SITE DEVELOPMENT PLAN
THE ENCHANTED FOREST
2nd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

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GENERAL NOTES

1. ALL WATER LINES SHALL BE CONSTRUCTED WITH A MINIMUM OF 42" COVER BELOW FINISHED GRADE.
2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, i.e., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, 1989 AMENDMENTS.
3. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FROM BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS TO VERIFY THEIR LOCATION AND ELEVATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF LOCATION OF UTILITIES IS OTHER THAN SHOWN.
5. CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS:

MISS UTILITY	1-800-257-7777
C&P TELEPHONE COMPANY	725-9976
HOWARD COUNTY BUREAU OF UTILITIES	313-4900
AT&T CABLE LOCATION DIVISION	393-3553
BALTIMORE GAS & ELECTRIC COMPANY	685-0123
STATE HIGHWAY ADMINISTRATION	531-5533
HOWARD COUNTY CONSTRUCTION/INSPECTION SURVEY DIVISION (24 HOURS NOTICE PRIOR TO COMMENCEMENT OF WORK)	792-7272

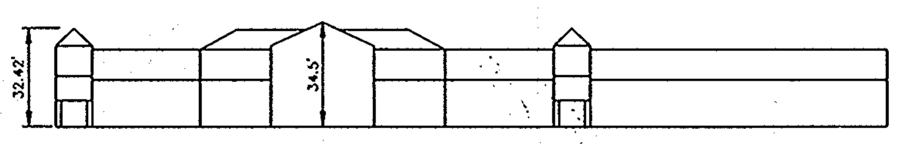
6. ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS, OR M.S.H.A. STANDARDS WITHIN THE R.O.W. OF RT. 40.
7. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
8. THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALLS.
9. PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
10. NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT TO SUBGRADE.
11. TOPO TAKEN FROM AERIAL SURVEY DATED MARCH 1989, BY MERRICK & CO.
12. ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
13. ALL STORM DRAIN PIPE BEDDING SHALL BE AS SHOWN IN DETAIL G2.01 (TRENCH IN ROCK OR TRENCH IN EARTH AS DETERMINED BY FIELD CONDITIONS) IN VOL. IV OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR AS SHOWN ON THE DRAWINGS.
14. THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS AND/OR RIGHTS-OF-WAY THAT MAY BE REQUIRED FOR THE SEDIMENT AND EROSION CONTROL PRACTICES, STORM WATER MANAGEMENT PRACTICES AND THE DISCHARGE OF STORM WATER ONTO OR ACROSS ADJACENT OR DOWNSTREAM PROPERTIES INCLUDED IN THIS PLAN. HE IS ALSO RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS AND/OR WORK ON ADJACENT PROPERTIES INCLUDED IN THIS PLAN.
15. THE OWNER SHALL PROVIDE A SEPARATE AND INDEPENDENT SEWER CONNECTION FOR EACH TENANT OR OCCUPANT OF ANY BUILDING, SHOWN ON THIS SITE DEVELOPMENT PLAN, WHO WILL DISCHARGE NON-DOMESTIC WASTE TO THE PUBLIC SEWERAGE SYSTEM IF THIS WASTE IS REGULATED UNDER SECTION 18.122A OF THE HOWARD COUNTY CODE. EACH SEPARATE AND INDEPENDENT SEWER CONNECTION SHALL INCLUDE A STANDARD MANHOLE AND OTHER WATER PRETREATMENT DEVICES AS REQUIRED AND APPROVED BY HOWARD COUNTY. WASTE LINES ON THE INTERIOR OF THE BUILDING SHALL BE DESIGNED, CONSTRUCTED OR MODIFIED SUCH THAT NON-DOMESTIC WASTE WILL BE DISCHARGED TO THE SEPARATE AND INDEPENDENT SEWER CONNECTION. NO PLAN SHALL DISCHARGE REGULATED NON-DOMESTIC WATER TO THE PUBLIC SEWERAGE SYSTEM PRIOR TO INSTALLATION OF THE SEPARATE AND INDEPENDENT SEWER CONNECTION AND RELATED INTERIOR WASTE LINES. THE ABOVE REQUIREMENTS SHALL APPLY TO ALL INITIAL AND FUTURE OCCUPANTS OR TENANTS.
16. THE OWNER SHALL PROVIDE MAINTENANCE FOR THE WATER QUALITY STRUCTURES PROVIDED FOR IN THIS DEVELOPMENT.
17. ALL IMPROVEMENTS AS SHOWN ON THESE PLANS WITHIN THE R/W OF U.S. ROUTE 40 WILL BE THE RESPONSIBILITY OF THE DEVELOPER.
18. ALL EXTERIOR LIGHTING WILL BE DIRECTED/REFLECTED AWAY FROM ADJACENT RESIDENTIALLY ZONED PROPERTIES AND PUBLIC STREET RIGHT-OF-WAYS.
19. ZB CASE 867-M: REQUESTED REZONING OF 10.1 Ac FROM R-20 TO B-2 (PARCEL 564 & PART OF PARCEL 10) AND 5.18Ac. FROM B-2 TO R-20 (PART OF PARCEL 454). APPROVED BY THE PLANNING BOARD ON JUNE 8, 1988.
20. WP-89-143: REQUESTED WAIVER TO SECT. 16.118.5 AND 16.120 (PRELIMINARY PLAN SUBMITTAL) APPROVED SEPT. 8, 1989. ALSO REQUESTED WAIVER TO SECT. 16.119.B.8 (ROAD IMPROVEMENTS TO BETHANY LANE) DENIED SEPT. 8, 1989, BUT ALLOWED FOR THE ESCROWING OF FUNDS IN LIEU OF ACTUAL IMPROVEMENTS.
21. WP-90-54: IS A REQUEST ORIGINALLY FILED ON NOVEMBER 3, 1989 FOR WAIVER OF SUBDIVISION REGULATIONS
    - A. SECTION 16.116.A.1 – TO ALLOW THE LOCATION OF A STORMWATER MANAGEMENT FACILITY WITHIN THE 100-YEAR FLOODPLAIN;
    - B. SECTION 16.116.C.6 – TO ALLOW GRADING, CLEARANCE AND FILL WITHIN 25 FEET OF A (MAN-MADE) WETLAND; (AND IN AN ADDENDUM FILED ON JANUARY 25, 1990)
    - C. SECTION 16.116.C.4.ii – GRADING INTO SLOPES OF 25% OR GREATER ADJACENT TO A FLOODPLAIN OR WETLAND; AND
    - D. SECTION 16.193.F.7 – TO PERMIT TWO DRIVEWAYS ON PARCEL A TO ACCESS U.S. ROUTE 40 AND TWO COMMERCIAL DRIVEWAYS ON PARCEL 68. THE WAIVER REQUESTS WERE APPROVED SUBJECT TO CONDITIONS OUTLINED IN A LETTER OF APRIL 30, 1990 FROM MARSHA McLAUGHLIN TO STONEHENGE LIMITED PARTNERSHIP; EXCEPT THAT THE DRIVEWAY FOR PARCEL 68 ONTO FREDERICK ROAD WAS DENIED.

ITEMS A, B, AND C WERE GRANTED APPROVAL BY THE HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING ON APRIL 11, 1990. ITEM D WAS DENIED ON APRIL 11, 1990 FOR ACCESS TO FREDERICK RD. & APPROVED FOR ACCESS TO U.S. ROUTE 40.

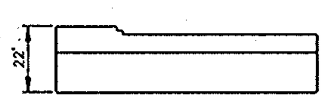
NOTE: ALL PASSENGER VANS/TRAMS WILL BE APPROVED TYPE AND EQUIPPED WITH LIFTS TO PICKUP AND DISCHARGE HANDICAPPED INDIVIDUALS ONTO THE SIDEWALK.

PARKING MANAGEMENT PLAN FOR THE ENCHANTED FOREST

1. ALL REQUIRED PARKING FOR THE ENCHANTED FOREST RETAIL USES WILL BE PROVIDED ON PARCEL A. AT ANTICIPATED PEAK PERIODS FOR COMMERCIAL USE AND AMUSEMENT PARK, AMUSEMENT PARK PARKING WILL BE DIRECTED TO AN OVERFLOW PARKING LOT ON PARCEL 68.
2. AVERAGE DAILY PARKING NEEDS ARE PROJECTED AS FOLLOWS: 210 SPACES FOR THE AMUSEMENT PARK; 329 SPACES FOR RETAIL USES; 539 TOTAL. ALL AVERAGE DAILY PARKING CAN BE ACCOMMODATED ON PARCEL A.
3. PEAK WEEKEND PARKING NEEDS ARE PROJECTED AS FOLLOWS: 530 SPACES FOR THE AMUSEMENT PARK; 568 SPACES FOR RETAIL USES; 918 TOTAL. ON PEAK SEASONAL WEEKENDS SPRING AND SUMMER, AMUSEMENT PARK TRAFFIC WILL BE DIRECTED TO THE OVERFLOW LOT ON PARCEL 68.
4. ATTENDANTS AND SIGNAGE WILL DIRECT AMUSEMENT PARK VEHICLES FROM PARCEL A TO THE OVERFLOW LOT. PASSENGER VANS WILL TRANSPORT PATRONS TO THE AMUSEMENT PARK ENTRANCE AND BACK. PEDESTRIAN MOVEMENT ACROSS ROUTE 40 WILL BE DISCOURAGED BY FENCING AND MANAGEMENT PERSONNEL.
5. WEEKDAY SCHOOL BUS VEHICLES WILL DROP OFF PASSENGERS AT THE PARK ENTRANCE ON PARCEL A, AND WILL BE PARKED ON THE OVERFLOW LOT.



BUILDING A
NO SCALE



BUILDING B
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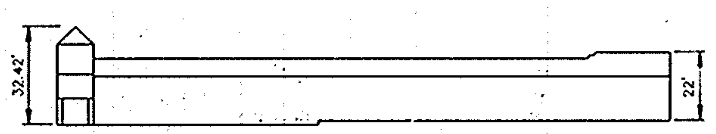

BUILDING C
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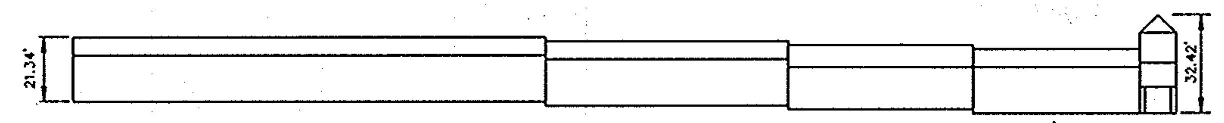

BUILDING D
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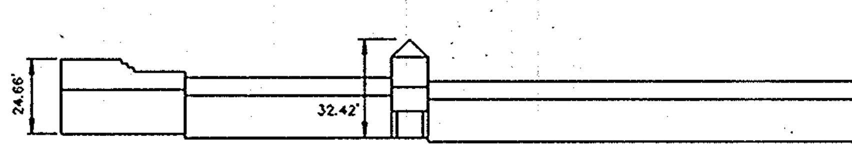
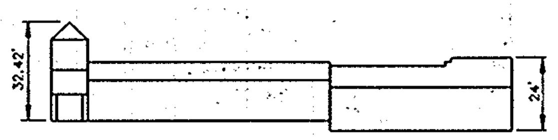
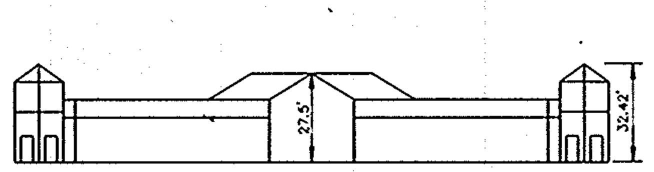


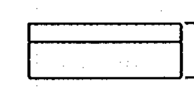
BUILDING E
NO SCALE



BUILDING F
NO SCALE



BUILDING G
NO SCALE



BUILDING H
NO SCALE

LEGEND
- ◻ LEVEL 2 ELECTRIC VEHICLE CHARGING EQUIPMENT
- ◻◻ LEVEL 3 ELECTRIC VEHICLE CHARGING ISLAND

SITE TABULATION

	North Site (Parcel A)	South Site (Parcel 68)	Total
Area of Parcel	31.753 Ac.	5.006 Ac.	36.759 Ac.
Present Zoning	B-2 (22.58 Ac.) R-20 (9.173 Ac.)	B-2	B-2(27.586 Ac.) R-20 (9.173 Ac.)
Proposed Use	Commercial Center & Existing Amusement Park	Bank & Parking	
Proposed Building Coverage	3.10 Ac. (138,702 Sq. Ft.) (14.11% of B-2)	.06 Ac. (2,500 Sq. Ft.) (1.15% of Site)	3.24 Ac. (141,202 S.F.) (11.70% of Both B-2 Sites)
Number of Parking Spaces Required (Shopping Center)	699 Spaces (1 Space per 200 Sq. Ft. Floor Area) Including 9 Reserved Spaces for Cendant Car Rental Group	13 (For Bank) (1 space per 200 Sq. Ft. Floor Area)	707
Number of Parking Spaces Provided	~~691~~ 693 Spaces ** (includes 13 handicapped)	319 (includes 9 handicapped)	~~1,010~~ 1012 (includes 22 handicapped and 3 eVgo spaces)
Open Space Required (20%)	4.516 Ac. in B-2 (196,717 Sq.Ft.)	1.001 Ac. (43,604. Sq.Ft.)	5.517 Ac. (240,321 Sq.Ft.)
Open Space Provided	11.295 Ac. (50%) (492,010 Sq.Ft.)	2.113 Ac. (42%) (92,042 Sq.Ft.)	13.408 Ac. (49%) (584,052 Sq.Ft.)
Area of Parking	212,460 Sq.Ft.	103,535 Sq.Ft.	322,833 Sq.Ft.
Landscaped Islands Required (5% of Parking Area)	10,640 Sq.Ft.	5,175 Sq.Ft.	15,815 Sq.Ft.
Landscaped Islands Provided	16,233 Sq.Ft. (7.64%)	6,670 Sq.Ft. (6.4%)	22,903 Sq.Ft. (7.09%)

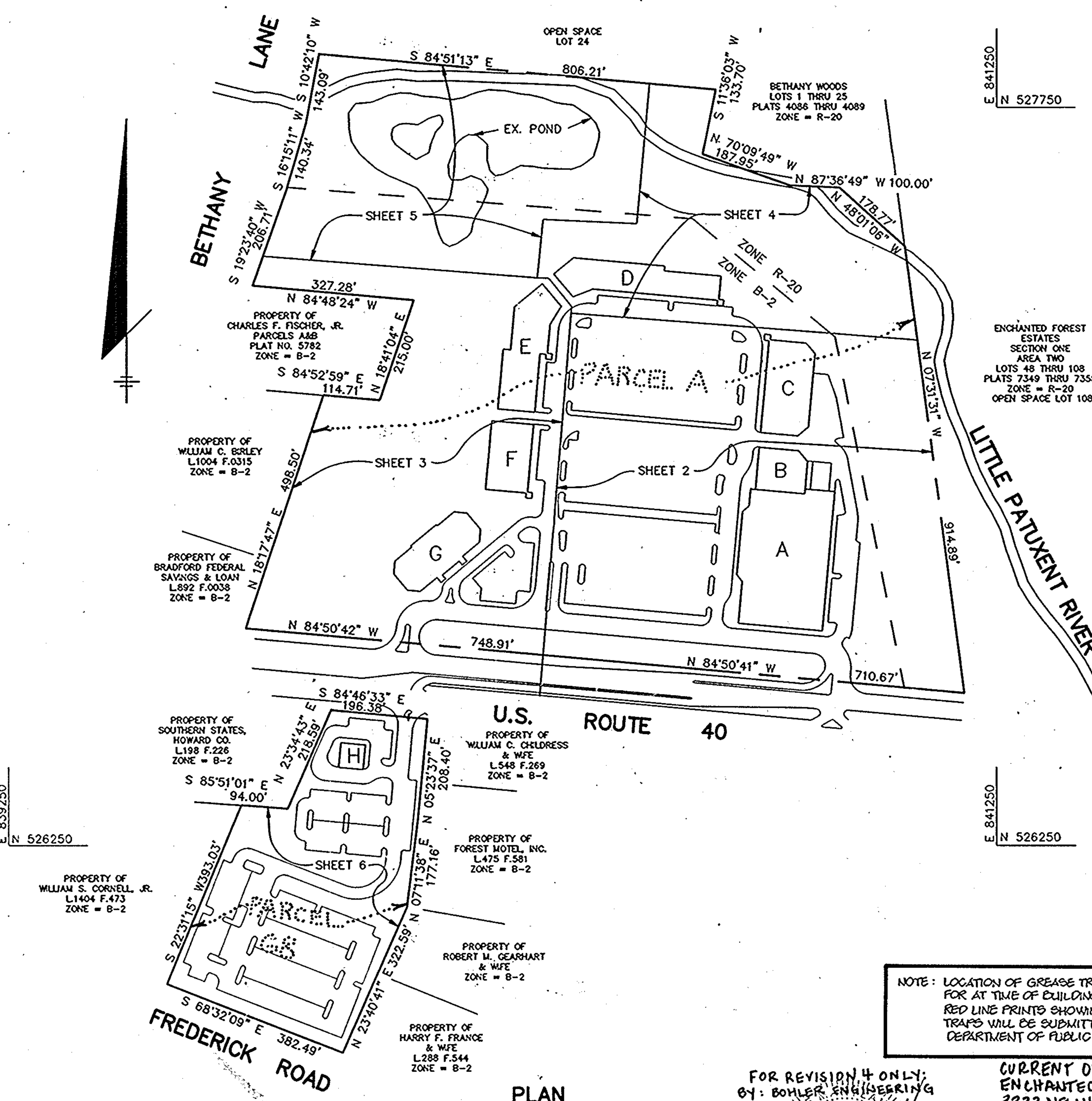
Proposed Building Areas Parcel A
- BUILDING A-48,771 SQ.FT.
- BUILDING B-8,400 SQ.FT.
- BUILDING C-17,650 SQ.FT.
- BUILDING D-18,316 SQ.FT.
- BUILDING E-19,513 SQ.FT. (INCLUDES 949 SF OUTDOOR DINING AREA)
- BUILDING F-11,900 SQ.FT.
- BUILDING G-15,191 SQ.FT.
- TOTAL -139,741 SQ.FT. COMMERCIAL CENTER

Proposed Building Areas Parcel 68
- BUILDING H-2,500 SQ. FT.

PLAT REFERENCE: PLATS 9687 & 9688 RECORDED DEC. 7, 1990.
** PLEASE SEE PARKING MANAGEMENT PLAN THIS SHEET. BASED ON PARKING MANAGEMENT PLAN, PEAK PARKING FOR THE SHOPPING CENTER IS 573 SPACES (568 SPACES IN PLAN AND 5 SPACES FOR NEW OUTDOOR SEATING AREA).

TREE PRESERVATION PROCEDURES

1. THE EDGE OF WOODS TO BE PROTECTED WILL BE MARKED IN THE FIELD PER THE APPROVED SITE DEVELOPMENT PLAN PRIOR TO THE START OF CONSTRUCTION ACTIVITY.
2. PROTECTIVE FENCING SHALL BE INSTALLED AT THE DRIP LINE OF THE EDGE OF WOODS. ALL AREAS WITHIN PROTECTIVE FENCES ARE TO BE CONSIDERED "OFF LIMITS" FOR ANY CONSTRUCTION ACTIVITIES.
3. PROTECTIVE FENCING WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR WILL AFFIX SIGNS TO THE FENCING INDICATING THAT THESE AREAS ARE "TREE PRESERVATION AREAS". THE GENERAL CONTRACTOR SHALL TAKE UTMOST CARE TO PROTECT TREE ROOT SYSTEMS DURING THE CONSTRUCTION CYCLE. TREE ROOT SYSTEMS SHALL BE PROTECTED FROM SMOTHERING, FLOODING, EXCESSIVE WETTING FROM DE-WATERING OPERATIONS, OFF-SITE RUN OFF, SPILLAGE, AND DRAINAGE OF SOLUTIONS CONTAINING MATERIALS HAZARDOUS TO TREE ROOTS.
4. REMOVAL OF TOPSOIL OR ROOT MAT WITHIN THE TREE PRESERVATION AREA SHALL BE PROHIBITED. THE GENERAL CONTRACTOR SHALL BE PROHIBITED FROM PARKING ANY CONSTRUCTION EQUIPMENT, OR FROM STORING BUILDING SUPPLIES OR EARTH STOCKPILES WITHIN THE TREE PRESERVATION AREAS.
5. FOOT TRAFFIC, AS WELL AS VEHICULAR TRAFFIC, IN THE TREE PRESERVATION AREAS SHALL BE KEPT TO A MINIMUM. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY TREE DAMAGED OR DESTROYED WITHIN THE TREE PRESERVATION AREAS, WHETHER CAUSED BY THE CONTRACTOR, HIS AGENTS, EMPLOYEES, SUB-CONTRACTORS OR LICENCES.
6. CONSTRUCTION ACTIVITIES EXPRESSLY RESTRICTED WITHIN THE TREE PRESERVATION AREAS:
   - PLACING BACKFILL IN PROTECTED AREAS;
   - FELLING TREES INTO PROTECTED AREAS;
   - DRIVING CONSTRUCTION EQUIPMENT INTO OR THROUGH PROTECTED AREAS;
   - BURNING IN OR IN CLOSE PROXIMITY TO PROTECTED AREAS;
   - STACKING OR STORING SUPPLIES IN PROTECTED AREAS;
   - CONDUCTING TRENCHING OPERATIONS IN PROTECTED AREAS;
   - GRADING BEYOND THE LIMITS OF DISTURBANCE.
7. THE GENERAL CONTRACTOR SHALL PROVIDE A "WASH OUT" AREA FOR CONCRETE TRUCKS ON SITE, WHICH WILL NOT DRAIN TOWARDS A PROTECTED AREA.
8. ALL TREES WHICH ARE NOT TO BE PRESERVED WITHIN FIFTY FEET OF ANY TREE PRESERVATION AREAS ARE TO BE REMOVED IN A MANNER THAT WILL NOT DAMAGE THOSE TREES THAT ARE DESIGNATED FOR PRESERVATION. IT IS HIGHLY RECOMMENDED THAT TREE STUMPS WITHIN THIS FIFTY FEET AREA BE GROUND OUT WITH A STUMP GRINDING MACHINE TO MINIMIZE DAMAGE.
9. FOR LIMITS OF SNOW FENCE SEE EROSION AND SEDIMENT CONTROL PLANS, SHEETS 19 THRU 22. FOR PLACEMENT OF SNOW FENCE SEE DETAIL, SHEET 40.



PLAN
SCALE : 1"=200'

NOTE: LOCATION OF GREASE TRAPS WILL BE PROVIDED FOR AT TIME OF BUILDING PERMIT SUBMITTAL. RED LINE PRINTS SHOWING LOCATION OF GREASE TRAPS WILL BE SUBMITTED TO HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS FOR APPROVAL.

PREPARED BY:
KIMLEY-HORN
11400 COMMERCE PARK DRIVE, SUITE 400
RESTON, VA 20191
PHONE: 703-674-1300
WWW.KIMLEY-HORN.COM

NOTE: -KIMLEY-HORN IS RESPONSIBLE FOR 8/22/14 REVISIONS ONLY.
-RIEMER MUEGGE AND ASSOCIATES IS RESPONSIBLE FOR ORIGINAL DESIGN.
-REFER TO EVGO FREEDOM STATION AT ENCHANTED FOREST CONSTRUCTION DRAWINGS FOR ADDITIONAL INFORMATION AND ADA REQUIREMENTS.

