROAD	C	1000'	YES (410')	NO	8	10
P-8	SFA TO B'D	C	80'	NO	NO	2	0

NOTE: LANDSCAPING SURETY TO BE PROVIDED AT THE TIME OF GRADING PERMIT APPLICATION. IN ADDITION, LANDSCAPING SURETY IN THE AMOUNT OF \$36,700.00 WAS PREVIOUSLY INCLUDED IN THE GRADING PERMIT APPLICATION NO. G00007862 ASSOCIATED WITH SOP 01-115 FOR 119 SHADE TREES AND 20 EVERGREEN TREES. UNDER THIS SITE PLAN, A LANDSCAPING SURETY IN THE AMOUNT OF \$29,400.00 WILL BE PROVIDED FOR 85 SHADE TREES AND 26 EVERGREEN TREES FOR A TOTAL OF 111 NEW PLANTINGS UNDER THIS PLAN.

No.	Revision	Date
1	Changed house types for Units 29-32 to Bolle Via model per new architectural plans.	2-3-04

**ENGINEER'S CERTIFICATE**  
I certify that the erosion and sediment control represents a practical and workable plan based on my knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

*John R. Robinson* 8/12/02  
Signature of Engineer (Print name below signature) Date

**DEVELOPER'S CERTIFICATE**  
I/we certify that the development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.

*David R. Remonde* 8-12-02  
Signature of Developer (Print name below signature) Date

Approved for HOWARD SCD and meets Technical Requirements.  
8/19/02  
*John R. Robinson*  
U.S.D. Natural Resources Conservation Service  
Date

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.  
8/19/02  
*John R. Robinson*  
How'd SCD Date

**OWNER / DEVELOPER**  
VILLAS AT CATTAIL CREEK, L.L.C.  
c/o MR. J. THOMAS SCRIVENER  
8009 CENTRE PARK DRIVE  
SUITE 209  
COLUMBIA, MARYLAND 21045  
(410) 964-9522

APPROVED DEPARTMENT OF PLANNING AND ZONING

*John R. Robinson* 8/27/02  
Chief, Division of Land Development Date

*John R. Robinson* 8/27/02  
Chief, Development Engineering Division Date

*John R. Robinson* 8/27/02  
Director, Department of Planning and Zoning Date

PROJECT	SECTION/AREA	LOT NO.
THE VILLAS AT CATTAIL CREEK		1 - 116
DEED	BLOCK NO.	ZONE
L 4228, F. 442	3	RC-DEO
TAX/ZONE	ELEC. DIST.	CENSUS TR.
21	4th	
WATER CODE	SEWER CODE	

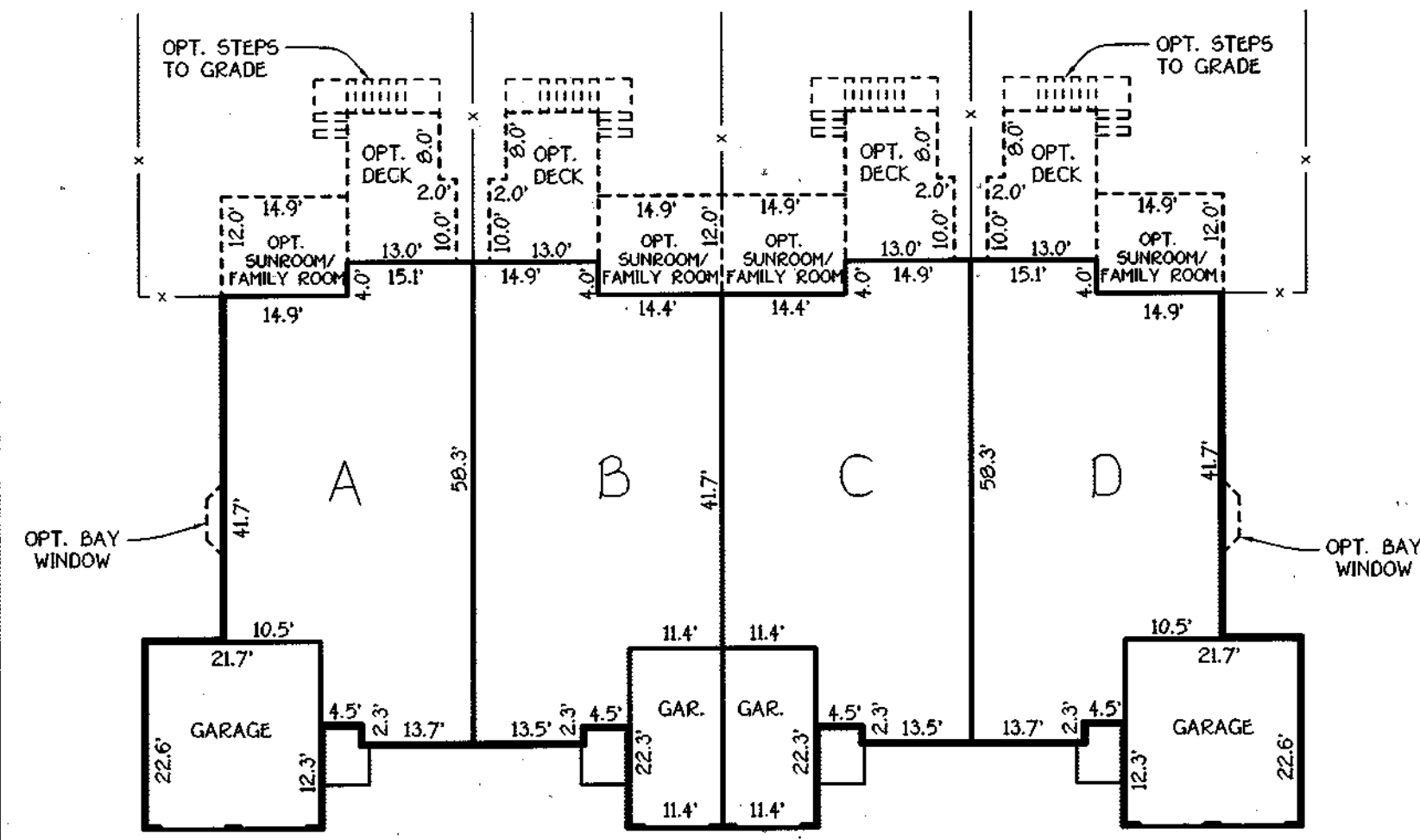
**LANDSCAPE PLAN**  
**SITE DEVELOPMENT PLAN**  
**THE VILLAS AT CATTAIL CREEK**

ZONING: RC-DEO  
TAX MAP No: 21 PARCEL: 3 GRID No: 2  
FOURTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
SCALE: 1" = 100' DATE: AUGUST 8, 2002  
SHEET 6 OF 9 **SOP 99-148**

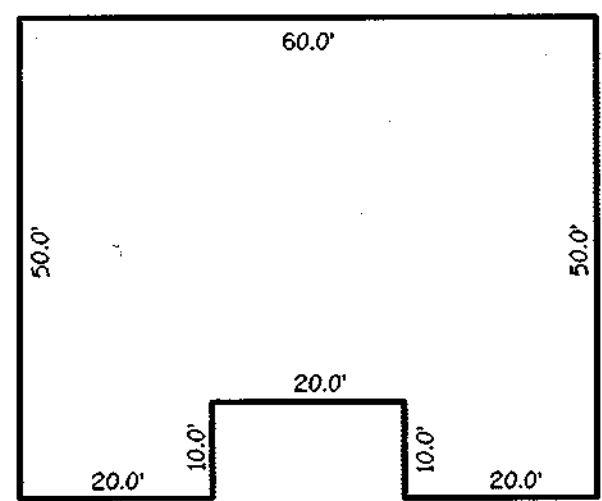
K:\Drawings\440321\_Villas At Cattail Creek (SOP)\SOP\REVISED SOP AUGUST 8, 2002\LANDSCAPE PLAN SHEET 6.dwg, 8/8/2002 7:54:39 AM

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL SQUARE OFFICE PARK - 1827 BALTIMORE NATIONAL FREE  
ELLSWORTH CITY, MARYLAND 21041  
(410) 661-2955

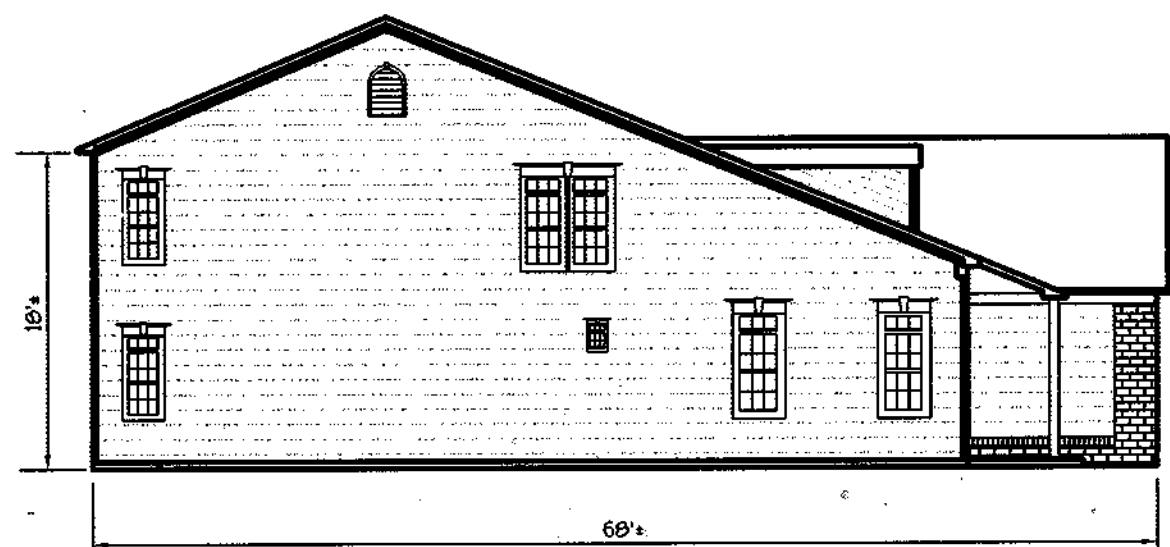




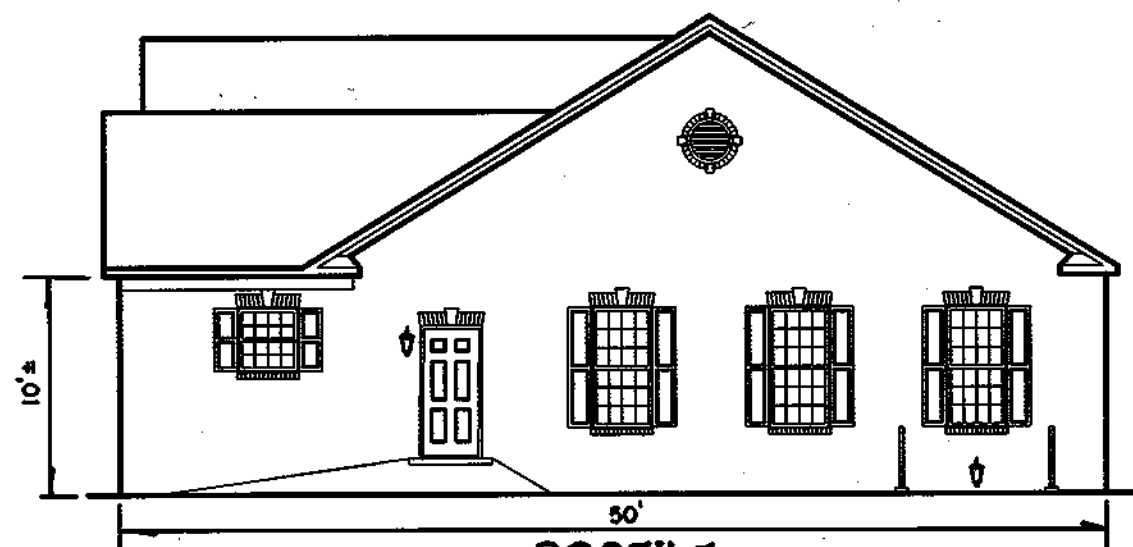
**PROPOSED HOUSING DETAIL**  
SCALE: 1" = 20"



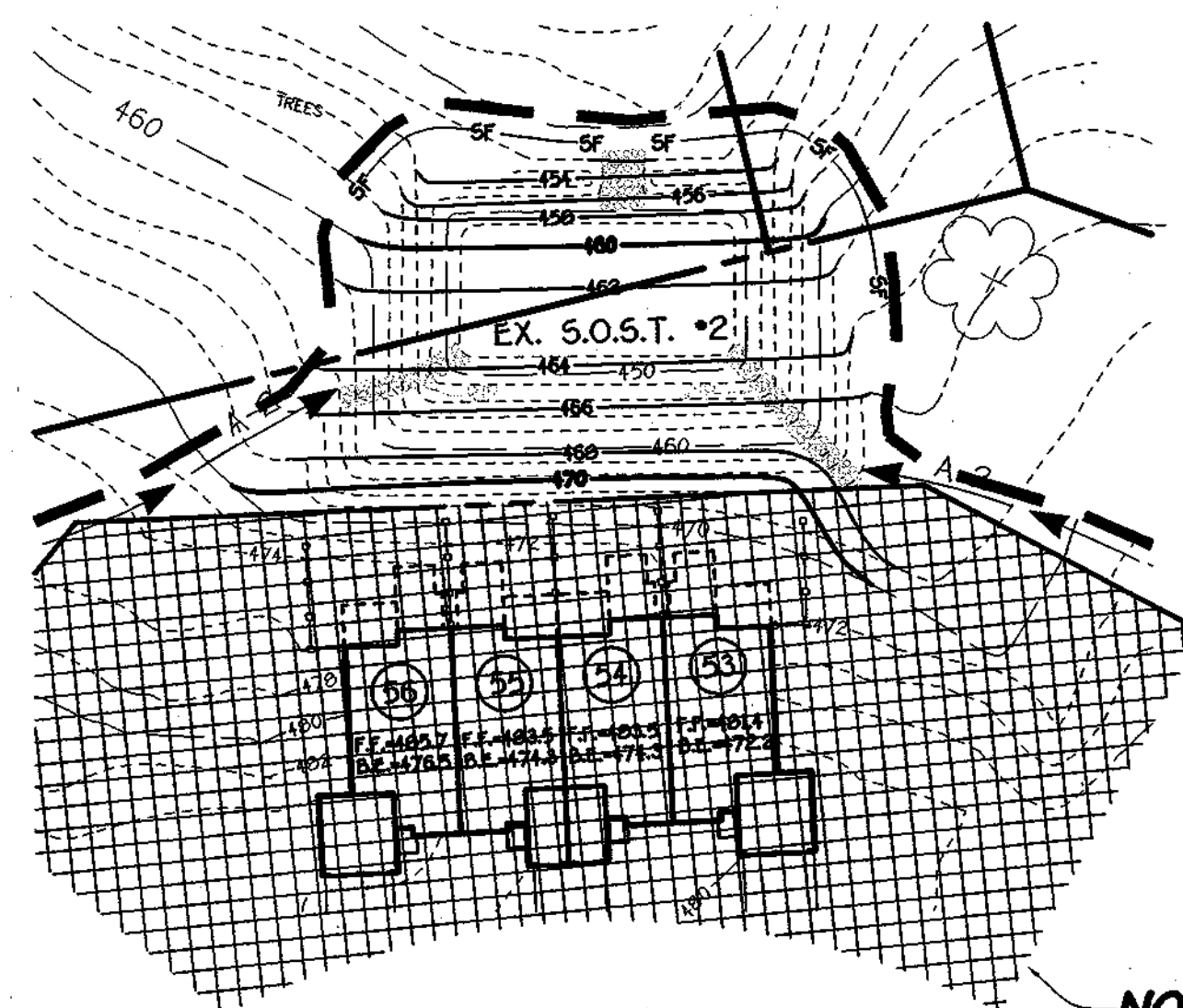
**PROPOSED GATEHOUSE / COMMON DINING AREA AND WATER TREATMENT BUILDING**  
SCALE: 1" = 20"



**PROFILE**  
NO SCALE

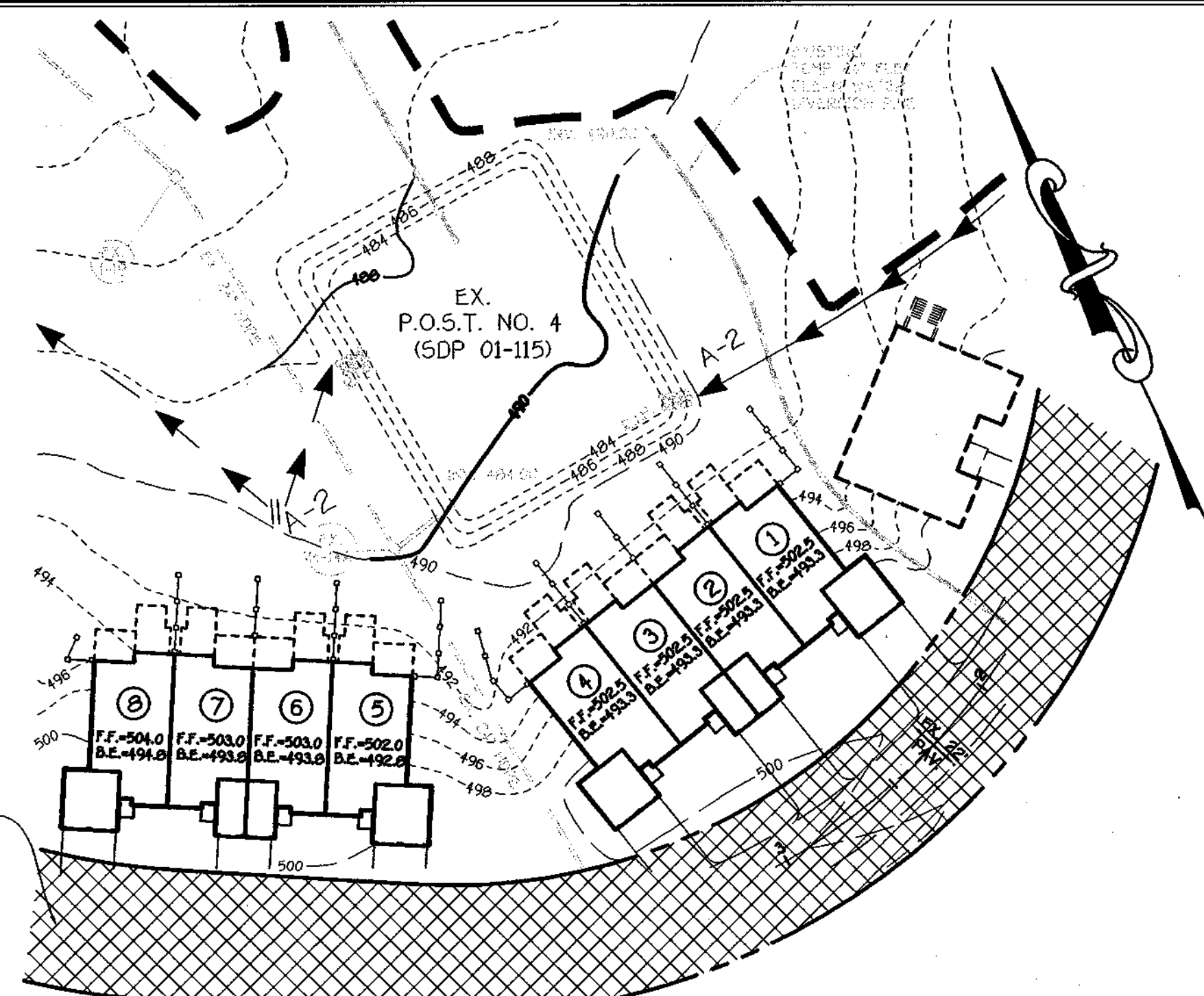


**PROFILE**  
NO SCALE

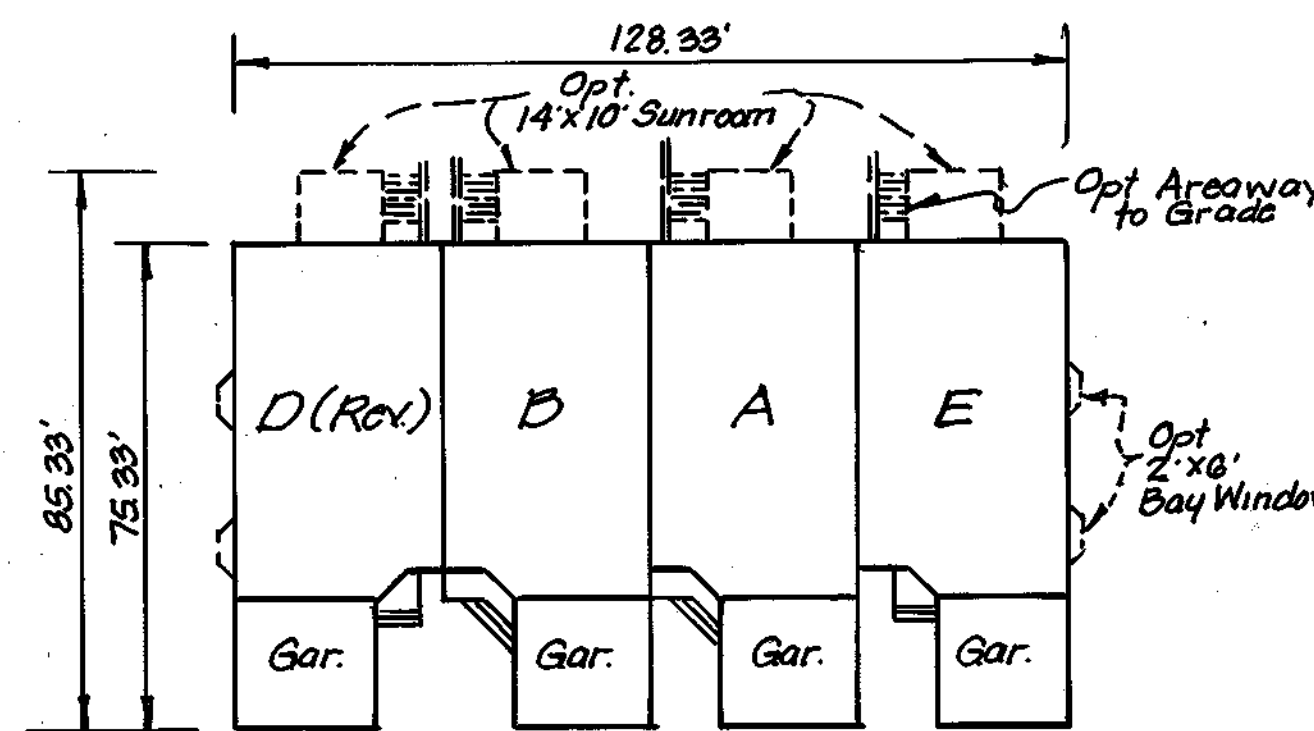


**FINAL GRADING @ S.O.S.T. NO. 2**  
SCALE: 1" = 50"

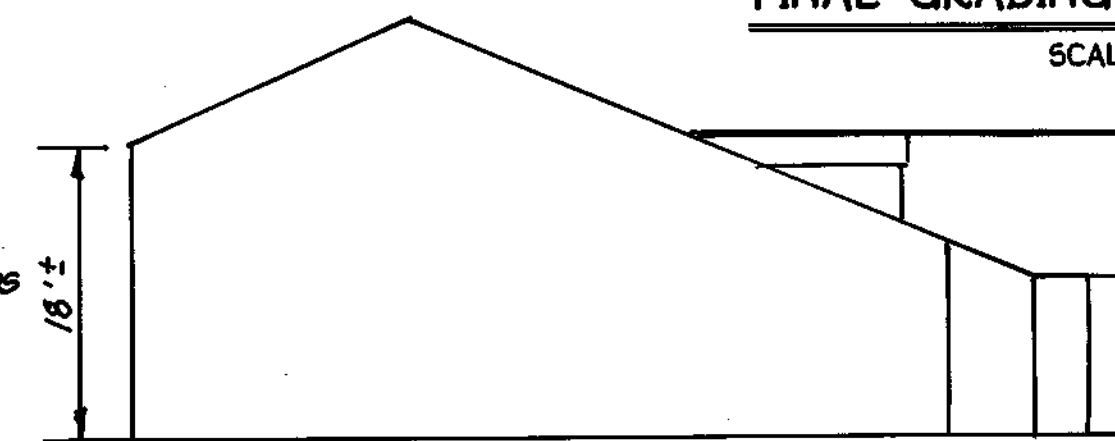
NOT PART OF THIS SUBMISSION (SEE SDP-01-115)