STATE OF MARYLAND KYLE T. BOLLINGER 43412 PROFESSIONAL ENGINEER
08/22/2014

FOR REVISION 4 ONLY:
BY: BOHLER ENGINEERING
10/17/14

CURRENT OWNER:
ENCHANTED FOREST
3333 NEW HYDE PARK RD.
NEW HYDE PARK, NY 11042
ATTN: TROY A. BROWN

REV 4: PROFESSIONAL CERTIFICATION
I, MICHAEL GESELL, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 40937, EXP. 6/19/15

STATE OF MARYLAND EARL D. COLLINS No. 9753 PROFESSIONAL ENGINEER

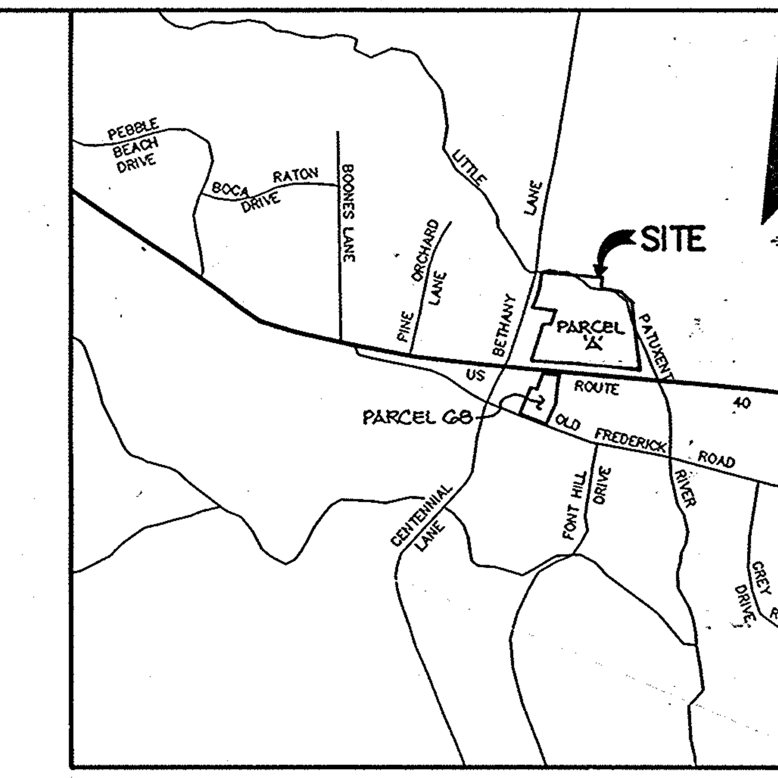
ADDRESS CHART

PARCEL	BUILDING	STREET ADDRESS
A	A	10,000 BALTIMORE NATIONAL PIKE
A	B	10,010 "
A	C	10,020 "
A	D	10,030 "
A	E	10,040 "
A	F	10,050 "
A	G	10,060 "
68	H	10,055 "

SUBDIVISION NAME –		SECT./AREA –	PARCEL –	
THE ENCHANTED FOREST		—	A & 68	
PLAT # – PAR. A: 9687-9688; L.1462 F.336-PAR. 68	BLOCK # – 2	ZONING – B-2 R-20	TAX MAP NO. – 24	ELECT. DIST. – SECOND	CENSUS TRACT – 6022
WATER CODE – H08		SEWER CODE – 5440000		

2 ADDITION OF ELECTRIC VEHICLE CHARGING STATION BY KIMLEY-HORN. 8/22/14

4 REVISED GRADING TO FRONT ISLAND BUFFER BY BOHLER ENGINEERING. 06/24/14



VICINITY MAP
SCALE: 1" = 2000'

BENCH MARKS

B.M.#1 – HOWARD COUNTY MONUMENT #3241002 ELEV. 354.60
N 526,397.261 E 841,575.71
CONCRETE MONUMENT AT SURFACE, 9.5' SOUTH OF EDGE OF ROUTE 40 EAST, 11.3' EAST OF EAST END OF CONCRETE BRIDGE.

B.M.#2 – HOWARD COUNTY MONUMENT #3241001 ELEV. 388.65
N 526,573.261 E 840,096.686
CONCRETE MONUMENT AT SURFACE, 9.3'+/- NORTH OF NORTH EDGE OF ROUTE 40 EAST BOUND, 21' +/- EAST OF EAST EDGE OF CROSSOVER AT ENCHANTED FOREST.

AS BUILT CERTIFICATE

JAYKANT O. PAREKH #10168
~~ARTHUR E. MUEGGE #8707~~ DATE

APPROVED : FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
COUNTY HEALTH OFFICER 5-2-91 DATE

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
DIRECTOR 5/3/91 DATE
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT 5/3/91 DATE

APPROVED : FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
DIRECTOR 4/26/91 DATE
CHIEF, BUREAU OF ENGINEERING 4-26-91 DATE

DATE	NO.	REVISION
7/1/14	2	ADD OUTDOOR SEATING AREA AND FENCE TO BUILDING E
1-5-05	1	Revised Parking Tabulation by Fisher, Collins & Carter, Inc.

OWNER / DEVELOPER
~~STONEHENGE LIMITED PARTNERSHIP~~
~~40 YORK ROAD~~
~~TOWSON, MARYLAND 21204~~

PROJECT A COMMERCIAL CENTER
THE ENCHANTED FOREST
PARCEL 'A' AND PARCEL 68

AREA TAX MAP NO. 24 PARCELS 454, 564, 19, 68
2nd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE
TITLE SHEET

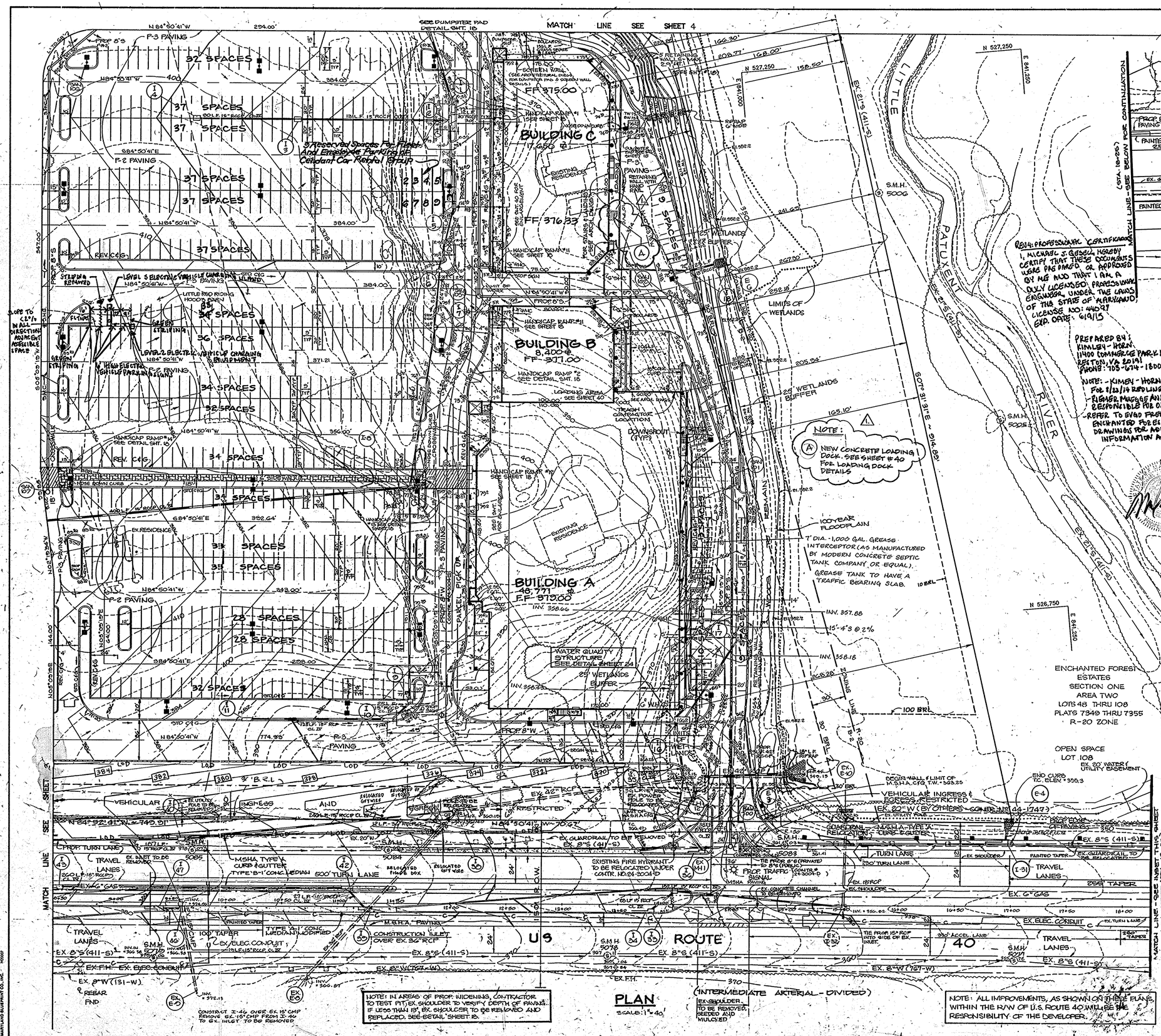
RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX : 301-750-3176

4.3.91
DATE

STATE OF MARYLAND ARTHUR E. MUEGGE III No. 8707 REGISTERED PROFESSIONAL ENGINEER
ARTHUR E. MUEGGE #8707

WP-90-54, ZB CASE 867M, S-89-82, WP-89-143, F-90-32, SDP-90-187
DESIGNED BY : M.G.K.
DRAWN BY: DAM
PROJECT NO : 30110
DATE :
SCALE : AS SHOWN
DRAWING NO. 1 OF 42

SDP-90-74 AS-BUILT



REV. 4: PROFESSIONAL CERTIFICATION
I, MICHAEL J. GESSEL, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO: 44097 EXP. DATE: 6/9/15
08/22/2014

PREPARED BY: KIMLEY-HORN 11400 COMMERCE PARK DRIVE, SUITE 400 RESTON, VA 20191 PHONE: 703-674-1800

NOTE: - KIMLEY-HORN IS RESPONSIBLE FOR 8/22/14 RED LINE REVISIONS ONLY. - FISHER, MUEGGE AND ASSOCIATES IS RESPONSIBLE FOR ORIGINAL DESIGN. - REFER TO EVAD FREEDOM STATION AT ENCHANTED FOREST CONSTRUCTION DRAWINGS FOR ADDITIONAL INFORMATION AND ADA REQUIREMENTS.

FOR REVISION 4 ONLY BY BOHLER ENGINEERING
10/17/14

LEGEND

- EXISTING PAVING TO BE REMOVED
- 470 EXISTING CONTOUR
- 470 PROPOSED CONTOUR
- WETLANDS
- WETLANDS BUFFER
- HC SIGN HANDICAP SIGN
- (PL) PLANTER
- DOUBLE LIGHT POLE
- SINGLE LIGHT POLE
- BUILDING ENTRANCE
- CANOPY (SEE ARCH.)
- TOWER

AS BUILT CERTIFICATION
ENGINEER J. Gandhi JAYANT D. PARIKH
DATE 2.18.94
PE # 10146

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
COUNTY HEALTH OFFICER — DATE 5-2-91

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
DIRECTOR — DATE 5/3/91
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 5/6/91

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 4/26/91
CHIEF, BUREAU OF ENGINEERING — DATE 4-26-91

Continued Below Left

DATE	NO.	REVISION
10/23/91	1	ADDED GREASE TANK AND ISLAND AT ENTRANCE, REVISED INLET TYPES & PIPES (RCP) TO NEW LOCATIONS.

OWNER/DEVELOPER
~~STONEHENGE LIMITED PARTNERSHIP~~
~~40 YORK ROAD~~
~~TOWSON, MARYLAND 21204~~
CURRENT OWNER: ENCHANTED FOREST LLC.
3366 NEW HYDE PARK ROAD
NEW HYDE PARK, NY 11042 ATTN: TROY A. BROWN

GARRETT/GEORGE ASSOCIATES INCORPORATED
500 N. EASTON ROAD, WILLOW GROVE, PA.

Seal BOARD OF ARCHITECTS 9394 JOHN L. WALKER STATE OF MARYLAND
DATE: 12/4/90
ENGINEER/ARCHITECT

PROJECT: A COMMERCIAL CENTER
THE ENCHANTED FOREST
PARCEL 'A' AND PARCEL G8

AREA TAX MAP NO. 24 — PARCELS 454, 564, 10, G8
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: SITE DEVELOPMENT PLAN

1 LOADING DOCK ADDITION BY GARRETT/GEORGE ASSOCIATES INCORPORATED. (215) 658-1380

2 Designate 9 Reserved Parking Spaces For CCRG In Front of Building 'C' by Fisher Collins & Carter, Inc. 1-5-05

3 ADDITION OF ELECTRIC VEHICLE CHARGING STATION BY KIMLEY-HORN. 8/22/14

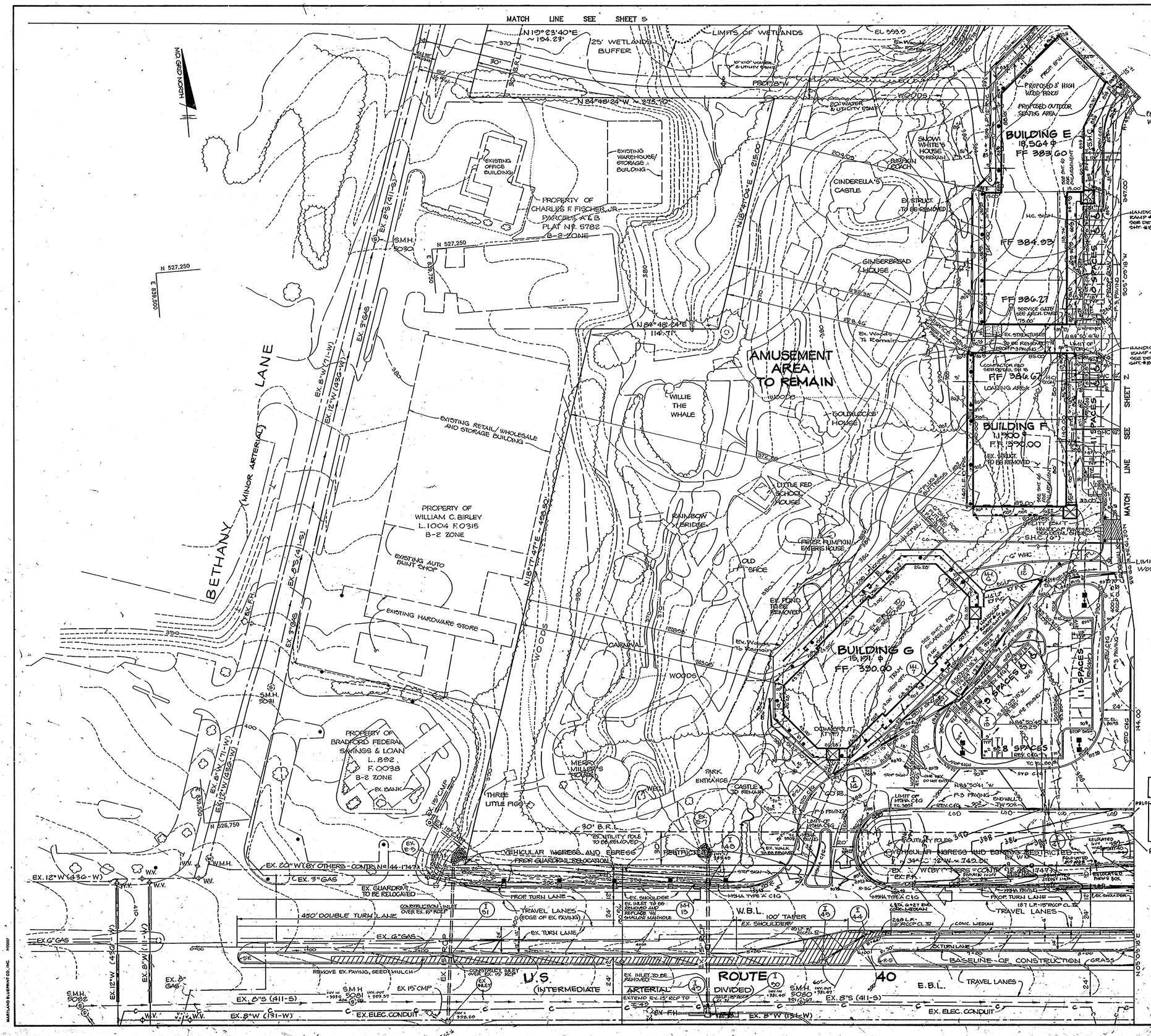
4 REVISED GRADING TO FRONT ISLAND BUFFER BY BOHLER ENGINEERING. 06/24/14

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

4.3.91 DATE
ARTHUR E. MUEGGE No. 9707

	SDP-90-107
	WP-90-54, 28 CASE 82TM S-80-82 WP-80-143 F-90-32
DESIGNED BY:	M.G.K.
DRAWN BY:	G.P.H.
PROJECT NO:	30108
DATE:	APRIL 3, 1991
SCALE:	AS SHOWN
DRAWING NO.	2 OF 42

SDP-90-74 AS-BUILT



REV 4: PROFESSIONAL CERTIFICATION

I, MICHAEL J. GESELL, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO: 44097, EXPIRATION DATE: 6/9/15.

FOR REVISION 4 ONLY: BY: BOHLER ENGINEERING

10/17/14

LEGEND

- EXISTING PAVING TO BE REMOVED
- 372 EXISTING CONTOUR
- 370 PROPOSED CONTOUR
- WETLANDS
- WETLANDS BUFFER
- HC SIGN HANDICAP SIGN
- (PL) PLANTER
- DOUBLE LIGHT POLE
- SINGLE LIGHT POLE
- BUILDING ENTRANCE
- CANOPY TOWER

AS BUILT CERTIFICATION

ENGINEER JAYKANT D. PAREKH
PE # 10148 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 5-2-91

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 5/3/91

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 5/3/91

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS:

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 4/26/91

CHIEF, BUREAU OF ENGINEERING — DATE 4-26-91

DATE	NO.	REVISION
7/1/14	2	ADD OUTDOOR SEATING AND FENCE TO BUILDING E
10/23/01	1	REVISED PIPE (RCCP) TO NEW LOCATION, REVISED INLETS

OWNER/DEVELOPER
STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON, MARYLAND 21204

PROJECT: A COMMERCIAL CENTER
THE ENCHANTED FOREST
PARCEL 'A' - PARCEL G8

AREA TAX MAP No. 24 PARCELS 454, 564, 15, G8
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: SITE DEVELOPMENT PLAN

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

4.3.91 DATE

STATE OF MARYLAND — ARTHUR E. MUEGGE III — No. 8107 REGISTERED PROFESSIONAL ENGINEER

ARTHUR E. MUEGGE #8107

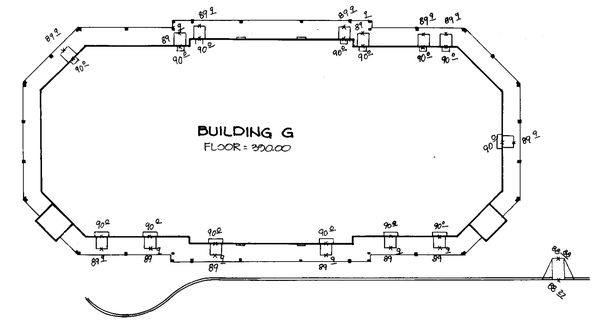
WP-90-54, ZB CASE 807M
S 85-82 WP 85-143 F-90-37.

DESIGNED BY: M.G.K.
DRAWN BY: JLB/SRH
PROJECT NO: 30108
DATE: APRIL 3, 1991
SCALE: 1" = 40'
DRAWING NO. 3 OF 12

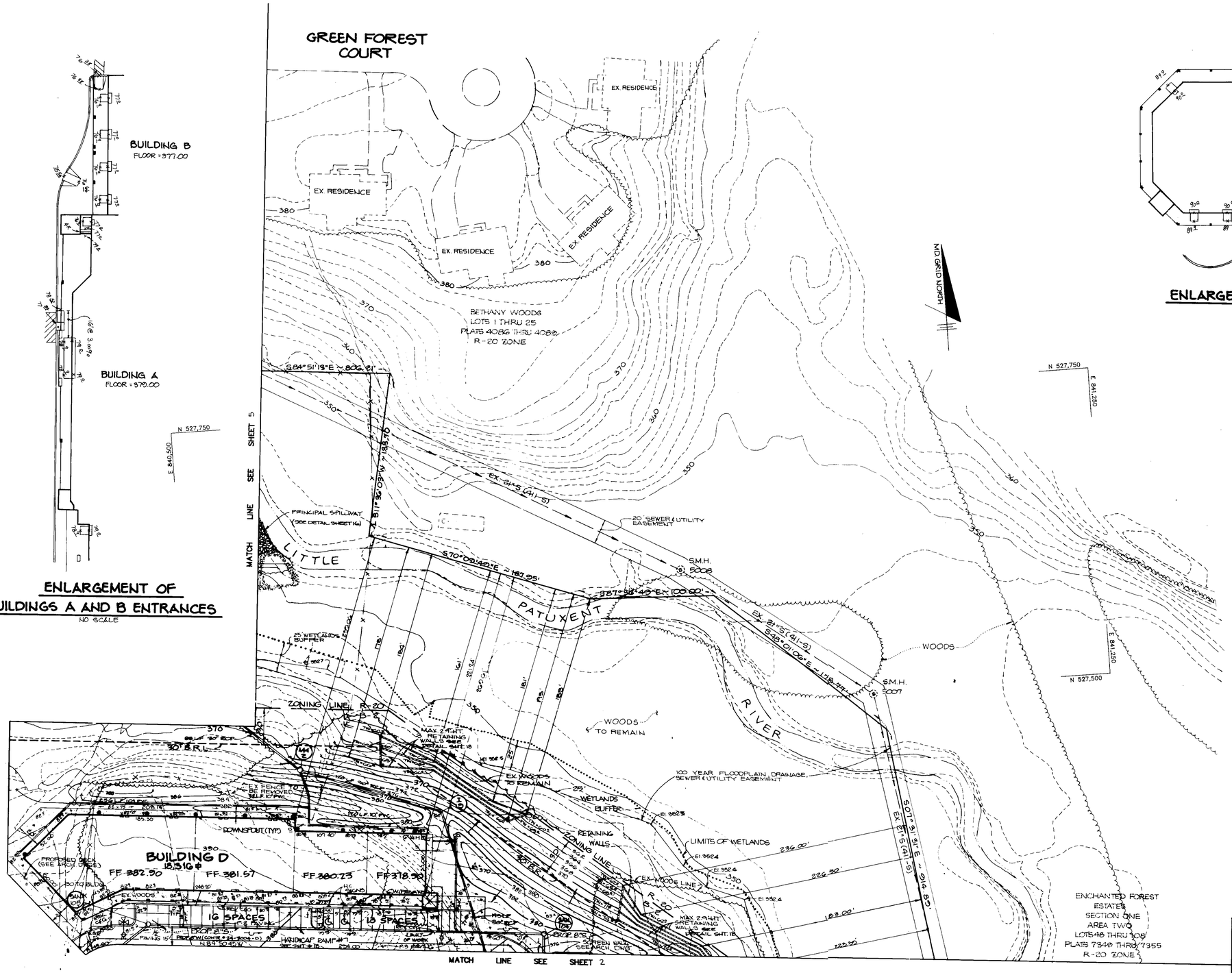
SDP-90-74

AS-BUILT

ENLARGEMENT OF BUILDINGS A AND B ENTRANCES
NO SCALE



ENLARGEMENT OF BUILDING G ENTRANCE
NO SCALE



PLAN
SCALE: 1" = 40'

LEGEND

- EXISTING PAVING TO BE REMOVED
- EXISTING CONTOUR
- PROPOSED CONTOUR
- WETLANDS
- WETLANDS BUFFER
- HC SIGN — HANDICAP SIGN
- (PL.) — PLANTER
- DOUBLE LIGHT POLE
- SINGLE LIGHT POLE
- BUILDING ENTRANCE
- CANOPY
- TOWER

AS BUILT CERTIFICATION

ENGINEER J. Karakh
PE # _____ DATE 2.18.94

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 5-2-91

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 5/3/91

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 5/3/91

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 4/26/91

CHIEF, BUREAU OF ENGINEERING — DATE 4-26-91

DATE	NO	REVISION

OWNER/DEVELOPER
STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON MARYLAND 21204

PROJECT: A COMMERCIAL CENTER
THE ENCHANTED FOREST
PARCEL 'A' - PARCEL 68

AREA TAX MAP NO. 24 PARCELS 454, 564, 19, 68
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: SITE DEVELOPMENT PLAN