**FINAL GRADING @ P.O.S.T. NO. 4**  
SCALE: 1" = 50"

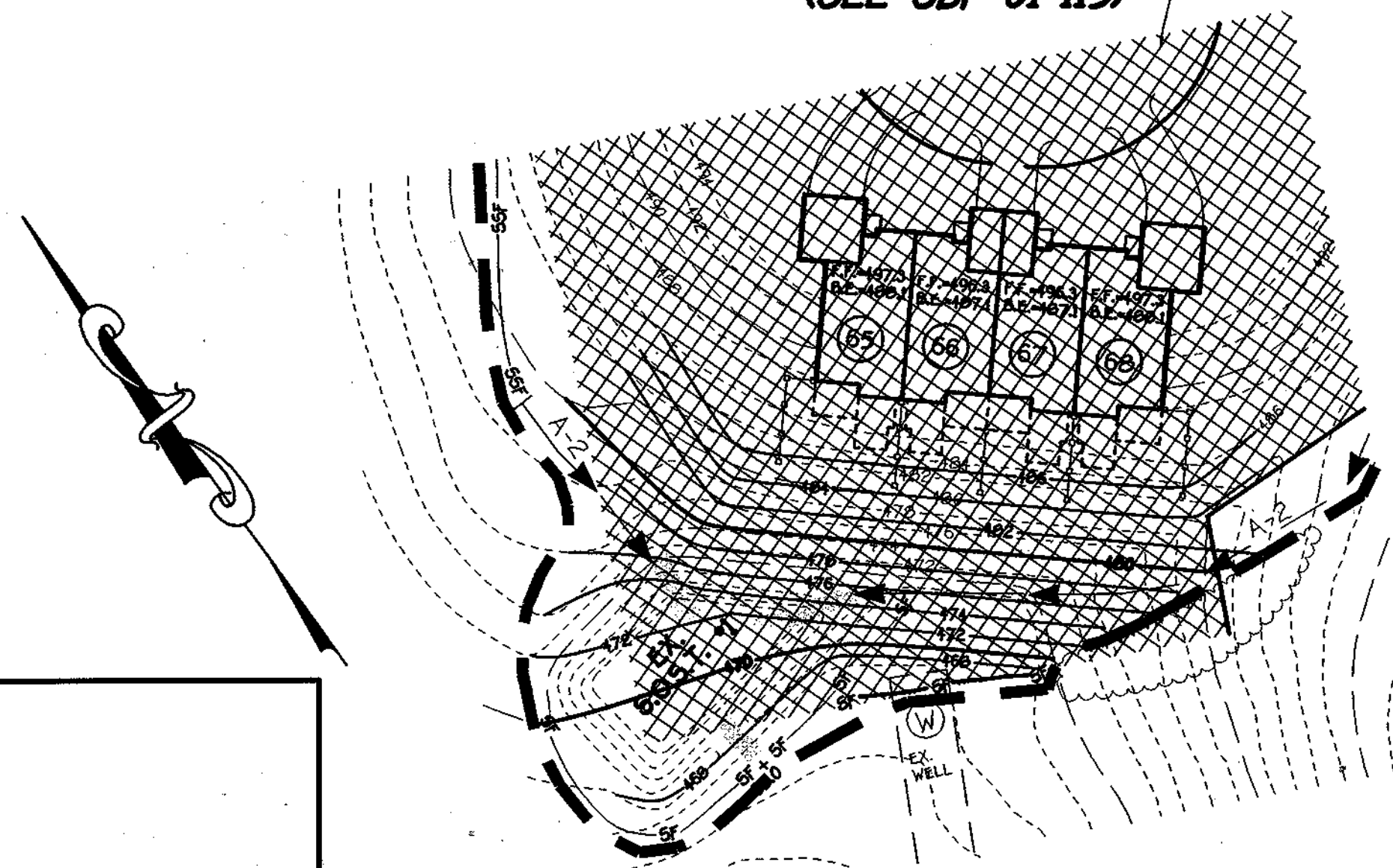


**PROPOSED 4-UNIT BLDGS**  
Scale 1" = 30"

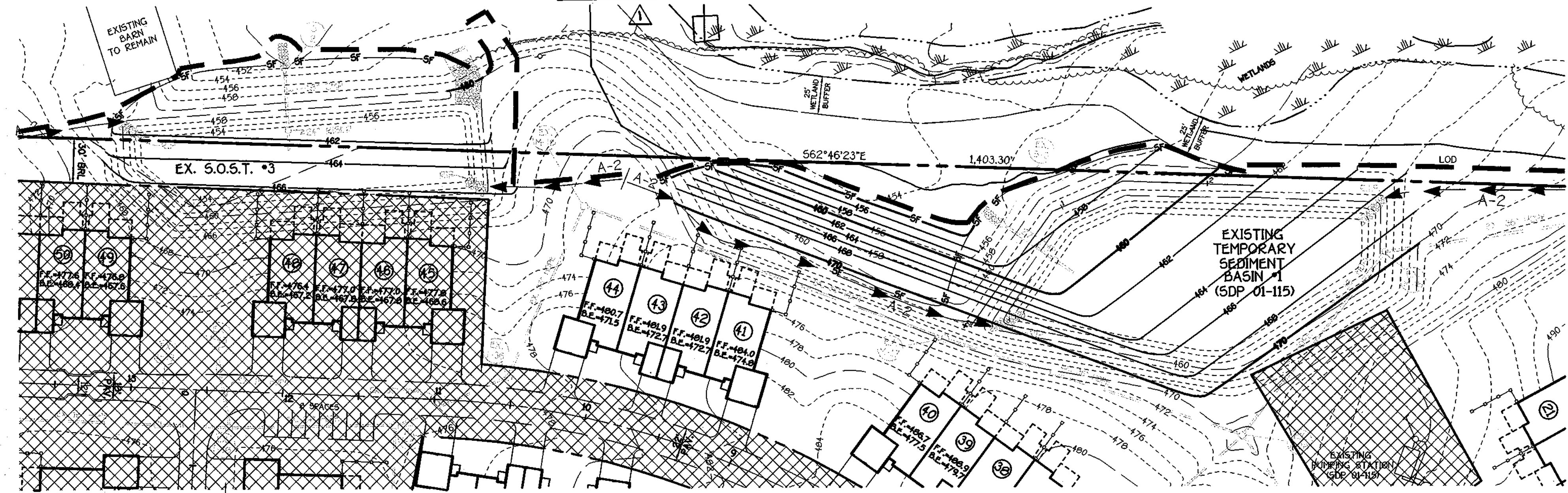


**PROFILE**  
No Scale

NOT PART OF THIS SUBMISSION (SEE SDP-01-115)



**FINAL GRADING @ S.O.S.T. NO. 1**  
SCALE: 1" = 50"



NOT PART OF THIS SUBMISSION (SEE SDP-01-115)

**FINAL GRADING @ S.O.S.T. NO. 3 & SEDIMENT BASIN NO. 1**  
SCALE: 1" = 50"

No	Revision	Date
1	Added "Belle Via" house type details	2-9-04

**ENGINEER'S CERTIFICATE**  
I certify that the design, dimension and sediment control represents a practical and workable plan based on the best knowledge of the site conditions and that it was prepared in accordance with the standards of the Howard Soil Conservation District.  
Signature: *John R. Reulicke, Jr.* Date: 8-12-02

**DEVELOPER'S CERTIFICATE**  
I/We certify that the development and construction will be done according to this plan and that any responsible personnel involved in the construction project will have a Certificate of Attendance of a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.  
Signature of Developer: *Donald R. Reulicke, Jr.* Date: 8-12-02

Reviewed for HOWARD SCD and meets Technical Requirements.  
U.S. Department of Natural Resources  
Conservation Service  
This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.  
Signature: *John R. Reulicke, Jr.* Date: 8/19/02

**OWNER / DEVELOPER**  
VILLAS AT CATTAIL CREEK, L.L.C.  
c/o H.C. J. THOMAS SCRIVENER  
8000 CENTRE PARK DRIVE  
SUITE 209  
COLUMBIA, MARYLAND 21045  
(410) 954-2522

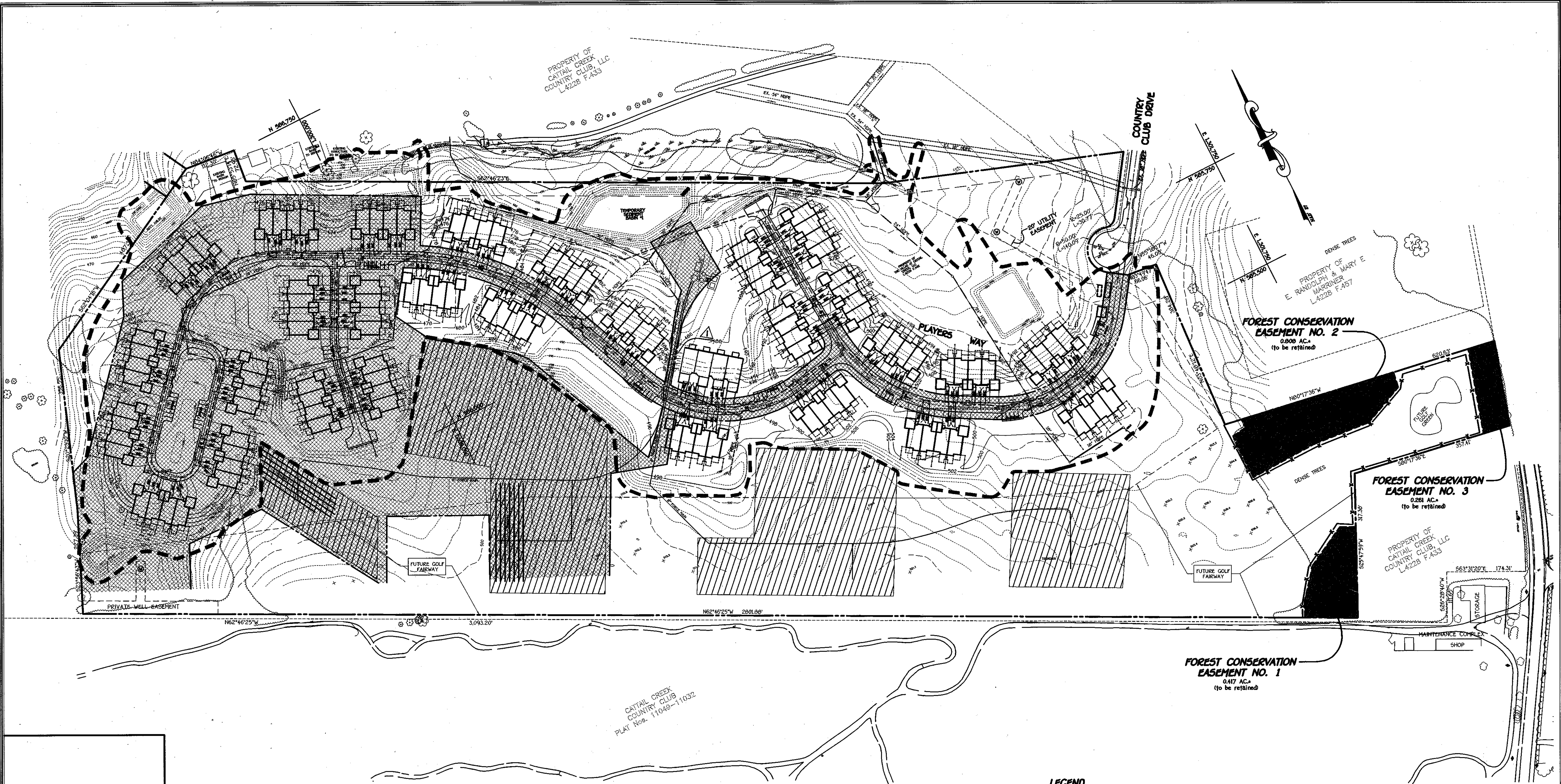
APPROVED DEPARTMENT OF PLANNING AND ZONING  
Signature: *Cynthia H. Heston* Date: 9/2/02  
Chief, Division of Land Development  
Signature: *John R. Reulicke, Jr.* Date: 8/12/02  
Chief, Development Engineering Division  
Signature: *John R. Reulicke, Jr.* Date: 8/27/02  
Director, Department of Planning and Zoning

PROJECT: THE VILLAS AT CATTAIL CREEK SECTION/AREA: 1-116 LOT NO.: 1-116  
DEED: L. 4228, F. 442 BLOCK NO.: 3 ZONE: RC-DEO TAX/ZONE: 21 ELEC. DIST.: 4th CENSUS TR.:  
WATER CODE: SEWER CODE:

**DETAIL SHEET**  
**SITE DEVELOPMENT PLAN**  
**THE VILLAS AT CATTAIL CREEK**  
ZONING: RC-DEO  
TAX MAP No: 21 PARCEL: 3 GRID No: 2  
FOURTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
SCALE: 1" = 50' DATE: AUGUST, 2002  
SHEET 7 OF 9

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTONAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
ELLSWORTH CITY, MARYLAND 21117  
(410) 461-2055





No.	Revision	Date
1	Changed house types for Units 29-32 to the Belle Via model per new architectural plans	2-9-04

**LEGEND**

- — — — — LIMIT OF DISTURBANCE
- FOREST CONSERVATION EASEMENT
- X — X — X TEMPORARY FENCING

**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTURIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL FREE  
 ELLICOTT CITY, MARYLAND 21114  
 (410) 461-2855

**Eco-Science Professionals, Inc.**  
 CONSULTING ECOLOGISTS  
 MD DNR Qualified Professional  
 USACOE Wetland Delimited  
 Certification # WDCP93MD06100418  
 JOHN P. CANOLES

**ENGINEER'S CERTIFICATE**  
 I certify that this plan, design and erosion and sediment control represents a practical and workable plan based on the best available knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.  
 Signature: *[Signature]* Date: 8/12/02  
**DEVELOPER'S CERTIFICATE**  
 I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.  
 Signature of Developer (Print name below signature): *[Signature]* Date: 8/12/02

Reviewed for HOWARD and meets Technical Requirements.  
 U.S.D. Natural Resources Conservation Service  
 U.S. District of Columbia  
 Date: 8/19/02  
 U.S. District of Columbia  
 Date: 8/19/02  
**OWNER / DEVELOPER**  
 VILLAS AT CATTAIL CREEK, L.L.C.  
 c/o MR. J. THOMAS SCRIVENER  
 8000 CENTRE PARK DRIVE  
 SUITE 209  
 COLUMBIA, MARYLAND 21045  
 (410) 564-2222

APPROVED DEPARTMENT OF PLANNING AND ZONING  
 Chief, Division of Land Development  
 Date: 9/26/02  
 Chief, Development Engineering Division  
 Date: 9/26/02  
 Director, Department of Planning and Zoning  
 Date: 9/27/02  
 PROJECT: THE VILLAS AT CATTAIL CREEK SECTION/AREA: 1-116 LOT NO.:  
 DEED: L. 4228, F. 442 BLOCK NO.: 3 ZONE: RC-DEO TAX/ZONE: 21 ELEC. DIST.: 4th CENSUS TR.:  
 WATER CODE: SEWER CODE:

**ON-SITE FOREST CONSERVATION PLAN**  
**SITE DEVELOPMENT PLAN**  
**THE VILLAS AT CATTAIL CREEK**  
 ZONING: RC-DEO  
 TAX MAP No: 21 PARCEL: 3 GRID No: 2  
 FOURTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 100' DATE: AUGUST 8, 2002  
 SHEET 8 OF 9



**FOREST DATA FOR THE VILLAS AT CATTAIL CREEK**  
TAX MAP NO. 21 PARCEL Nos. 229  
FOURTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

	ACRES
GROSS AREA:	58.0
100 YEAR FLOODPLAIN:	58.0
NET TRACT AREA (NTA):	58.0
EXISTING FOREST (NTA):	3.4
AFFORESTATION THRESHOLD:	8.7
FOREST TO BE CLEARED (NTA):	1.9
FOREST TO BE RETAINED IN FCE (NTA):	1.9
REFORESTATION REQUIRED:	9.1
ONSITE REFORESTATION PROPOSED:	0
OFF-SITE REFORESTATION REQUIRED:	9.1

See SDP 01.115 & F. 02.170  
for 3.9 acres of planting.  
3.9 + 5.2 = 9.1 acres

**OFF-SITE FCE PLANT LIST**

QTY.	NAME	SIZE
290	ACER RUBRUM - RED MAPLE	2-3" WHP
350	FRAXINUS PENNSYLVANICA - GREEN ASH	2-3" WHP
291	LIRIODENDRON TULIPIFERA - POPLAR	2-3" WHP
180	NYSSA SYLVATICA - BLACK GUM	2-3" WHP
219	PLATANUS OCCIDENTALIS - SYCAMORE	2-3" WHP
245	QUERCUS ALBA - WHITE OAK	2-3" WHP
236	QUERCUS PALUSTRIS - PIN OAK	2-3" WHP

**PLANTING/SOIL SPECIFICATIONS**

- PLANTING OF NURSERY STOCK SHALL TAKE PLACE BETWEEN MARCH 15th AND APRIL 30th OR SEPTEMBER 15th AND NOVEMBER 15th.
- A TWELVE (12) INCH LAYER OF TOPSOIL SHALL BE SPREAD OVER ALL FORESTATION AREAS IMPACTED BY SITE GRADING TO ASSURE A SUITABLE PLANTING AREA. DISTURBED AREAS SHALL BE SEEDED AND STABILIZED AS PER GENERAL CONSTRUCTION PLAN FOR PROJECT. PLANTING AREAS NOT IMPACTED BY SITE GRADING SHALL HAVE NO ADDITIONAL TOPSOIL INSTALLED.
- ALL BARE-ROOT PLANTING STOCK SHALL HAVE THEIR ROOT SYSTEMS DIPPED INTO AN ANTI-DESICCANT GEL PRIOR TO PLANTING.
- PLANTS SHALL BE INSTALLED SO THAT THE TOP OF ROOT MASS IS LEVEL WITH THE TOP OF EXISTING GRADE. BACKFILL IN THE PLANTING PITS SHALL CONSIST OF 3 PARTS EXISTING SOIL TO 1 PART FINE FINES OR EQUIVALENT.
- MULCH SHALL CONSIST OF AGRIFORM 22-9-2, OR EQUIVALENT, APPLIED AS PER MANUFACTURER'S SPECIFICATIONS.
- A TWO (2) INCH LAYER OF HARDWOOD MULCH SHALL BE PLACED OVER THE ROOT AREA OF ALL PLANTINGS.
- PLANT MATERIAL SHALL BE TRANSPORTED TO THE SITE IN A TARPED OR COVERED TRUCK. PLANTS SHALL BE KEPT MOIST PRIOR TO PLANTING.
- ALL NON-ORGANIC DEBRIS ASSOCIATED WITH THE PLANTING OPERATION SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.

**SEQUENCE OF CONSTRUCTION**

- SEDIMENT CONTROL AND TREE PROTECTION DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH GENERAL CONSTRUCTION PLAN FOR SITE. SITE SHALL BE GRADED IN ACCORDANCE WITH GENERAL CONSTRUCTION PLANS.
- PROPOSED FORESTATION AREAS IMPACTED BY SITE GRADING SHALL BE TOPSOILED AND STABILIZED AS PER NOTE NO. 2 OF PLANTING/SOIL SPECIFICATIONS FOR PROJECT.
- PLANTS SHALL BE INSTALLED AS PER PLANT SCHEDULE AND THE PLANTING/SOIL SPECIFICATIONS FOR THE PROJECT.
- UPON COMPLETION OF THE PLANTING, SIGNAGE SHALL BE INSTALLED AS PER THE FOREST PROTECTION DEVICES SHOWN ON THE FOREST CONSERVATION PLAN.
- PLANTINGS SHALL BE MAINTAINED AND GUARANTEED IN ACCORDANCE WITH THE MAINTENANCE AND GUARANTEE REQUIREMENTS FOR PROJECT.

**MAINTENANCE OF PLANTINGS**

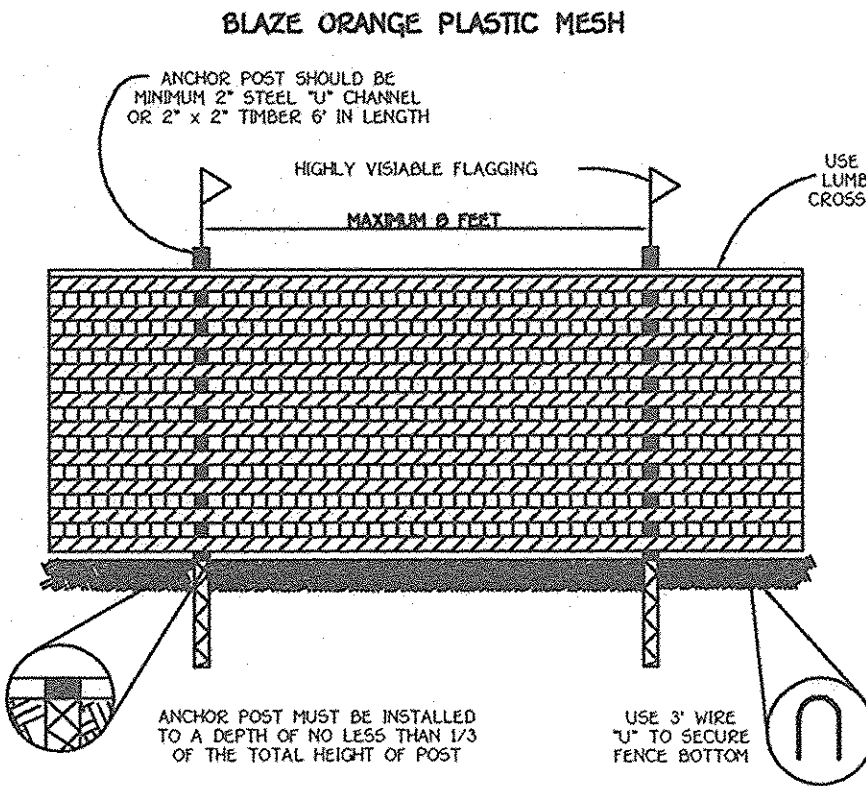
- MAINTENANCE OF PLANTINGS SHALL LAST FOR A PERIOD OF 26 MONTHS.
- ALL PLANT MATERIAL SHALL BE WATERED TWICE A MONTH DURING THE 1st GROWING SEASON. WATERING MAY BE MORE OR LESS FREQUENT DEPENDING ON WEATHER CONDITIONS. DURING 2nd GROWING SEASON, ONCE A MONTH DURING MAY-SEPTEMBER, IF NEEDED.
- INVASIVE EXOTICS AND NOXIOUS WEEDS WILL BE REMOVED FROM FORESTATION AREAS. OLD FIELD SUCCESSIONAL SPECIES WILL BE RETAINED.
- PLANTS WILL BE EXAMINED A MINIMUM TWO TIMES DURING THE GROWING SEASON FOR SERIOUS PLANT PESTS AND DISEASES. SERIOUS PROBLEMS WILL BE TREATED WITH THE APPROPRIATE AGENT.
- DEAD BRANCHES WILL BE PRUNED FROM PLANTINGS.

**GUARANTEE REQUIREMENTS**

- A 75 PERCENT SURVIVAL RATE OF FORESTATION PLANTINGS WILL BE REQUIRED AT THE END OF THE 24 MONTH MAINTENANCE PERIOD. ALL PLANT MATERIAL BELOW THE 75 PERCENT THRESHOLD WILL BE REPLACED AT THE BEGINNING OF THE NEXT GROWING SEASON.

**SURETY FOR FORESTATION**

- THE DEVELOPER SHALL POST A SURETY (BOND, LETTER OF CREDIT) TO ENSURE THAT FORESTATION PLANTINGS ARE COMPLETED. UPON ACCEPTANCE OF THE PLANTINGS BY THE COUNTY, THE BOND SHALL BE RELEASED.
- SURETY FOR ON-SITE RETENTION (\$13,069.00), AND OFF-SITE AFFORESTATION (\$113,256.00) IS POSTED WITH THE DEVELOPER'S AGREEMENT FOR THIS SUBDIVISION. TOTAL FOREST CONSERVATION SURETY AMOUNT FOR THIS SUBDIVISION IS \$126,325.00



**FCP NOTES**

- ANY FOREST CONSERVATION EASEMENT (FCE) AREA SHOWN HEREON IS SUBJECT TO PROTECTIVE COVENANTS WHICH MAY BE FOUND IN THE LAND RECORDS OF HOWARD COUNTY WHICH RESTRICT THE DISTURBANCE AND USE OF THESE AREAS.
- THE FOREST CONSERVATION EASEMENTS HAVE BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE, FOREST CONSERVATION ACT. NO CLEARING, GRADING, OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENTS, HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.
- FORESTED AREAS OCCURRING OUTSIDE OF THE FCE SHALL NOT BE CONSIDERED PART OF THE FCE AND SHALL NOT BE SUBJECT TO PROTECTIVE LAND COVENANTS.
- LIMITS OF DISTURBANCE SHALL BE RESTRICTED TO AREAS OUTSIDE THE LIMIT OF TEMPORARY FENCING OR THE FCE BOUNDARY, WHICHEVER IS GREATER.
- THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION OR DISTURBANCE OF VEGETATION IN THE FOREST CONSERVATION EASEMENT, EXCEPT AS PERMITTED BY HOWARD COUNTY DPZ.
- NO STOCKPILES, PARKING AREAS, EQUIPMENT CLEANING AREAS, ETC. SHALL OCCUR WITHIN AREAS DESIGNATED AS FOREST CONSERVATION EASEMENTS.
- TEMPORARY FENCING SHALL BE USED TO PROTECT FOREST RESOURCES DURING CONSTRUCTION. THE FENCING SHALL BE PLACED ALONG ALL FCE BOUNDARIES WHICH OCCUR WITHIN 15 FEET OF THE PROPOSED LIMITS OF DISTURBANCE.
- PERMANENT SIGNAGE SHALL BE PLACED 50' - 100' APART ALONG BOUNDARIES OF ALL AREAS INCLUDED IN FOREST CONSERVATION EASEMENTS.
- THE OUTSTANDING FOREST CONSERVATION REFORESTATION OBLIGATION SHALL BE MET THROUGH OFF-SITE PLANTING (5.2 AC.) ON PRESERVATION PARCEL 'B' IN 'GATHER HUNT, SECTION 1, AREA 1' PLAT NO. 13210.

**PLANTING SCHEDULE**

**OFF-SITE PLANTING AREA - FCE 21 (0.026 ACRES)**  
GATHER HUNT, SECTION 1, AREA 1 PROPERTY

QTY.	SPECIES	SIZE	SPACING
40	ACER RUBRUM - RED MAPLE	2-3" WHP	**
60	FRAXINUS PENNSYLVANICA - GREEN ASH	2-3" WHP	**
60	LIRIODENDRON TULIPIFERA - POPLAR	2-3" WHP	**
29	NYSSA SYLVATICA - BLACK GUM	2-3" WHP	**
30	PLATANUS OCCIDENTALIS - SYCAMORE	2-3" WHP	**
35	QUERCUS ALBA - WHITE OAK	2-3" WHP	**
35	QUERCUS PALUSTRIS - PIN OAK	2-3" WHP	**

**OFF-SITE PLANTING AREA - FCE 22 (3.346 ACRES)**  
GATHER HUNT, SECTION 1, AREA 1 PROPERTY

QTY.	SPECIES	SIZE	SPACING
200	ACER RUBRUM - RED MAPLE	2-3" WHP	**
225	FRAXINUS PENNSYLVANICA - GREEN ASH	2-3" WHP	**
176	LIRIODENDRON TULIPIFERA - POPLAR	2-3" WHP	**
115	NYSSA SYLVATICA - BLACK GUM	2-3" WHP	**
145	PLATANUS OCCIDENTALIS - SYCAMORE	2-3" WHP	**
155	QUERCUS ALBA - WHITE OAK	2-3" WHP	**
155	QUERCUS PALUSTRIS - PIN OAK	2-3" WHP	**

**OFF-SITE PLANTING AREA - FCE 20 (1.028 ACRES)**  
GATHER HUNT, SECTION 1, AREA 1 PROPERTY

QTY.	SPECIES	SIZE	SPACING
50	ACER RUBRUM - RED MAPLE	2-3" WHP	**
65	FRAXINUS PENNSYLVANICA - GREEN ASH	2-3" WHP	**
55	LIRIODENDRON TULIPIFERA - POPLAR	2-3" WHP	**
44	NYSSA SYLVATICA - BLACK GUM	2-3" WHP	**
44	PLATANUS OCCIDENTALIS - SYCAMORE	2-3" WHP	**
29	QUERCUS ALBA - WHITE OAK	2-3" WHP	**
46	QUERCUS PALUSTRIS - PIN OAK	2-3" WHP	**

\*\* - PLANTING UNITS TO BE SPACED ON 10 FOOT CENTERS. TREE SHADERS ARE REQUIRED - PLANTINGS SHOULD BE INSTALLED IN ROWS TO FACILITATE FUTURE MAINTENANCE. WHERE POSSIBLE ROWS SHOULD BE MADE ALONG CONTOUR.  
B.T. - BRANCHED TRANSPLANT

**FOREST CONSERVATION WORKSHEET**

**NET TRACT AREA:**

A. TOTAL TRACT AREA	58.0 Ac.
B. AREA WITHIN 100 YEAR FLOODPLAIN	0.0 Ac.
C. AREA TO REMAIN IN AGRICULTURAL PRODUCTION	0.0 Ac.
D. NET TRACT AREA	58.0 Ac.
E. AFFORESTATION THRESHOLD	8.7 Ac.
F. CONSERVATION THRESHOLD	11.6 Ac.

**EXISTING FOREST COVER:**

G. EXISTING FOREST COVER (EXCLUDING FLOODPLAIN)	3.4 Ac.
H. AREA OF FOREST ABOVE AFFORESTATION THRESHOLD	0.0 Ac.
I. AREA OF FOREST ABOVE CONSERVATION THRESHOLD	0.0 Ac.

**BREAK EVEN POINT:**

J. FOREST RETENTION ABOVE THRESHOLD WITH NO MITIGATION	N/A
K. CLEARING PERMITTED WITHOUT MITIGATION	0.0 Ac.

**PROPOSED FOREST CLEARING:**

L. TOTAL AREA OF FOREST TO BE CLEARED	1.9 Ac.
M. TOTAL AREA OF FOREST TO BE RETAINED	1.5 Ac.

**PLANTING REQUIREMENTS:**

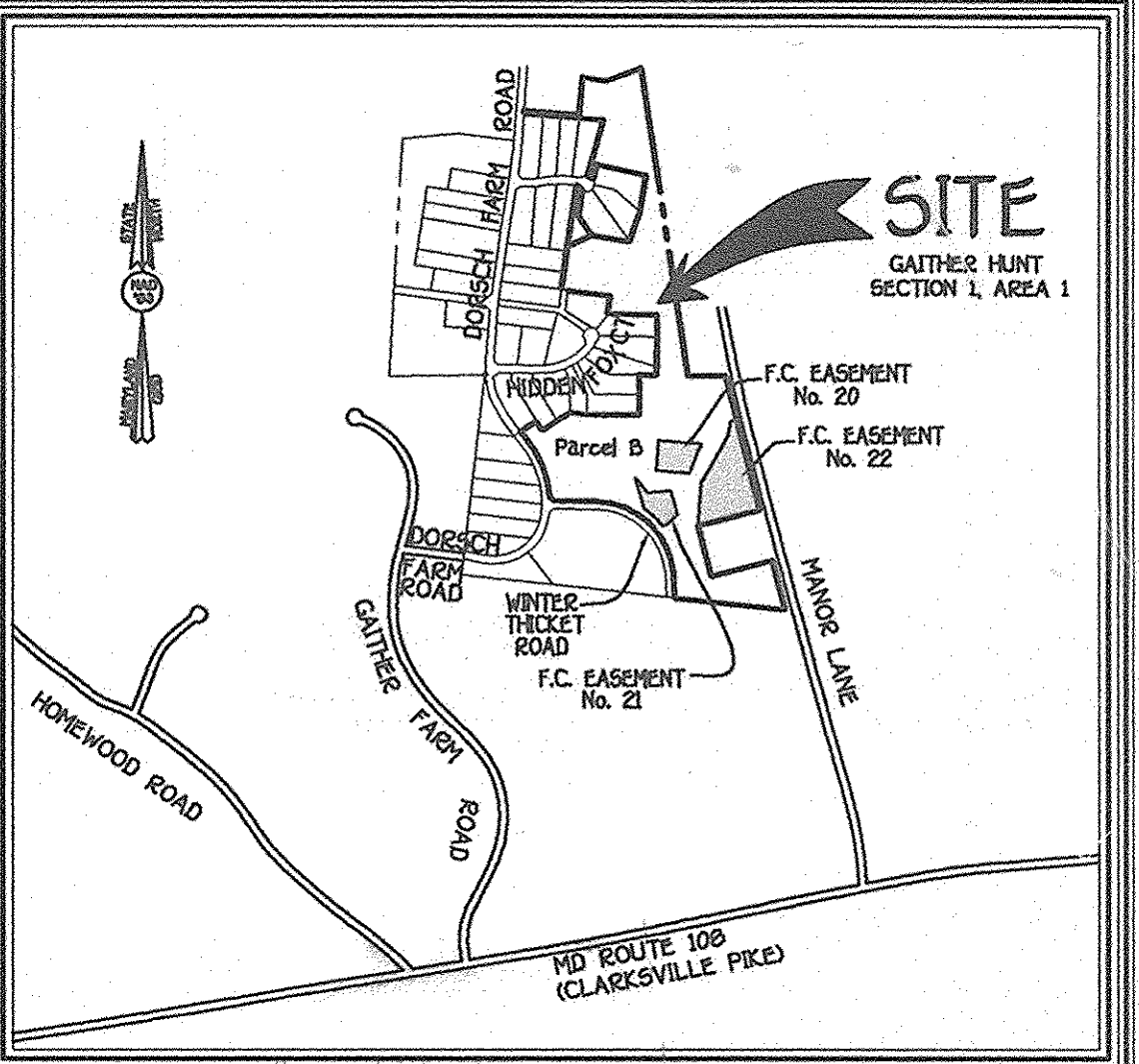
N. REFORESTATION FOR CLEARING ABOVE CONSERVATION THRESHOLD	0.0 Ac.
P. REFORESTATION FOR CLEARING BELOW CONSERVATION THRESHOLD	3.8 Ac.
Q. CREDIT FOR CLEARING ABOVE CONSERVATION THRESHOLD	-0.0 Ac.
R. TOTAL REFORESTATION REQUIRED	3.8 Ac.
S. TOTAL AFFORESTATION REQUIRED	5.3 Ac.
T. TOTAL REFORESTATION AND AFFORESTATION REQUIRED	9.1 Ac. (OFFSITE)

**PLANTING NOTES:**

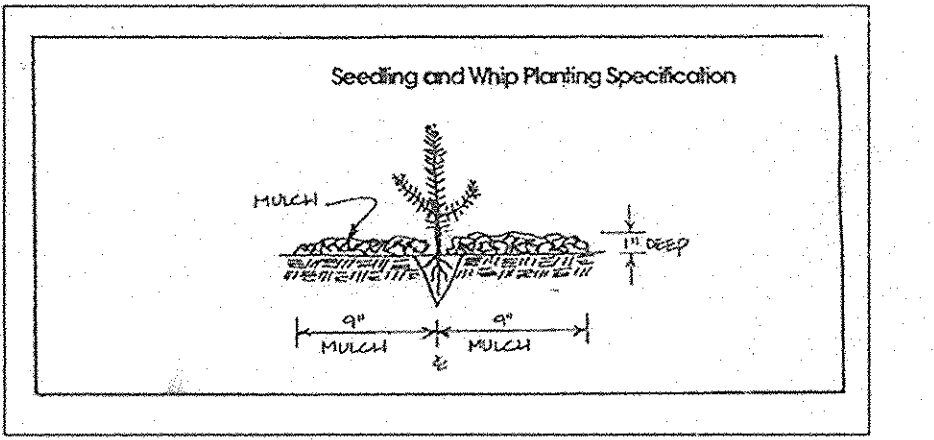
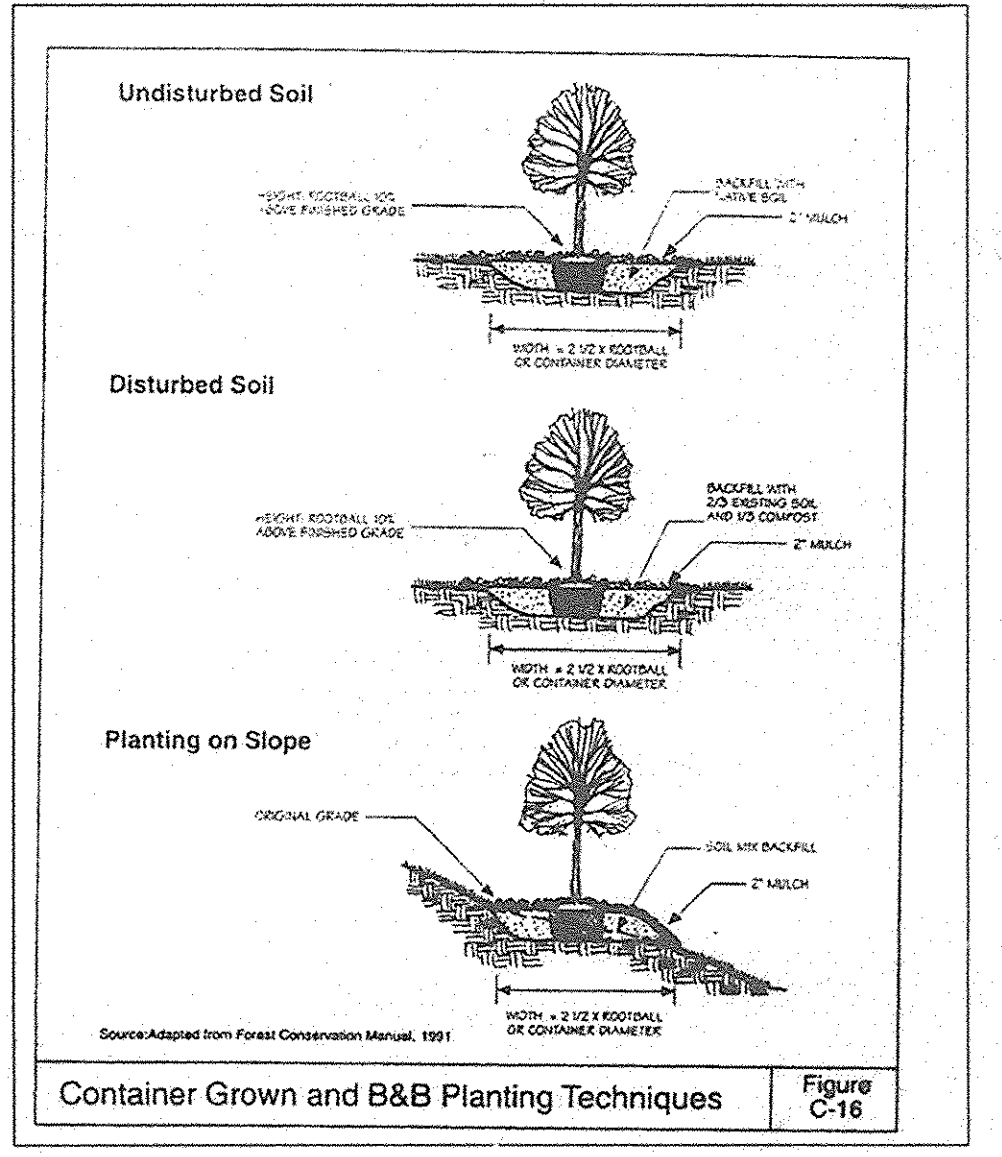
- MULTIFLORA ROSE CONTROL MUST BE PERFORMED AS PART OF THIS PLANTING PLAN.
- BARE-ROOT MATERIAL MAY BE USED TO OFFSET THE COST OF MULTIFLORA ROSE REMOVAL AND MAINTENANCE. IF BARE-ROOT MATERIAL IS USED IT MUST BE PLANTED IN MARCH-APRIL AND AN ANTI-DESICCANT GEL SHOULD BE UTILIZED TO PROTECT ROOT SYSTEMS. CONTAINER GROWN STOCK MAY BE USED.
- PLANTS SHOULD BE FLAGGED TO AID ON LOCATION DURING MAINTENANCE. PLANTINGS SHOULD ALSO BE PLANTED IN GRID PATTERN TO FACILITATE MAINTENANCE AND REMOVAL OF INVASIVE AND EXOTIC SPECIES.

**MULTIFLORA ROSE CONTROL NOTE:**

PRIOR TO PLANTING ALL MULTIFLORA ROSE WITHIN PLANTING AREAS SHALL BE REMOVED. REMOVAL OF THE ROSE MAY BE PERFORMED WITH MOWING AND HERBICIDE TREATMENTS. PHYSICAL REMOVAL OF ALL TOP GROWTH FOLLOWING BY A PERIODIC HERBICIDE TREATMENT OF STUMP SPROUTS IS RECOMMENDED. NATIVE TREE AND SHRUB SPECIES OCCURRING WITHIN THE ROSE THICKETS SHOULD BE RETAINED WHEREVER POSSIBLE. HERBICIDES TREATMENTS SHALL OCCUR ON 2 MONTH INTERVALS DURING THE FIRST GROWING SEASON AND ONCE EACH IN THE SPRING AND FALL FOR SUBSEQUENT YEARS. HERBICIDE USED SHALL BE MADE SPECIFICALLY TO ADDRESS WOODY PLANT MATERIAL AND SHALL BE APPLIED AS PER MANUFACTURERS SPECIFICATIONS. CARE SHOULD BE TAKEN NOT TO SPRAY PLANTED TREES OR NATURALLY OCCURRING NATIVE TREE/SHRUB SEEDLINGS. IT IS RECOMMENDED THAT INITIATION OF ROSE REMOVAL BEGIN AT LEAST SIX MONTHS PRIOR TO PLANTING.



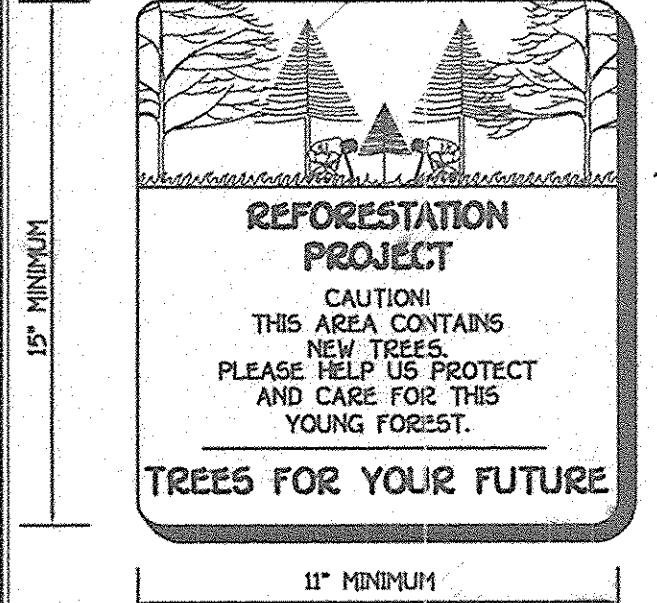
**VICINITY MAP**  
SCALE: 1" = 1200'



**OFF-SITE FOREST CONSERVATION PLAN, FOREST CONSERVATION NOTES AND DETAILS LOCATED ON NON-BUILDABLE PRESERVATION PARCEL 'B' GATHER HUNT, SECTION 1, AREA 1 (PLAT Nos. 13208 THRU 13211)**  
SEE C-22-14

**SITE DEVELOPMENT PLAN THE VILLAS AT CATTAIL CREEK**  
ZONING: RC-DEO

TAX MAP No: 21 PARCEL: 3 GRID No: 2  
FOURTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
SCALE: 1" = 100' DATE: AUGUST 8, 2002  
SHEET 9 OF 9



▲ - DENOTES PLAN VIEW SYMBOL

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL SQUARE OFFICE PARK, 10072 BALDORNE NATIONAL PIKE  
ELLSWORTH CITY, MARYLAND 21041  
(410) 461 - 2095

**Eco-Science Professionals, Inc.**  
CONSULTING ECOLOGISTS

MD DNR Qualified Professional  
USACOE Wetland Delinator  
Certification # WDCP93MD05100418

JOHN P. CANOLES

**ENGINEER'S CERTIFICATE**  
I certify that the erosion and sediment control represents a practical and workable plan based on the professional knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

*John P. Canoles*  
Signature of Engineer (Print name below signature) Date: 8-12-02

**DEVELOPER'S CERTIFICATE**  
I/We certify that all development and construction will be done according to this plan and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.

*John P. Canoles*  
Signature of Developer (Print name below signature) Date: 8/12/02

Reviewed for HOWARD SCD and meets Technical Requirements.  
*John K. Robertson*  
U.S. Natural Resources Conservation Service  
Date: 8/14/02

This development plan is approved for erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.  
*John K. Robertson*  
Date: 8/14/02

**OWNER / DEVELOPER**  
VILLAS AT CATTAIL CREEK, L.L.C.  
c/o MR. J. THOMAS SCRIVENER  
8608 CENTRE PARK DRIVE  
SUITE 209  
COLUMBIA, MARYLAND 21045  
(410) 364-5222

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development	<i>Cindy Havens</i>	Date: 9/26/02
Chief, Development Engineering Division	<i>John P. Canoles</i>	Date: 8/21/02
Director, Department of Planning and Zoning	<i>John P. Canoles</i>	Date: 9/27/02

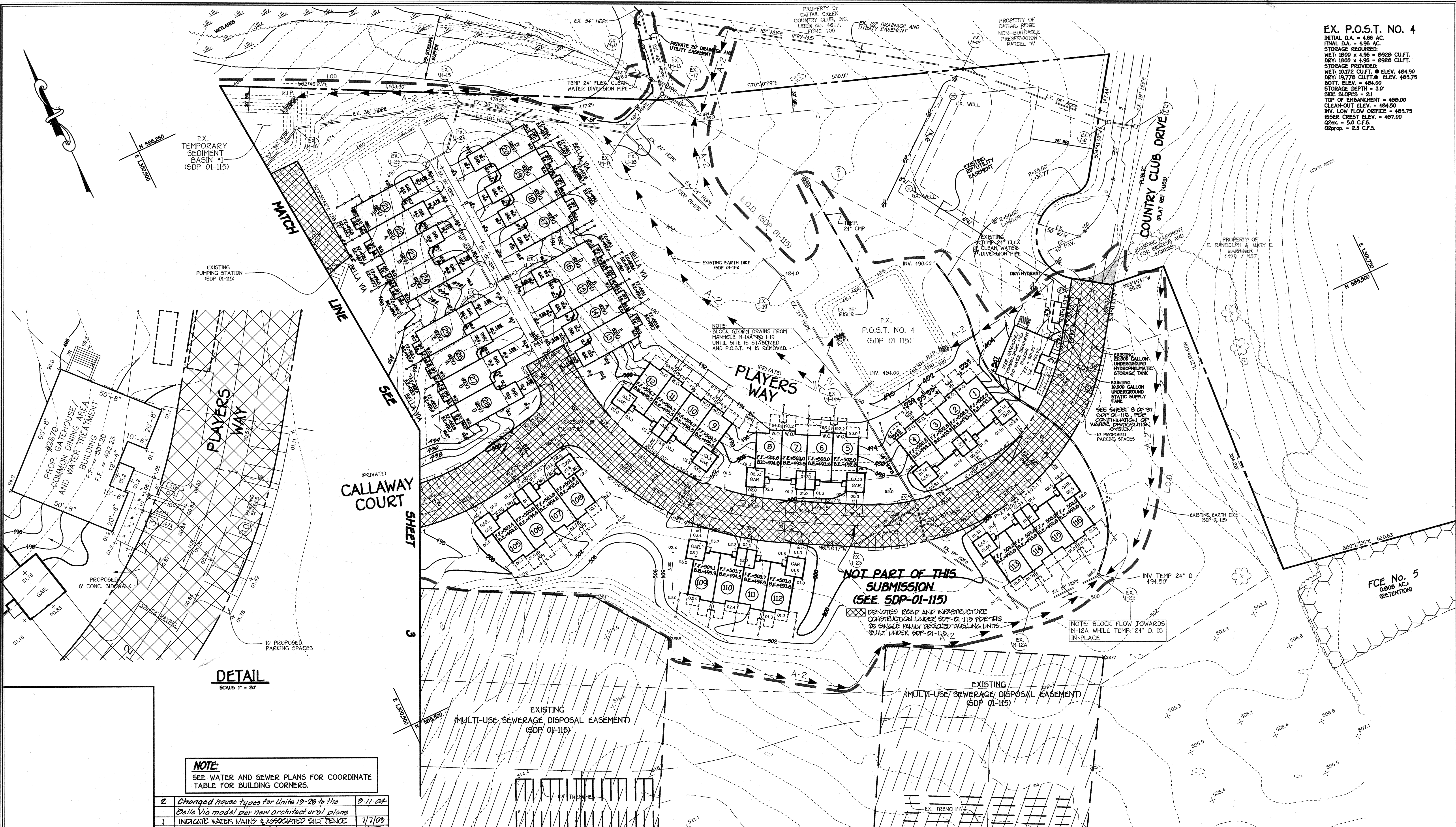
PROJECT: THE VILLAS AT CATTAIL CREEK SECTION/AREA: LOT NO. 1-16

DEED	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
L. 4228, F. 442	3	RC-DEO	21	4th	

WATER CODE: SEWER CODE:

SDP-99-148





**EX. P.O.S.T. NO. 4**  
 INITIAL D.A. = 4.66 AC.  
 FINAL D.A. = 4.96 AC.  
 STORAGE REQUIRED:  
 WET: 1800 x 4.96 = 8928 CU.FT.  
 STORAGE PROVIDED:  
 WET: 10172 CU.FT. @ ELEV. 484.90  
 DRY: 19,778 CU.FT. @ ELEV. 485.75  
 BOTTL. ELEV. = 484.00  
 STORAGE DEPTH = 3.0'  
 SIDE SLOPES = 2:1  
 TOP OF EMBANKMENT = 486.00  
 CLEAN-OUT ELEV. = 484.50  
 INV. LOW FLOW ORIFICE = 485.75  
 RISER CREST ELEV. = 487.00  
 Q25% = 5.0 C.F.S.  
 Q2prop = 2.3 C.F.S.

EX. TEMPORARY SEDIMENT BASIN #1 (SDP 01-115)

EXISTING PUMPING STATION (SDP 01-115)

NOTE: BLOCK STORE DRAINS FROM HATCH TO M-12A UNTIL SITE IS STABILIZED AND P.O.S.T. #4 IS REMOVED.

**NOT PART OF THIS SUBMISSION (SEE SDP-01-115)**

INDICATES ROAD AND INFRASTRUCTURE CONSTRUCTION UNDER SDP-01-115 FOR THE 25 SINGLE FAMILY DETACHED DWELLING UNITS BUILT UNDER SDP-01-115.