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

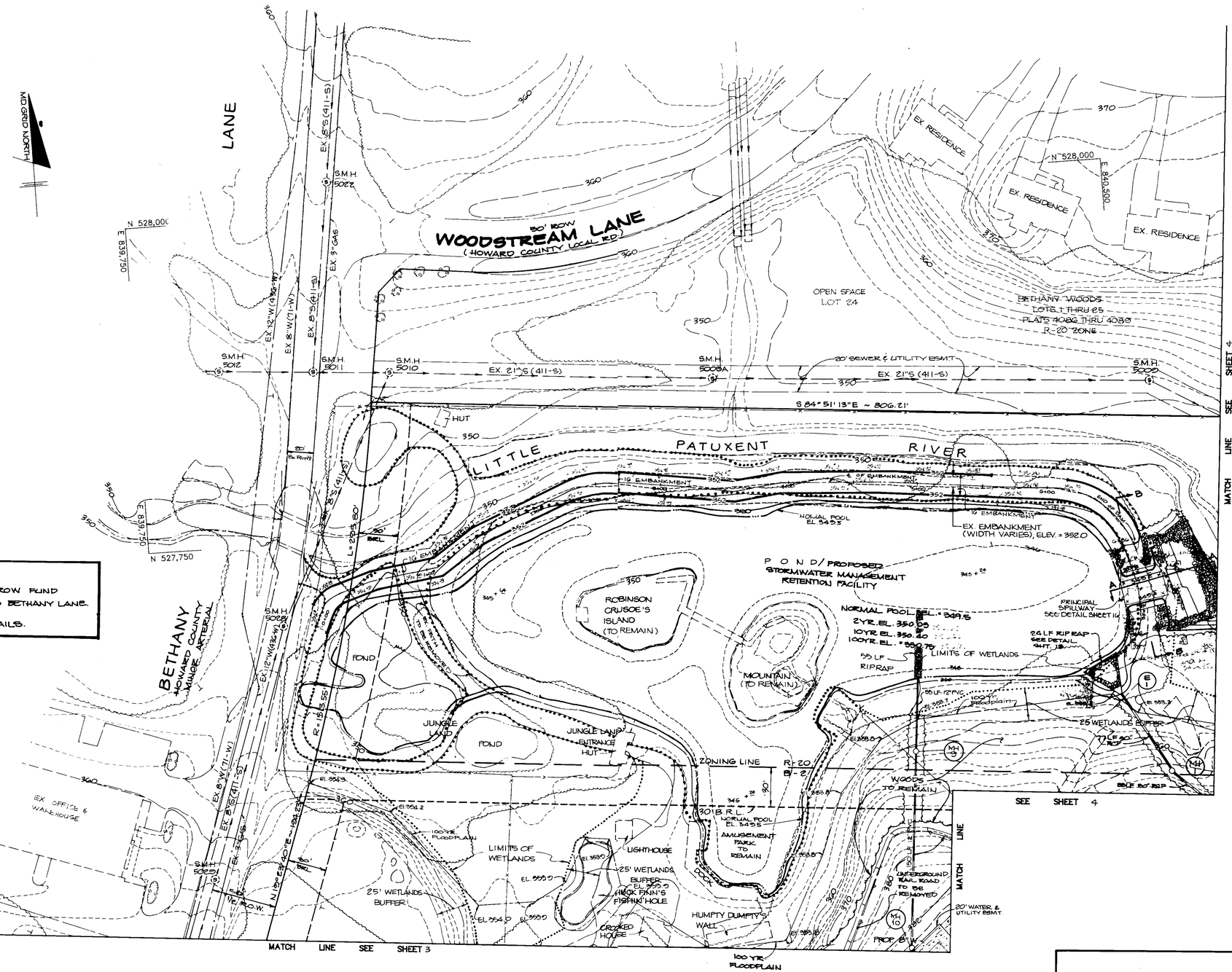
4-3-91
DATE

ARTHUR E MUEGGE #8707

WP-90-54, ZB CASE 867M
S-89-82 WP-89-143 F-90-32

DESIGNED BY: M.G.K.
DRAWN BY: S.R.H.
PROJECT NO: 30108
DATE: APRIL 3, 1991
SCALE: AS SHOWN
DRAWING NO. 4 OF 40

SDP-90-74



NOTE:

1. PAYMENT SHALL BE MADE TO COUNTY ESCROW FUND IN LIEU OF REQUIRED IMPROVEMENTS TO BETHANY LANE.
2. SEE SHEET 16 FOR PROFILES AND DETAILS.

LEGEND

- EXISTING PAVING TO BE REMOVED
- 370 EXISTING CONTOUR
- 370 PROPOSED CONTOUR
- WETLANDS
- WETLANDS BUFFER
- HC SIGN — HANDICAP SIGN
- (PL) PLANTER
- DOUBLE LIGHT POLE
- SINGLE LIGHT POLE

PLAN

SCALE: 1" = 40'

AS BUILT CERTIFICATION

ENGINEER J. Lavelle

PE #

DATE 2.18.94

BY THE DEVELOPER:

"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

DEVELOPER — DATE 4-3-91

BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

ENGINEER — DATE 4-3-91

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

U.S. SOIL CONSERVATION SERVICE — DATE 4/17/91

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED HOWARD S.C.D. — DATE 4/17/91

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 5-2-91

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 5/3/91

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 5/6/91

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 4/22/91

CHIEF, BUREAU OF ENGINEERING — DATE 4-26-91

DATE	NO	REVISION
10/23/91	1	SHOWED CONCRETE SYMBOL IN 20' WATER & UTILITY EASEMENT, REVISED ELEV. IN POND

OWNER/DEVELOPER

STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON MARYLAND 21204

PROJECT: A COMMERCIAL CENTER

THE ENCHANTED FOREST

PARCEL 'A' - PARCEL G8

AREA: TAX MAP NO. 24 — PARCELS 454, 564, 15, G8
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: SITE DEVELOPMENT PLAN

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3776

SDP-90-167

4-3-91
DATE

ARTHUR E. MUEGGE #8707

WP-90-54, ZB CASE 867M
S-85-82 WP-85-143 F-90-32

DESIGNED BY: D.F.

DRAWN BY: J.L.B.

PROJECT NO: 90108

DATE: APRIL 3, 1991

SCALE: AS SHOWN

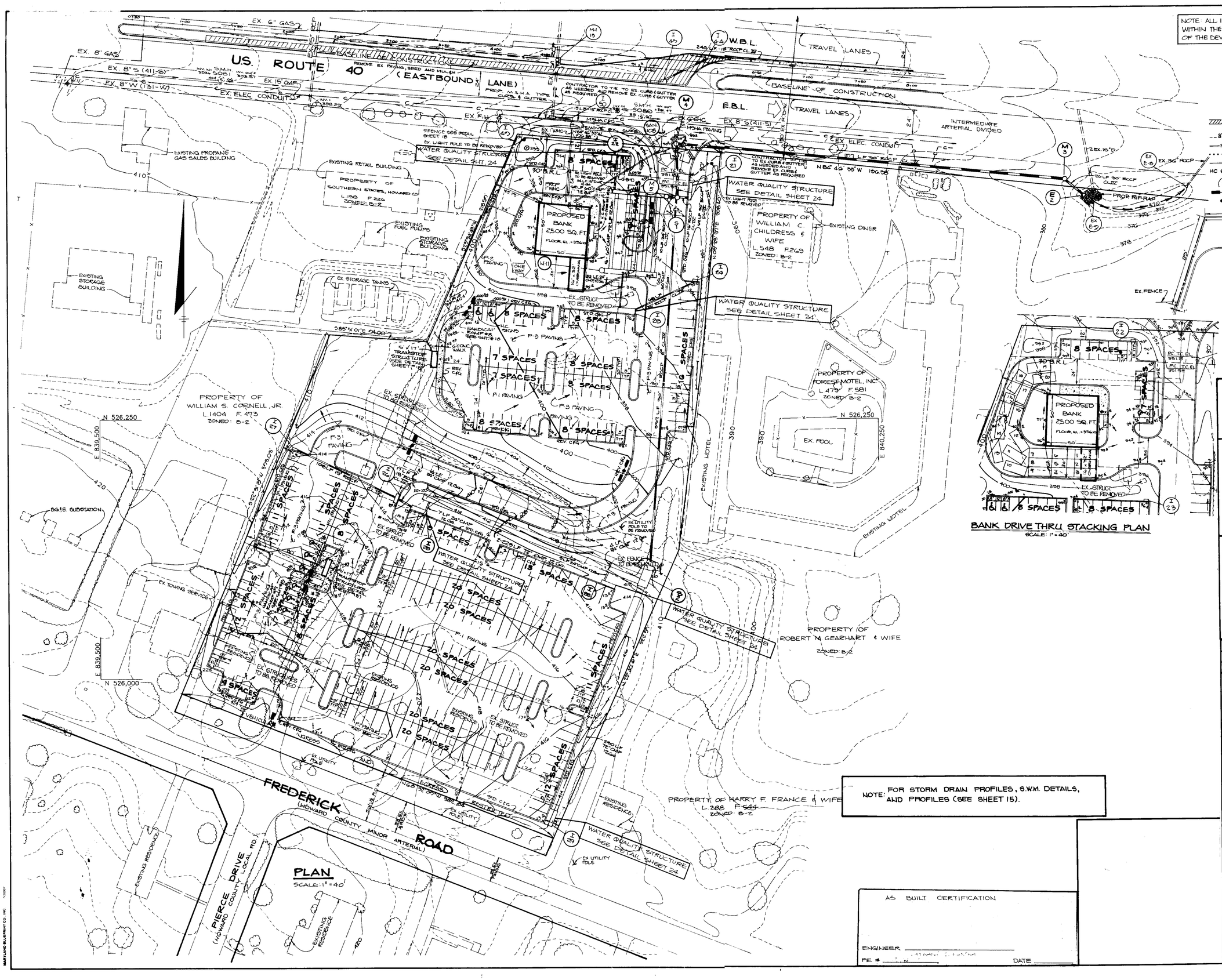
DRAWING NO. 5 OF 40

SDP-90-74

MATCH LINE SEE SHEET 4

MARYLAND BLUEPRINT CO. INC. 1-1-2000

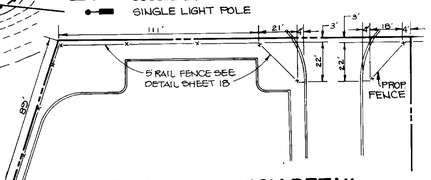
NOTE: ALL IMPROVEMENTS, AS SHOWN ON THESE THESE PLANS, WITHIN THE R/W OF U.S. ROUTE 40 WILL BE THE RESPONSIBILITY OF THE DEVELOPER.



PLAN
SCALE: 1" = 40'

LEGEND

- EXISTING PAVING TO BE REMOVED
- 370 EXISTING CONTOUR
- 370 PROPOSED CONTOUR
- WETLANDS
- WETLANDS BUFFER
- HC SIGN HANDICAP SIGN
- PL PLANTER
- DOUBLE LIGHT POLE
- SINGLE LIGHT POLE



FENCE LOCATION DETAIL
SCALE: 1" = 40'

BANK DRIVE THRU STACKING PLAN
SCALE: 1" = 40'

NOTE: FOR STORM DRAIN PROFILES, S.W.M. DETAILS, AND PROFILES (SEE SHEET 15).

AS BUILT CERTIFICATION

ENGINEER _____

PE # _____ DATE _____

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 5-2-91

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 5/3/91

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 5/3/91

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 4/26/91

CHIEF, BUREAU OF ENGINEERING — DATE 4-26-91

DATE	NO.	REVISION

OWNER/DEVELOPER
STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON MARYLAND 21204

PROJECT: A COMMERCIAL CENTER
THE ENCHANTED FOREST
PARCEL 'A' - PARCEL G8

AREA TAX MAP NO. 24 PARCELS 454, 564, 19, G8
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE:
SITE DEVELOPMENT PLAN

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

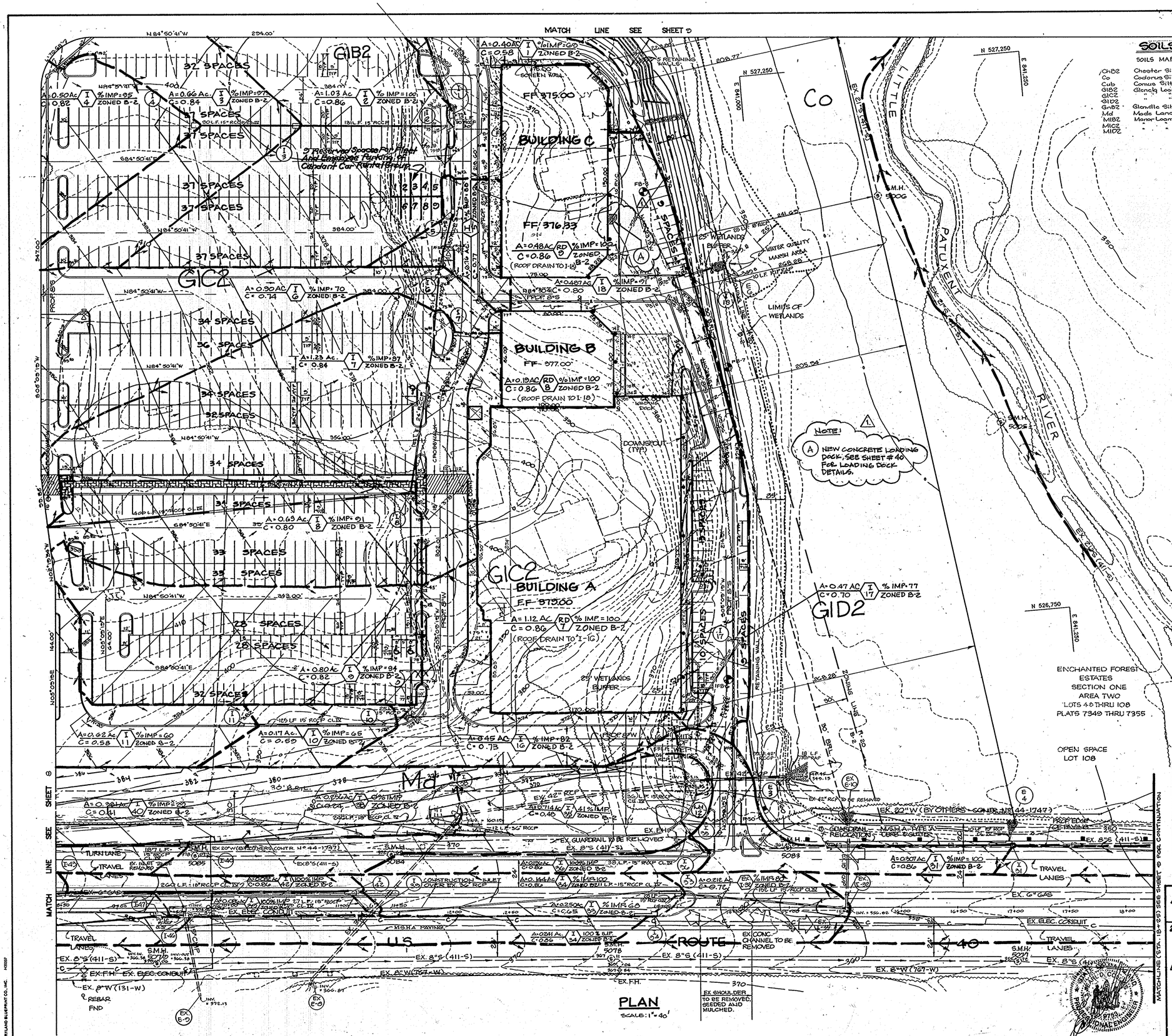
4.3.91
DATE

ARTHUR E. MUEGGE # 8707

WP-90-54, ZB CASE 867M
S-89-82, WP-89-143, F-90-32

DESIGNED BY: JJB
DRAWN BY: DJE
PROJECT NO: 30108
DATE: APRIL 3, 1991
SCALE: AS SHOWN
DRAWING NO. 6 OF 40

SDP-90-74



NOTE! (A) NEW CONCRETE LOADING DOCK, SEE SHEET #40 FOR LOADING DOCK DETAILS.

SOILS LIST

SOILS MAP NO. 15

ChB2	Chester Silt Loam, 3-8% Slopes, Mod. Eroded
Co	Codorus Silt Loam
Cub	Comus Silt Loam, Local Alluvium, 3-8% Slopes
GlB2	Glenelg Loam, 3-8% Slopes, Mod. Eroded
GlC2	" " " 8-15% " " "
GlD2	" " " 15-25% " " "
GnB2	Glenville Silt Loam, 3-8% Slopes, Mod. Eroded
Mdd	Made Land
MlB2	Manor Loam, 3-8% Slopes, Mod. Eroded
MlC2	" " 8-15% " " "
MlD2	" " 15-25% Slopes " "

BY THE DEVELOPER:

"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

DEVELOPER _____ DATE 4/3/91

BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

ENGINEER _____ DATE 4-3-91

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

U.S. SOIL CONSERVATION SERVICE _____ DATE 4/17/91

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED _____ HOWARD S.C.D. DATE 4/17/91

AS BUILT CERTIFICATION

ENGINEER JAYKANT D. PARIKH

P.E.# 19140 DATE _____

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER _____ DATE 5-2-91

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR _____ DATE 5/3/91

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT _____ DATE 5/3/91

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR _____ DATE 4/26/91

CHIEF, BUREAU OF ENGINEERING _____ DATE 4-26-91

REV. 4 PROFESSIONAL CERTIFICATION

I, MICHAEL J. GESELL, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO: 44097 EXP. DATE: 6/9/15

FOR REVISION 4 ONLY: BY: BOHLER ENGINEERING

10/17/14

GARRETT/GEORGE ASSOCIATES INCORPORATED
500 N. EASTON ROAD, WILLOW GROVE, PA.

BOARD OF ARCHITECTS 9394 JOHN L. WALKER STATE OF MARYLAND

DATE: 12/4/13

ENGINEER/ARCHITECT: _____

1 LOADING DOCK ADDITION: BY GARRETT/GEORGE ASSOCIATES INCORPORATED. (215) 658-1380

2 Designate 5 Reserved Parking Spaces For CCRG In Front Of Bldg. 'C' by Fisher Collins & Carter, Inc. 1-8-05

4 REVISED GRADING TO FRONT ISLAND BUFFER BY BOHLER ENGINEERING. 06/24/14

Continued Below Left

DATE	NO.	REVISION
10/23/01	1	REVISED INLETS, RELOCATED PIPES (RCP), ADDED ISLAND W/ ELEV. & POOR GRADE NUMBER.

OWNER/DEVELOPER

STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON MARYLAND 21204

PROJECT: A COMMERCIAL CENTER

THE ENCHANTED FOREST

PARCEL 'A' - PARCEL 68

AREA TAX MAP NO. 24 PARCELS 454, 564, 10, 68
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: DRAINAGE AREA MAP

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

SDP-00-167

4-3-91 DATE

STATE OF MARYLAND ARTHUR E. MUEGGE No. 8707 REGISTERED PROFESSIONAL ENGINEER

ARTHUR E. MUEGGE #8707

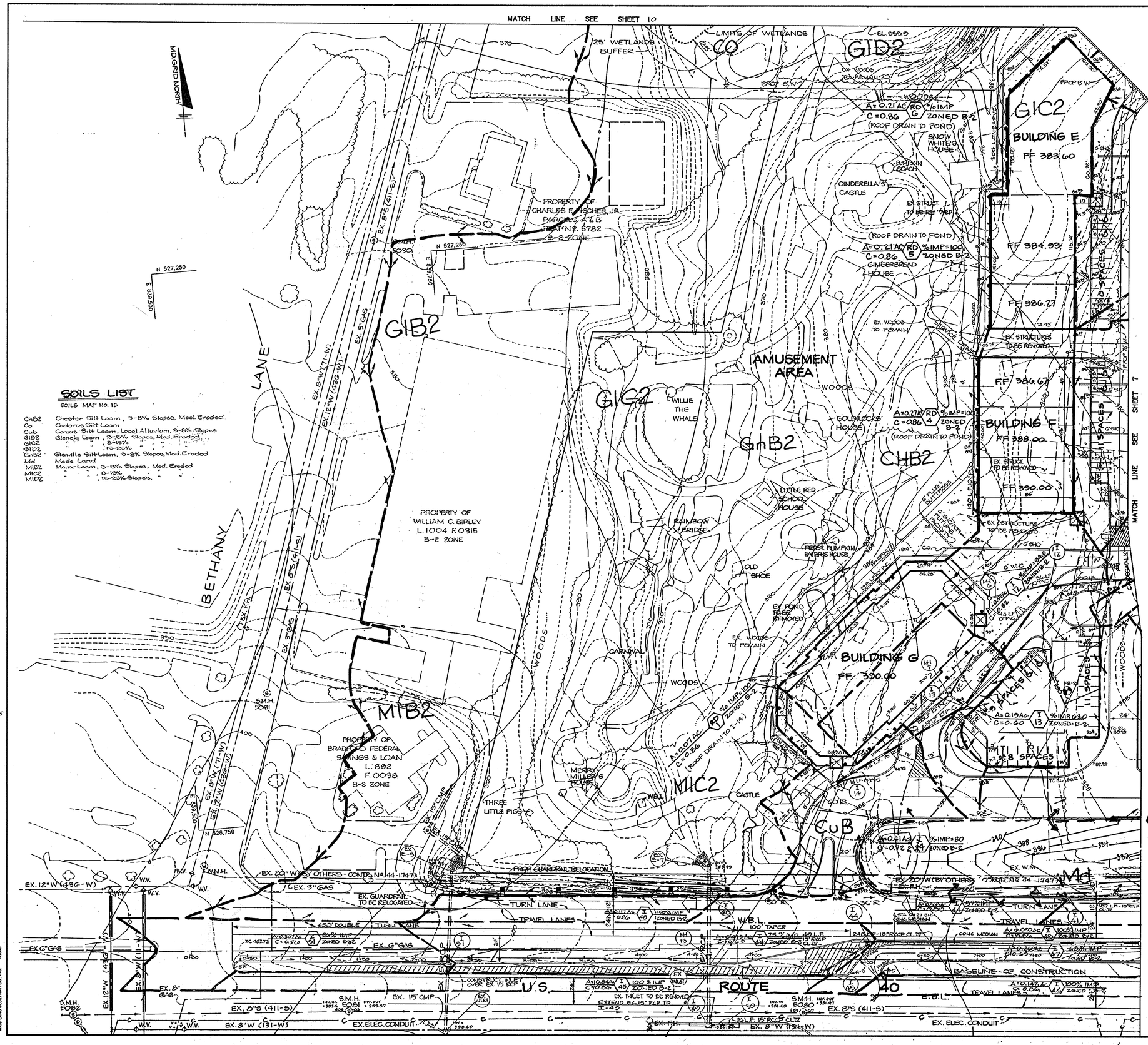
WP-90-54, ZB CASE 867M S-89-82 WP-89-143 F-90-32	
DESIGNED BY: JLB	
DRAWN BY: G.D.H.	
PROJECT NO: 30108	
DATE: APRIL 8, 1991	
SCALE: AS SHOWN	
DRAWING NO. 7 OF 42	

SDP-90-74

AS-BUILT

MATCHLINE (STA. 18+89) SEE SHEET 9 FOR CONTINUATION

MARYLAND BLUEPRINT CO., INC. H20007



SOILS LIST

SOILS MAP No. 15

ChB2	Chester Silt Loam, 3-8% Slopes, Mod. Eroded
Co	Codorus Silt Loam
Cub	Comus Silt Loam, Local Alluvium, 3-8% Slopes
GIB2	Glenelg Loam, 3-8% Slopes, Mod. Eroded
GIC2	" " " 8-15% " " "
GIE2	" " " 15-25% " " "
GnB2	Glenville Silt Loam, 3-8% Slopes, Mod. Eroded
Md	Made Land
MIB2	Manor Loam, 3-8% Slopes, Mod. Eroded
MIC2	" " 8-15% " " "
MIE2	" " 15-25% Slopes, " "

BY THE DEVELOPER:

"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

DEVELOPER — DATE 4/3/91

BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

ENGINEER — DATE 4.3.91

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

U.S. SOIL CONSERVATION SERVICE — DATE 4/17/91

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED Robert W. Zielke HOWARD S. CONS. DISTRICT — DATE 4/17/91