NOTE: BLOCK FLOW TOWARDS M-12A WHILE TEMP. 24" D. IS IN-PLACE

**DETAIL**  
SCALE 1" = 20'

**NOTE:**  
SEE WATER AND SEWER PLANS FOR COORDINATE TABLE FOR BUILDING CORNERS.

2	Changed house types for Units 19-20 to the Belle Via model per new architectural plans	8-11-04
1	INDICATE WATER MAINS & ASSOCIATED SILT FENCE	7/7/09
N.D.	REVISION	DATE

**ENGINEER'S CERTIFICATE**  
 I certify that this erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Signature of Engineer (Print name below signature) *John K. Robertson* Date *8-12-02*

**DEVELOPER'S CERTIFICATE**  
 I/we certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.

Signature of Developer (Print name below signature) *Donna R. Revuzick, Jr.* Date *8-12-02*

Reviewed for HOWARD SCD and meets Technical Requirements.  
 Signature of *Jim Myers* Date *8/19/02*  
 U.S.D.A.-Natural Resource Conservation Service

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.  
 Signature of *John K. Robertson* Date *8/19/02*  
 Howard SCD

**OWNER / DEVELOPER**  
 VILLAS AT CATTAIL CREEK, L.L.C.  
 c/o MR. J. THOMAS SCRIVENER  
 8800 CENTRE PARK DRIVE  
 SUITE 209  
 COLUMBIA, MARYLAND 21045  
 (410) 964-5522

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 Chief, Division of Land Development  
 Signature of *Chris Hume* Date *9/26/02*

Chief, Development Engineering Division  
 Signature of *John P. Sells* Date *8/27/02*  
 Director, Department of Planning and Zoning

PROJECT		SECTION/AREA		LOT NO.	
THE VILLAS AT CATTAIL CREEK		---		1 - 116	
DEED	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
L 4228, F. 442	3	RC-DEO	21	4th	---
WATER CODE			SEWER CODE		

**GRADING AND SEDIMENT CONTROL**

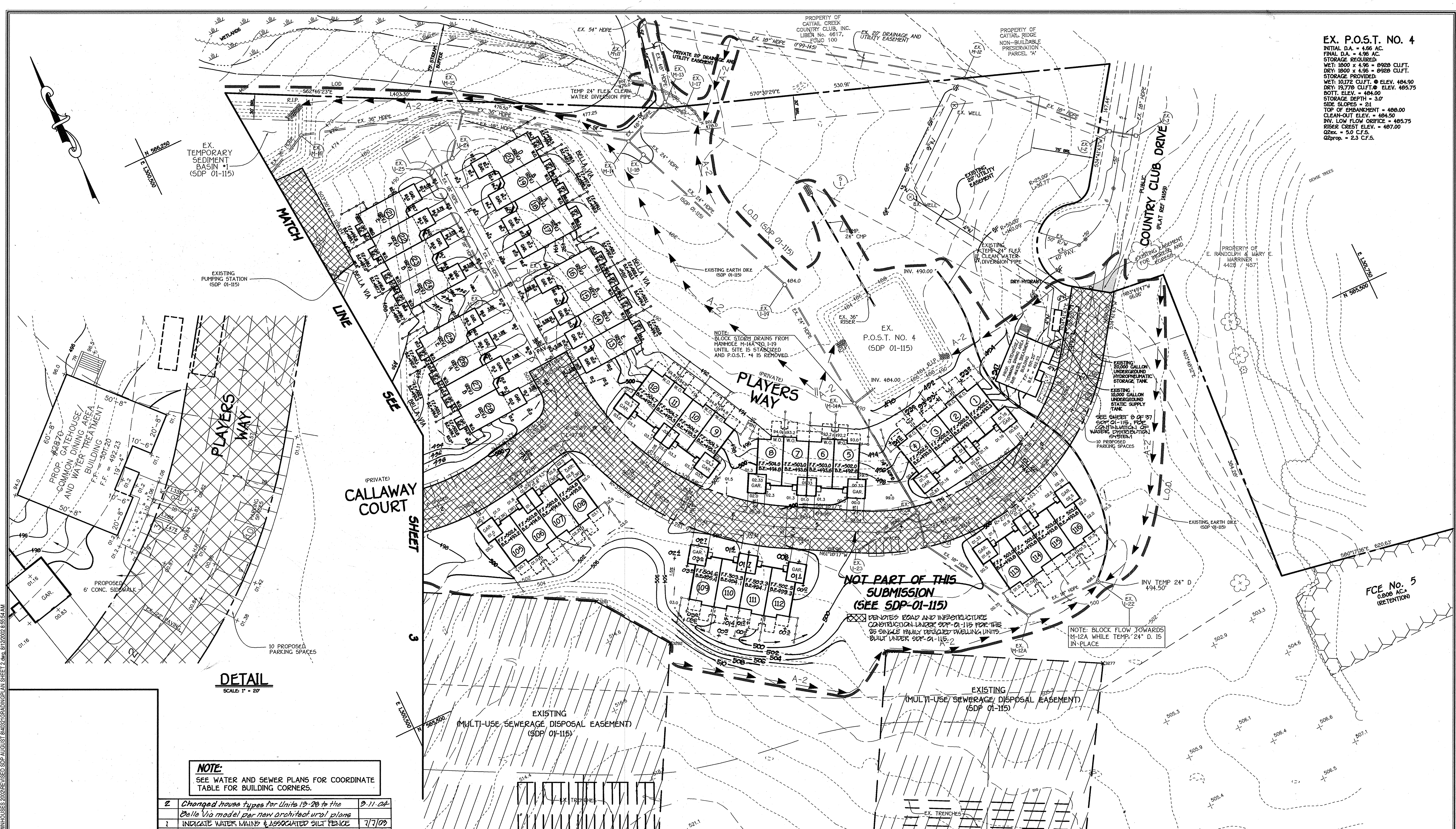
**SITE DEVELOPMENT PLAN**  
**THE VILLAS AT CATTAIL CREEK**  
 ZONING: RC-DEO  
 TAX MAP No: 21 PARCEL: 3 GRID No: 2  
 FOURTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 50' DATE: AUGUST 8, 2002  
 SHEET 2 OF 9

**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTENNIAL SQUARE OFFICE PARK - 10275 BALTIMORE NATIONAL FREE  
 ELLIOTT CITY, MARYLAND 21114  
 (410) 461-2895

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shp.99.148





**EX. P.O.S.T. NO. 4**  
 INITIAL D.A. = 4.66 AC.  
 FINAL D.A. = 4.96 AC.  
 STORAGE REQUIRED:  
 WET: 1800 x 4.96 = 8928 CU.FT.  
 DRY: 1800 x 4.96 = 8928 CU.FT.  
 STORAGE PROVIDED:  
 WET: 10172 CU.FT. @ ELEV. 484.90  
 DRY: 19,770 CU.FT. @ ELEV. 485.75  
 STORAGE DEPTH = 3.0'  
 BOTT. ELEV. = 484.00  
 TOP OF EMBANKMENT = 488.00  
 CLEAN-OUT ELEV. = 484.50  
 INV. LOW FLOW ORIFICE = 485.75  
 RISER CREST ELEV. = 487.00  
 Q<sub>2ex</sub> = 5.0 C.F.S.  
 Q<sub>2prop</sub> = 2.3 C.F.S.

EX. TEMPORARY SEDIMENT BASIN #1 (SDP 01-115)

EXISTING PUMPING STATION (SDP 01-115)

**DETAIL**  
 SCALE: 1" = 20'

**NOTE:**  
 SEE WATER AND SEWER PLANS FOR COORDINATE TABLE FOR BUILDING CORNERS.

2	Changed house types for Units 19-26 to the Belle Via model per new architectural plans	8-11-04
1	INDICATE WATER MAINS & ASSOCIATED SILT FENCE	7/7/03
NO.	REVISION	DATE

**ENGINEER'S CERTIFICATE**  
 I certify that the erosion and sediment control represents a practical and workable plan based on my knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.  
 Signature: *[Signature]* Date: 8-12-02  
**DEVELOPER'S CERTIFICATE**  
 I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.  
 Signature of Developer (Print name below signature): *Donald R. Reutter, Jr.* Date: 8-12-02

Reviewed for HOWARD SCD and meets Technical Requirements.  
 U.S.A. - Natural Resources Conservation Service  
 Signature: *Jim Myers* Date: 8/19/02  
 Signature: *John R. Robertson* Date: 8/19/02  
**OWNER / DEVELOPER**  
 VILLAS AT CATTAIL CREEK, L.L.C.  
 c/o MR. J. THOMAS SCRIVENER  
 8808 CENTRE PARK DRIVE  
 SUITE 209  
 COLUMBIA, MARYLAND 21045  
 (410) 964-5522

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 Chief, Division of Land Development  
 Chief, Development Engineering Division  
 Director, Department of Planning and Zoning  
 PROJECT: THE VILLAS AT CATTAIL CREEK  
 SECTION/AREA: 1-116  
 DEED: L. 4228, F. 442  
 BLOCK NO.: 3  
 ZONE: RC-DEO  
 TAX/ZONE: 21  
 ELEC. DIST.: 4th  
 CENSUS TR.:  
 WATER CODE:  
 SEWER CODE:

**GRADING AND SEDIMENT CONTROL**  
**SITE DEVELOPMENT PLAN**  
**THE VILLAS AT CATTAIL CREEK**  
 ZONING: RC-DEO  
 TAX MAP No: 21 PARCEL: 3 GRID No: 2  
 FOURTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 50' DATE: AUGUST 09, 2002  
 SHEET 2 OF 9

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**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
 ELICOTT CITY, MARYLAND 21034  
 (410) 468 - 2955

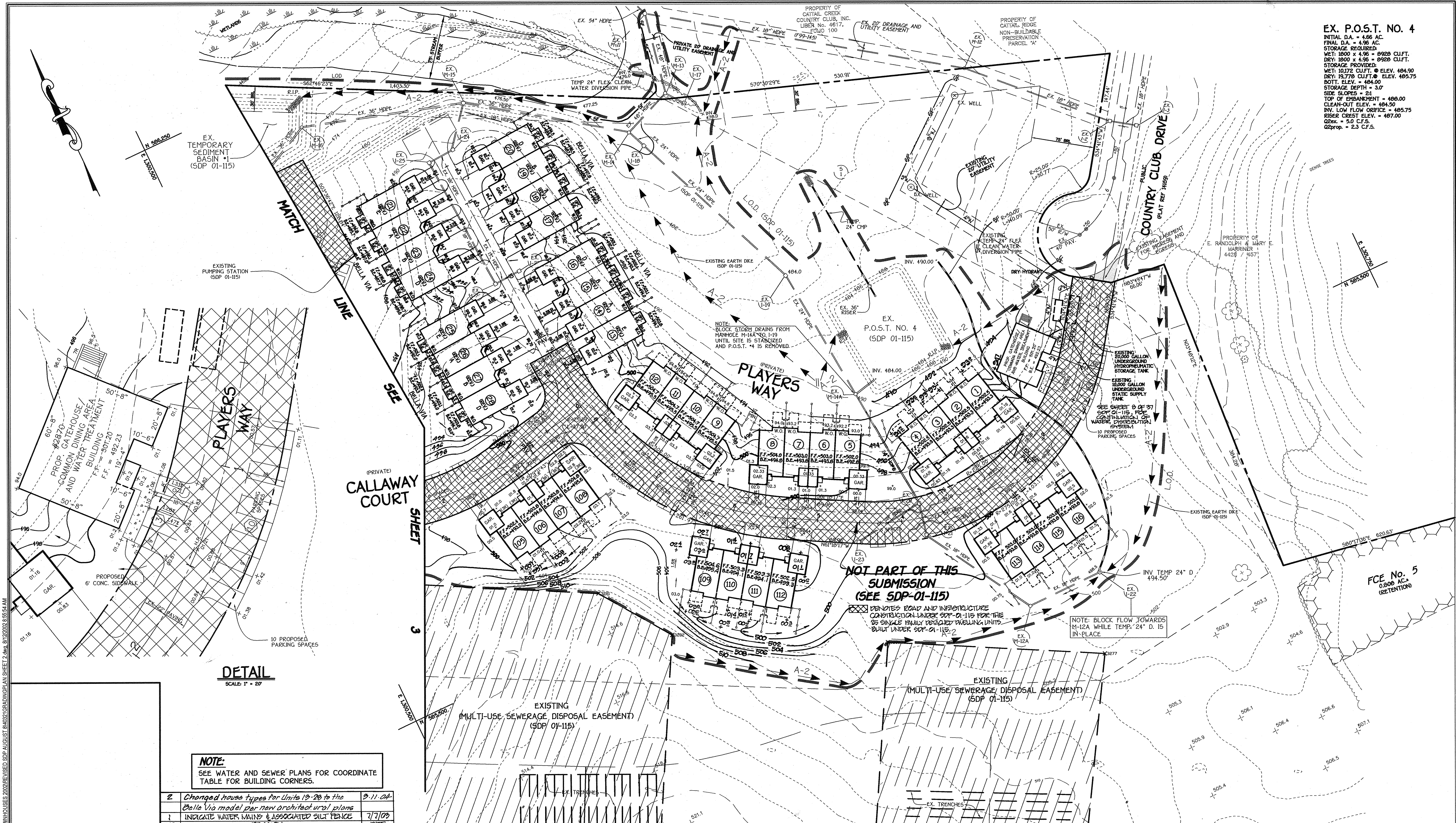
SDP-99-148







**EX. P.O.S.T. NO. 4**  
 INITIAL D.A. = 4.66 AC.  
 FINAL D.A. = 4.96 AC.  
 STORAGE REQUIRED:  
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 STORAGE PROVIDED:  
 WET: 10172 CUFT. @ ELEV. 484.90  
 DRY: 15778 CUFT. @ ELEV. 485.75  
 CLEAN-OUT ELEV. = 484.50  
 STORAGE DEPTH = 3.0'  
 SIDE SLOPES = 2:1  
 TOP OF EMBANKMENT = 486.00  
 RISE: 15.778 CUFT. @ ELEV. 485.75  
 CLEAN-OUT ELEV. = 484.50  
 INV. LOW FLOW ORIFICE = 485.75  
 RISER CREST ELEV. = 487.00  
 Q2ec = 5.0 C.F.S.  
 Q2prop = 2.3 C.F.S.



**DETAIL**  
 SCALE 1" = 20'

**NOTE:**  
 SEE WATER AND SEWER PLANS FOR COORDINATE TABLE FOR BUILDING CORNERS.

2	Changed house types for Units 19-26 to the Belle Via model per new architectural plans	9-11-04
1	INDICATE WATER MAINS & ASSOCIATED SILT FENCE	7/7/03
NO.	REVISION	DATE

EXISTING (MULTI-USE SEWERAGE DISPOSAL EASEMENT) (SDP 01-115)

**NOT PART OF THIS SUBMISSION**  
 (SEE SDP-01-115)  
 INDICATES ROAD AND INFRASTRUCTURE CONSTRUCTION UNDER SDP-01-115 FOR THE 26 SINGLE FAMILY DETACHED DWELLING UNITS BUILT UNDER SDP-01-115.2

EXISTING (MULTI-USE SEWERAGE DISPOSAL EASEMENT) (SDP 01-115)

**ENGINEER'S CERTIFICATE**  
 I certify that this erosion and sediment control plan represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Signature of Engineer: *[Signature]* Date: 8-12-02

**DEVELOPER'S CERTIFICATE**  
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Signature of Developer: *[Signature]* Date: 8-12-02

Reviewed for HOWARD SCD and meets Technical Requirements.  
 Signature: *[Signature]* Date: 8/19/02

Signature: *[Signature]* Date: 8/19/02

**OWNER / DEVELOPER**  
 VILLAS AT CATTAIL CREEK, L.L.C.  
 c/o 182 L. THOMAS SCRIBNER  
 8800 CENTRE PARK DRIVE  
 SUITE 209  
 COLUMBIA, MARYLAND 21045  
 (410) 964-5522

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 Signature: *[Signature]* Date: 9/26/02

Signature: *[Signature]* Date: 8/21/02

PROJECT	THE VILLAS AT CATTAIL CREEK		SECTION/AREA	1 - 116	LOT NO.	
DEED	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.	
L 4228, F. 442	3	RC-DEO	21	4th		
WATER CODE	SEWER CODE					

**GRADING AND SEDIMENT CONTROL**

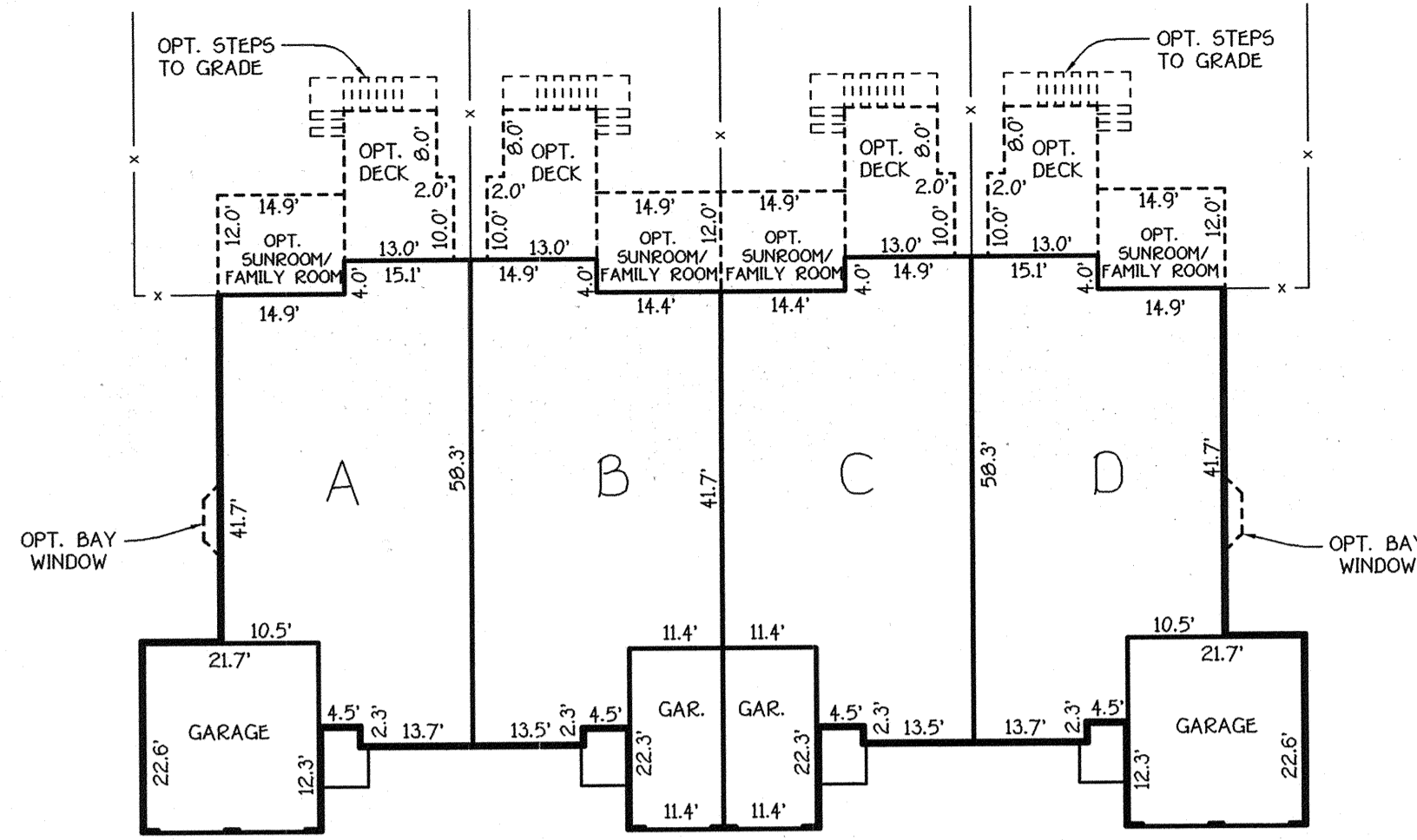
**SITE DEVELOPMENT PLAN**  
**THE VILLAS AT CATTAIL CREEK**  
 ZONING: RC-DEO  
 TAX MAP No: 21 PARCEL: 3 GRID No: 2  
 FOURTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 50' DATE: AUGUST 8, 2002  
 SHEET 2 OF 9

**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTENNIAL SQUARE OFFICE PARK - 16275 BALTIMORE NATIONAL PIKE  
 ELLICOTT CITY, MARYLAND 21114  
 (410) 481-2855

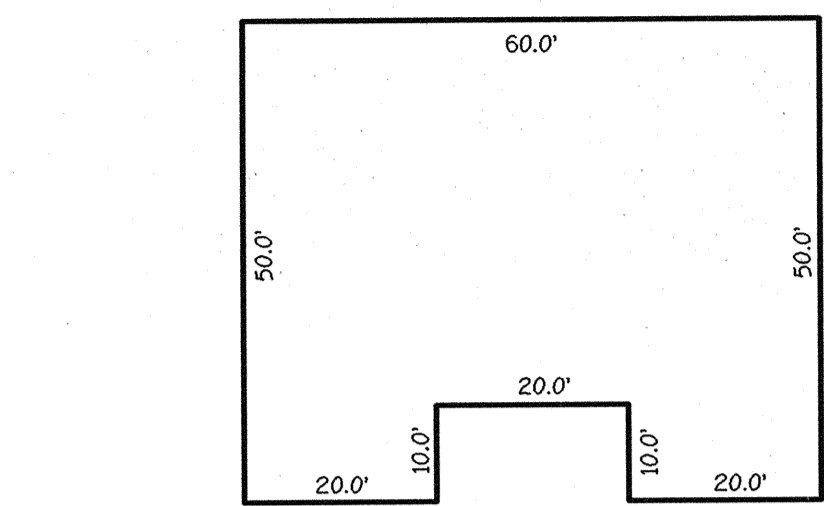
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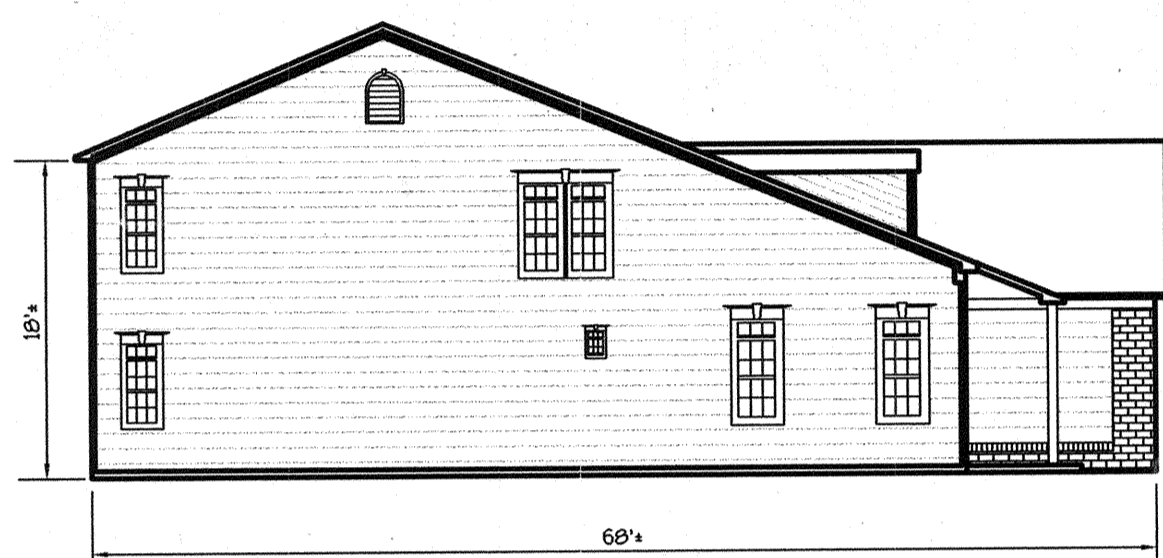




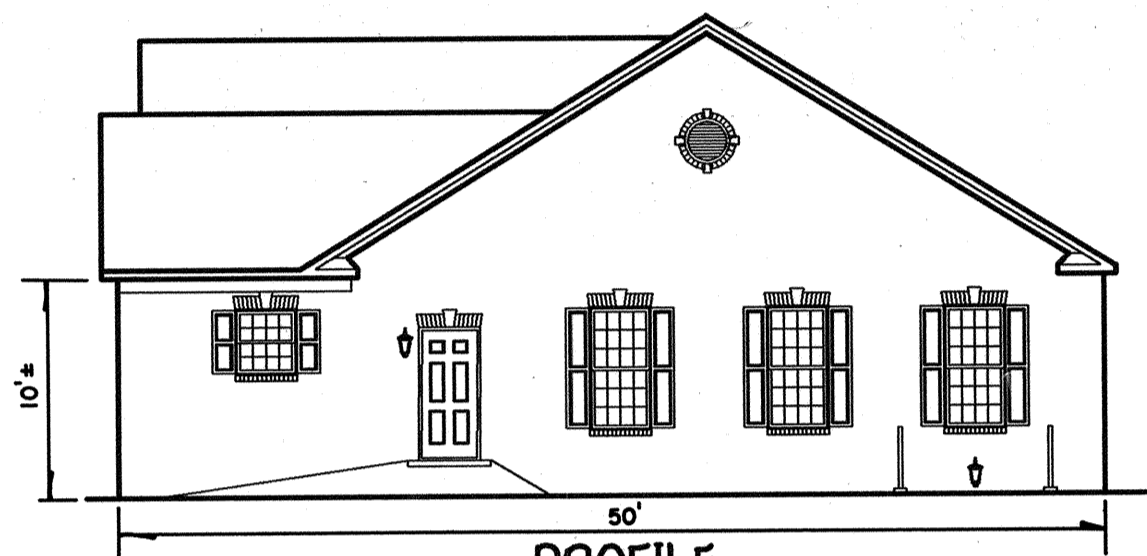
**PROPOSED HOUSING DETAIL**  
SCALE: 1" = 20'