AS BUILT CERTIFICATION

ENGINEER _____

P.E. # 10148 JAYKANT D. PARIKH — DATE _____

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 5-2-91

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 5/3/91

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 5/3/91

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 4/26/91

CHIEF, BUREAU OF ENGINEERING — DATE 4-26-91

REV 4: PROFESSIONAL CERTIFICATION
I, MICHAEL J. GAESELL, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO: 44097 EXPIRATION DATE: 6/9/15

FOR REVISION 4 ONLY:
BY: BOHLER ENGINEERING

10/17/14

4 REVISED GRADING FOR FRONT ISLAND BUFFER BY BOHLER ENGINEERING. 10/24/14

DATE	NO	REVISION
10/23/91	1	REVISED INLETS, REVISED PIPES & SIZE (RCCP)

OWNER/DEVELOPER
STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON MARYLAND 21204

PROJECT: A COMMERCIAL CENTER
THE ENCHANTED FOREST
PARCEL 'A' AND PARCEL 'G8'

AREA TAX MAP No. 24 — PARCELS 454, 564, 19, G8
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: DRAINAGE AREA MAP

RIEMER MUEGGE & ASSOCIATES, INC
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

SDP-90-187

4.3.91 DATE

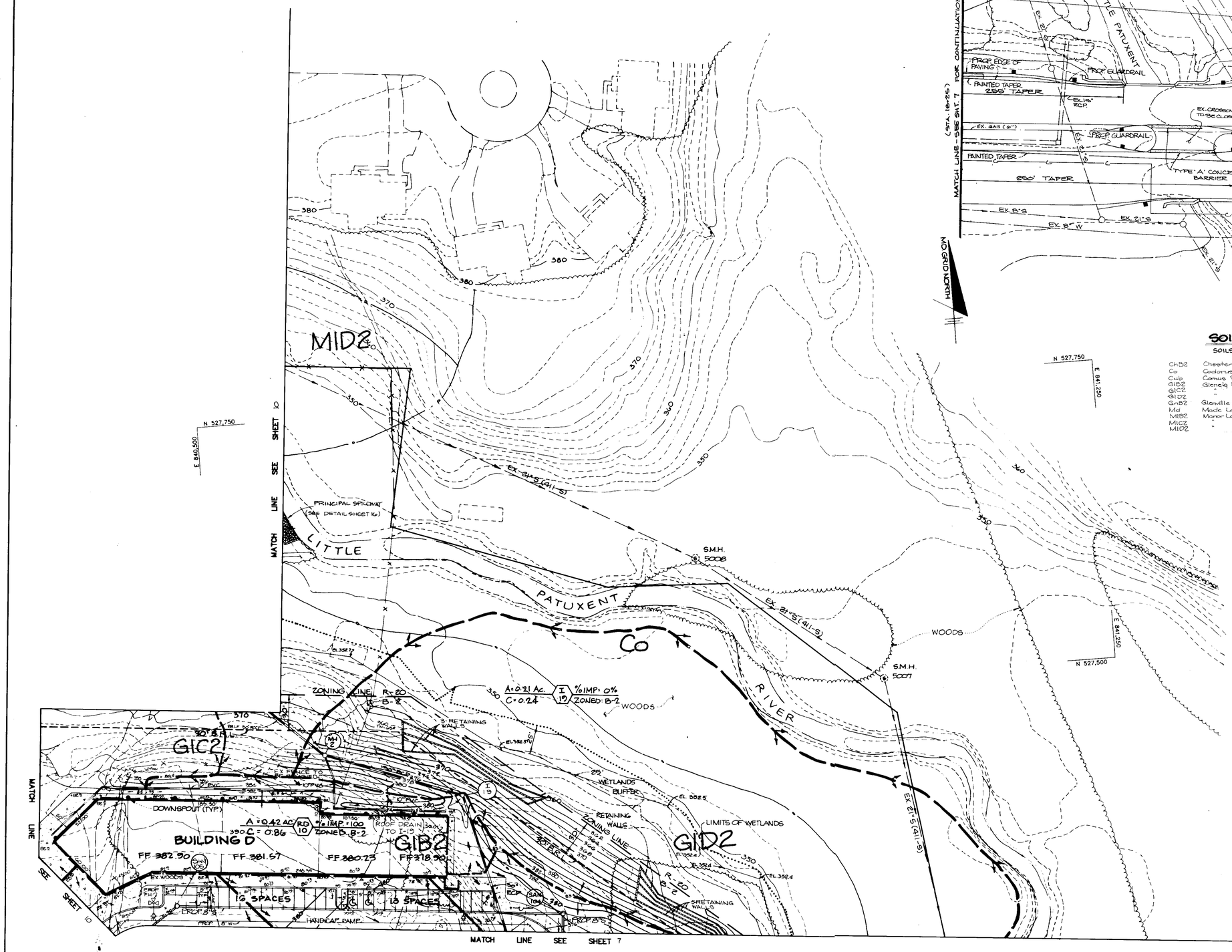
STATE OF MARYLAND — ARTHUR E. MUEGGE III — No. 8707 — REGISTERED PROFESSIONAL ENGINEER

ARTHUR E. MUEGGE 8707

WP-90-94, 2B CASE 83-M S-88-82 WP-88-143 F-90-32	
DESIGNED BY:	JLD
DRAWN BY:	GDH
PROJECT NO:	30108
DATE:	APRIL 3, 1991
SCALE:	1" = 40'
DRAWING NO.	8 OF 42

SDP-90-74

AS-BUILT



PLAN

SCALE: 1" = 40'

SOILS LIST

SOILS MAP NO. 15

ChB2	Chester Silt Loam, 3-8% Slopes, Mod. Eroded
Co	Codorus Silt Loam
CuB	Comus Silt Loam, Local Alluvium, 3-8% Slopes
GlB2	Glenelg Loam, 3-8% Slopes, Mod. Eroded
GlC2	" " , 8-15% " , " "
GlD2	" " , 15-25% " , " "
GnB2	Glenville Silt Loam, 3-8% Slopes, Mod. Eroded
Md	Made Land
MlB2	Manor Loam, 3-8% Slopes, Mod. Eroded
MlC2	" " , 8-15% " , " "
MlD2	" " , 15-25% Slopes, " "

AS BUILT CERTIFICATION

ENGINEER _____

PE # _____ DATE _____

BY THE DEVELOPER:

"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

DEVELOPER _____ DATE 4/3/91

BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

ENGINEER _____ DATE 4.3.91

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

USDA SOIL CONSERVATION SERVICE _____ DATE 4/17/91

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED Robert W. Ziehm HOWARD S.C.D. _____ DATE 4/17/91

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER _____ DATE 5-2-91

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR _____ DATE 5/3/91

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT _____ DATE 5/3/91

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR _____ DATE 4/26/91

CHIEF, BUREAU OF ENGINEERING _____ DATE 4-26-91

DATE	NO.	REVISION

OWNER/DEVELOPER
STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON MARYLAND 21204

PROJECT: A COMMERCIAL CENTER
THE ENCHANTED FOREST
PARCEL 'A' AND PARCEL 'G.B'

AREA TAX MAP NO. 24 PARCELS 454, 564, 15, 68
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: DRAINAGE AREA MAP

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

SDP-90-187

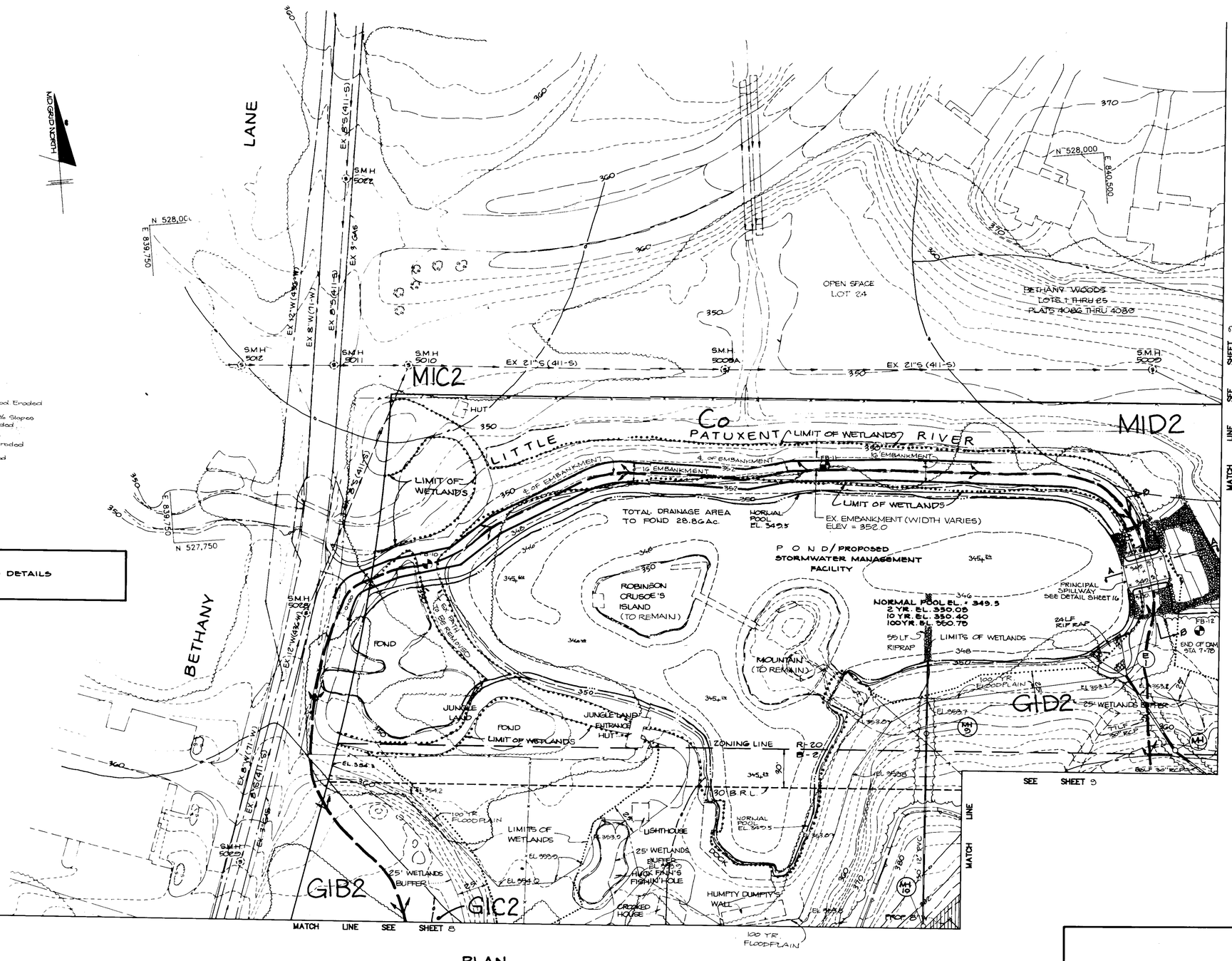
4.3.91
DATE

ARTHUR E. MUEGGE 8707

WP-90-54, 28 CASE 86-7 M
S-89-82 WP-89-143 F-90-32

DESIGNED BY	JLB
DRAWN BY	GDH
PROJECT NO.	90108
DATE	APRIL 3, 1991
SCALE	AS SHOWN
DRAWING NO.	9 OF 10

SDP-90-74



SOILS LIST

SOILS MAP NO. 15

ChB2	Chester Silt Loam, 3-8% Slopes, Mod. Eroded
Co	Codorus Silt Loam
Cub	Comus Silt Loam, Local Alluvium, 3-8% Slopes
GIB2	Glenelg Loam, 3-8% Slopes, Mod. Eroded
GIC2	" " , 8-15% " " "
GID2	" " , 15-25% " " "
GnB2	Glenville Silt Loam, 3-8% Slopes, Mod. Eroded
Md	Made Land
MIB2	Manor Loam, 3-8% Slopes, Mod. Eroded
MIC2	" " , 8-15% " " "
MID2	" " , 15-25% Slopes, " "

NOTE:

1. SEE SHEET 16 FOR PROFILES AND DETAILS

PLAN

SCALE 1" = 40'

BY THE DEVELOPER:

"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

DEVELOPER — DATE 4-3-91

BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

ENGINEER — DATE 4-3-91

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

U.S. SOIL CONSERVATION SERVICE — DATE 4/17/91

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED HOWARD S.C.D. — DATE 4/17/91

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 5-2-91

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 5/3/91

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 5/3/91

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 4/26/91

CHIEF, BUREAU OF ENGINEERING — DATE 4-26-91

DATE	NO	REVISION

OWNER/DEVELOPER

STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON MARYLAND 21204

PROJECT A COMMERCIAL CENTER

THE ENCHANTED FOREST

PARCEL 'A' AND PARCEL 'GB'

AREA TAX MAP NO 24 PARCELS 454, 564, 19, 68
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: DRAINAGE AREA MAP

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

SDP-90-187

4-3-91
DATE

STATE OF MARYLAND — ARTHUR E. MUEGGE — No. 8707 — PROFESSIONAL ENGINEER

ARTHUR E. MUEGGE #8707

WP-90-54, 28 CASE 867 M
S-88-82, WP-88-145 F-90-32

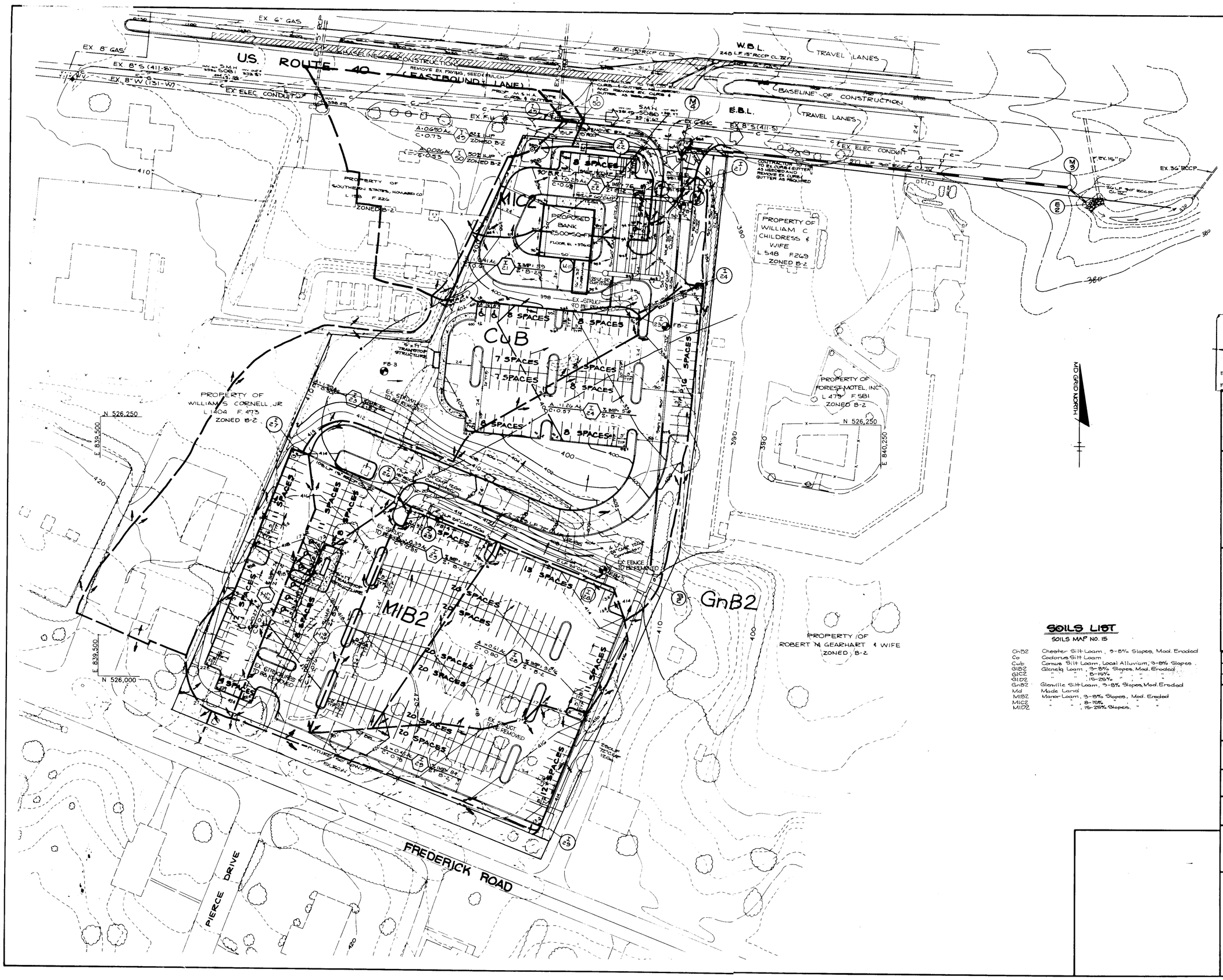
DESIGNED BY: JLB
DRAWN BY: GDH
PROJECT NO: 90108
DATE: APRIL 3, 1991
SCALE: AS SHOWN
DRAWING NO. 10 OF 40

AS BUILT CERTIFICATION

ENGINEER _____
PE # _____ DATE _____

SDP-90-74

MARYLAND BLUEPRINT CO. INC. 7-1-2001



SOILS LIST

SOILS MAP NO. 15

ChB2	Chester Silt Loam, 3-8% Slopes, Mod. Eroded
Co	Codorus Silt Loam
Cub	Comus Silt Loam, Local Alluvium, 3-8% Slopes
GlB2	Glenelg Loam, 3-8% Slopes, Mod. Eroded
GlC2	" " , 8-15% " " "
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GnB2	Glenville Silt Loam, 3-8% Slopes, Mod. Eroded
Md	Made Land
MlB2	Manor Loam, 3-8% Slopes, Mod. Eroded
MlC2	" " , 8-15% " " "
MlD2	" " , 15-25% Slopes, " "

AS BUILT CERTIFICATION

ENGINEER _____

PE # _____ DATE _____

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 5-2-91

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 5/3/91

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 5/3/91

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 4/26/91

CHIEF, BUREAU OF ENGINEERING — DATE 4-26-91

DATE	NO	REVISION

OWNER/DEVELOPER

STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON MARYLAND 21204

PROJECT: A COMMERICAL CENTER
THE ENCHANTED FOREST
PARCEL 'A' AND PARCEL 'GB'

AREA TAX MAP NO 24 PARCELS 454, 564, 19, 68
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE:
DRAINAGE AREA MAP

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

SDP-90-187

4-3-91
DATE

STATE OF MARYLAND — ARTHUR E. MUEGGE — NO. 8707 REGISTERED PROFESSIONAL ENGINEER

ARTHUR E. MUEGGE #8707

WP-90-54, ZB CASE 867M
S-89-82 WP89-143 F-90-32

DESIGNED BY: M.G.K.

DRAWN BY: DJE

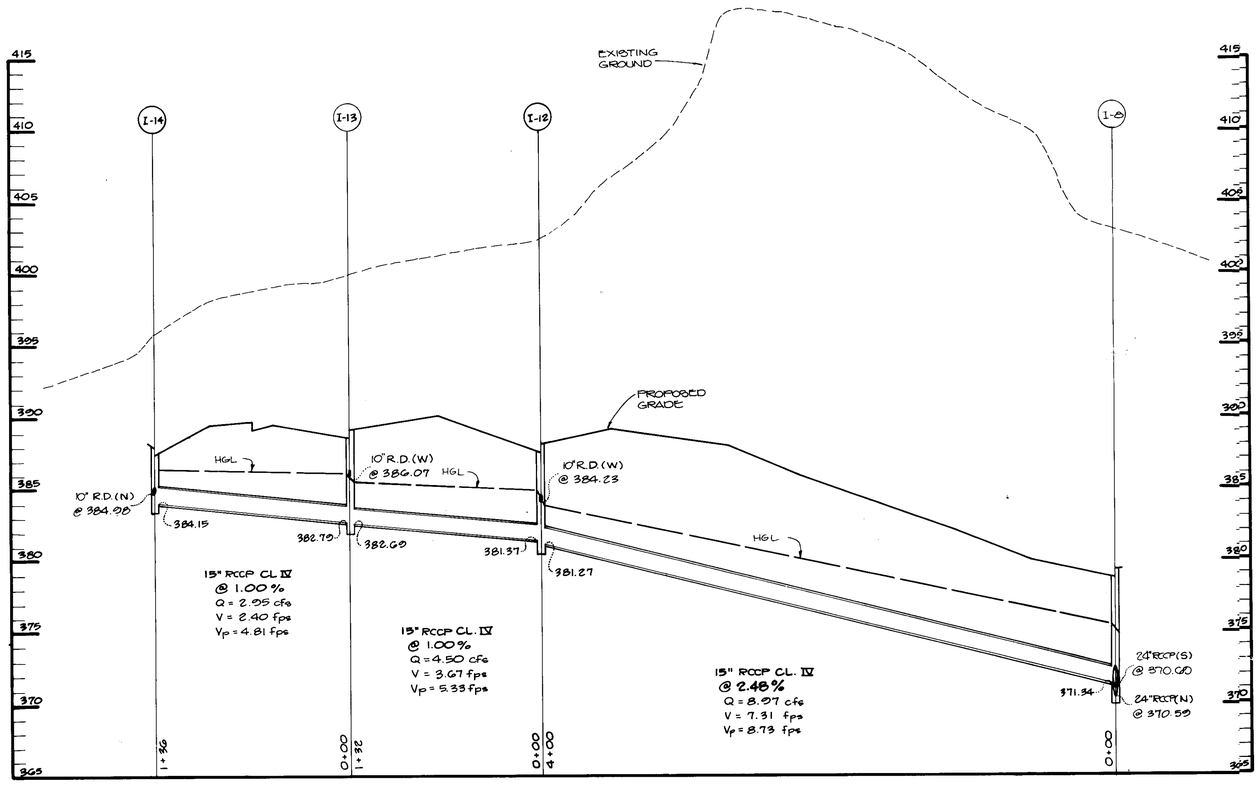
PROJECT NO: 90108

DATE: APRIL 3, 1991

SCALE: 1" = 40'

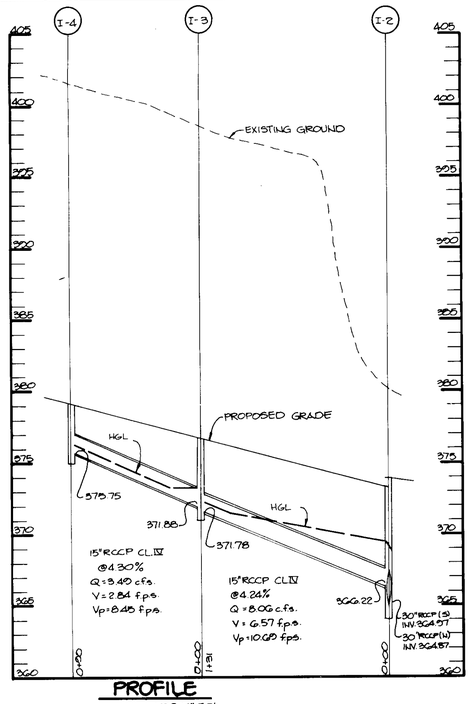
DRAWING NO. 11 OF 40

SDP-90-74



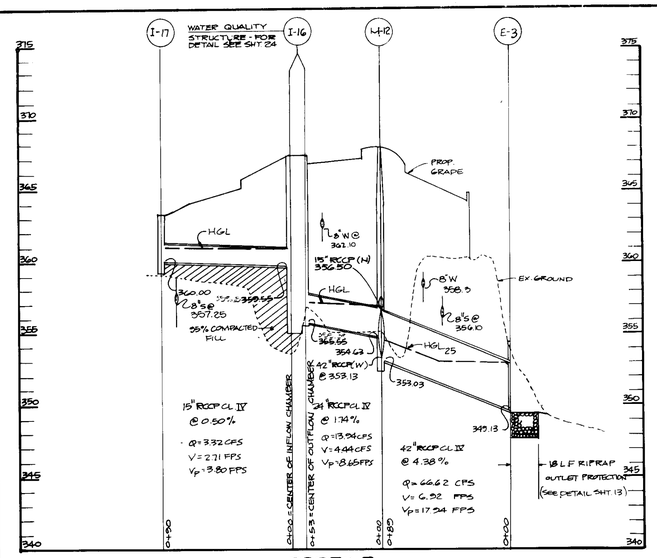
PROFILE

SCALE: HOR. 1" = 50'
VERT. 1" = 5'