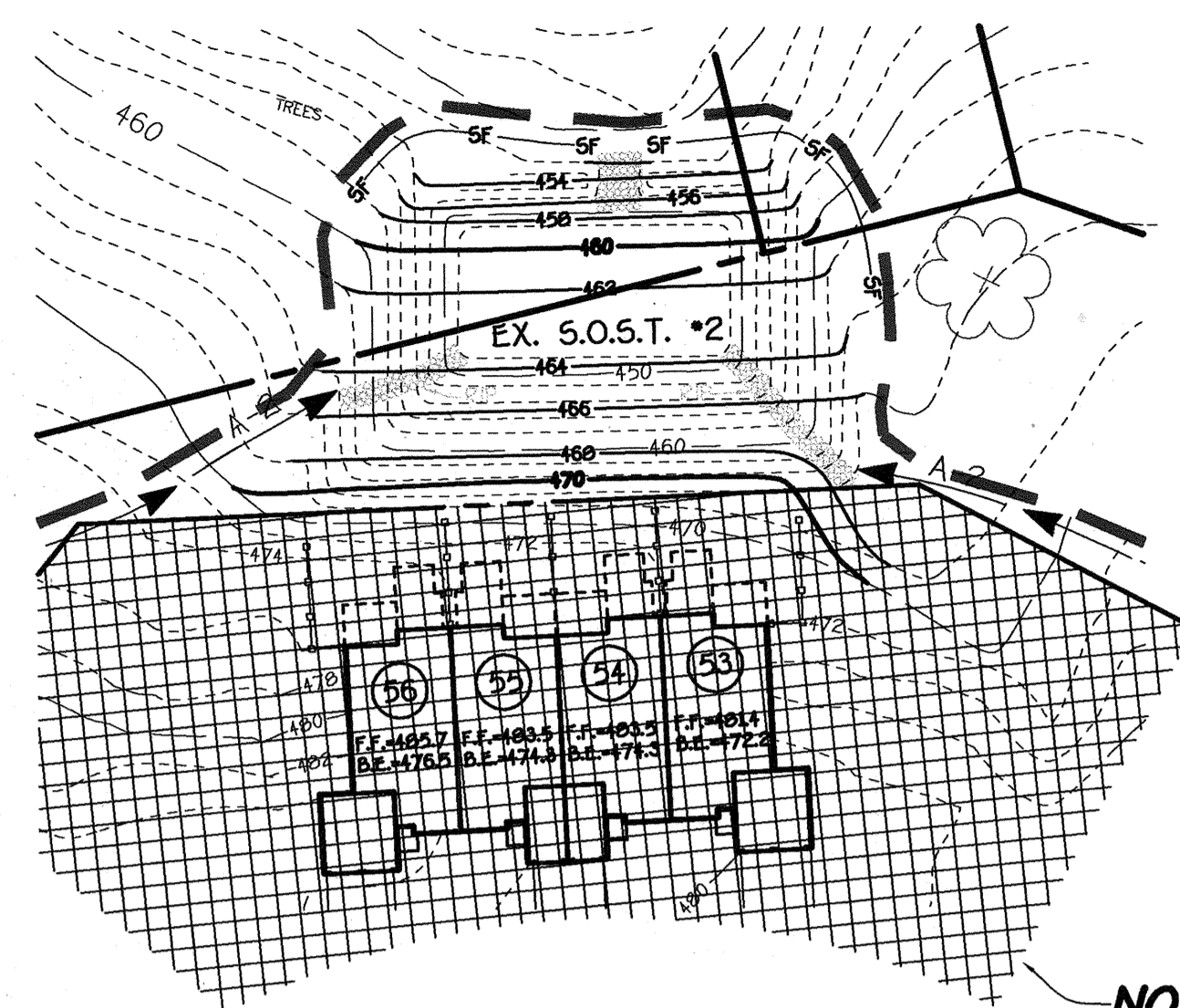
**PROPOSED GATEHOUSE / COMMON DINING AREA AND WATER TREATMENT BUILDING**  
SCALE: 1" = 20'



**PROFILE**  
NO SCALE

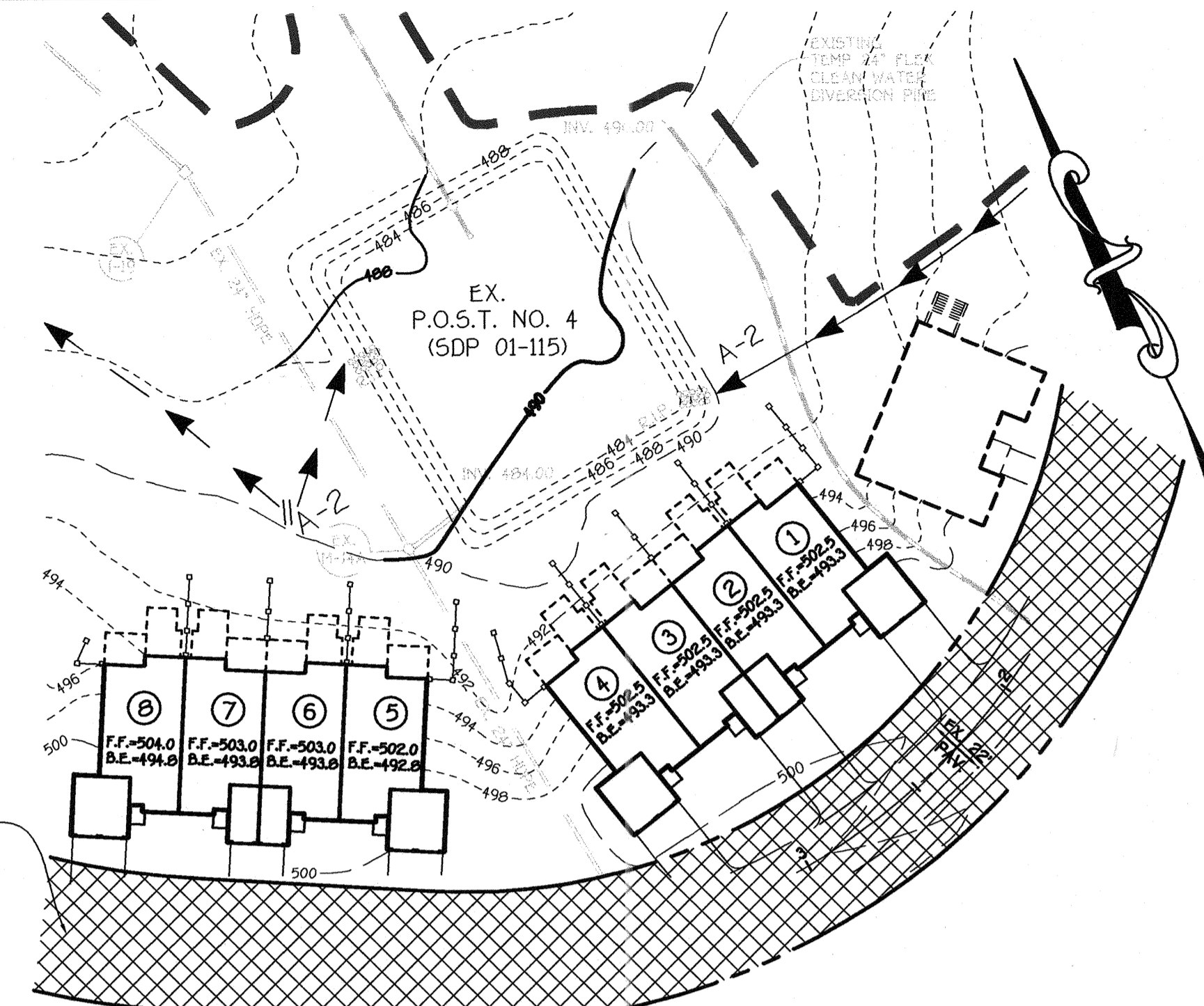


**PROFILE**  
NO SCALE

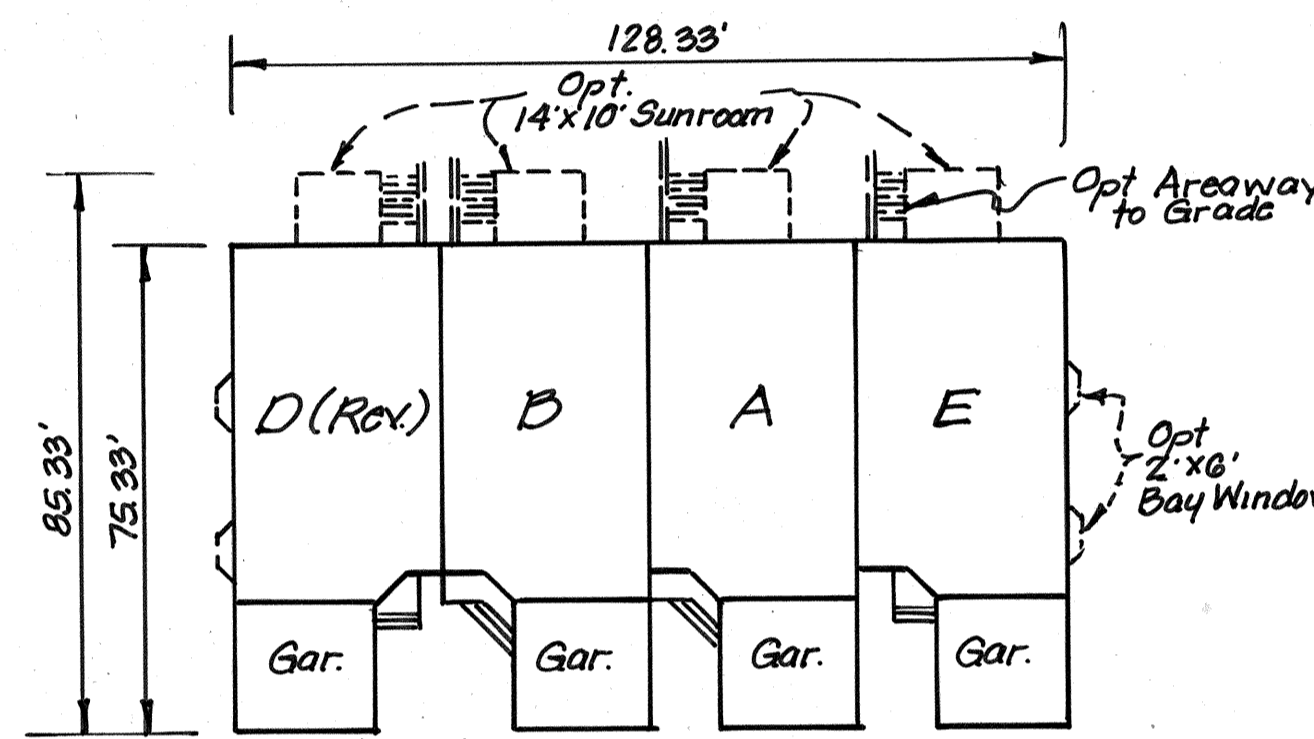


**FINAL GRADING @ S.O.S.T. NO. 2**  
SCALE: 1" = 50'

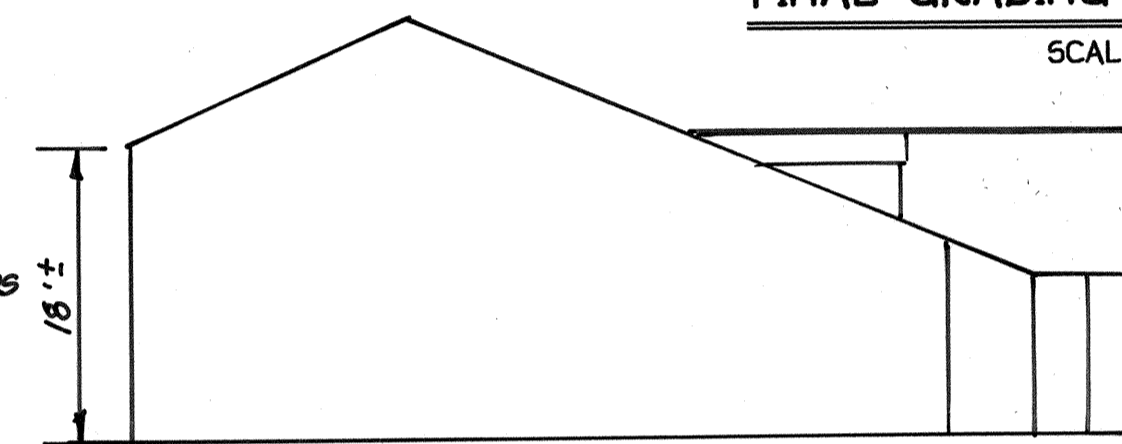
NOT PART OF THIS SUBMISSION (SEE SDP-01-115)



**FINAL GRADING @ P.O.S.T. NO. 4**  
SCALE: 1" = 50'

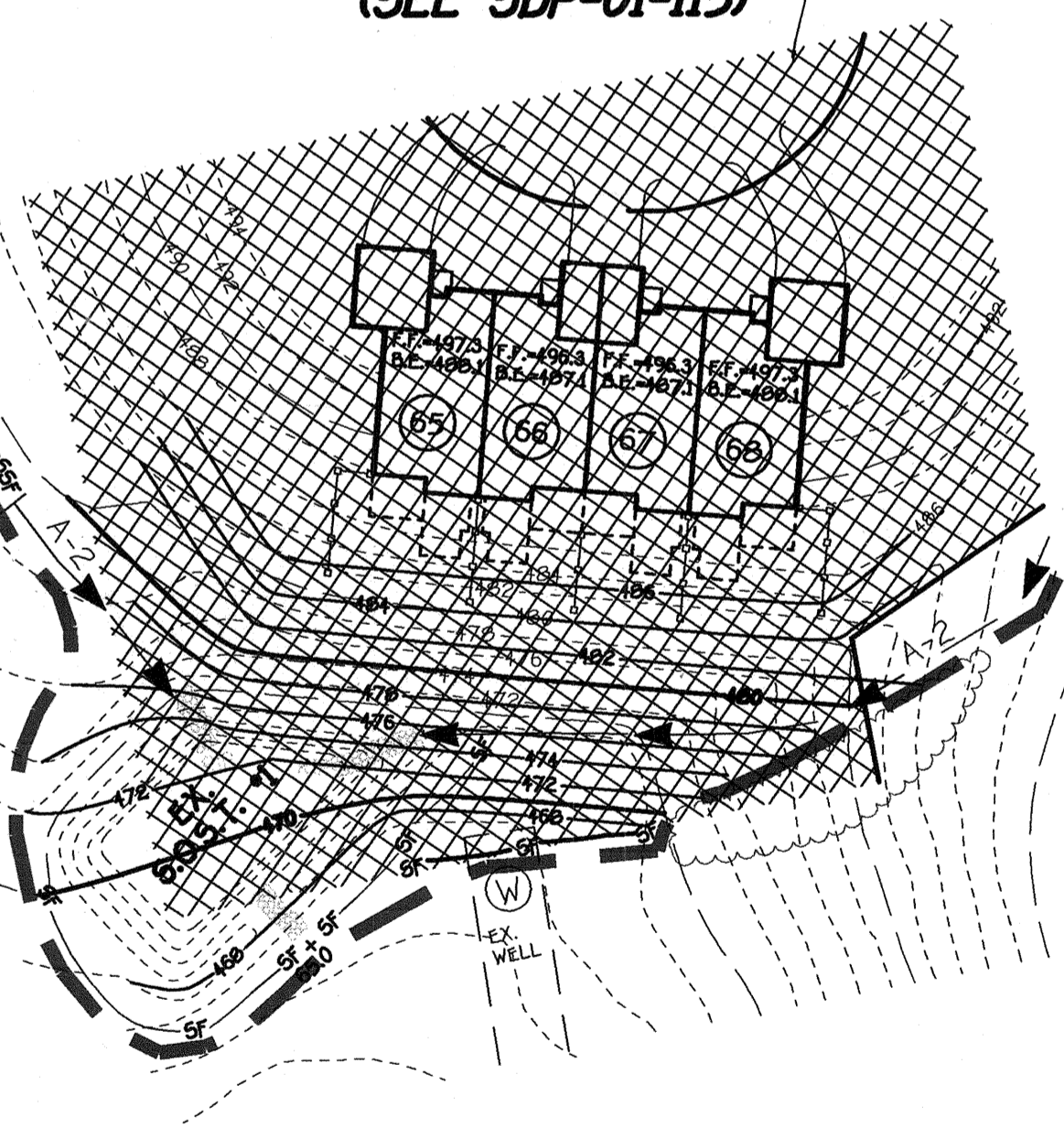


**PROPOSED 4-UNIT BLDG**  
Scale 1" = 30'

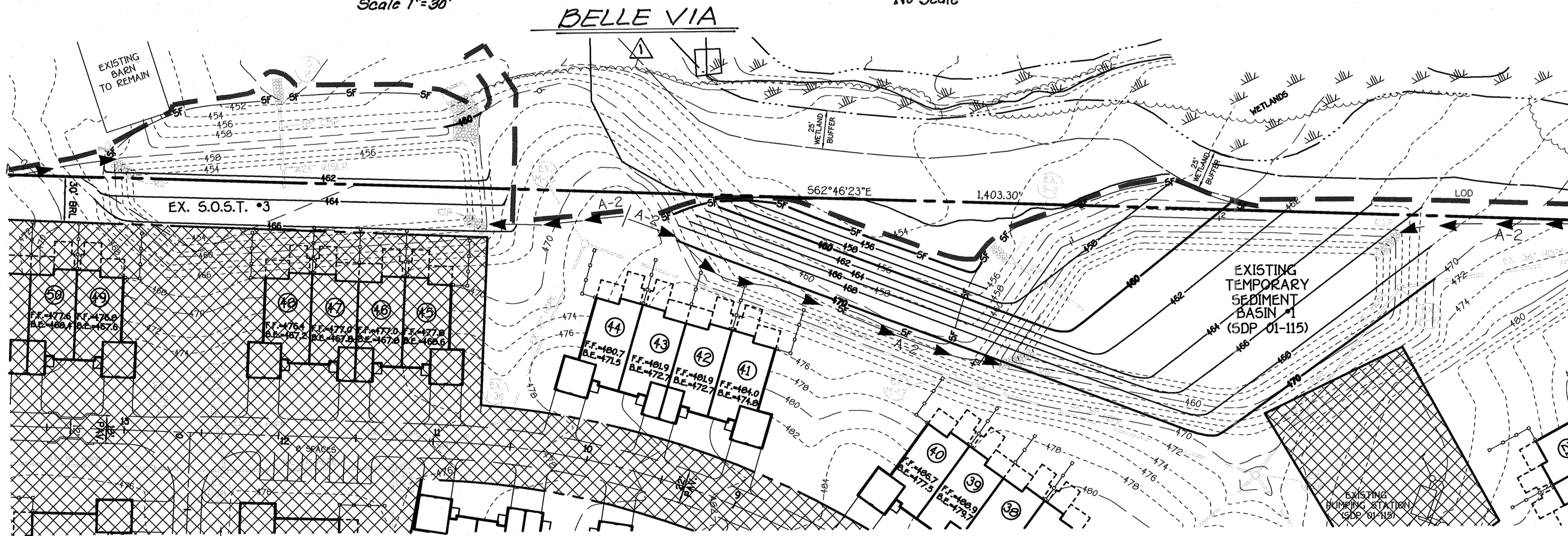


**PROFILE**  
No Scale

NOT PART OF THIS SUBMISSION (SEE SDP-01-115)



**FINAL GRADING @ S.O.S.T. NO. 1**  
SCALE: 1" = 50'



**FINAL GRADING @ S.O.S.T. NO. 3 & SEDIMENT BASIN NO. 1**  
SCALE: 1" = 50'

NOT PART OF THIS SUBMISSION (SEE SDP-01-115)

No	Revision	Date
1	Added "Belle Via" house type details	2-9-04

**ENGINEER'S CERTIFICATE**  
I certify that this plan for erosion and sediment control represents a practical and workable plan based on the professional knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.  
Signature of Engineer: *John R. Robertson* Date: 8-12-02

**DEVELOPER'S CERTIFICATE**  
I/We certify that all development and construction will be done according to this plan and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.  
Signature of Developer: *Donald R. Reuter, Jr.* Date: 8-12-02

Approved for HOWARD SCD and meets Technical Requirements.  
U.S.D. Natural Resources Conservation Service  
This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.  
HOWARD SCD  
*John R. Robertson* 8/19/02  
*John R. Robertson* 8/19/02

**OWNER / DEVELOPER**  
VILLAS AT CATTAIL CREEK, L.L.C.  
c/o MR. J. THOMAS SCRIVENER  
8808 CENTRE PARK DRIVE  
SUITE 209  
COLUMBIA, MARYLAND 21045  
(410) 964-5522

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
Chief, Division of Land Development  
Chief, Development Engineering Division  
Director, Department of Planning and Zoning

9/2/02  
9/2/02  
9/2/02

PROJECT: THE VILLAS AT CATTAIL CREEK SECTION/AREA: 1 - 116 LOT NO.: 116  
DEED: L. 4228, F. 442 BLOCK NO.: 3 ZONE: RC-DEO TAX/ZONE: 21 ELEC. DIST.: 4th CENSUS TR.:  
WATER CODE: SEWER CODE:

**DETAIL SHEET**  
**SITE DEVELOPMENT PLAN**  
**THE VILLAS AT CATTAIL CREEK**  
ZONING: RC-DEO  
TAX MAP No: 21 PARCEL: 3 GRID No: 2  
FOURTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
SCALE: 1" = 50' DATE: AUGUST, 2002  
SHEET 7 OF 9

SDP.99.118

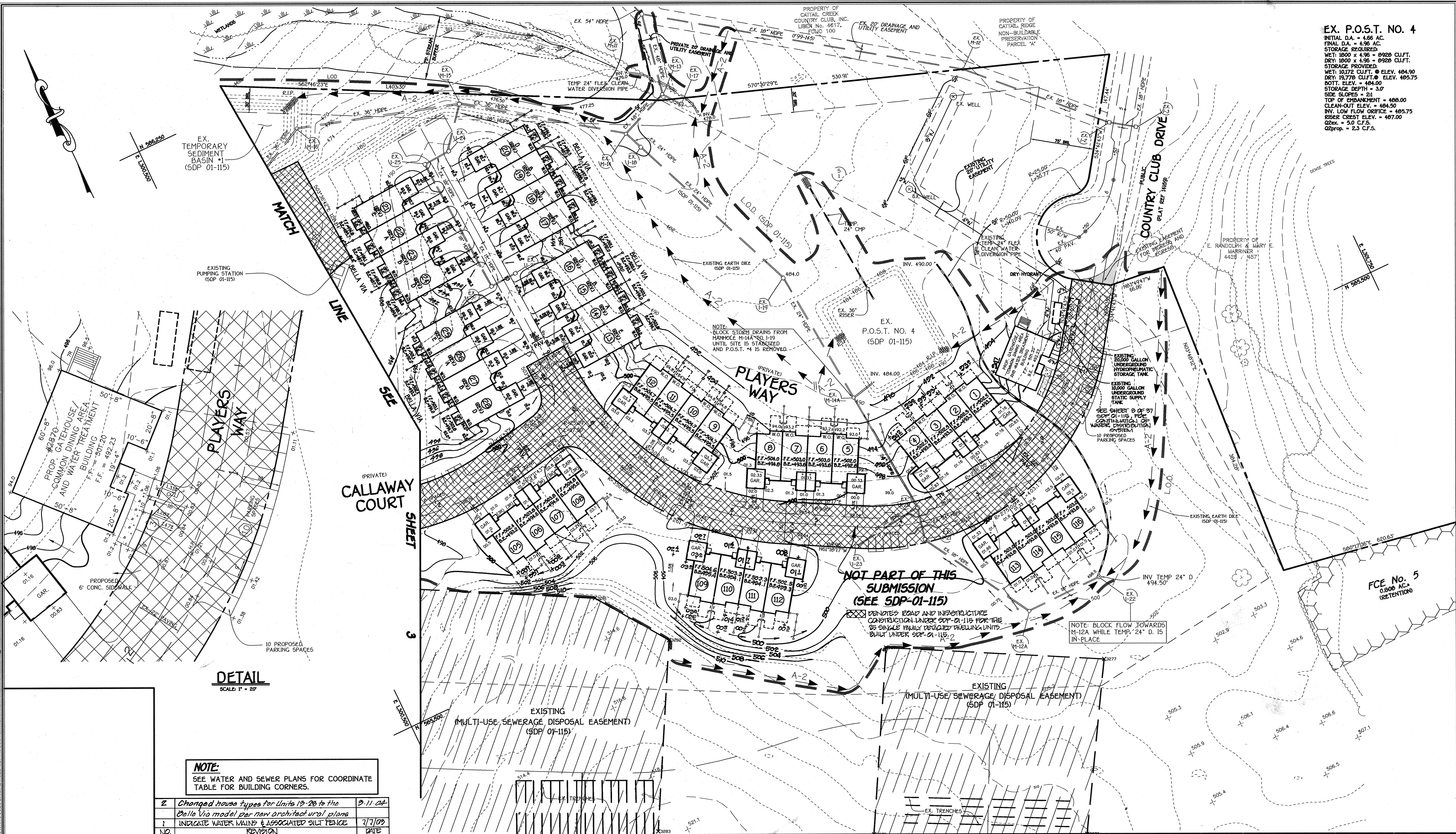
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**EX. P.O.S.T. NO. 4**  
 INITIAL D.A. = 4.66 AC.  
 FINAL D.A. = 4.96 AC.  
 STORAGE REQUIRED:  
 WET: 1800 x 4.96 = 8928 CU.FT.  
 STORAGE PROVIDED:  
 WET: 10172 CU.FT. @ ELEV. 484.90  
 DRY: 15,778 CU.FT. @ ELEV. 485.75  
 STORAGE DEPTH = 3.0'  
 SIDE SLOPES = 2:1  
 TOP OF EMBANKMENT = 486.00  
 CLEAN-OUT ELEV. = 484.50  
 INV. LOW FLOW ORIFICE = 485.75  
 RISER CREST ELEV. = 487.00  
 Q2ex = 5.0 C.F.S.  
 Q2prop = 2.3 C.F.S.