PROFILE

SCALE: HOR. 1" = 50'
VERT. 1" = 5'



PROFILE

SCALE: HOR. 1" = 50'
VERT. 1" = 5'

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 5-2-91

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 5/3/91

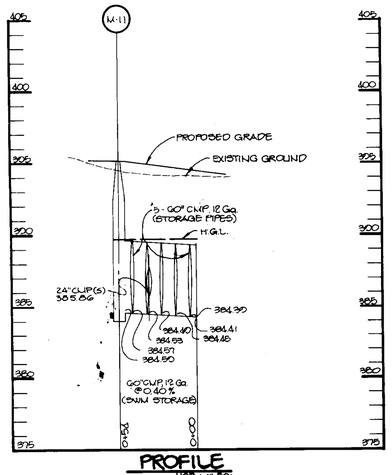
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 5/3/91

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

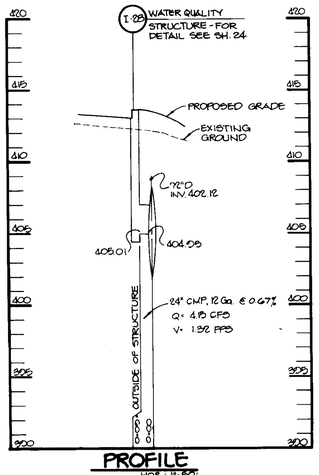
DIRECTOR — DATE 4/26/91

CHIEF, BUREAU OF ENGINEERING — DATE 4-26-91



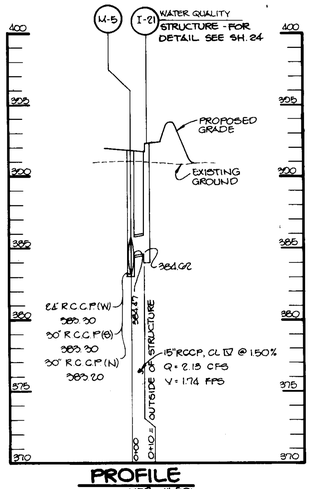
PROFILE

SCALE: HOR. 1" = 50'
VERT. 1" = 5'



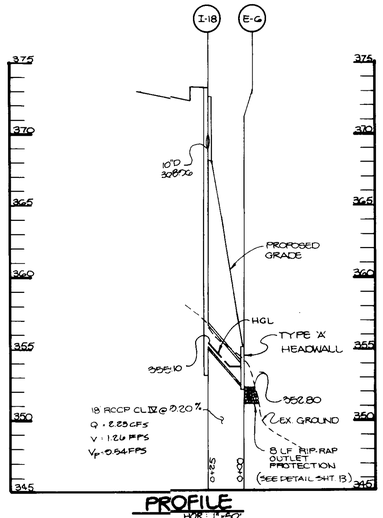
PROFILE

SCALE: HOR. 1" = 50'
VERT. 1" = 5'



PROFILE

SCALE: HOR. 1" = 50'
VERT. 1" = 5'



PROFILE

SCALE: HOR. 1" = 50'
VERT. 1" = 5'

AS BUILT CERTIFICATION

ENGINEER J. Gorecki — DATE

P.E. #

DATE	NO.	REVISION

OWNER/DEVELOPER

STONEHENGE LIMITED PARTNERSHIP
40 YORK RD
TOWSON, MARYLAND 21204

PROJECT: A COMMERCIAL CENTER

THE ENCHANTED FOREST

PARCEL 'A' AND PARCEL 'GB'

AREA TAX MAP NO. 24 PARCELS 454, 5CA, 10, GB
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE:

STORM DRAIN PROFILES

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

SDP-90-107

4-3-91
DATE

STATE OF MARYLAND — ARTHUR E. MUEGGE — No. 8707 — REGISTERED PROFESSIONAL ENGINEER

ARTHUR E. MUEGGE

WP-90-54, 28 CAGE 86 TM
SDP-82 WP85-149 F-90-32

DESIGNED BY: JLB

DRAWN BY: G.D.H.

PROJECT NO: 30108

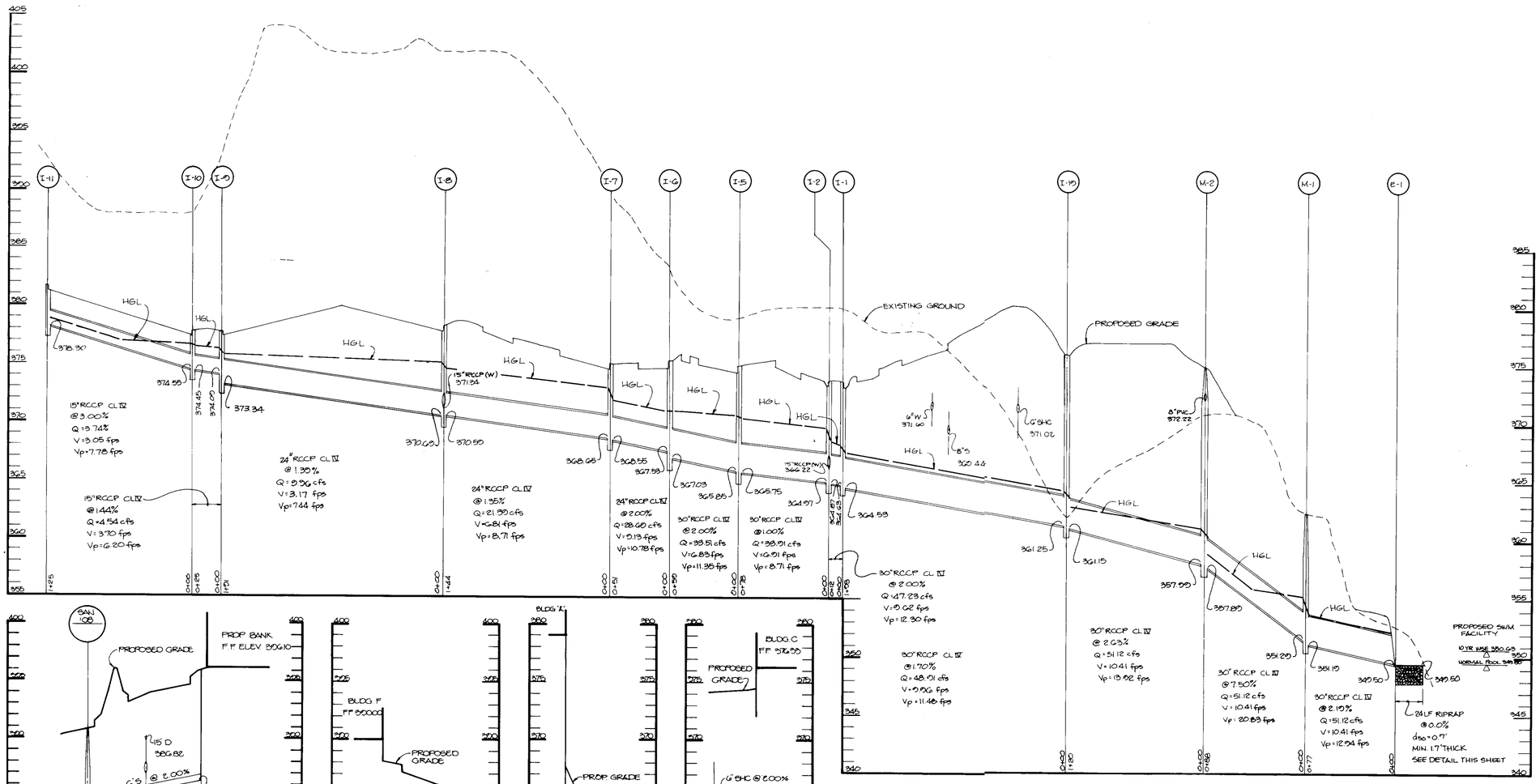
DATE: APRIL 3, 1991

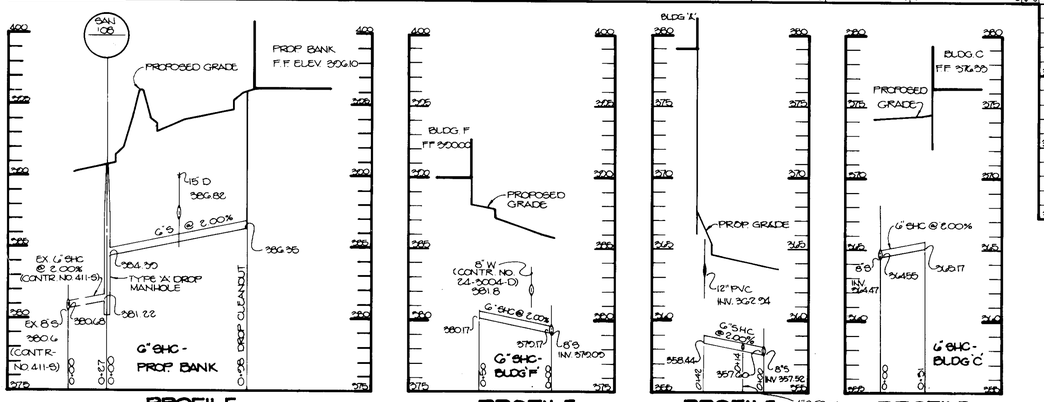
SCALE: AS SHOWN

DRAWING NO. 12 OF 40

SDP 90-74

MARYLAND BLUEPRINT CO., INC. 7/1/90



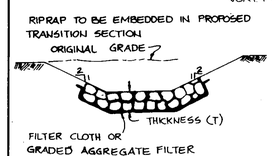


PROFILE
SCALE: HOR. 1"=50' VERT. 1"=5'

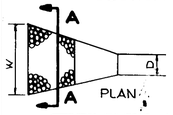
PROFILE
SCALE: HOR. 1"=50' VERT. 1"=5'

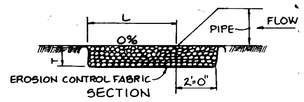
PROFILE
SCALE: HOR. 1"=50' VERT. 1"=5'
4"S FROM GREASE INTERCEPTOR INV. 357.88

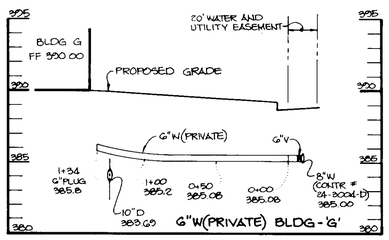
PROFILE
SCALE: HOR. 1"=50' VERT. 1"=5'



SECTION A-A





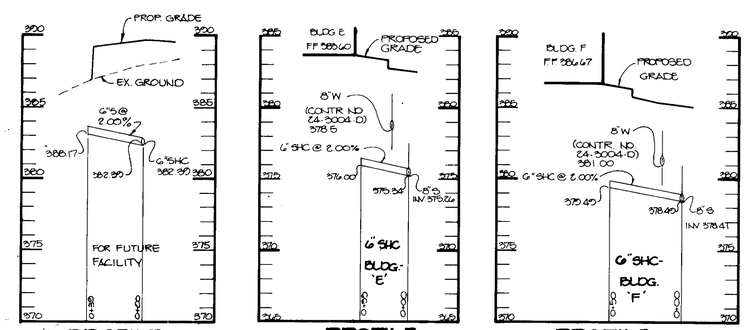


PROFILE
SCALE: HOR. 1"=50' VERT. 1"=5'

STRUCTURE	MEDIUM STONE DIA.	LENGTH (L)	WIDTH (W)	THICKNESS (T)
E-1	9"	24'	28'	1.7'
E-2	6"	12'	25'	1.2'
E-3	6"	18'	25	1.2'
E-4	6"	10'	12'	1.2'

STRUCTURE	MEDIUM STONE DIA.	LENGTH (L)	WIDTH (W)	THICKNESS (T)
EX. E-5	6"	14'	16'	1.2'
E-6	6"	8'	12'	1.2'
EX. E-7	6"	10'	12'	1.2'
EX. E-9	6"	10'	12'	1.2'
EX. E-10	6"	10'	12'	1.2'

OUTLET PROTECTION DETAIL
No Scale

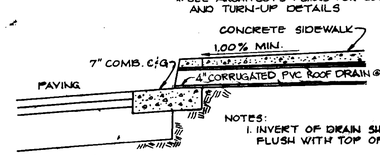


PROFILE
SCALE: HOR. 1"=50' VERT. 1"=5'

PROFILE
SCALE: HOR. 1"=50' VERT. 1"=5'

PROFILE
SCALE: HOR. 1"=50' VERT. 1"=5'

* SEE ARCHITECT'S PLANS FOR LOCATIONS AND TURN-UP DETAILS



NOTES:
1. INVERT OF DRAIN SHOULD BE PLACED FLUSH WITH TOP OF PAVING.

TYPICAL ROOF DRAIN DETAIL
NO SCALE

AS BUILT CERTIFICATE

ARTHUR E. MUEGGE #8707 — DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 5-2-91

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 5-3-91

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 5/3/91

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 4/26/91

CHIEF, BUREAU OF ENGINEERING — DATE 4-26-91

DATE	NO	REVISION
10/25/91	1	REVISED PROFILE - ADDED STATIONING & 4" S

OWNER/DEVELOPER
STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON, MARYLAND 21204

PROJECT: A COMMERCIAL CENTER
THE ENCHANTED FOREST
PARCEL 'A' AND PARCEL 'G-B'

AREA: TAX MAP NO. 24 — PARCELS 454, 564, 19, G-B
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: **STORM DRAIN, WATER AND SEWER PROFILES & DETAIL SHEET**

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

SDP-90-18

4-3-91
DATE

ARTHUR E. MUEGGE #8707

WP-90-54, ZB CASE 867M S-89-82, WP-89-143, F-90-32.

DESIGNED BY: M.G.K.

DRAWN BY: D.A.M.

PROJECT NO: 90108

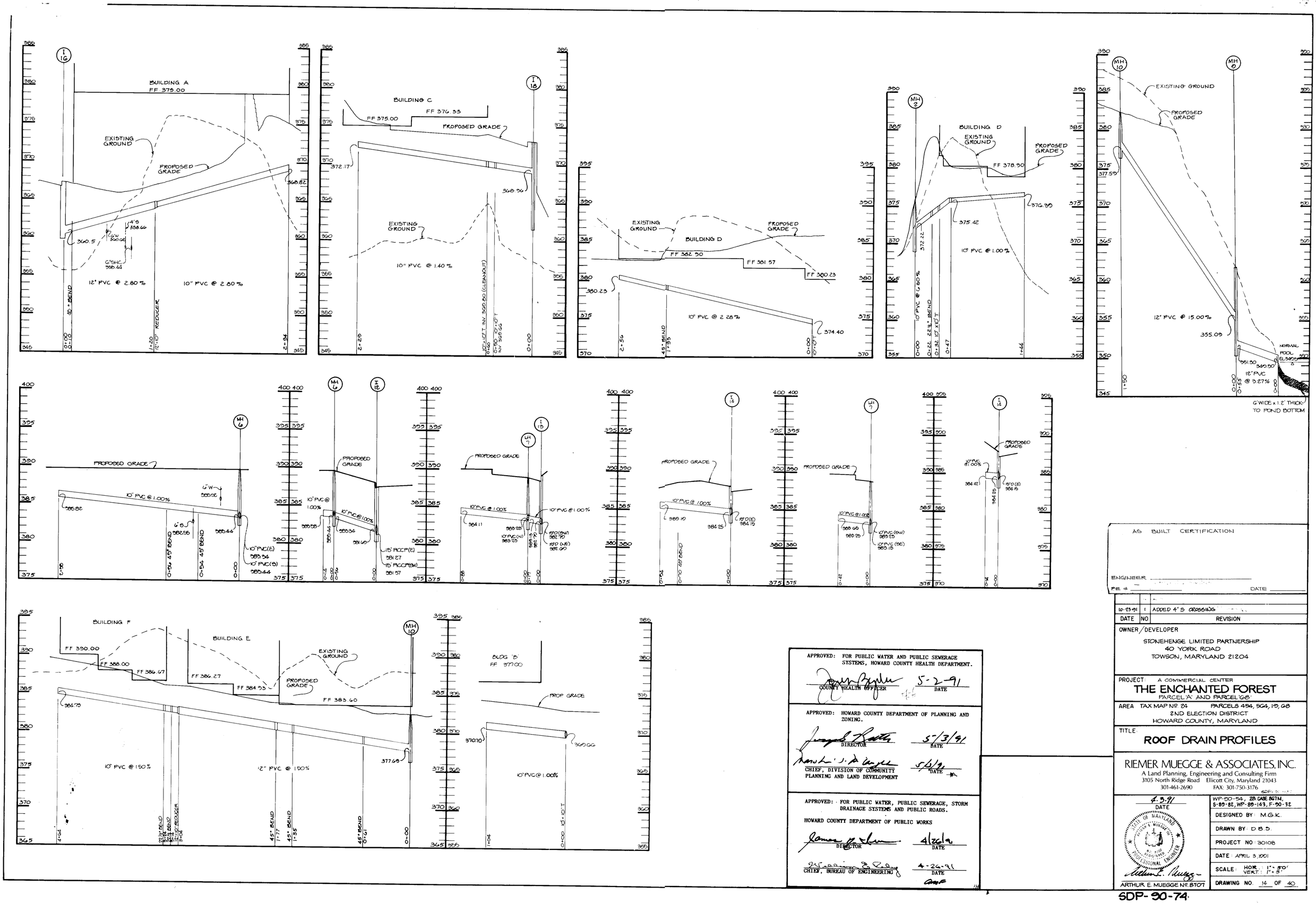
DATE: APRIL 3, 1991

SCALE: AS SHOWN

DRAWING NO. 13 OF 40

SDP-90-74

MARYLAND BLUE PRINT CO., INC. 742-0300



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 5-2-91

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 5/3/91

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 5/3/91

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 4/26/91

CHIEF, BUREAU OF ENGINEERING — DATE 4-26-91

AS BUILT CERTIFICATION

ENGINEER _____

P.E. # _____ DATE _____

DATE	NO	REVISION
10-23-91	1	ADDED 4" S CROSSING

OWNER/DEVELOPER

STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON, MARYLAND 21204

PROJECT: A COMMERCIAL CENTER

THE ENCHANTED FOREST

PARCEL 'A' AND PARCEL '68'

AREA TAX MAP No. 24 PARCELS 454, 564, 19, 68
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE:

ROOF DRAIN PROFILES

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

4-3-91
DATE

STATE OF MARYLAND — ARTHUR E. MUEGGE — No. 8707 — REGISTERED PROFESSIONAL ENGINEER

ARTHUR E. MUEGGE No. 8707

WP-90-54, ZB CASE 867M, S-89-82, WP-89-143, F-90-32

DESIGNED BY: M.G.K.

DRAWN BY: D.B.S.

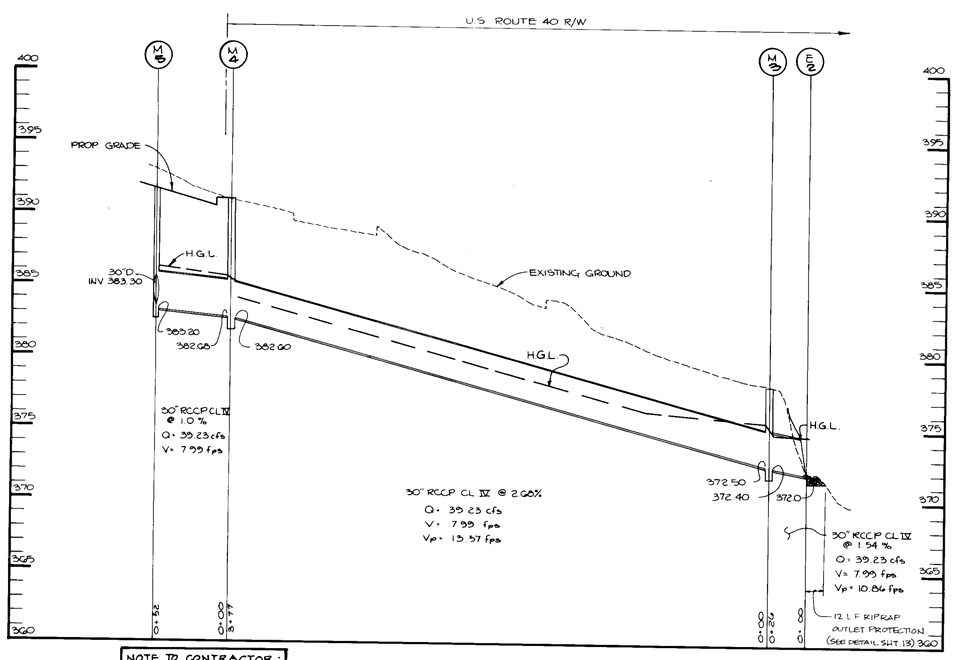
PROJECT NO: 30108

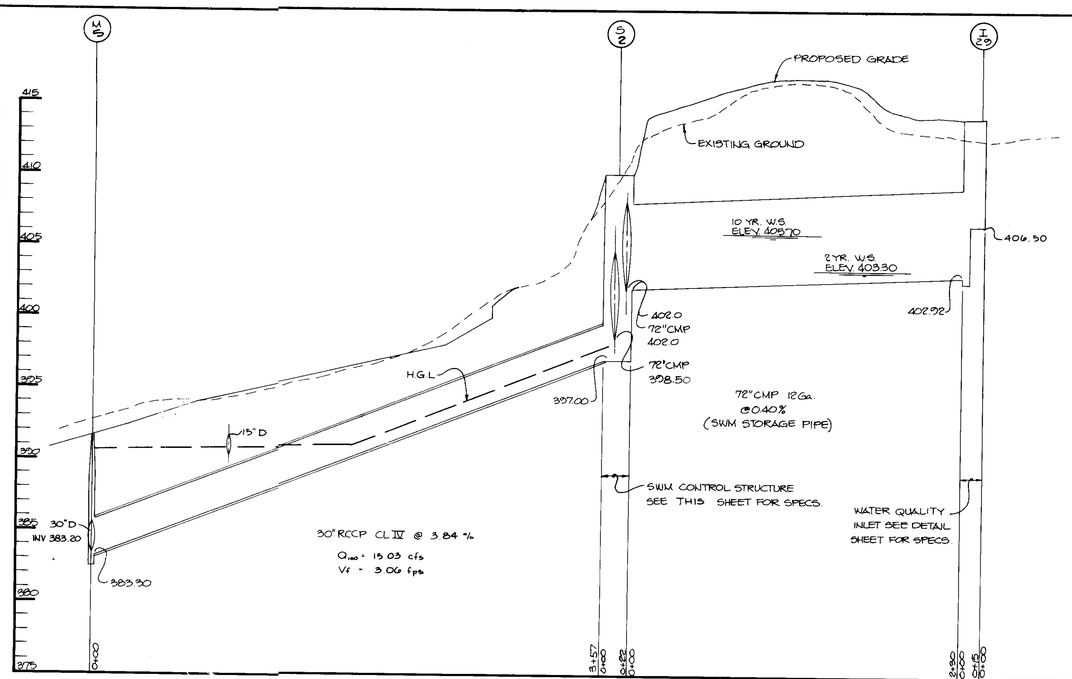
DATE: APRIL 3, 1991

SCALE: HOR.: 1" = 50' VERT.: 1" = 5'

DRAWING NO. 14 OF 40

SDP-90-74





BY THE DEVELOPER:

"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

DEVELOPER — DATE 4-3-91

BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A FEASIBLE AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

ENGINEER — DATE 4-3-91

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

SOIL CONSERVATION SERVICE — DATE 4/17/91

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT — DATE 4/17/91

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 5-2-91

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 5/3/91

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 5/3/91

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 4/26/91

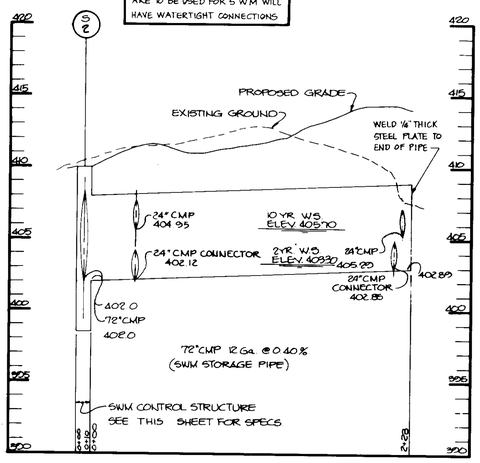
CHIEF, BUREAU OF ENGINEERING — DATE 4-26-91