**DETAIL**  
 SCALE: 1" = 20'

**NOTE:**  
 SEE WATER AND SEWER PLANS FOR COORDINATE TABLE FOR BUILDING CORNERS.

NO.	REVISION	DATE
2	Changed house types for Units 19-26 to the Belle Via model per new architectural plans	9-11-04
1	INDICATE WATER MAINS & ASSOCIATED SILT FENCE	7-7-09

**ENGINEER'S CERTIFICATE**  
 I certify that this plan, specification and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.  
 Signature of Professional Engineer: *[Signature]* Date: 8-12-02

**DEVELOPER'S CERTIFICATE**  
 We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.  
 Signature of Developer (Print name below signature): *Donato R. Revuzse, Jr.* Date: 8-12-02

Reviewed for HOWARD SCD and meets Technical Requirements.  
 Signature of Professional Engineer: *Jim Myers* Date: 8/19/02  
 Signature of Professional Engineer: *John R. Robertson* Date: 8/19/02

**OWNER / DEVELOPER**  
 VILLAS AT CATTAIL CREEK, L.L.C.  
 c/o MR. J. THOMAS SCRIVENER  
 8900 CENTRE PARK DRIVE  
 SUITE 209  
 COLUMBIA, MARYLAND 21045  
 (410) 964-5522

APPROVED: DEPARTMENT OF PLANNING AND ZONING

SECTION/AREA	LOT NO.
PROJECT: THE VILLAS AT CATTAIL CREEK	1 - 116
DEED: L. 4228, F. 442	3
ZONE: RC-DEO	21
TAX/ZONE: 4th	---
ELEC. DIST.:	---
SEWER CODE:	---
WATER CODE:	---

**GRADING AND SEDIMENT CONTROL**

**SITE DEVELOPMENT PLAN**  
**THE VILLAS AT CATTAIL CREEK**

ZONING: RC-DEO

TAX MAP No: 21 PARCEL: 3 GRID No: 2  
 FOURTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 50' DATE: AUGUST 8, 2002  
 SHEET 2 OF 9

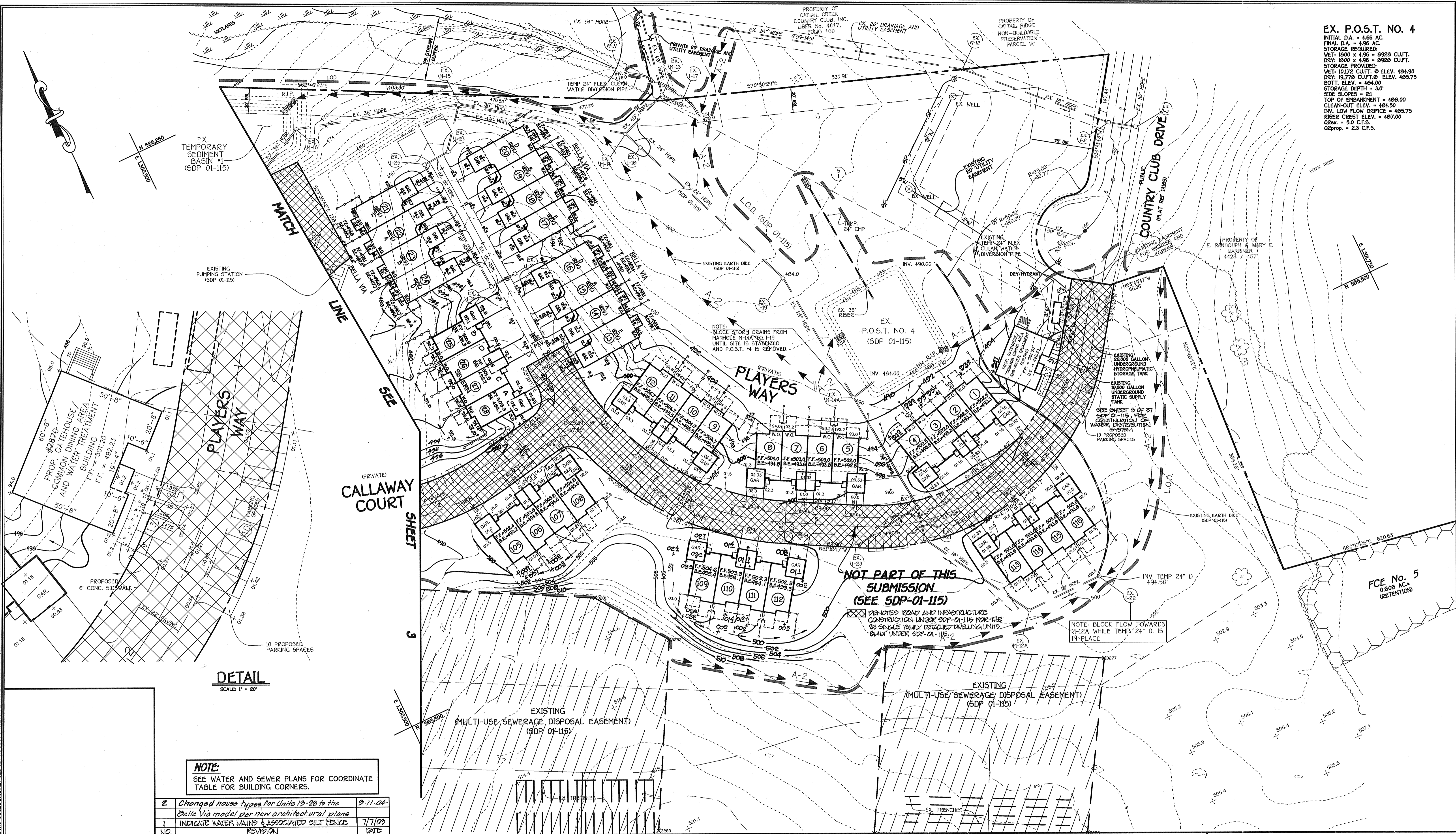
**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTRAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL FREE  
 ELLICOTT CITY, MARYLAND 21114  
 (410) 461 - 2855

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58p.99.148



**EX. P.O.S.T. NO. 4**  
 INITIAL D.A. = 4.66 AC.  
 FINAL D.A. = 4.96 AC.  
 STORAGE REQUIRED:  
 WET: 1800 x 4.96 = 8928 CU.FT.  
 STORAGE PROVIDED:  
 WET: 19,770 CU.FT. @ ELEV. 484.90  
 DRY: 15,770 CU.FT. @ ELEV. 485.75  
 CLEAN-OUT ELEV. = 484.50  
 INV. LOW FLOW ORIFICE = 485.75  
 RISER CREST ELEV. = 487.00  
 Q2ex = 5.0 C.F.S.  
 Q2prop = 2.3 C.F.S.



**DETAIL**  
 SCALE: 1" = 20'

**NOTE:**  
 SEE WATER AND SEWER PLANS FOR COORDINATE TABLE FOR BUILDING CORNERS.

NO.	REVISION	DATE
2	Changed house types for Units 19-28 to the Bella Via model per new architectural plans	9-11-04
1	INDICATE WATER MAINS & ASSOCIATED SILT FENCE	7/7/03

NO.	REVISION	DATE
7	Rev. lots 25-28 from Bella Via to Severn Model	11-9-04
6	Rev. grad. in Rear of lots 9-12 to show As-Built Conditions	10-19-04
5	Rev. grad. lots 105-108 to show As-Built Conditions	7-23-04
4	Rev. grad. Units 109-112 to show As-Built Conditions	6-22-04
3	Rev. grad. Units 1-4 to reflect As-Built Conditions	5-21-04

**ENGINEER'S CERTIFICATE**  
 I certify that this erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.  
 Signature of Engineer: *[Signature]* Date: 8-12-02

**DEVELOPER'S CERTIFICATE**  
 I/we certify that all development and construction will be done according to this plan and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.  
 Signature of Developer: *[Signature]* Date: 8-12-02

Reviewed for HOWARD SCD and meets Technical Requirements.  
 Signature: *[Signature]* Date: 8/19/02  
 Signature: *[Signature]* Date: 8/19/02  
**OWNER / DEVELOPER**  
 VILLAS AT CATTAIL CREEK, LLC.  
 c/o MR. J. THOMAS SCRIVENER  
 8809 CENTRE PARK DRIVE  
 SUITE 209  
 COLUMBIA, MARYLAND 21045  
 (410) 964-5522

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 Signature: *[Signature]* Date: 9/26/02  
 Signature: *[Signature]* Date: 8/21/02  
 Signature: *[Signature]* Date: 8/27/02  
**PROJECT:** THE VILLAS AT CATTAIL CREEK  
**SECTION/AREA:** 1 - 116  
**LOT NO.:** 116  
**DEED:** L 4228, F. 442  
**BLOCK NO.:** 3  
**ZONE:** RC-DEO  
**TAX/ZONE:** 21  
**ELEC. DIST.:** 4th  
**CENSUS TR.:** ---  
**WATER CODE:** ---  
**SEWER CODE:** ---

**GRADING AND SEDIMENT CONTROL**  
**SITE DEVELOPMENT PLAN**  
**THE VILLAS AT CATTAIL CREEK**  
 ZONING: RC-DEO  
 TAX MAP No: 21 PARCEL: 3 GRID No: 2  
 FOURTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 50' DATE: AUGUST 8, 2002  
 SHEET 2 OF 9

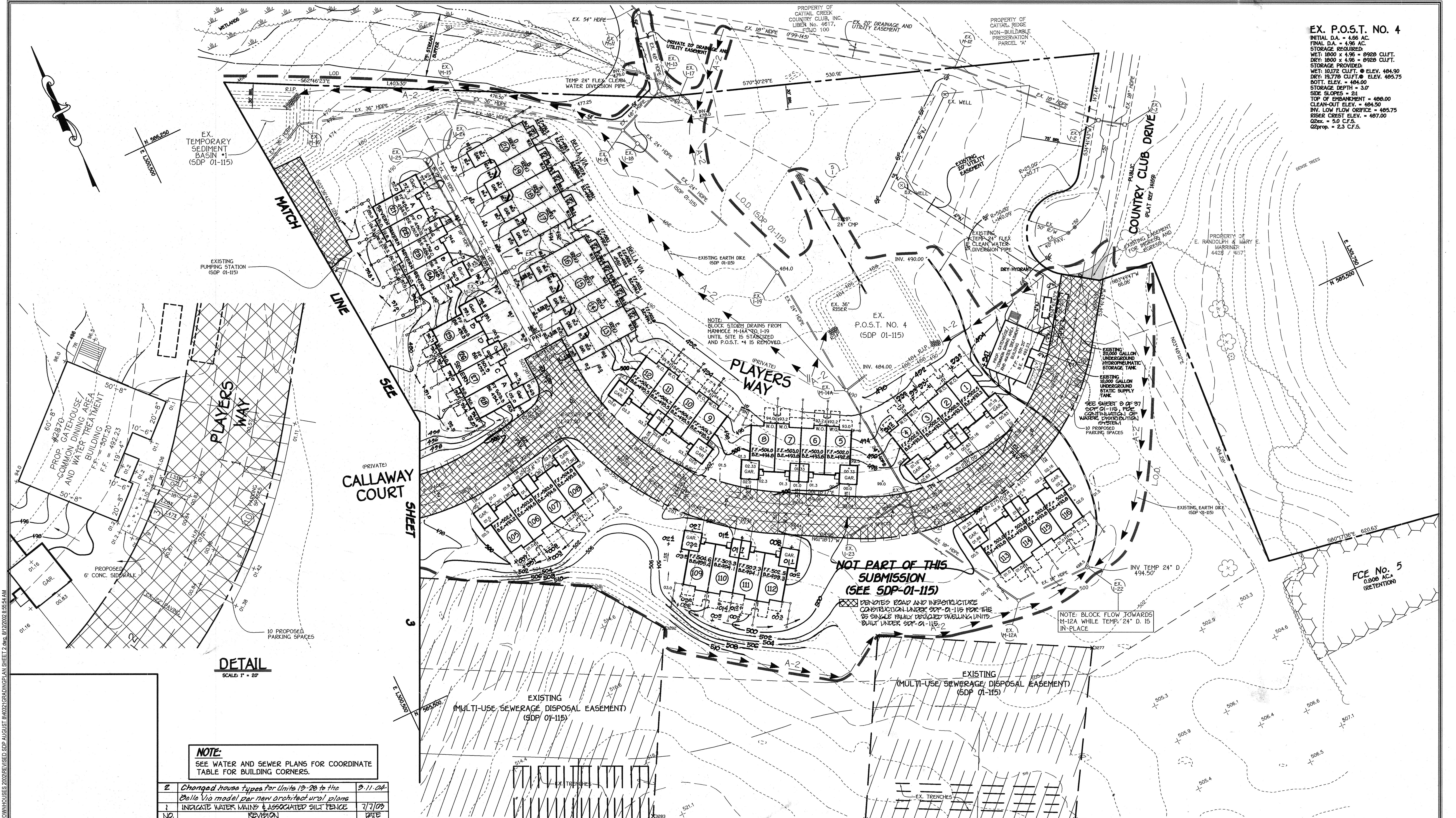
**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
 ELLETTTS CITY, MARYLAND 21114  
 (410) 461-2855

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**EX. P.O.S.T. NO. 4**  
 INITIAL D.A. = 4.66 AC.  
 FINAL D.A. = 4.96 AC.  
 STORAGE REQUIRED:  
 WET: 1800 x 4.96 = 8928 CUFT.  
 DRY: 1800 x 4.96 = 8928 CUFT.  
 STORAGE PROVIDED:  
 WET: 10172 CUFT. @ ELEV. 484.90  
 DRY: 15,779 CUFT. @ ELEV. 485.75  
 STORAGE DEPTH = 3.0'  
 SIDE SLOPES = 2:1  
 TOP OF EMBANKMENT = 488.00  
 CLEAN-OUT ELEV. = 484.50  
 INV. LOW FLOW ORIFICE = 485.75  
 RISER CREST ELEV. = 487.00  
 Q<sub>24h</sub> = 5.0 C.F.S.  
 Q<sub>prop</sub> = 2.3 C.F.S.



**DETAIL**  
 SCALE 1" = 20'

**NOTE:**  
 SEE WATER AND SEWER PLANS FOR COORDINATE TABLE FOR BUILDING CORNERS.

NO.	REVISION	DATE
2	Changed house types for Units 19-26 to the Bella Via model per new architectural plans	9/11/02
1	INDICATE WATER MAINS & ASSOCIATED GILT FENCE	7/7/02

**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL FREE  
 ELICOTT CITY, MARYLAND 21042  
 (410) 461-2955

NO.	REVISION	DATE
8	Rev. lots 21-24 from Bella Via to Severn Model	12-3-04
7	Rev. lots 25-28 from Bella Via to Severn Model	11-9-04
6	Rev. grad. in Rear of lots 9-12 to show As-Built Conditions	10-19-04
5	Rev. grad. lots 105-108 to show As-Built Conditions	7-23-04
4	Rev. grad. Units 109-112 to show As-Built Conditions	6-22-04
3	Rev. grad. Units 1-4 to reflect As-Built Conditions	5-21-04

**ENGINEER'S CERTIFICATE**  
 I certify that the erosion and sediment control represents a practical and workable plan based on the knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.  
 Signature: *John R. Robertson* Date: 8/19/02  
 PROFESSIONAL ENGINEER

**DEVELOPER'S CERTIFICATE**  
 I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.  
 Signature of Developer (Print name below signature): *Donna R. Reusse, Jr.* Date: 8/12/02

Reviewed for HOWARD SCD and meets Technical Requirements.  
*Jim Myers* 8/19/02  
 U.S.D.A.-Natural Resources Conservation Service  
 This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.  
*John R. Robertson* 8/19/02  
 Howard SCD

**OWNER / DEVELOPER**  
 VILLAS AT CATTAIL CREEK, L.L.C.  
 c/o MR. J. THOMAS SCRIVENER  
 9809 CENTRE PARK DRIVE  
 SUITE 209  
 COLUMBIA, MARYLAND 21045  
 (410) 964-5522

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*Janet Hunt* 9/26/02  
 Chief, Division of Land Development  
*John R. Robertson* 8/27/02  
 Chief, Development Engineering Division  
 Director, Department of Planning and Zoning

PROJECT: THE VILLAS AT CATTAIL CREEK SECTION/AREA: 1-116 LOT NO.: 1-116  
 DEED: L. 4228, F. 442 BLOCK NO.: 3 ZONE: RC-DEO TAX/ZONE: 21 ELEC. DIST.: 4th. CENSUS TR.:  
 WATER CODE: SEWER CODE:

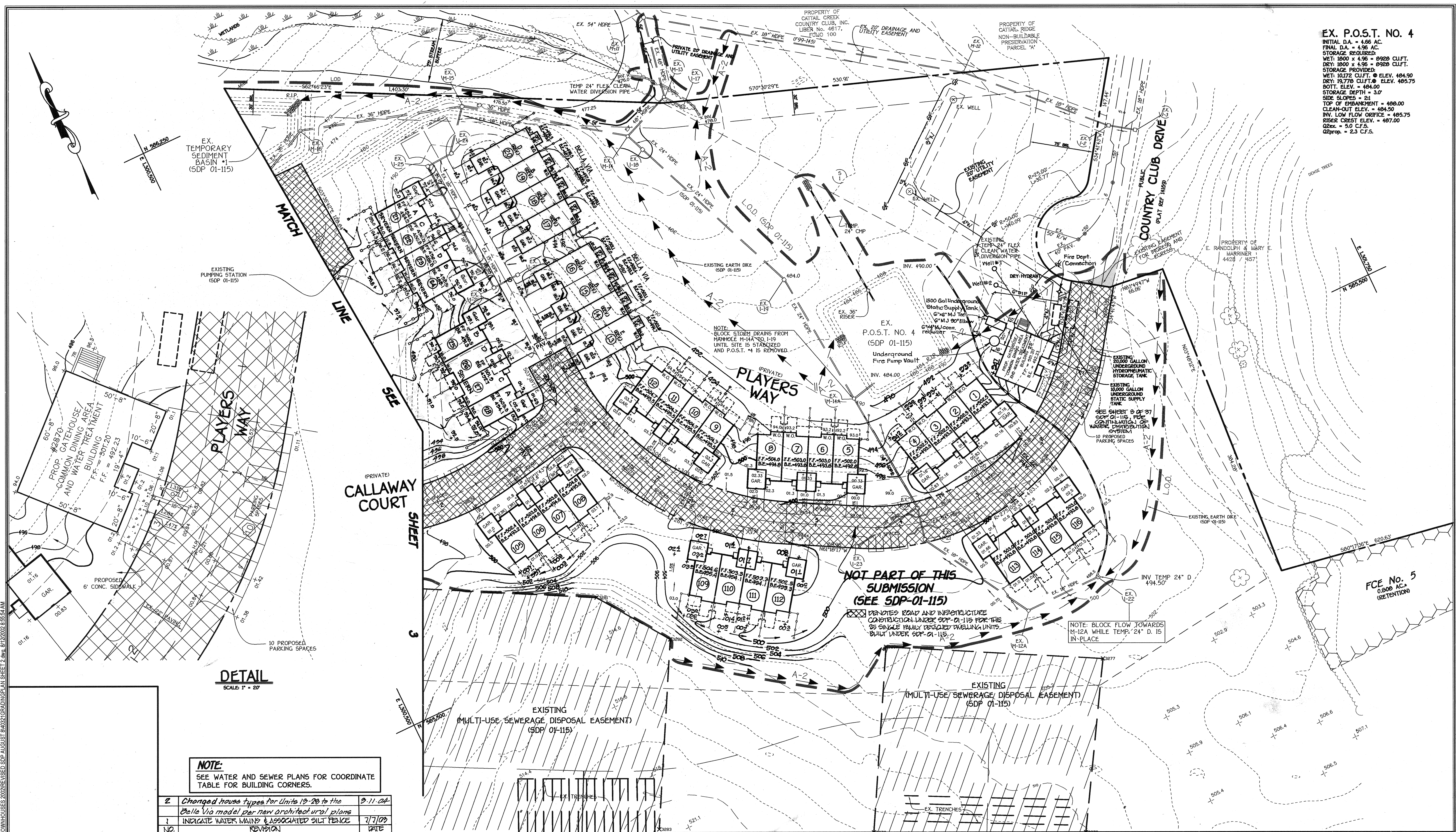
**GRADING AND SEDIMENT CONTROL**  
**SITE DEVELOPMENT PLAN**  
**THE VILLAS AT CATTAIL CREEK**  
 ZONING: RC-DEO  
 TAX MAP No: 21 PARCEL: 3 GRID No: 2  
 FOURTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 50' DATE: AUGUST 8, 2002  
 SHEET 2 OF 9

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SDP.99.148



**EX. P.O.S.T. NO. 4**  
 INITIAL D.A. = 4.66 AC.  
 FINAL D.A. = 4.96 AC.  
 STORAGE REQUIRED:  
 WET: 1800 x 4.96 = 8928 CU.FT.  
 DRY: 1800 x 4.96 = 8928 CU.FT.  
 STORAGE PROVIDED:  
 WET: 10,172 CU.FT. @ ELEV. 484.90  
 DRY: 19,770 CU.FT. @ ELEV. 484.90  
 BOTTL. ELEV. = 484.00  
 STORAGE DEPTH = 3.0'  
 SIDE SLOPES = 2:1  
 TOP OF EMBANKMENT = 486.00  
 CLEAN-OUT ELEV. = 484.50  
 INV. LOW FLOW ORIFICE = 485.75  
 RISER CREST ELEV. = 487.00  
 Q25% = 5.0 C.F.S.  
 Q20% = 2.3 C.F.S.