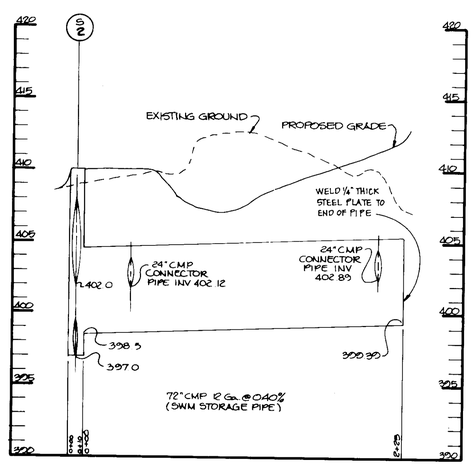
DATE	NO	REVISION

OWNER/DEVELOPER

STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON, MARYLAND 21204

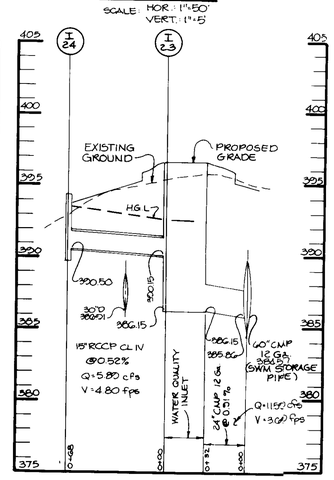
NOTE TO CONTRACTOR:
ALL UNDERGROUND PIPES THAT ARE TO BE USED FOR S.W.M. WILL HAVE WATERTIGHT CONNECTIONS

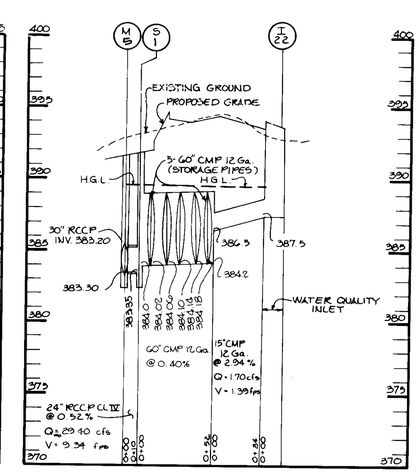


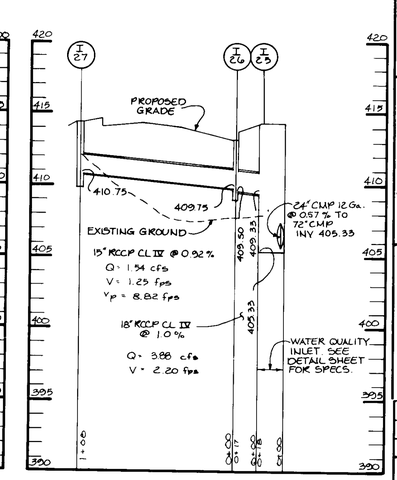


PROFILES

SCALE: HOR.: 1"=50' VERT.: 1"=5'

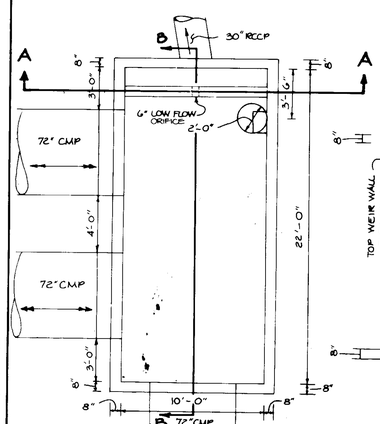




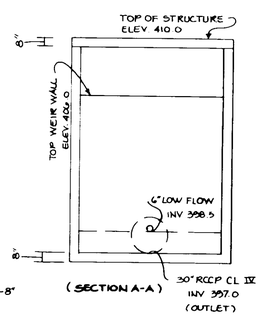


PROFILES

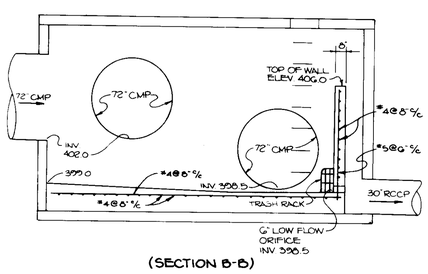
SCALE: HOR. 1"=50' VERT. 1"=5'



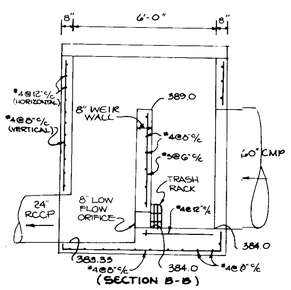
(PLAN S-2)



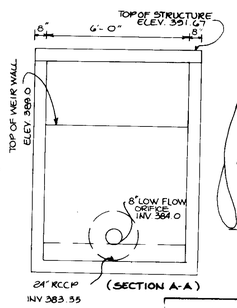
(SECTION A-A)



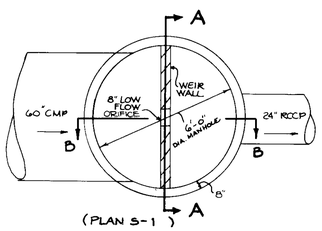
(SECTION B-B)



(SECTION B-B)



(SECTION A-A)



(PLAN S-1)

DETAILS FOR STORM WATER MANAGEMENT STRUCTURE S-2
NO SCALE

DETAILS FOR MODIFIED MANHOLE S-1
NO SCALE

AS BUILT CERTIFICATION

ENGINEER _____

PE # _____ DATE _____

PROJECT: A COMMERCIAL CENTER
THE ENCHANTED FOREST
PARCEL 'A' AND PARCEL 'GB'

AREA: TAX MAP No. 24 PARCELS 454, 564, 19, GB
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: **STORM DRAIN PROFILES**
S.W.M. DETAILS & PROFILES

RIEMER MUEGGE & ASSOCIATES, INC.
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4-3-91
DATE

ARTHUR E. MUEGGE No. 8707

	WP-90-54, ZB CASE 867 M, S-89-82, WP 89-143, F-90-32
DESIGNED BY: C.J.R.	
DRAWN BY: D.B.S.	
PROJECT NO: 30108	
DATE: APRIL 3, 1991	
SCALE: AS SHOWN	
DRAWING NO. 15 OF 40	

SDP-90-74

MARYLAND BLUEPRINT CO., INC.

STRUCTURE SCHEDULE

• GRATE ELEVATION ** TOP OF HEADWALL @ PIPE

No	Type	Location	Inv In	Inv Out	Top of Curb (rim elevation)	Remarks
I- 1	A-5	See Plan	364.63	364.53	373.80	HO CO STD DET SD 4.01
I- 2	A-10	See Plan	364.97\366.22	364.87	373.84	HO CO STD DET SD 4.02
I- 3	Dbl-S w/Ret Grate	See Plan	371.88	371.78	*376.68	HO CO STD DET SD 4.23 & 4.93
I- 4	Dbl-S w/Ret Grate	See Plan	-	375.75	*379.05	HO CO STD DET SD 4.23 & 4.93
I- 5	A-5	See Plan	365.85	365.75	374.95	HO CO STD DET SD 4.01
I- 6	A-5	See Plan	367.53	367.03	375.40	HO CO STD DET SD 4.01
I- 7	A-5	See Plan	368.65	368.55	375.40	HO CO STD DET SD 4.01
I- 8	A-5	See Plan	371.34\370.69	370.59	378.40	HO CO STD DET SD 4.01
I- 9	A-5	See Plan	374.09	373.34	378.10	HO CO STD DET SD 4.01
I-10	A-5	See Plan	374.55	374.45	378.15	HO CO STD DET SD 4.01
I-11	A-10	See Plan	-	370.20	381.79	HO CO STD DET SD 4.02
I-12	A-5	See Plan	384.23\381.37	381.27	388.00	HO CO STD DET SD 4.01
I-13	A-5	See Plan	386.07\382.79	382.69	389.10	HO CO STD DET SD 4.01
I-14	A-5	See Plan	384.98	384.15	388.00	HO CO STD DET SD 4.01
I-16	A-5 & H20 Qual	See Plan	360.50\359.55	355.55	367.30\367.60	HO CO STD DET SD 4.01 - Det Sht 24
I-17	S-Inlet w/Ret Grate	See Plan	-	360.00	*363.88	HO CO STD DET SD 4.22 & 4.93
I-18	A-5	See Plan	368.96	368.86	373.10	HO CO STD DET SD 4.01
I-19	S-Inlet w/Ret Grate	See Plan	361.25	361.15	*376.00	HO CO STD DET SD 4.22 & 4.93
I-21	A-10 & H20 Qual	See Plan	-	384.62	391.47\392.06	HO CO STD DET SD 4.02 - Det Sht 24
I-22	A-5 & H20 Qual	See Plan	-	387.50	393.60\394.00	HO CO STD DET SD 4.01-Det Sht 24
I-23	A-5 & H20 Qual	See Plan	390.15	386.15	397.10\397.48	HO CO STD DET SD 4.01-Det Sht 24
I-24	A-5	See Plan	-	390.50	394.30	HO CO STD DET SD 4.01
I-25	A-5 & H20 Qual	See Plan	409.33	405.33	414.30\414.62	HO CO STD DET SD 4.01-Det Sht 24
I-26	Dbl-S Cmb w/Ret Grt	See Plan	409.75	409.50	*413.11	HO CO STD DET SD 4.34 & 4.93
I-27	A-5	See Plan	-	410.75	414.20	HO CO STD DET SD 4.01
I-28	A-5 & H20 Qual	See Plan	-	405.01	413.60\413.94	HO CO STD DET SD 4.01-Det Sht 24
I-29	A-5 & H20 Qual	See Plan	--	402.92	414.10\414.47	HO CO STD DET SD 4.01-Det Sht 24
I-31	COG-20	55' LT of BL/STA 16+95	348.00	355.99\356.47		MSHA STD DET MD-374.51
I-32	Ex. Inlet	See Plan	356.70	356.54	-	-
I-33	COG-15	14' LT of BL/STA 14+01	358.70	358.40	365.00/366.52	MSHA STD DET MD-374.51
I-34	COG- 20	8' RT of BL/STA 13+80	-	359.65	367.34/366.67	MSHA STD DET MD-374.51
I-35	COS-5	77' LT of BL/STA 14+03	360.31	360.04	365.55	MSHA STD DET MD-374.61
I-36	COG-15	6' LT of BL/STA 14+24	-	360.50	366.27\364.83	MSHA STD DET MD-374.51 MODIFIED ***
I-38	K-Inlet	83' LT of BL/STA 12+04	362.41/362.05	360.19	*369.00	MSHA STD DET MD-378.05
I-39	COG-10	4' LT of BL/STA 11+30	363.88\364.37	364.31	373.98	MSHA STD DET MD-374.51 CAST IN PLACE
I-40	STD WR	61' LT of BL/STA 9+60	374.74	374.64	*378.52	MSHA STD DET MD-374.04 CAST IN PLACE
I-41	STD WR	57' LT of BL/STA 7 +74	-	380.50	*384.30	MSHA STD DET MD-374.04 CAST IN PLACE
I-42	COG-10	15' LT of BL/STA 11+09	368.51	368.41	374.78	MSHA STD DET MD-374.51
I-43	COG-10	17' LT of BL/STA 8+51	377.56	377.45	383.15	MSHA STD DET MD-374.51
I-44	COG 20	17' LT of BL/STA 6+04	383.80	383.64	390.40\391.01	MSHA STD DET MD-374.51
I-45	COG-15	15' RT of BL/STA 5+65	-	384.88	392.08/392.55	MSHA STD DET MD-374.51 MODIFIED ****
I-46	COG-15	8' RT of BL/STA 9+60	374.77	374.77	379.62	MSHA STD DET MD-374.51 MODIFIED ****
I-47	COG-15	4' RT of BL/STA 9+41	375.52	375.12	382.18	MSHA STD DET MD-374.51
I-48	COG 15	56' LT of BL/STA 4+62	384.12	384.07	393.83\394.98	MSHA STD DET MD-374.51
I-49	COG- 20	55' LT of BL/STA 4+62	386.96	386.86	393.40/393.93	MSHA STD DET MD-374.51
I-50	COG-15	55' LT of BL/STA 4+88	-	387.41	392.60/393.10	MSHA STD DET MD-374.51
I-51	COG 20	4' LT of BL/STA 2+28	394.97	394.86	401.74\402.32	MSHA STD DET MD-374.51
M-1	5'-0"DIA Precst MH	See Plan	351.29		SET TO EX. GR.	HO CO STD DET G5.13
M-2	5'-0"DIA Precst MH	See Plan	372.22\357.99	357.79	375.00	HO CO STD DET G5.13
M-3	5'-0"DIA Precst MH	See Plan	372.50	372.40	SET TO EX. GR.	MSHA STD DET MD-383.21
M-4	5'-0"DIA Precst MH	See Plan	382.68	382.58	390.90	MSHA STD DET MD-383.21
M-5	5'-0"DIA Precst MH	See Plan	2-383.20\384.47	383.20	391.78	HO CO STD DET G5.13
M-6	4'-0"DIA Precst MH	See Plan	385.02\384.85	384.59	389.68	HO CO STD DET G5.12
M-7	4'-0"DIA Precst MH	See Plan	386.95\387.04	386.85	389.80	HO CO STD DET G5.12
M-8	4'-0"DIA Precst MH	See Plan	386.63\386.63	386.54	389.90	HO CO STD DET G5.12
M-9	4'-0"DIA Precst MH	See Plan	355.09	351.30	SET TO EX. GR.	HO CO STD DET G5.12
M-10	4'-0"DIA Precst MH	See Plan	377.69	377.59	382.70	HO CO STD DET G5.12
M-11	BRICK MH	See Plan	356.50\353.13	353.03	395.10	HO CO STD DET G5.03
M-12	5'-0"DIA Precst MH	See Plan	356.50\353.13	353.03	368.40	HO CO STD DET G5.13
M-13	Std. Shallow MH	See Plan	385.48	385.43	394.14	MSHA STD DET MD-383.00
S-1	Modified Manhole	See Plan	384.00	383.35	391.92	SEE SHEET 15
S-2	SWM Control Strctr	See Plan	2-402.00\398.50	397.00	410.00	SEE SHEET 15
E-1	30" Conc. End Sec	See Plan	-	349.50	-	HO CO STD DET SD 5.51
E-2	30" Conc. End Sec	See Plan	-	372.00	-	HO CO STD DET SD 5.51
E-3	Type A Headwall	See Plan	-	349.13	-	HO CO STD DET SD 5.41
E-4	MOD TYPE 'C' HEADWALL	See Plan	-	347.50	**352.00	MSHA STD DET MD 354.01
E-6	TYPE 'A' HEADWALL	See Plan	-	352.80	**355.80	HO CO STD DET SD 5.11
SAN 100	4'-0" DIA. Precst MH	See Plan	395.72	395.78	403.68	HO CO STD DET G5.12
SAN 101	4'-0" DIA. Precst MH	See Plan	398.92	398.82	408.48	HO CO STD DET G5.12
SAN 102	4'-0" DIA. Precst MH	See Plan	403.10	403.00	373.54	HO CO STD DET G5.12
SAN 103	4'-0" DIA. Precst MH	See Plan	397.28	397.18	375.87	HO CO STD DET G5.12
SAN 104	4'-0" DIA. Precst MH	See Plan	398.69	398.59	378.00	HO CO STD DET G5.12
SAN 105	4'-0" DIA. Precst MH	See Plan	373.64	373.51	381.02	HO CO STD DET G5.12
SAN 106	4'-0" DIA. Precst MH	See Plan	374.06	374.86	382.50	HO CO STD DET G5.12
SAN 107	4'-0" DIA. Precst MH	See Plan	380.76	380.66	388.75	HO CO STD DET G5.12
SAN 108	4'-0" DIA. Precst MH	See Plan	384.90	381.22	390.70	HO CO STD DET G5.12

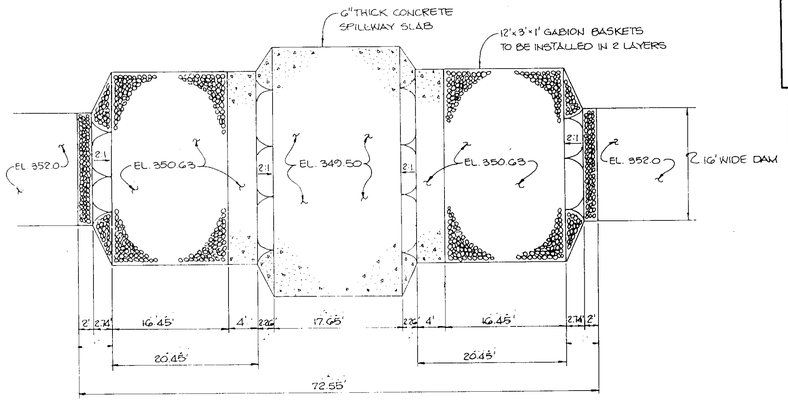
SANITARY SEWER MANHOLES

*** MODIFICATION:

BASE UNIT HEIGHT LESS THAN SHOWN ON STD. DETAIL FOR CLEARANCE FROM EX. 20" WATER MAIN.

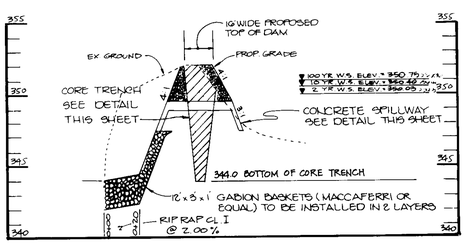
**** MODIFICATION:

BASE UNIT HEIGHT LESS THAN SHOWN ON STD. DETAIL BASED ON INVERT OF EX. STORM DRAIN.



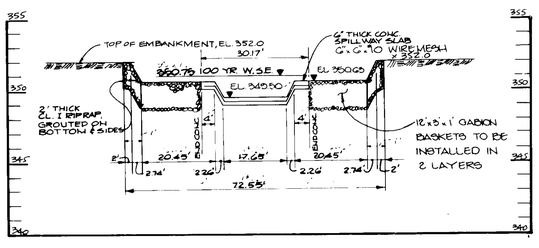
PRINCIPAL SPILLWAY DETAIL

NO SCALE



SECTION A-A

SCALE: HORIZ. 1"=40' VERT. 1"=5'

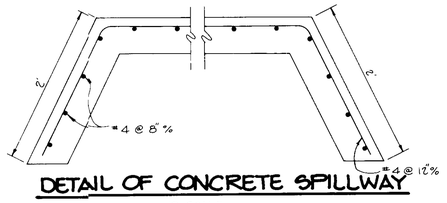


SECTION B-B

SCALE: HORIZ. 1"=20' VERT. 1"=5'

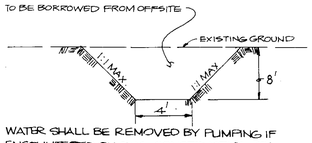
SECTIONS THROUGH PRINCIPAL SPILLWAY

SCALE: AS SHOWN



DETAIL OF CONCRETE SPILLWAY

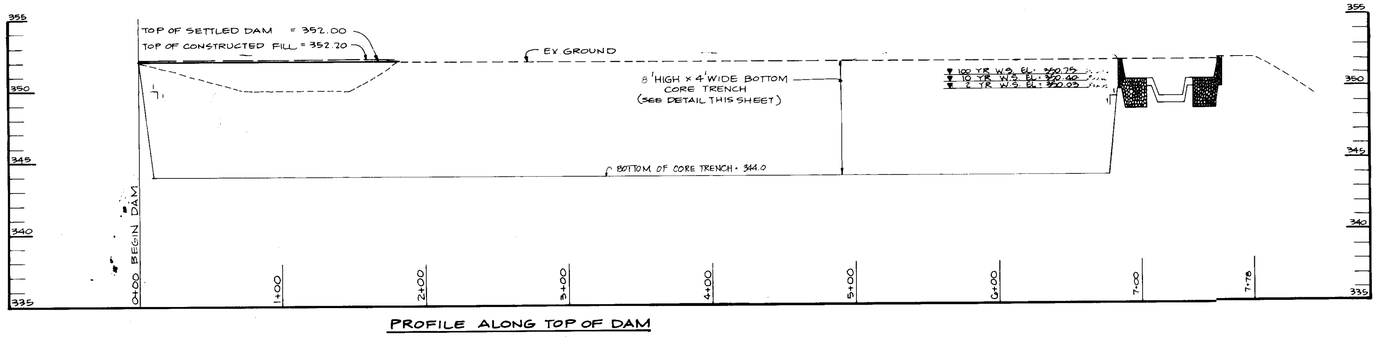
NO SCALE



WATER SHALL BE REMOVED BY PUMPING IF ENCOUNTERED DURING CONSTRUCTION OF THE CORE TRENCH.

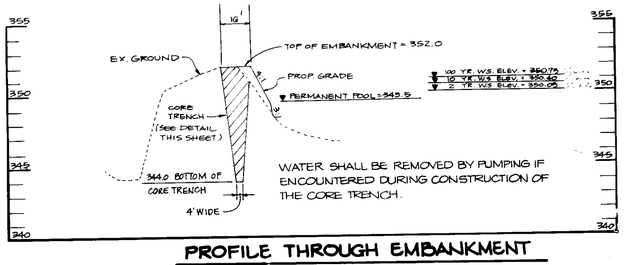
CORE TRENCH DETAIL

NO SCALE



PROFILE ALONG TOP OF DAM

SCALE: HORIZ. 1"=50' VERT. 1"=5'



WATER SHALL BE REMOVED BY PUMPING IF ENCOUNTERED DURING CONSTRUCTION OF THE CORE TRENCH.

PROFILE THROUGH EMBANKMENT

SCALE: HOR. 1"=50' VERT. 1"=5'

AS BUILT CERTIFICATE

J. Gaskill 2.18.94

ARTHUR E. MUEGGE #8707 DATE

BY THE DEVELOPER:

"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

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U.S. SOIL CONSERVATION SERVICE 4/17/91 DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED HOWARD S.C.D. 4/17/91 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER 5-2-91 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR 5/3/91 DATE

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT 5/3/91 DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR 4/26/91 DATE

CHIEF, BUREAU OF ENGINEERING 4-26-91 DATE

DATE	NO	REVISION
10/28/91	1	REVISED STRUCTURE SCHEDULE

OWNER/DEVELOPER

STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON MARYLAND 21204

PROJECT: A COMMERCIAL CENTER
THE ENCHANTED FOREST
PARCEL 'A' & PARCEL G-8

AREA TAX MAP NO. 24 PARCELS 454, 564, 19, 68
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: SWM PROFILES, DETAILS AND STRUCTURE SCHEDULE

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

2.3.91 DATE

STATE OF MARYLAND ARTHUR E. MUEGGE No. 8707 REGISTERED PROFESSIONAL ENGINEER

ARTHUR E. MUEGGE #8707

WP-90-54, 2B CASE 86-7M
S-80-82 WP-83-143 F-90-32

DESIGNED BY: DF

DRAWN BY: J.L.B.

PROJECT NO: 3-0108

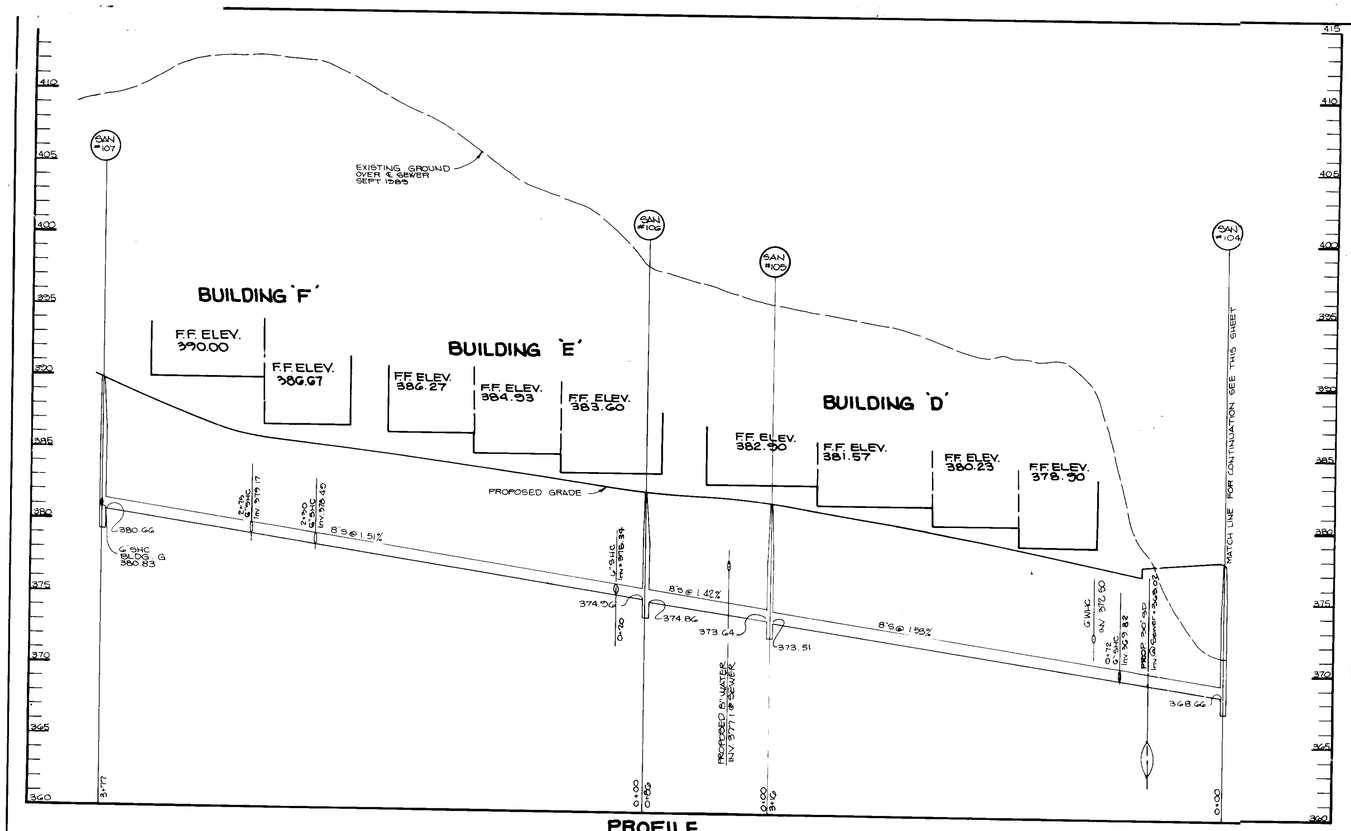
DATE: APRIL 3, 1991

SCALE: AS SHOWN

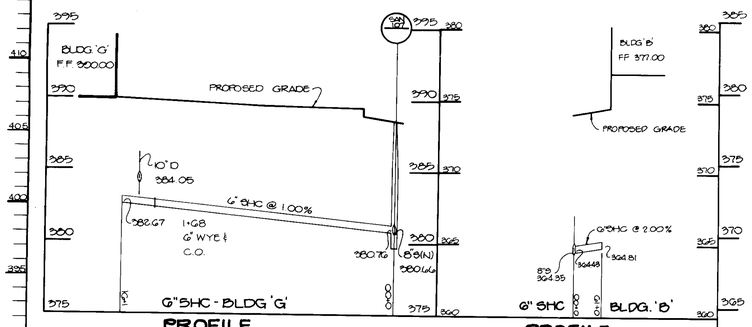
DRAWING NO. 16 OF 40

SDP-90-74

MARYLAND BLUEPRINT CO. INC.

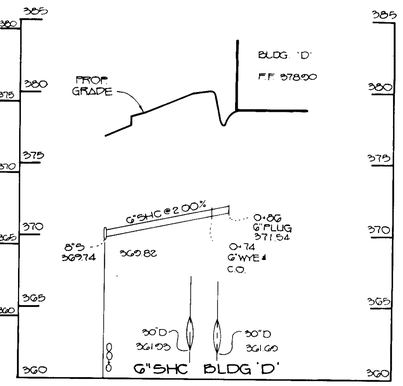


PROFILE
SCALE: HOR. 1"=50' VERT. 1"=5'

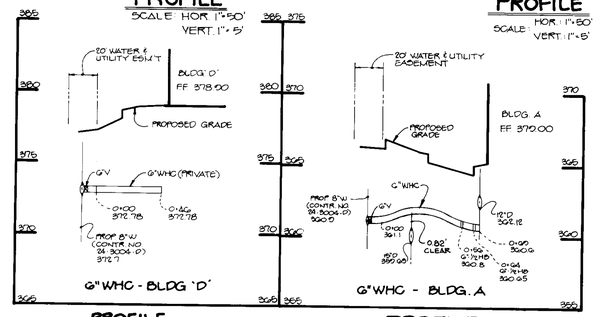


PROFILE
SCALE: HOR. 1"=50' VERT. 1"=5'

PROFILE
SCALE: HOR. 1"=50' VERT. 1"=5'

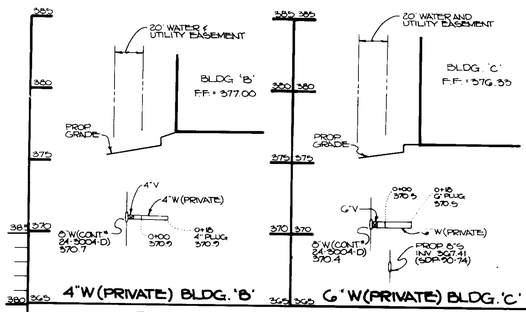


PROFILE
SCALE: HOR. 1" = 50' VERT. 1" = 5'



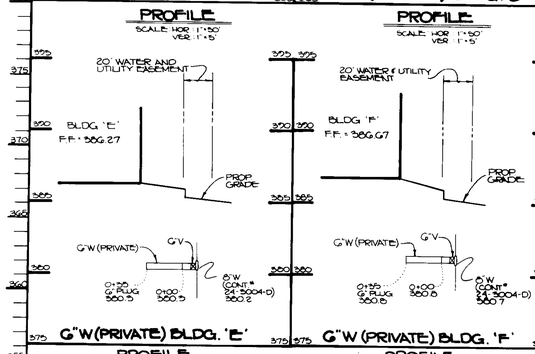
PROFILE
SCALE: HOR. 1"=50' VERT. 1"=5'

PROFILE
SCALE: HOR. 1"=50' VERT. 1"=5'



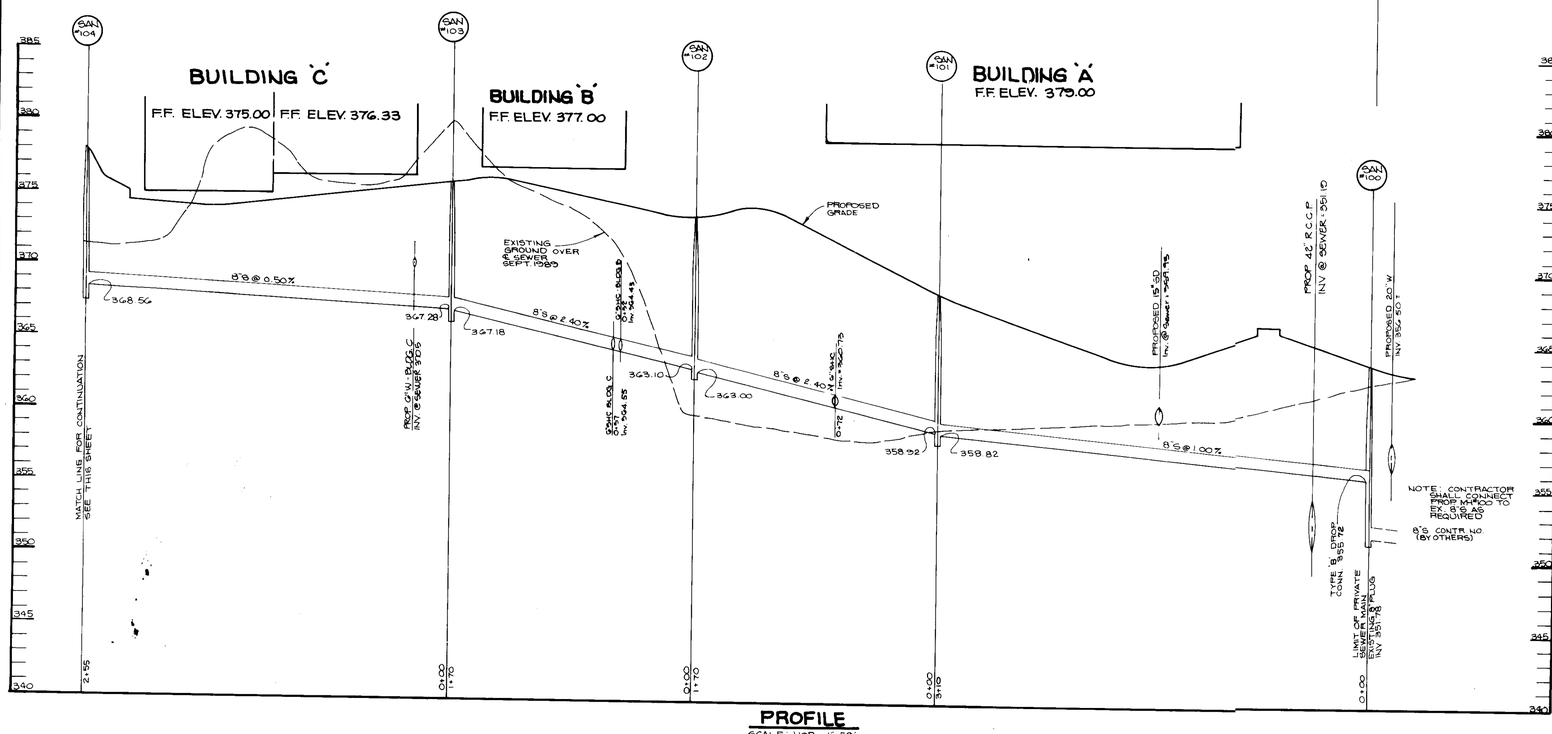
PROFILE
SCALE: HOR. 1"=50' VER. 1"=5'

PROFILE
SCALE: HOR. 1"=50' VER. 1"=5'



PROFILE
SCALE: HOR. 1"=50' VER. 1"=5'

PROFILE
SCALE: HOR. 1"=50' VER. 1"=5'



PROFILE
SCALE: HOR. 1"=50' VERT. 1"=5'

AS BUILT CERTIFICATION

ENGINEER _____

P.E. # _____ DATE _____

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 5-2-91

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 5/3/91

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 5/3/91

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 4/26/91

CHIEF, BUREAU OF ENGINEERING — DATE 4-26-91

DATE	NO	REVISION

OWNER/DEVELOPER

STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON, MARYLAND 21204

PROJECT A COMMERCIAL CENTER

THE ENCHANTED FOREST

PARCEL 'A' AND PARCEL 'G8'

AREA TAX MAP NO. 24 — PARCELS 454, 564, 15, G8
2nd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE:

WATER & SEWER PROFILES

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

SDP-90-18)

4.3.91
DATE

STATE OF MARYLAND — ARTHUR E. MUEGGE — No. 8707 — REGISTERED PROFESSIONAL ENGINEER

ARTHUR E. MUEGGE # 8707

WP-90-54, 28 CASE 867M
S 89-82, WP 89-143, F-90-92

DESIGNED BY: D.B.S.

DRAWN BY: G.D.H.

PROJECT NO: 90108

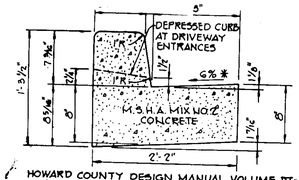
DATE: APRIL 3, 1991

SCALE: AS SHOWN

DRAWING NO. 17 OF 40

SDP-90-74

MARYLAND BLUEPRINT CO., INC. 72000

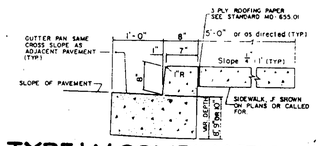


HOWARD COUNTY DESIGN MANUAL VOLUME IV - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-3.01)

* GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AS THE PAVEMENT.

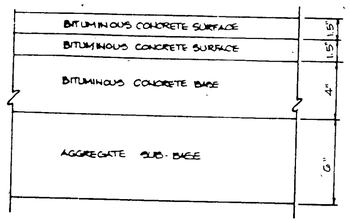
STANDARD 7" COMBINATION CURB AND GUTTER

No Scale



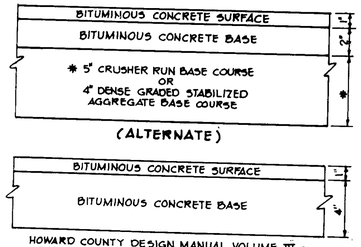
TYPE 'A' COMBINATION CURB AND GUTTER

NO SCALE



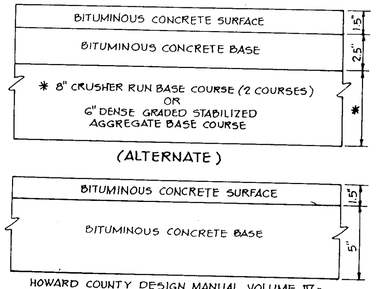
M.S.H.A. PAVING SECTION

NO SCALE



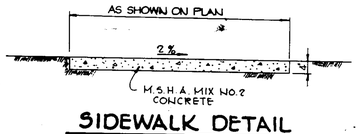
HOWARD COUNTY DESIGN MANUAL VOLUME IV - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-2.01)

(5" PAVING, P-1)



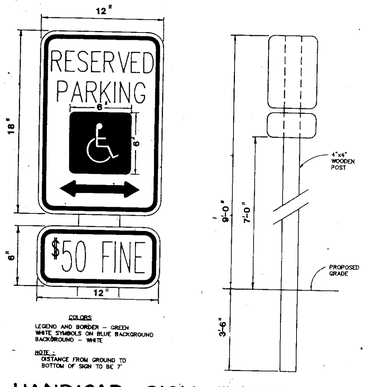
HOWARD COUNTY DESIGN MANUAL VOLUME IV - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-2.01)

(6½" PAVING, P-2)



SIDEWALK DETAIL

No Scale

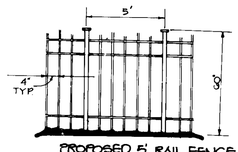


COLORS
LEGEND AND BORDER - GREEN
WHITE, SYMBOLS OR BLUE BACKGROUND
BACKGROUND - WHITE

NOTE:
DISTANCE FROM GROUND TO BOTTOM OF SIGN TO BE 7'

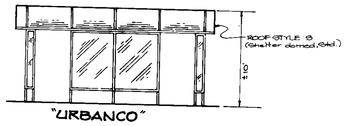
HANDICAP SIGN DETAIL

NO SCALE



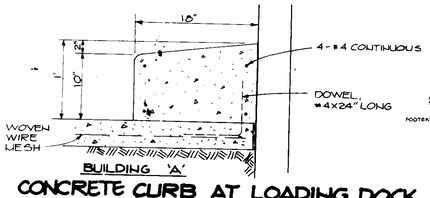
PROPOSED 5' RAIL FENCE

5' Aluminum Fence (Painted Bronze)
'JLRITH' Style #100 OR EQUAL
(Not To Scale)



"URBANCO"

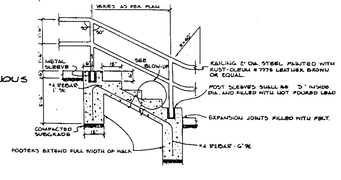
8'x17' Transtop Structure
Model #986-AM-W OR EQUAL
(Not To Scale)



BUILDING 'A'

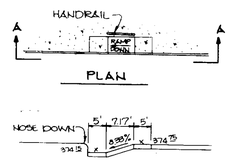
CONCRETE CURB AT LOADING DOCK

NO SCALE



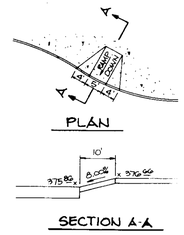
HAND RAIL DETAIL

(NO SCALE)



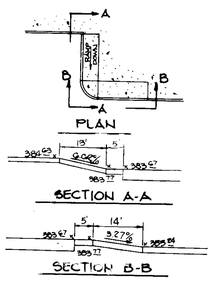
HANDICAP RAMP #1

NO SCALE



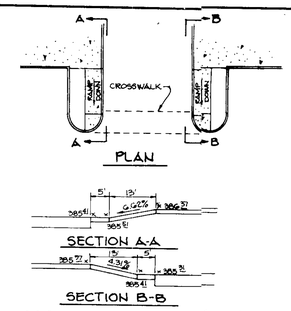
HANDICAP RAMP #2

NO SCALE



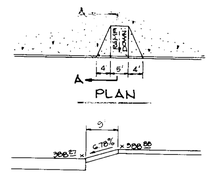
HANDICAP RAMP #4

NO SCALE



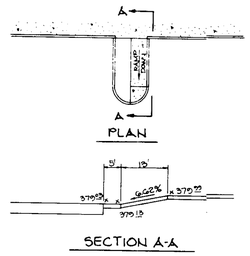
HANDICAP RAMP #5

NO SCALE



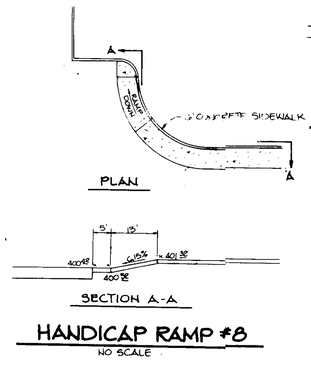
HANDICAP RAMP #6

NO SCALE



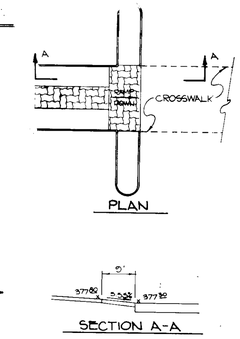
HANDICAP RAMP #7

NO SCALE



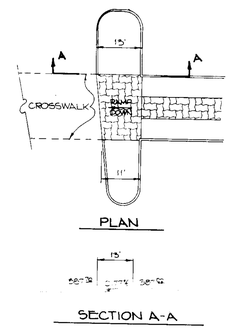
HANDICAP RAMP #8

NO SCALE



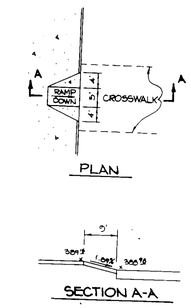
HANDICAP RAMP #13

NO SCALE



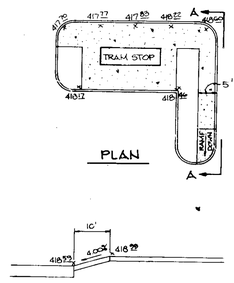
HANDICAP RAMP #14

NO SCALE



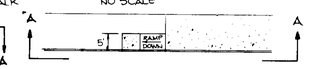
HANDICAP RAMP #15

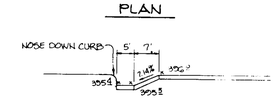
NO SCALE



HANDICAP RAMP #9

NO SCALE





HANDICAP RAMP #10

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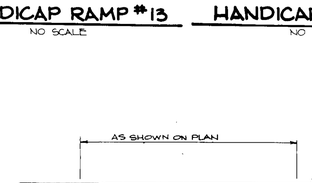
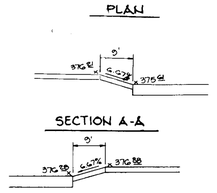


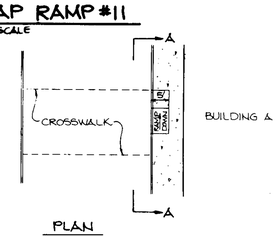
REVERSE 7" COMBINATION CURB AND GUTTER

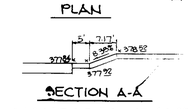
No Scale



HANDICAP RAMP #11

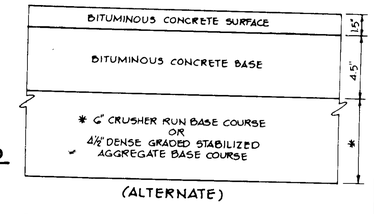
NO SCALE





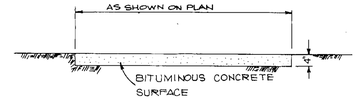
HANDICAP RAMP #12

NO SCALE



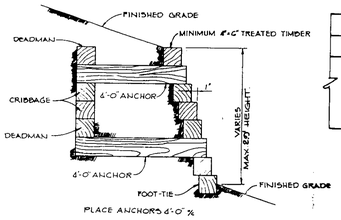
HOWARD COUNTY DESIGN MANUAL VOLUME IV - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-2.01)

(8" PAVING, P-3)



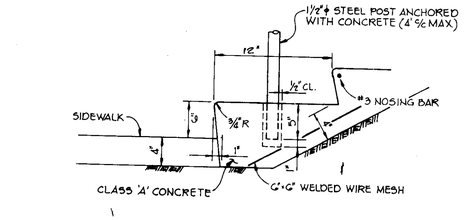
MACADAM PATHWAY DETAIL

NO SCALE



TIMBER RETAINING WALL

No Scale



TYPICAL CONCRETE STEP W/ RAIL DETAIL

NO SCALE

AS BUILT CERTIFICATION

ENGINEER _____

PE # _____ DATE _____

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 5-2-91

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING.