**DETAIL**  
 SCALE: 1" = 20'

**NOTE:**  
 SEE WATER AND SEWER PLANS FOR COORDINATE TABLE FOR BUILDING CORNERS.

2	Changed house types for Units 19-26 to the Belle Via model per new architectural plans	9/11/04
1	INDICATE WATER MAINS & ASSOCIATED SILT FENCE	7/7/09
NO.	REVISION	DATE

3	Add Static Supply Tank to Gatehouse/Water Treatment Building	3-9-05
3	Rev. lots 21-24 from Bella Via to Severn Model	12-3-04
7	Rev. lots 25-28 from Bella Via to Severn Model	11-9-04
6	Rev. grad. in Rear of lots 9-12 to show As-Built Conditions	10-19-04
5	Rev. grad. lots 105-108 to show As-Built Conditions	7-23-04
4	Rev. grad. Units 109-112 to show As-Built Conditions	6-22-04
3	Rev. grad. Units 1-4 to reflect As-Built Conditions	5-21-04

**ENGINEER'S CERTIFICATE**  
 I certify that this plan and sediment control represents a practical and workable plan based on the best knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.  
 Signature: *James R. Labatson* Date: 8/19/02  
 Title: Professional Engineer

**DEVELOPER'S CERTIFICATE**  
 I certify that all development and construction will be done according to this plan and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.  
 Signature: *Donald R. Rousseau, Jr.* Date: 8/12-02  
 Title: Developer

Reviewed for HOWARD SCD and meets Technical Requirements.  
 Signature: *Jim Myers* Date: 8/19/02  
 Title: U.S.A. - Natural Resources Conservation Service

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.  
 Signature: *John R. Labatson* Date: 8/19/02  
 Title: Howard SCD

**OWNER / DEVELOPER**  
 VILLAS AT CATTAIL CREEK, L.L.C.  
 c/o MR. J. THOMAS SCOVINEER  
 8905 CENTRE PARK DRIVE  
 SUITE 209  
 COLUMBIA, MARYLAND 21045  
 (410) 964-9522

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 Signature: *Conde Hovatt* Date: 9/26/02  
 Title: Chief, Division of Land Development

Signature: *David Williams* Date: 9/26/02  
 Title: Chief, Development Engineering Division

Signature: *David P. Smith* Date: 9/27/02  
 Title: Director, Department of Planning and Zoning

PROJECT: THE VILLAS AT CATTAIL CREEK SECTION/AREA: 1-116 LOT NO.: 1-116  
 DEED: L. 4228, F. 442 BLOCK NO.: 3 ZONE: RC-DEO TAX/ZONE: 21 ELEC. DIST.: 4th CENSUS TR.:  
 WATER CODE: SEWER CODE:

**GRADING AND SEDIMENT CONTROL**  
**SITE DEVELOPMENT PLAN**  
**THE VILLAS AT CATTAIL CREEK**  
 ZONING: RC-DEO  
 TAX MAP No: 21 PARCEL: 3 GRID No: 2  
 FOURTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 50' DATE: AUGUST 8, 2002  
 SHEET 2 OF 9

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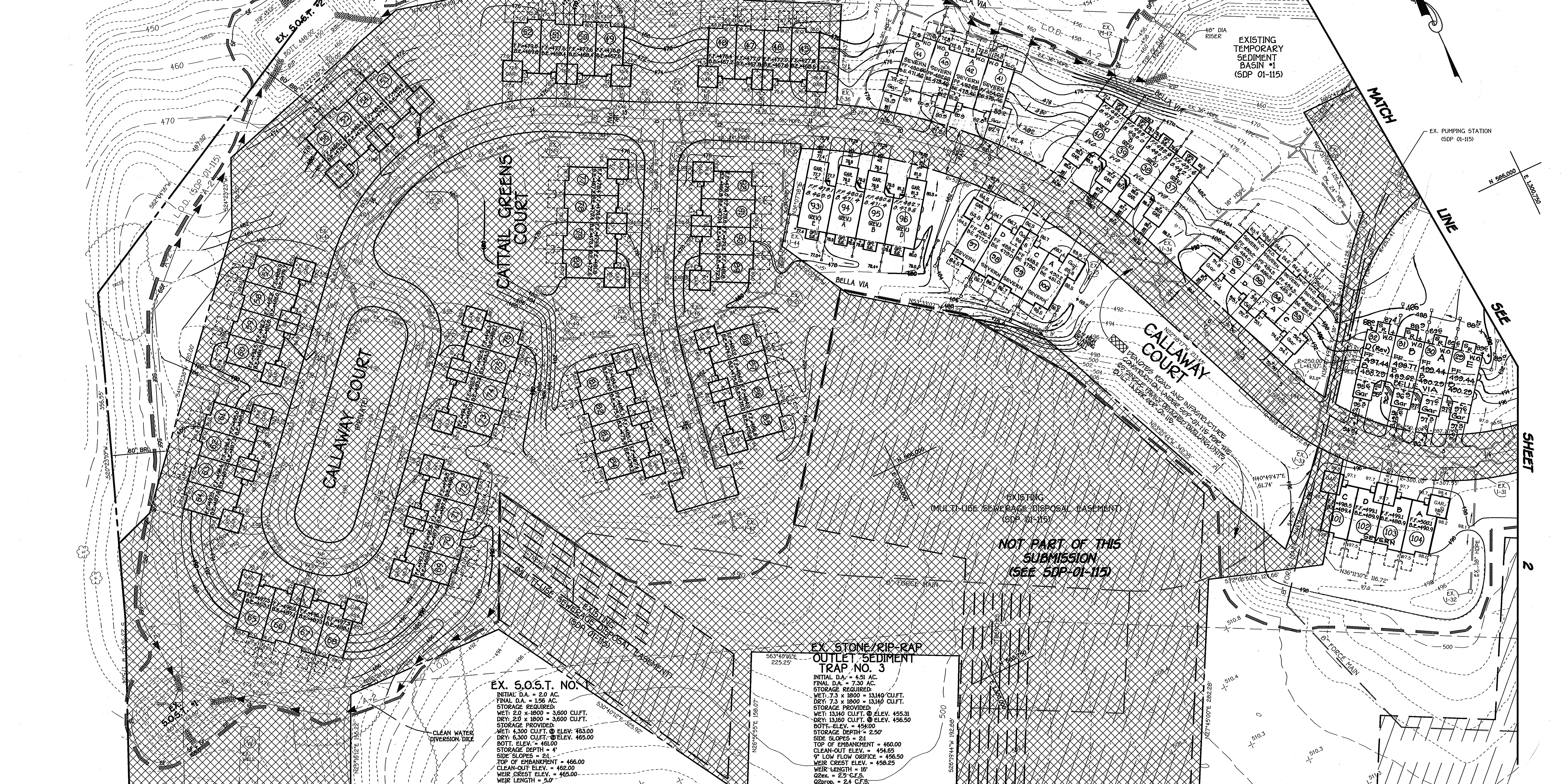
**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
 ELLICOTT CITY, MARYLAND 21114  
 (410) 481-2955

519.99.148



**EX. 5.0.5.T. NO. 2**  
 INITIAL D.A. = 3.89 AC.  
 FINAL D.A. = 1.69 AC.  
 STORAGE REQUIRED:  
 WET: 3,89 x 1800 = 6,994 CUFT.  
 DRY: 3,89 x 1800 = 6,994 CUFT.  
 STORAGE PROVIDED:  
 WET: 7,000 CUFT. @ ELEV. 450.00  
 DRY: 9,000 CUFT. @ ELEV. 452.00  
 BOTT. ELEV. = 448.00  
 STORAGE DEPTH = 4'  
 SIDE SLOPES = 2:1  
 TOP OF EMBANKMENT = 453.00  
 CLEAN-OUT ELEV. = 449.00  
 WEIR CREST ELEV. = 452.00  
 WEIR LENGTH = 10.0'

**EX. SEDIMENT BASIN NO. 1**  
 INITIAL D.A. = 14.0 AC.  
 FINAL D.A. = 16.5 AC.  
 STORAGE REQUIRED:  
 WET: 29,700 CUFT.  
 DRY: 29,700 CUFT. @ ELEV. 456.75  
 STORAGE PROVIDED:  
 WET: 31,950 CUFT. @ ELEV. 455.25  
 DRY: 29,700 CUFT. @ ELEV. 456.75  
 BOTT. ELEV. = 453.00  
 TOP OF EMBANKMENT = 462.00  
 CLEAN-OUT ELEV. = 454.42  
 LOW FLOW ORIFICE = 457.10  
 RISER CREST ELEV. = 458.50  
 Q2ex = 61 C.F.S.  
 Q2prop = 3.8 C.F.S.



**EX. 5.0.5.T. NO. 1**  
 INITIAL D.A. = 2.0 AC.  
 FINAL D.A. = 1.56 AC.  
 STORAGE REQUIRED:  
 WET: 2.0 x 1800 = 3,600 CUFT.  
 DRY: 2.0 x 1800 = 3,600 CUFT.  
 STORAGE PROVIDED:  
 WET: 4,300 CUFT. @ ELEV. 483.00  
 DRY: 5,300 CUFT. @ ELEV. 485.00  
 BOTT. ELEV. = 461.00  
 STORAGE DEPTH = 4'  
 SIDE SLOPES = 2:1  
 TOP OF EMBANKMENT = 466.00  
 CLEAN-OUT ELEV. = 462.00  
 WEIR CREST ELEV. = 465.00  
 WEIR LENGTH = 5.0'

**EX. STONE/RIP-RAP  
 OUTLET SEDIMENT  
 TRAP NO. 3**  
 INITIAL D.A. = 4.51 AC.  
 FINAL D.A. = 7.30 AC.  
 STORAGE REQUIRED:  
 WET: 7.3 x 1800 = 13,140 CUFT.  
 DRY: 7.3 x 1800 = 13,140 CUFT.  
 STORAGE PROVIDED:  
 WET: 13,140 CUFT. @ ELEV. 455.31  
 DRY: 13,140 CUFT. @ ELEV. 456.50  
 BOTT. ELEV. = 454.00  
 STORAGE DEPTH = 2.50'  
 SIDE SLOPES = 2:1  
 TOP OF EMBANKMENT = 460.00  
 CLEAN-OUT ELEV. = 454.65  
 9" LOW FLOW ORIFICE = 458.50  
 WEIR CREST ELEV. = 458.25  
 WEIR LENGTH = 15'  
 Q2ex = 2.9 C.F.S.  
 Q2prop = 2.4 C.F.S.

NOT PART OF THIS  
 SUBMISSION  
 (SEE 50P-01-115)

Nº	Revision	Date
1	Changed house types for Units 29-32 to the Bella Via model per new architectural plans	2-9-04
2	Changed house types for Units 99-104 to the Bella Via model per new architectural plans	3-11-04
3	Rev. grad. lot 32 to show As-Built Conditions	8-13-04
4	Rev unit type grad on units 33-36 & 91-100 from Bella Via to Severn Model	12-3-04
5	Rev. unit types 41-44 from Bella Via to Severn	5-2-05

**ENGINEER'S CERTIFICATE**  
 I certify that the design and sediment control represents a practical and workable plan based on the knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.  
 Signature of Engineer: *Donald R. Reutter, Jr.* Date: 8/12/02

**DEVELOPER'S CERTIFICATE**  
 I/we certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.  
 Signature of Developer: *Donald R. Reutter, Jr.* Date: 8/12/02

Reviewed for HOWARD SCD and meets Technical Requirements.  
 U.S.D. - Natural Resources Conservation Service  
 Signature: *John R. Morrison* Date: 8/19/02

How'd SCD  
 Signature: *John R. Morrison* Date: 8/19/02

**OWNER / DEVELOPER**  
 VILLAS AT CATTAIL CREEK, L.L.C.  
 c/o MR. J. THOMAS SCRIVENER  
 8808 CENTRE PARK DRIVE  
 SUITE 209  
 COLUMBIA, MARYLAND 21045  
 (410) 964-5922

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 Signature: *John R. Morrison* Date: 8/26/02  
 Chief, Division of Land Development  
 Signature: *John R. Morrison* Date: 8/26/02  
 Chief, Department Engineering Division  
 Signature: *John R. Morrison* Date: 8/27/02  
 Director, Department of Planning and Zoning

PROJECT: THE VILLAS AT CATTAIL CREEK SECTION/AREA: 1-116  
 DEED: L. 4228, F. 442 BLOCK NO: 3 ZONE: RC-DEO TAX/ZONE: 21 ELEC. DIST.: 4th CENSUS TR.:  
 WATER CODE: SEWER CODE:

**GRADING AND SEDIMENT CONTROL**  
**SITE DEVELOPMENT PLAN**  
**THE VILLAS AT CATTAIL CREEK**  
 ZONING: RC-DEO  
 TAX MAP No: 21 PARCEL: 3 GRID No: 2  
 FOURTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 50' DATE: AUGUST 8, 2002  
 SHEET 3 OF 9 **SDP 99-140**

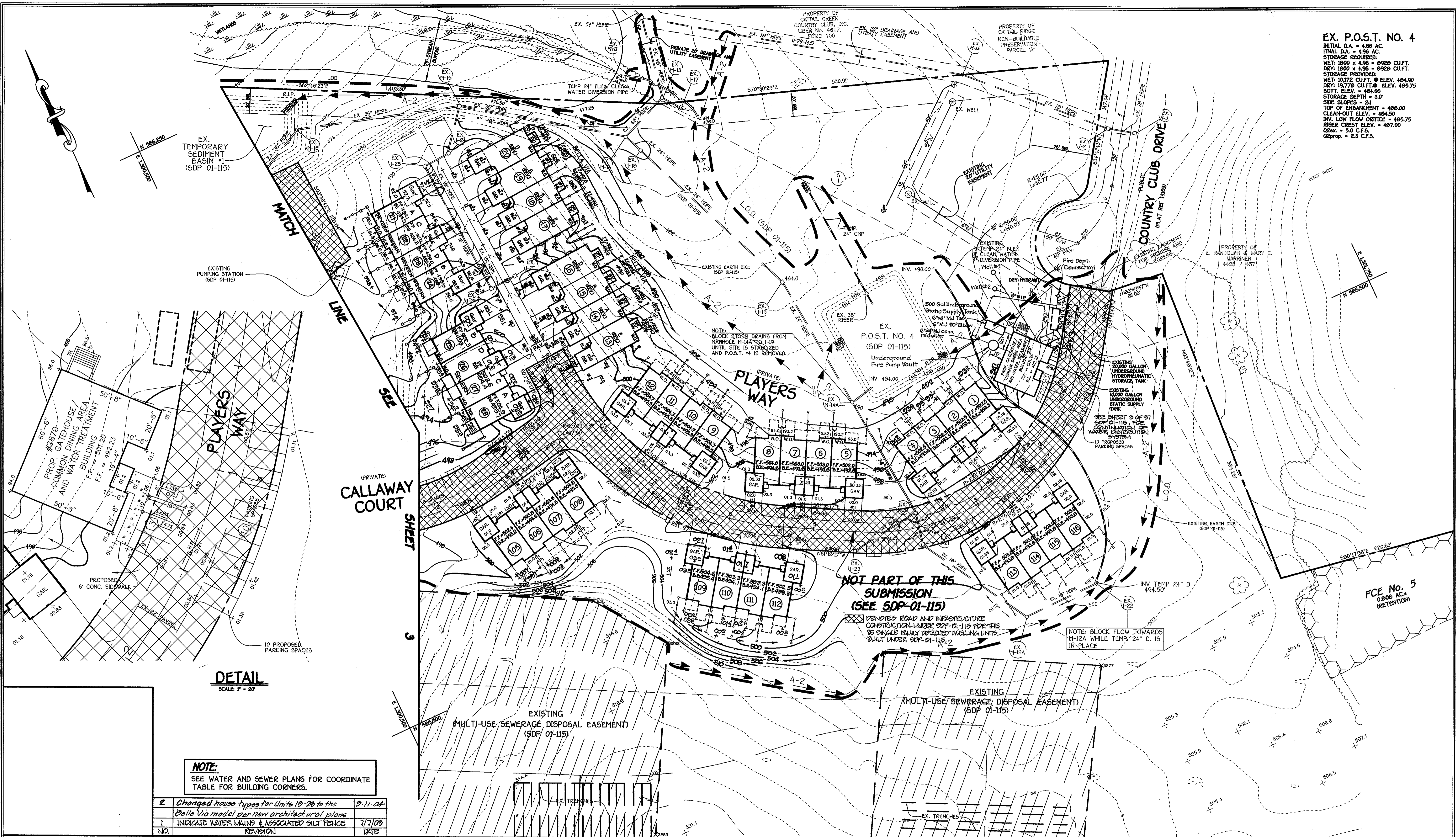
**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
 ELLETTTS CITY, MARYLAND 21114  
 (410) 461-2955

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SDP 99-140



**EX. P.O.S.T. NO. 4**  
 INITIAL D.A. = 4.96 AC.  
 FINAL D.A. = 4.96 AC.  
 STORAGE REQUIRED:  
 WET: 1800 x 4.96 = 9928 CUFT.  
 DRY: 1200 x 4.96 = 5952 CUFT.  
 STORAGE PROVIDED:  
 WET: 10172 CUFT. @ ELEV. 484.90  
 DRY: 19170 CUFT. @ ELEV. 485.75  
 BOTT. ELEV. = 484.00  
 STORAGE DEPTH = 3.0'  
 SIDE SLOPES = 2:1  
 TOP OF EMBANKMENT = 486.00  
 CLEAN-OUT ELEV. = 484.50  
 INV. LOW FLOW ORIFICE = 485.75  
 2562 CREST ELEV. = 487.00  
 Q2ec = 5.0 C.F.S.  
 Q2prop = 2.3 C.F.S.



EX. TEMPORARY SEDIMENT BASIN (SDP 01-115)

EXISTING PUMPING STATION (SDP 01-115)

**DETAIL**  
 SCALE 1" = 20'

**NOTE:**  
 SEE WATER AND SEWER PLANS FOR COORDINATE TABLE FOR BUILDING CORNERS.

NO.	REVISION	DATE
2	Changed house types for Units 19-28 to the Bella Via model per new architectural plans	9-11-04
1	INDICATE WATER MAINS & ASSOCIATED SILT FENCE	7/7/03
NO.		

12	Rev. grd. lots 13-16 to show As-Built Conditions	5-20-05
11	Rev. grd. lots 25-28 to show As-Built Conditions	5-10-05
10	Rev. grd. lots 17-20 to show As-Built Conditions	4-12-05
9	Add Static Supply Tank to Gatehouse/Water Treatment Building	3-9-05
8	Rev. lots 21-24 from Bella Via to Severn Model	12-3-04
7	Rev. lots 25-28 from Bella Via to Severn Model	11-9-04
6	Rev. grd. in Rear of lots 9-12 to show As-Built Conditions	10-19-04
5	Rev. grd. lots 105-108 to show As-Built Conditions	7-23-04
4	Rev. grd. Units 109-112 to show As-Built Conditions	6-22-04
3	Rev. grd. Units 1-4 to reflect As-Built Conditions	5-21-04

**ENGINEER'S CERTIFICATE**  
 I certify that the plan, specification and sediment control represents a practical and workable plan based on my professional knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.  
 Signature: *[Signature]* Date: 8-12-02

**DEVELOPER'S CERTIFICATE**  
 I/We certify that all development and construction will be done according to this plan and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.  
 Signature of Developer (Print name below signature): *Donald R. Reulicke, Jr.* Date: 8-12-02

Reviewed for HOWARD SCD and meets Technical Requirements.  
 Signature: *Jim Myers* Date: 8/19/02  
 Signature: *John K. Robertson* Date: 8/19/02

**OWNER / DEVELOPER**  
 VILLAS AT CATTAL CREEK, L.L.C.  
 c/o MR. J. THOMAS SCRIVENER  
 8909 CENTRE PARK DRIVE  
 SUITE 209  
 COLUMBIA, MARYLAND 21045  
 (410) 964-5522

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 Chief, Division of Land Development: *[Signature]* Date: 9/26/02  
 Chief, Development Engineering Division: *[Signature]* Date: 8/21/02  
 Director, Department of Planning and Zoning: *[Signature]* Date: 8/27/02

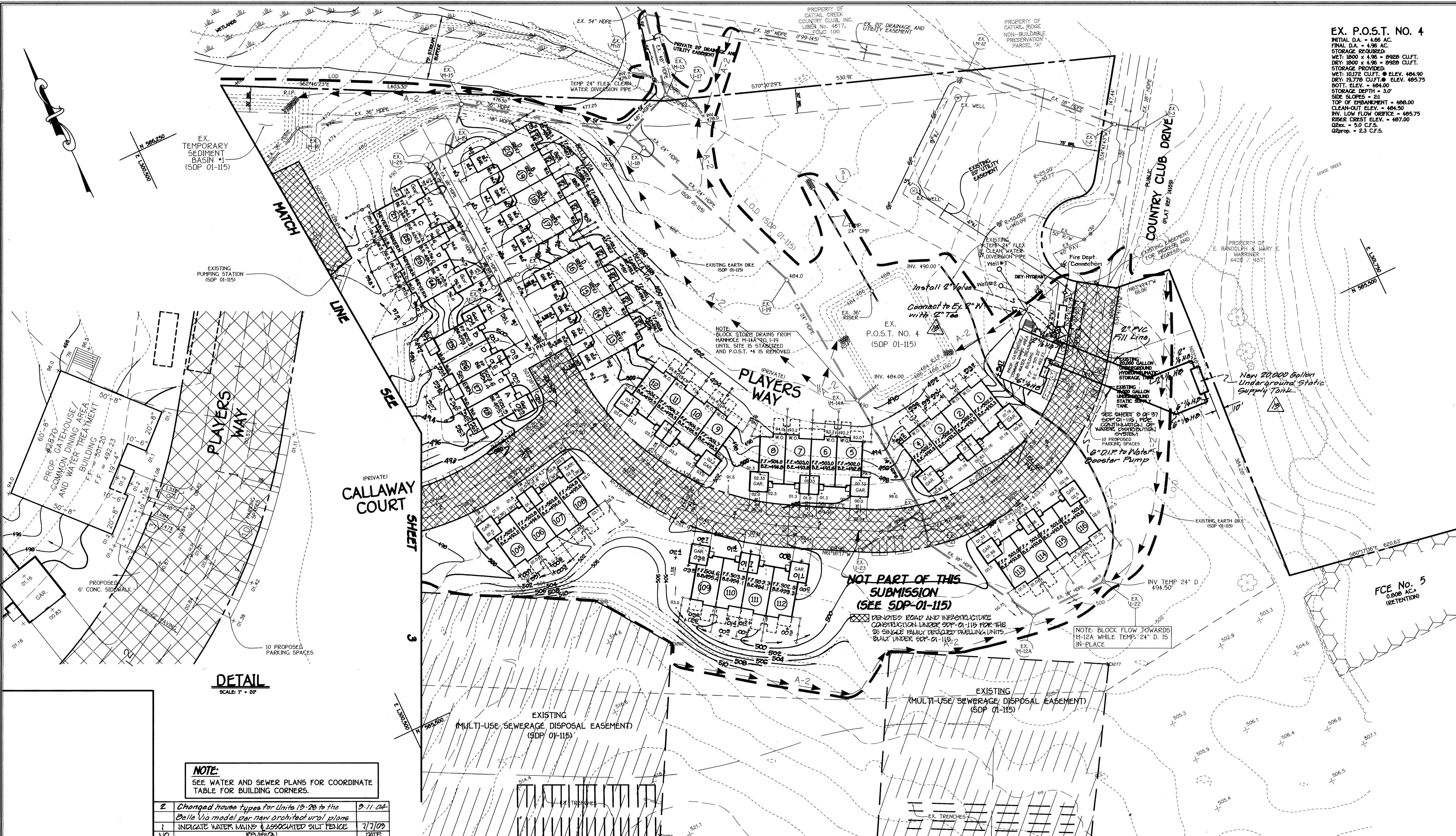
PROJECT: THE VILLAS AT CATTAL CREEK SECTION/AREA: LOT NO. 1-116  
 DEED: L. 4228, F. 442 ZONE: RC-DEO TAX/ZONE: 21 ELEC. DIST.: 4th CENSUS TR.:  
 WATER CODE: SEWER CODE:

**GRADING AND SEDIMENT CONTROL**  
**SITE DEVELOPMENT PLAN**  
**THE VILLAS AT CATTAL CREEK**  
 ZONING: RC-DEO  
 TAX MAP No: 21 PARCEL: 3 GRID No: 2  
 FOURTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 50' DATE: AUGUST 8, 2002  
 SHEET 2 OF 9

K:\Drawings\440021\Villas At Cattal Creek (SDP)\SDP\TOWNHOUSES 2002\REVISED SDP AUGUST 2002\GRADING\PLAN SHEET 2.dwg 8/17/2002 8:55:41AM  
 FISHER, COLLINS & CARTER, INC.  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTRAL SQUARE OFFICE PARK - 18272 BALTIMORE NATIONAL PIKE  
 ELICOTT CITY, MARYLAND 21042  
 (410) 461-2855  
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SDP 99.148





**EX. P.O.S.T. NO. 4**  
 INITIAL D.A. = 4.86 AC.  
 FINAL D.A. = 4.98 AC.  
 STORAGE REQUIRED:  
 WET: 1800 x 4.96 = 8928 CU.FT.  
 DRY: 1800 x 4.96 = 8928 CU.FT.  
 STORAGE PROVIDED:  
 WET: 10,172 CU.FT. @ ELEV. 484.90  
 DRY: 19,778 CU.FT. @ ELEV. 485.75  
 SOTT. ELEV. = 484.00  
 STORAGE DEPTH = 3.0'  
 SIDE SLOPES = 2:1  
 TOP OF EMBANKMENT = 486.00  
 CLEAN-OUT ELEV. = 484.50  
 INV. LOW FLOW ORIFICE = 485.75  
 RISER CREST ELEV. = 487.00  
 G2cr = 5.0 C.F.S.  
 G2prop = 2.3 C.F.S.

EX. TEMPORARY SEDIMENT BASIN #1 (SDP 01-115)

EXISTING PUMPING STATION (SDP 01-115)

**DETAIL**  
 SCALE: 1" = 20'

**NOTE:**  
 SEE WATER AND SEWER PLANS FOR COORDINATE TABLE FOR BUILDING CORNERS.

2	Changed house types for Units 19-28 to the Bella Via model per new architectural plans	3-11-04
1	INDICATE WATER MAINS & ASSOCIATED SILT FENCE	7/7/03
N.D.	REVISION	DATE

17	Elim. 1400 Gal. Underground Static Supply Tank behind Gatehouse, add 20,000 Gal. Underground Static Supply Tank on east side Players Way	1-17-06
12	Rev. grd. lots 13-16 to show As-Built Conditions	5-20-05
11	Rev. grd. lots 25-28 to show As-Built Conditions	5-10-05
10	Rev. grd. lots 17-20 to show As-Built Conditions	4-12-05
9	Add Static Supply Tank to Gatehouse/Water Treatment Building	3-9-05
8	Rev. lots 21-24 from Bella Via to Severn Model	12-3-04
7	Rev. lots 25-28 from Bella Via to Severn Model	11-9-04
6	Rev. grd. in Rear of lots 9-12 to show As-Built Conditions	10-19-04
5	Rev. grd. lots 105-108 to show As-Built Conditions	7-23-04
4	Rev. grd. Units 109-112 to show As-Built Conditions	6-22-04
3	Rev. grd. Units 1-4 to reflect As-Built Conditions	5-21-04

**ENGINEER'S CERTIFICATE**  
 I certify that the erosion and sediment control represents a practical and workable plan based on the knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.  
 Signature of Professional Engineer (Print name below signature) *Jim Myers* Date *8/19/02*

**DEVELOPER'S CERTIFICATE**  
 I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.  
 Signature of Developer (Print name below signature) *Donald R. Reuser, Jr.* Date *8-12-02*

Reviewed for HOWARD SCD and meets Technical Requirements.  
*John R. Robertson* 8/19/02  
 Director SCD

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*Chris Stewart* 9/26/02  
 Chief, Division of Land Development

Chief, Development Engineering Division  
*John R. Robertson* 8/27/02  
 Director, Department of Planning and Zoning

**OWNER / DEVELOPER**  
 VILLAS AT CATTAIL CREEK, L.L.C.  
 c/o MR. J. THOMAS SCRIVENER  
 8800 CENTRE PARK DRIVE  
 SUITE 209  
 COLUMBIA, MARYLAND 21045  
 (410) 964-5822

PROJECT	THE VILLAS AT CATTAIL CREEK	SECTION/AREA	1 - 116
DEED	L. 4228, F. 442	BLOCK NO.	3
ZONE	RC-DEO	TAX/ZONE	21
ELEC. DIST.	4th	CENSUS TR.	---
WATER CODE	---	SEWER CODE	---

**GRADING AND SEDIMENT CONTROL**

**SITE DEVELOPMENT PLAN**  
**THE VILLAS AT CATTAIL CREEK**

ZONING: RC-DEO  
 TAX MAP No: 21 PARCEL: 3 GRID No: 2  
 FOURTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 50' DATE: AUGUST 8, 2002  
 SHEET 2 OF 9

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**FISHER COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTRAL SQUARE OFFICE PARK - 10722 BALTIMORE NATIONAL FREE  
 ELLICOTT CITY, MARYLAND 21042  
 (410) 461-2095

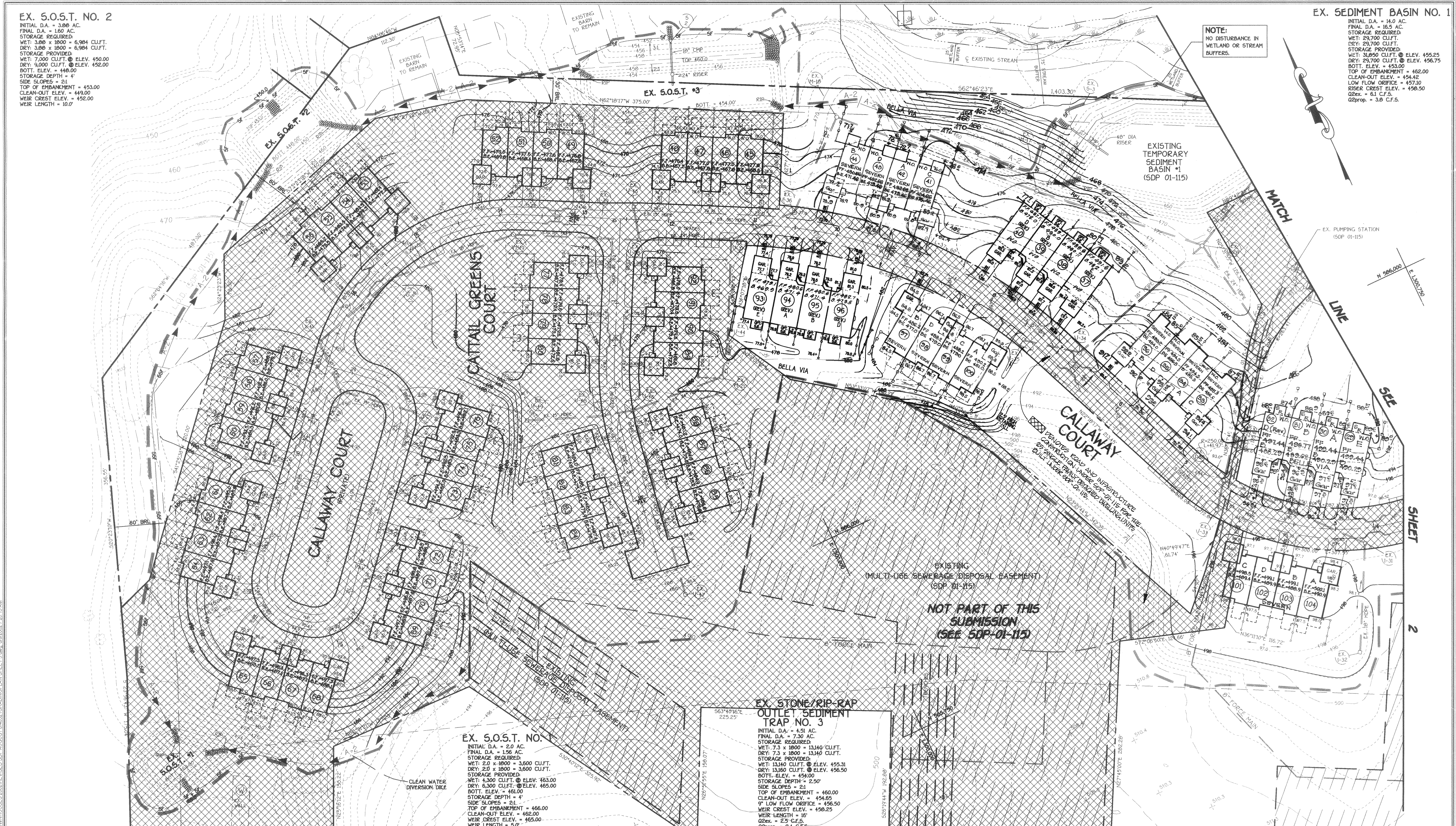
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**EX. 5.0.5.T. NO. 2**  
 INITIAL D.A. = 3.99 AC.  
 FINAL D.A. = 1.60 AC.  
 STORAGE REQUIRED:  
 WET: 3.89 x 1800 = 6,994 CUFT.  
 DRY: 3.89 x 1800 = 6,994 CUFT.  
 STORAGE PROVIDED:  
 WET: 7,000 CUFT. @ ELEV. 450.00  
 DRY: 9,000 CUFT. @ ELEV. 452.00  
 BOT. ELEV. = 448.00  
 STORAGE DEPTH = 4'  
 SIDE SLOPES = 2:1  
 TOP OF ENBANKMENT = 453.00  
 CLEAN-OUT ELEV. = 449.00  
 WEIR CREST ELEV. = 452.00  
 WEIR LENGTH = 10.0'

**EX. SEDIMENT BASIN NO. 1**  
 INITIAL D.A. = 14.0 AC.  
 FINAL D.A. = 16.5 AC.  
 STORAGE REQUIRED:  
 WET: 29,700 CUFT.  
 DRY: 29,700 CUFT.  
 STORAGE PROVIDED:  
 WET: 31,950 CUFT. @ ELEV. 455.25  
 DRY: 29,700 CUFT. @ ELEV. 456.75  
 BOT. ELEV. = 453.00  
 TOP OF ENBANKMENT = 462.00  
 CLEAN-OUT ELEV. = 454.42  
 LOW FLOW ORIFICE = 457.10  
 RISER CREST ELEV. = 456.50  
 Q2ex. = 6.1 C.F.S.  
 Q2prop. = 3.8 C.F.S.

**NOTE:**  
 NO DISTURBANCE IN  
 WETLAND OR STREAM  
 BUFFERS.



No	Revision	Date
1	Changed house types for Units 29-32 to the Bella Via model per new architectural plans	2-9-04
2	Changed house types for Units 33-44 & 93-100 to the Bella Via model per new architectural plans	9-11-04
3	Rev. grd. lot 32 to show As-Built Conditions	8-13-04
4	Rev unit type 4rd on units 33-36 & 91-100 from Bella Via to Severn Model	12-3-04
5	Rev. unit types 41-44 from Bella Via to Severn	5-9-05
6	Rev. grd. lots 37-40 to show Existing Conditions	9-23-05
7	Rev. grd. lots 41-44 to show Existing Conditions	11-15-05

**ENGINEER'S CERTIFICATE**  
 I certify that this plan, specification and sediment control represents a practical and workable plan based on the professional knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.  
 Signature of Engineer: *Donald P. Reutter, Jr.* Date: 8/12/02

**DEVELOPER'S CERTIFICATE**  
 I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.  
 Signature of Developer: *Donald P. Reutter, Jr.* Date: 8/12/02

Reviewed for HOWARD SCD and meets Technical Requirements.  
 U.S.D. Natural Resources Conservation Service  
*John R. Robertson* 8/19/02  
 How. SCD Date

**OWNER / DEVELOPER**  
 VILLAS AT CATTAIL CREEK, LLC.  
 c/o MR. J. THOMAS SCRIVENER  
 8808 CENTRE PARK DRIVE  
 SUITE 209  
 COLUMBIA, MARYLAND 21045  
 (410) 964-5522

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 Chief, Division of Land Development  
 Chief, Development Engineering Division  
 Director, Department of Planning and Zoning  
 8/19/02  
 8/21/02  
 9/27/02

PROJECT	SECTION/AREA	LOT NO.
THE VILLAS AT CATTAIL CREEK		1 - 116
DEED	BLOCK NO.	ZONE
L. 4228, F. 442	3	RC-DEO
	TAX/ZONE	ELEC. DIST.
	21	4th
WATER CODE	SEWER CODE	

**GRADING AND SEDIMENT CONTROL**  
**SITE DEVELOPMENT PLAN**  
**THE VILLAS AT CATTAIL CREEK**  
 ZONING: RC-DEO  
 TAX MAP No: 21 PARCEL: 3 GRID No: 2  
 FOURTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 50' DATE: AUGUST 8, 2002  
 SHEET 3 OF 9 **SDP 99-148**

**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL FREE  
 ELK COTT CITY, MARYLAND 21042  
 410.461.3955

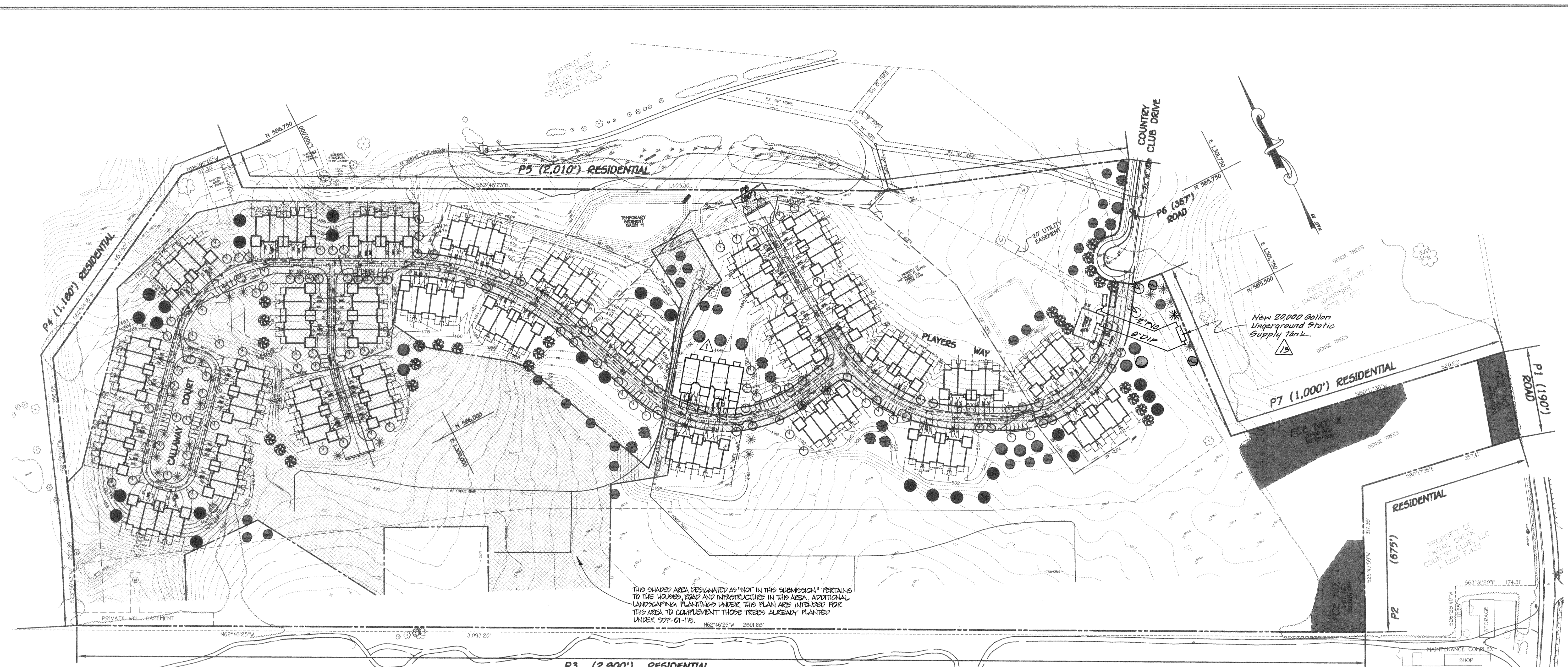
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SDP 99-148









THIS SHADED AREA DESIGNATED AS "NOT IN THIS SUBMISSION" PERTAINS TO THE HOUSES, ROAD AND INFRASTRUCTURE IN THIS AREA. ADDITIONAL LANDSCAPING PLANTINGS UNDER THIS PLAN ARE INTENDED FOR THIS AREA TO COMPLEMENT THOSE TREES ALREADY PLANTED UNDER SOP-01-115.

QTY.	KEY	NAME	SIZE
119		ACER RUBRUM "RED SUNSET" RED MAPLE	2 1/2" - 3" CAL.
20		CUPRESSOCYPARIS LEYLANDI LEYLAND CYPRESS	5' - 6' HT.
30		ACER PLATANOIDES "EMERALD GREEN" EMERALD GREEN NORWAY MAPLE	2 1/2" - 3" CAL.
16		CORNUS FLORIDA WHITE FLOWERING DOGWOOD	2 1/2" - 3" CAL.
9		CORNUS FLORIDA "RUBRA" RED FLOWER DOGWOOD	2 1/2" - 3" CAL.
30		FRAXINUS AMERICANA "AUTUMN PURPLE" AUTUMN PURPLE WHITE ASH	2 1/2" - 3" CAL.
26		CUPRESSOCYPARIS LEYLANDI LEYLAND CYPRESS	5' - 6' HT.

NOTES TREES PROVIDED FOR AND BOUND UNDER SOP-01-115 EX. BOUND TO REMAIN.

SCHEDULE C RESIDENTIAL DEVELOPMENT INTERNAL LANDSCAPING	
NUMBER OF DWELLING UNITS	116
NUMBER OF TREES REQUIRED (1 DU SFA; 1:3 DU APTS)	116
NUMBER OF TREES PROVIDED	116
SHADE TREES (2:1 SUBSTITUTION)	116

SCHEDULE A PERIMETER LANDSCAPE EDGE										
PERIMETER	CATEGORY (PROPERTIES/ROADWAYS)	LANDSCAPE TYPE	LINEAR FEET OF ROADWAY FRONTAGE PERIMETER	CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	CREDIT FOR TREES PLANTED UNDER SOP 01-115		NUMBER OF PLANTS REQUIRED AND PROVIDED UNDER THIS PLAN		
						SHADE TREES	EVERGREEN TREES	SHADE TREES	EVERGREEN TREES	SHRUBS
P-1	SFA TO ROAD	NONE	190'	YES (190')	NO	0	-	0	-	-
P-2	SFA TO RESIDENTIAL	A	675'	YES (200')	NO	0	-	0	-	-
P-3	SFA TO OTHER	A	2800'	NO	YES (2800' FOR DISTANCE)	47	-	0	-	-
P-4	SFA TO OTHER	A	1180'	NO	NO	20	-	0	-	-
P-5	SFA TO OTHER	A	2010'	NO	NO	34	-	0	-	-
P-6	SFA SIDE/REAR TO ROAD	C	367'	YES (410')	NO	0	10	1	0	-
P-7	SFA SIDE/REAR TO ROAD	C	1000'	NO (410')	NO	0	10	7	14	-
P-8	SFA TO SFD	C	80'	NO	NO	2	-	0	4	-

NOTE: LANDSCAPING SURETY TO BE PROVIDED AT THE TIME OF GRADING PERMIT APPLICATION. IN ADDITION, LANDSCAPING SURETY IN THE AMOUNT OF \$30,700.00 WAS PREVIOUSLY INCLUDED IN THE GRADING PERMIT APPLICATION NO. G00007862 ASSOCIATED WITH SOP 01-115 FOR 119 SHADE TREES AND 20 EVERGREEN TREES. UNDER THIS SITE PLAN, A LANDSCAPING SURETY IN THE AMOUNT OF \$29,400.00 WILL BE PROVIDED FOR 85 SHADE TREES AND 26 EVERGREEN TREES FOR A TOTAL OF 111 NEW PLANTINGS UNDER THIS PLAN.

No.	Revision	Date
1	Changed house types for Units 29-32 to Bolle Via mode! per new architectural plans.	2-9-04
13	Elim. 1800 Gal. Underground Static Supply Tank behind Botchouse; added 20,000 Gal. Underground Static Supply Tank-1; 10-08 on east side Players Way; relocated @ landscape trees	

**ENGINEER'S CERTIFICATE**  
I certify that the erosion and sediment control represents a practical and workable plan based on my knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Signature of Engineer (Print name below signature) *John R. Robertson* Date *8-12-02*

**DEVELOPER'S CERTIFICATE**  
I/We certify that the development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.

Signature of Developer (Print name below signature) *Donald R. Reuser, Jr.* Date *8-12-02*

Required for HOWARD SCD and meets Technical Requirements.

*John R. Robertson* 8/19/02  
U.S.D. Natural Resources Conservation Service  
This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.  
John R. Robertson  
HOWARD SCD

**OWNER / DEVELOPER**  
VILLAS AT CATTAIL CREEK, LLC  
c/o MR. J. THOMAS SCRIVENER  
8808 CENTRE PARK DRIVE  
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COLUMBIA, MARYLAND 21045  
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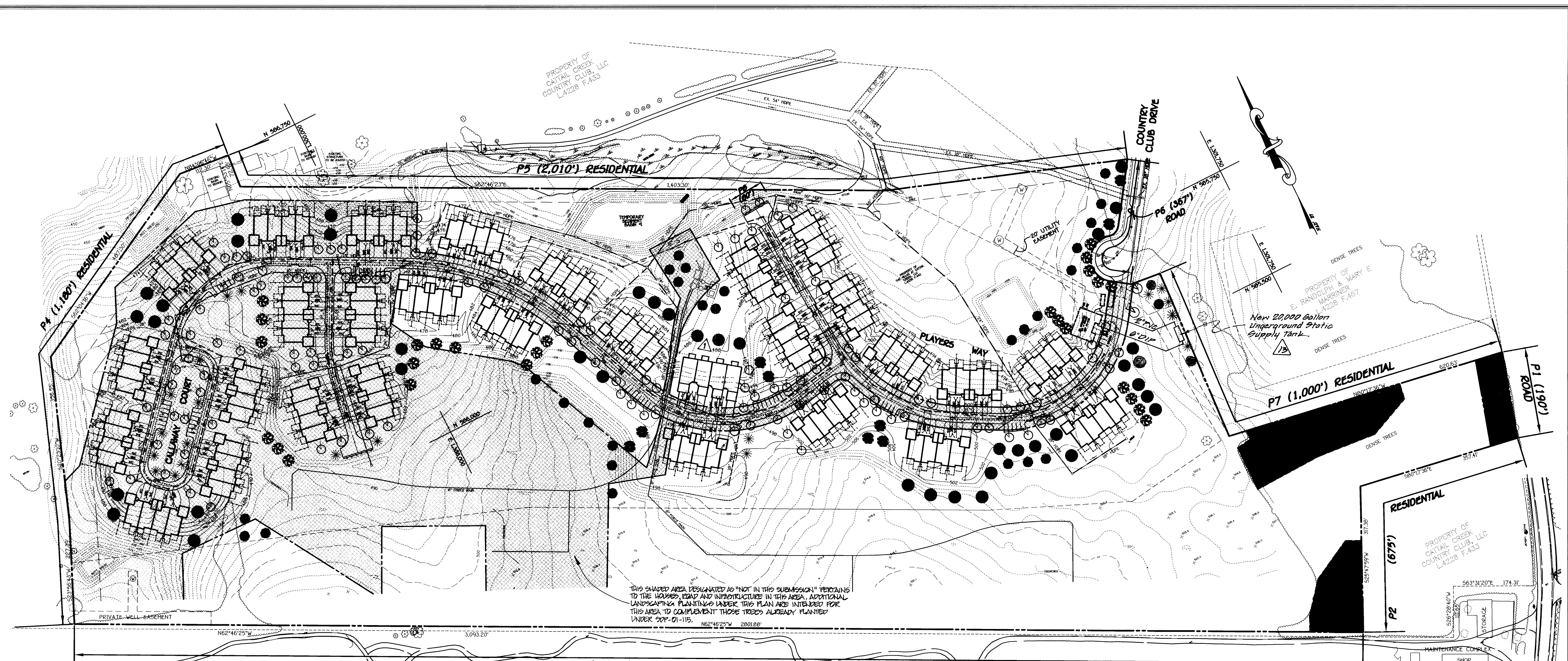
APPROVED: DEPARTMENT OF PLANNING AND ZONING

*John R. Robertson* 8/19/02  
Chief, Division of Land Development  
*John R. Robertson* 8/19/02  
Chief, Development Engineering Division  
*John R. Robertson* 8/19/02  
Director, Department of Planning and Zoning

**LANDSCAPE PLAN**  
**SITE DEVELOPMENT PLAN**  
**THE VILLAS AT CATTAIL CREEK**  
ZONING: RC-DEO  
TAX MAP No: 21 PARCEL: 3 GRID No: 2  
FOURTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
SCALE: 1" = 100' DATE: AUGUST 8, 2002  
SHEET 6 OF 9

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
ELLSWORTH CITY, MARYLAND 21042  
410-461-2955





QTY.	KEY	NAME	SIZE
119		ACER RUBRUM 'RED SUNSET' RED MAPLE	2 1/2" - 3" CAL.
20		CUPRESSOCYPARIS LEYLANDI LEYLAND CYPRESS	5' - 6' HT.
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16		CORNUS FLORIDA WHITE FLOWERING DOGWOOD	2 1/2" - 3" CAL.
9		CORNUS FLORIDA 'RUBRA' RED FLOWER DOGWOOD	2 1/2" - 3" CAL.
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NOTES TREES PROVIDED FOR AND BOUND UNDER 00P-01-115 EX. BOUND TO REMAIN.

SCHEDULE C RESIDENTIAL DEVELOPING INTERNAL LANDSCAPING	
NUMBER OF DWELLING UNITS	116
NUMBER OF TREES REQUIRED (BDU SFA: 1:3 DU APTS)	116
NUMBER OF TREES PROVIDED	116
SHADE TREES	116
OTHER TREES (2:1 SUBSTITUTION)	

SCHEDULE A PERIMETER LANDSCAPE EDGE										
PERIMETER	CATEGORY (PROPERTIES/ROADWAYS)	LANDSCAPE TYPE	LINEAR FEET OF ROADWAY FRONTAGE PERMETER	CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	CREDIT FOR TREES PLANTED UNDER SDF 01-115		NUMBER OF PLANTS REQUIRED AND PROVIDED UNDER THIS PLAN		
						SHADE TREES	EVERGREEN TREES	SHADE TREES	EVERGREEN TREES	SHRUBS
P-1	SFA TO ROAD	NONE	190'	YES (190')	NO	0	-	0	-	-
P-2	SFA TO RESIDENTIAL	A	675'	YES (200')	NO	0	-	0	-	-
P-3	SFA TO OTHER	A	2800'	NO	YES (2800' FOR DISTANCE)	47	-	0	-	-
P-4	SFA TO OTHER	A	1180'	NO	NO	20	-	0	-	-
P-5	SFA TO OTHER	A	2010'	NO	NO	34	-	0	-	-
P-6	SFA SIDE/REAR TO ROAD	C	367'	NO	NO	0	10	1	0	-
P-7	SFA SIDE/REAR TO ROAD	C	1000'	YES (410')	NO	0	10	7	14	-
P-8	SFA TO SFD	C	80'	NO	NO	2	-	0	4	-

NOTE: LANDSCAPING SURETY TO BE PROVIDED AT THE TIME OF GRADING PERMIT APPLICATION. IN ADDITION, LANDSCAPING SURETY IN THE AMOUNT OF \$30,700.00 WAS PREVIOUSLY INCLUDED IN THE GRADING PERMIT APPLICATION NO. G00007962 ASSOCIATED WITH SDF 01-115 FOR 119 SHADE TREES AND 20 EVERGREEN TREES. UNDER THIS SITE PLAN, A LANDSCAPING SURETY IN THE AMOUNT OF \$29,400.00 WILL BE PROVIDED FOR 85 SHADE TREES AND 26 EVERGREEN TREES. FOR A TOTAL OF 111 NEW PLANTINGS UNDER THIS PLAN.

No.	Revision	Date
1	Changed house types for Units 29-32 to Belle Via model per new architectural plans.	2-9-04
2	Elim. 1500 Gal. Underground Static Supply Tank behind Gatehouse, added 20,000 Gal. Underground Static Supply Tank on east side Players Way; relocated 6 landscape trees	1-10-06

**ENGINEER'S CERTIFICATE**  
I certify that this erosion and sediment control represents a practical and workable plan based on my knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Signature of Engineer (Print name below signature) *Donald R. Reimold* Date *8-12-02*

**DEVELOPER'S CERTIFICATE**  
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Signature of Developer (Print name below signature) *Donald R. Reimold* Date *8-12-02*

Approved for HOWARD SCD and meets Technical Requirements.

*John Mayus* 8/19/02  
U.S.D. Natural Resources Conservation Service  
Date

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

*John R. Robinson* 8/19/02  
Howard SCD  
Date

**OWNER / DEVELOPER**  
VILLAS AT CATTAIL CREEK, LLC  
c/o MR. J. THOMAS SCRIVENER  
8800 CENTRE PARK DRIVE SUITE 209  
COLUMBIA, MARYLAND 21045  
(410) 964-5522

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Chris Hester* 8/20/02  
Chief, Division of Land Development  
Date

*John J. Williams* 8/21/02  
Chief, Development Engineering Division  
Date

*John J. Williams* 8/27/02  
Director, Department of Planning and Zoning  
Date

PROJECT: THE VILLAS AT CATTAIL CREEK SECTION/AREA: 1-116  
DEED: L. 4228, F. 442 BLOCK NO. 3 ZONE RC-DEO TAX/ZONE 21 ELEC. DIST. 4th CENSUS TR. ---  
WATER CODE --- SEWER CODE ---

**LANDSCAPE PLAN**

**SITE DEVELOPMENT PLAN**

**THE VILLAS AT CATTAIL CREEK**

ZONING: RC-DEO

TAX MAP No: 21 PARCEL: 3 GRID No: 2

FOURTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

SCALE: 1" = 100' DATE: AUGUST 8, 2002

SHEET 6 OF 9 **SDF 99-148**

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**FISHER COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL SQUARE OFFICE PARK • 1072 BALTOUR NATIONAL PIKE  
ELLSWORTH CITY, MARYLAND 21042  
(410) 461-2555

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