DIRECTOR — DATE 5/3/91

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 5/3/91

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 4/26/91

CHIEF, BUREAU OF ENGINEERING — DATE 4-26-91

DATE	NO	REVISION

OWNER/DEVELOPER
STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON, MARYLAND 21204

PROJECT A COMMERCIAL CENTER
THE ENCHANTED FOREST
PARCEL A & PARCEL GB

AREA TAX MAP NO. 24 PARCELS 454, 564, 19, GB
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: DETAIL SHEET

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

4.3.91
DATE

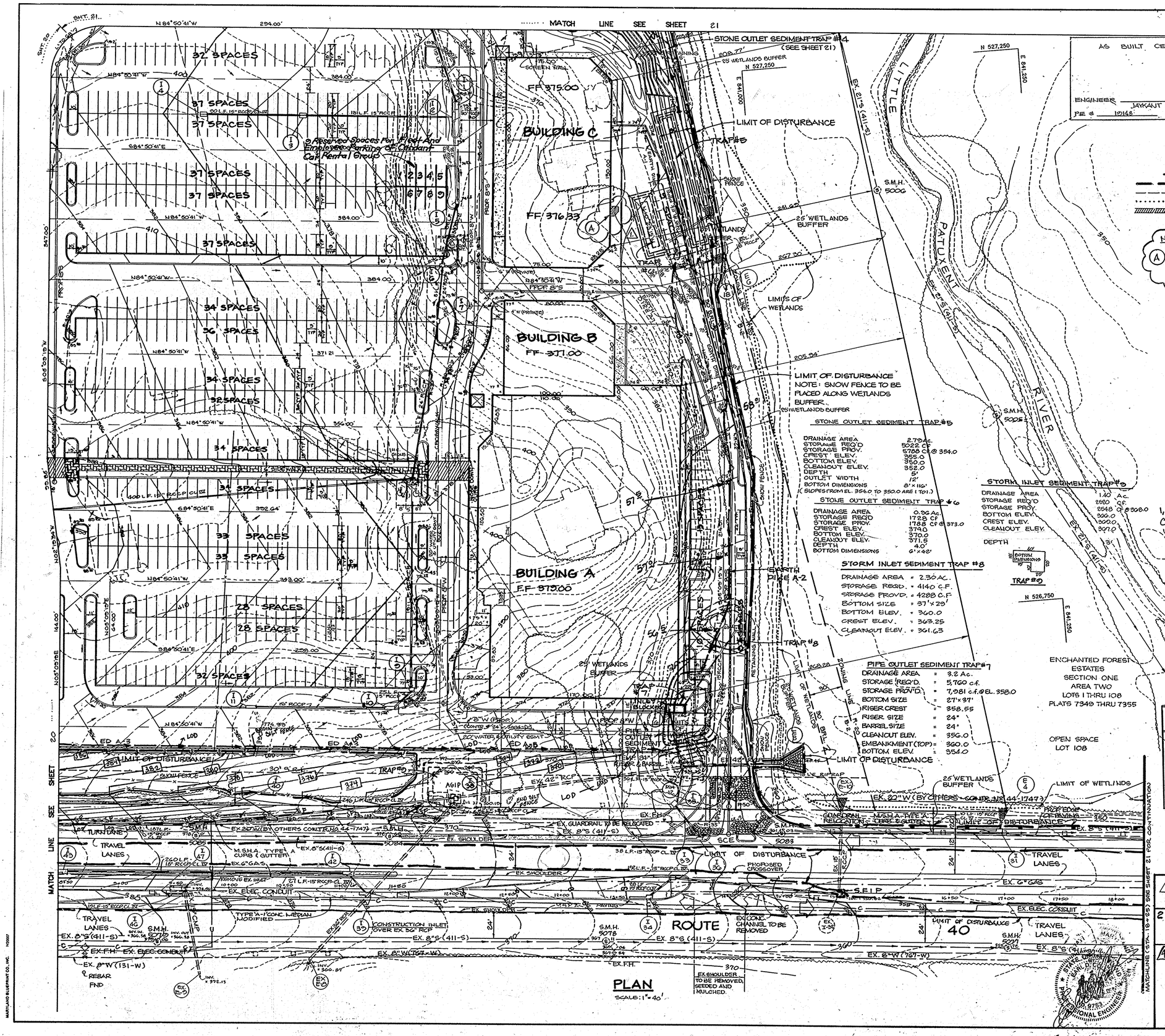
STATE OF MARYLAND — ARTHUR E. MUEGGE — No. 5707 — PROFESSIONAL ENGINEER

ARTHUR E. MUEGGE

	WP-90-54, 2B-CASE 8671M S-85-82, WP-89-143, F-90-32
DESIGNED BY: M.G.K.	
DRAWN BY: G.D.H.	
PROJECT NO: 30108	
DATE: APRIL 3, 1991	
SCALE: AS SHOWN	
DRAWING NO. 18 OF 40	

SDP-90-74

MARYLAND BLUEPRINT CO. INC. 7-800-492



PLAN
SCALE: 1" = 40'

AS BUILT CERTIFICATION

ENGINEER JAYKANT D. PARIKH
P.E. # 12148 DATE

BY THE DEVELOPER:

"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

DEVELOPER 4/3/91 DATE

BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

ENGINEER 4.3.91 DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

U.S. SOIL CONSERVATION SERVICE 4/17/91 DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED Robert W. Ziehm HOWARD S.C.D. 4/17/91 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER 5-2-91 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR 5/3/91 DATE

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT 5/6/91 DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR 4/26/91 DATE

CHIEF, BUREAU OF ENGINEERING 4-26-91 DATE

REV 4: PROFESSIONAL CERTIFICATION

I, MICHAEL J. GESSEL, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO: 40097 EXP: 6/9/95

FOR REVISION 4 ONLY:
BY: BOHLER ENGINEERING

10/17/94

GARRETT/GEORGE ASSOCIATES INCORPORATED
500 N. EASTON ROAD, WILLOW GROVE, PA.
BOARD OF ARCHITECTS 9394 JOHN L. WEIKEL MARYLAND
DATE: 12/4/90
ENGINEER/ARCHITECT

FOR SNOW FENCE PLACEMENT SEE DETAIL, SHEET 40

1. LOADING DOCK ADDITION BY GARRETT/GEORGE ASSOCIATES INCORPORATED. (215) 658-1280
2. Designate 8 Reserved Parking Spaces for CCAG in front of Bldg. 'C' by Fisher, Collins & Carter, Inc. 1-5-05
4. REVISED GRADING TO FRONT ISLAND BUFFER BY BOHLER ENGINEERING

DATE	NO.	REVISION
		Continued Below Left.
10/20/91	1	REVISED INLETS & PIPES W/ STEPS (RCCP), ADDED ISLAND, ADDED GRADE LINE

OWNER/DEVELOPER
STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON MARYLAND 21204

PROJECT: A COMMERCIAL CENTER
THE ENCHANTED FOREST
PARCEL 'A' AND PARCEL '68'

AREA TAX MAP NO. 24 PARCELS 454, 564, 10, 68
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: EROSION & SEDIMENT CONTROL PLAN

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

SDP-90-187

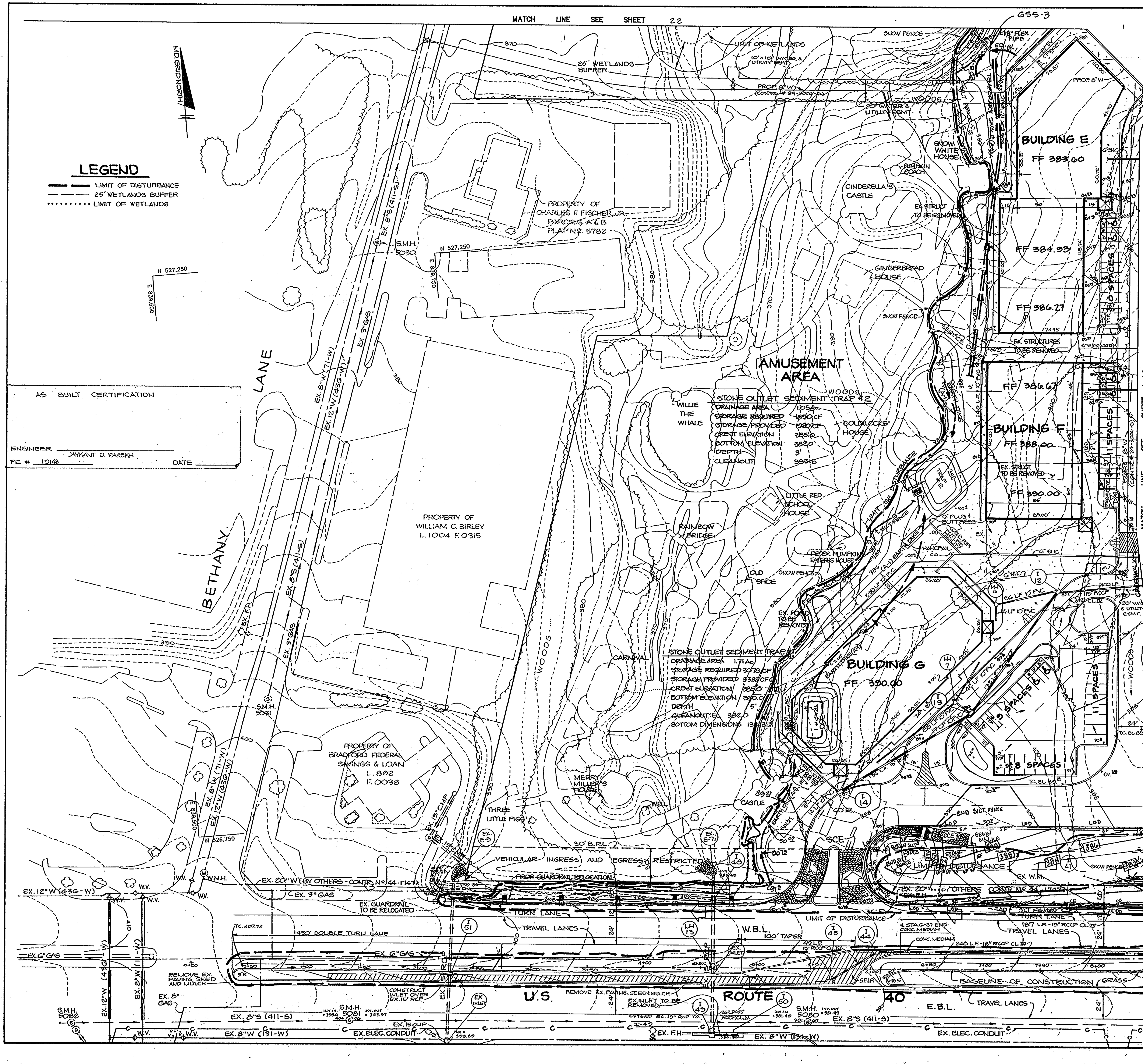
4/3/91 DATE
STATE OF MARYLAND ARTHUR E. MUEGGE No. 8707 REGISTERED PROFESSIONAL ENGINEER
ARTHUR E. MUEGGE 8707

WP-90-54, ZB CASE 867M
S-88-82 WP-89-143 F-90-92

DESIGNED BY:	M.G.K.
DRAWN BY:	S.R.H.
PROJECT NO:	30108
DATE:	APRIL 3, 1991
SCALE:	AS SHOWN
DRAWING NO.	10 OF 42

SDP-90-74

AS-BUILT



REV 4: PROFESSIONAL CERTIFICATION

I, MICHAEL J. GESELL, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO: 44097 EXPIRATION DATE: 6/9/15

FOR REVISION 4 ONLY: BY: BOHLER ENGINEERING

[signature] 10/17/14

FOR SNOW FENCE PLACEMENT SEE DETAIL, SHEET 40

4 REVISED GRADING TO FRONT ISLAND BUFFER BY BOHLER ENGINEERING. 06/24/14.

BY THE DEVELOPER:

"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

[signature] DEVELOPER — 4/3/91 DATE

BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

[signature] ENGINEER — 4-3-91 DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

[signature] U.S. SOIL CONSERVATION SERVICE — 4-17-91 DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED [signature] HOWARD S.C.D. — 4/17/91 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

[signature] COUNTY HEALTH OFFICER — 5-2-91 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

[signature] DIRECTOR — 5/3/91 DATE

[signature] CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — 5/3/91 DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[signature] DIRECTOR — 4/26/91 DATE

[signature] CHIEF, BUREAU OF ENGINEERING — 4-26-91 DATE

DATE	NO	REVISION
10/25/91	1	REVISED INLETS, PIPES & SIZE OF RCCP

OWNER/DEVELOPER

STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON MARYLAND 21204

PROJECT: A COMMERCIAL CENTER

THE ENCHANTED FOREST

PARCEL 'A' AND PARCEL '68'

AREA TAX MAP NO. 24 — PARCELS 454, 564, 19, 68
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: EROSION & SEDIMENT CONTROL PLAN

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

SDP-90-187

4-3-91
DATE

WP-90-54, ZB CASE 867M
S-89-82 WP89-143 F-90-32

DESIGNED BY: M.G.K.
DRAWN BY: E.B.J.
PROJECT NO: 30108
DATE: APRIL 3, 1991
SCALE: 1" = 40'
DRAWING NO. 20 OF 42

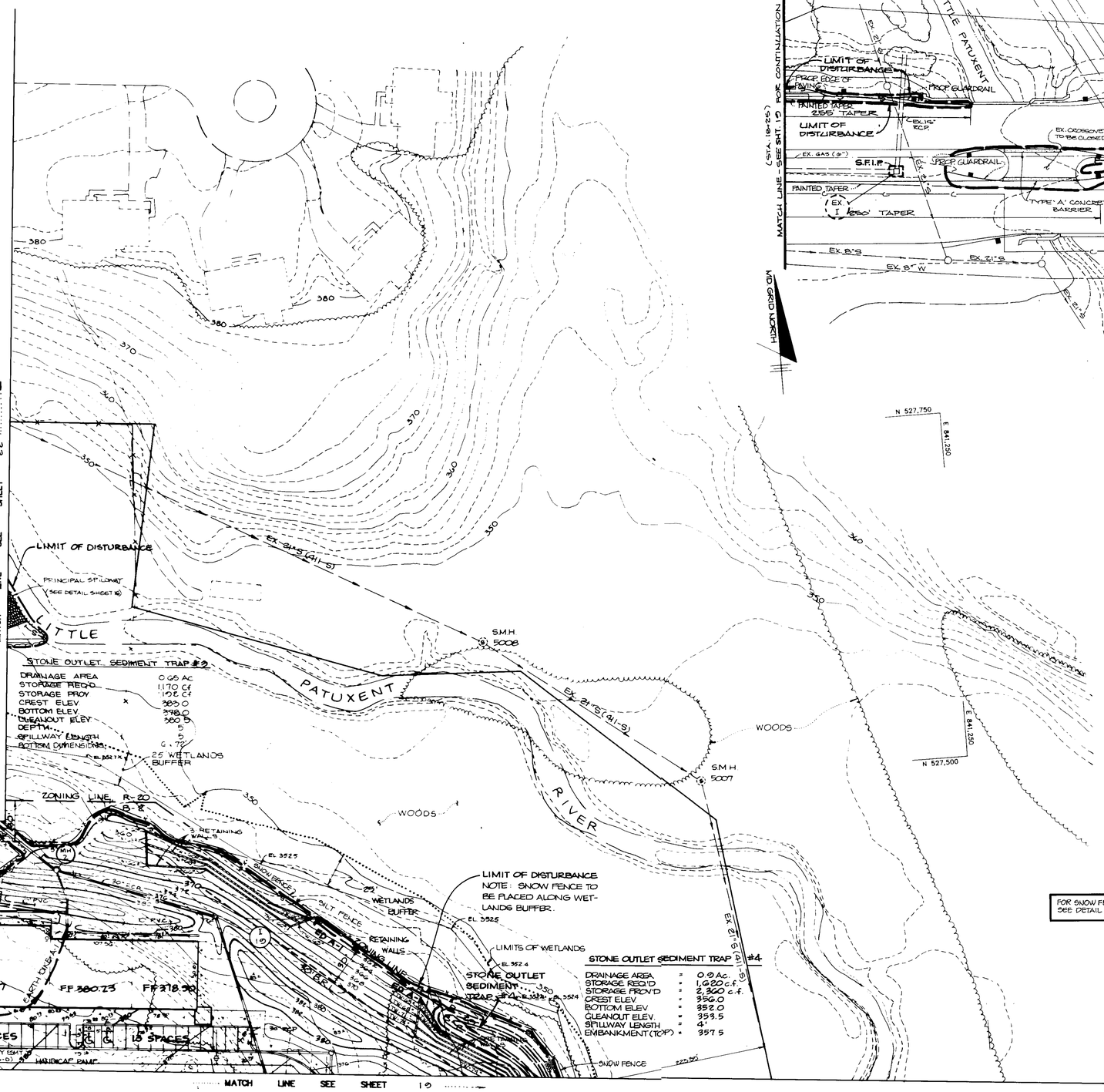
STATE OF MARYLAND — ARTHUR E. MUEGGE III — NO. 8707 REGISTERED PROFESSIONAL ENGINEER

ARTHUR E. MUEGGE #8707

SDP-90-74

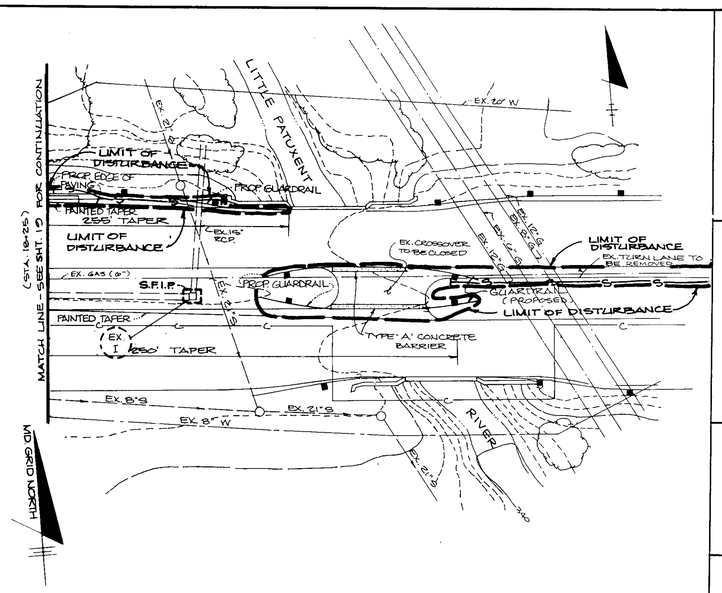
AS-BUILT

MARYLAND BLUEPRINT CO., INC. N20007



PLAN

SCALE: 1" = 40'



LEGEND

- LIMIT OF DISTURBANCE
- 25' WETLANDS BUFFER
- LIMIT OF WETLANDS

FOR SNOW FENCE PLACEMENT SEE DETAIL, SHEET 40

AS BUILT CERTIFICATION

ENGINEER _____

PE # _____ DATE _____

BY THE DEVELOPER:

"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

DEVELOPER — DATE 4/3/91

BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

ENGINEER — DATE 4.3.91

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

U.S. SOIL CONSERVATION SERVICE — DATE 4/17/91

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: HOWARD S.C.D. — DATE 4/17/91

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 5-2-91

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 5/3/91

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 5/3/91

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 4/26/91

CHIEF, BUREAU OF ENGINEERING — DATE 4-26-91

DATE	NO	REVISION

OWNER/DEVELOPER
STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON MARYLAND 21204

PROJECT A COMMERCIAL CENTER
THE ENCHANTED FOREST
PARCEL 'A' AND PARCEL 'GB'

AREA TAX MAP NO. 24 PARCELS 454, 564, 15, 68
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: EROSION & SEDIMENT CONTROL PLAN

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

SDP-90-187

4.3.91 DATE

STATE OF MARYLAND — ARTHUR E. MUEGGE — No. 6707 — REGISTERED PROFESSIONAL ENGINEER

ARTHUR E. MUEGGE #6707

WP 90-54, 28 CASE 867 M, S-80-82, WP 80-143, F-30-32.

DESIGNED BY: M.G.K.

DRAWN BY:

PROJECT NO: 30108

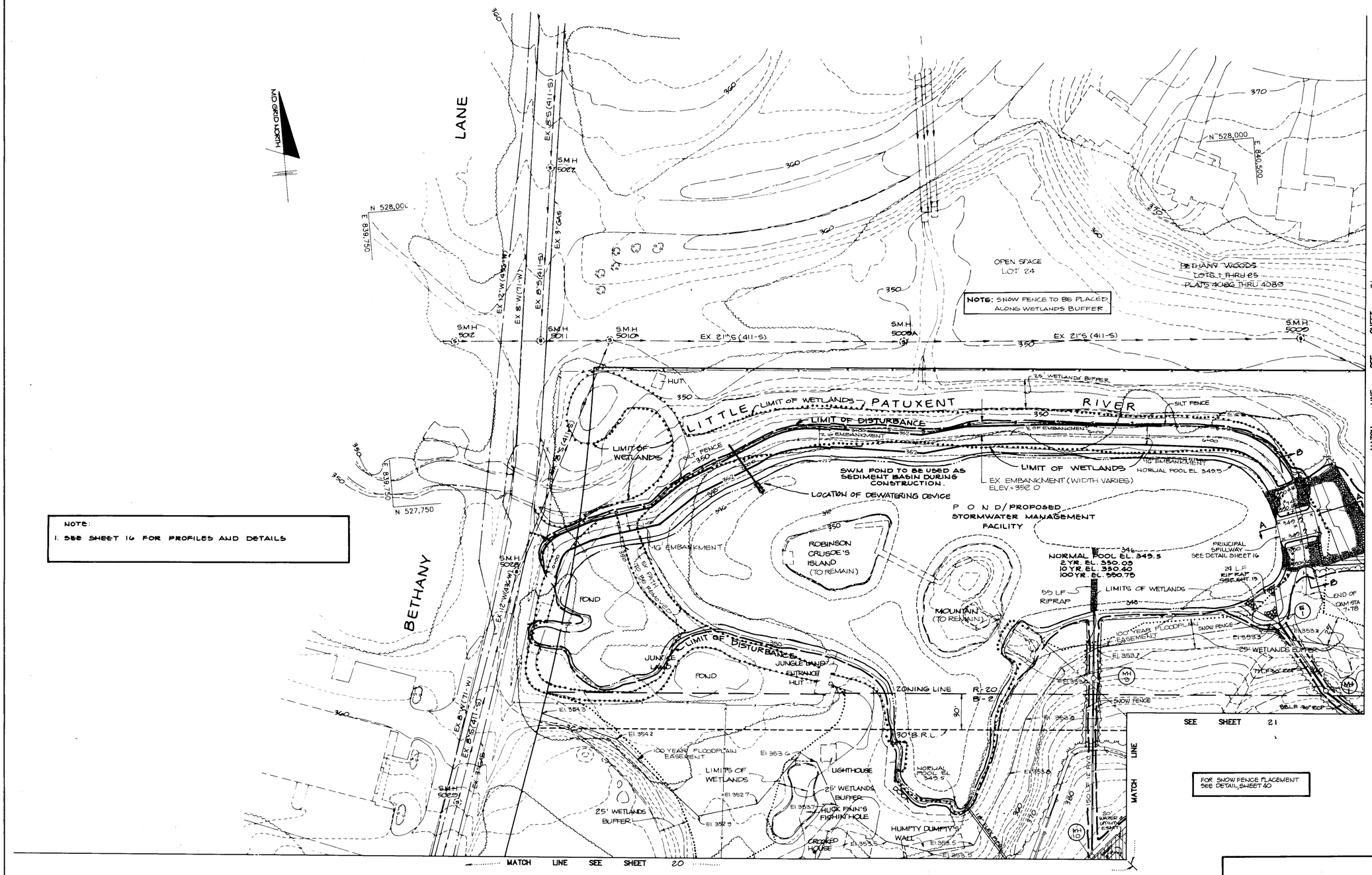
DATE: APRIL 3, 1991

SCALE: AS SHOWN

DRAWING NO. 21 OF 40

SDP-90-74

MARYLAND BLUEPRINT CO. INC. 410-837



NOTE:

1. SEE SHEET 16 FOR PROFILES AND DETAILS

FOR SNOW FENCE PLACEMENT SEE DETAIL, SHEET 40

PLAN

SCALE 1" = 40'

AS BUILT CERTIFICATION

ENGINEER _____

PE # _____ DATE _____

BY THE DEVELOPER:

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DEVELOPER _____ DATE _____

BY THE ENGINEER:

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ENGINEER _____ DATE 4-3-91

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

U.S. SOIL CONSERVATION SERVICE _____ DATE 4-17-91

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED _____ HOWARD S.C.D. _____ DATE 4/17/91

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER _____ DATE 5-2-91

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR _____ DATE 5/3/91

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT _____ DATE 5/3/91

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR _____ DATE 4/26/91

CHIEF, BUREAU OF ENGINEERING _____ DATE 4-26-91

DATE	NO	REVISION

OWNER/DEVELOPER

STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON MARYLAND 21204

PROJECT: A COMMERCIAL CENTER

THE ENCHANTED FOREST

PARCEL 'A' AND PARCEL 'GB'

AREA TAX MAP NO. 24 PARCELS 454, 564, 13, 68
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: EROSION & SEDIMENT CONTROL PLAN

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

SDP-90-187

4.3.91
DATE

ARTHUR E. MUEGGE #8707

WP-90-54, 'B' CASE 867M
S-85-82, WP 85-148 F 90-52

DESIGNED BY: M.G.K.

DRAWN BY:

PROJECT NO: 90108

DATE: APRIL 3, 1991

SCALE: AS SHOWN

DRAWING NO. 22 OF 40

SDP-90-74

MARYLAND BLUEPRINT CO. INC.

FLAN

SCALE 1" = 40'

BY THE DEVELOPER:

"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

DEVELOPER DATE

BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

ENGINEER — 4.3.91 DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

U.S. SOIL CONSERVATION SERVICE — 4-17-91 DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED — HOWARD S.C.D. — 4/17/91 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — 5-2-91 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — 5/2/91 DATE

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — 5/2/91 DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — 4/26/91 DATE

CHIEF, BUREAU OF ENGINEERING — 4-26-91 DATE

DATE	NO	REVISION

OWNER/DEVELOPER

STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON MARYLAND 21204

PROJECT A COMMERCIAL CENTER

THE ENCHANTED FOREST

PARCEL 'A' - PARCEL 68

AREA TAX MAP NO 24 PARCELS 454, 564, 15, 68
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE EROSION & SEDIMENT CONTROL PLAN

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

SDP-90-187

4.3.91 DATE

ARTHUR E. MUEGGE #8707

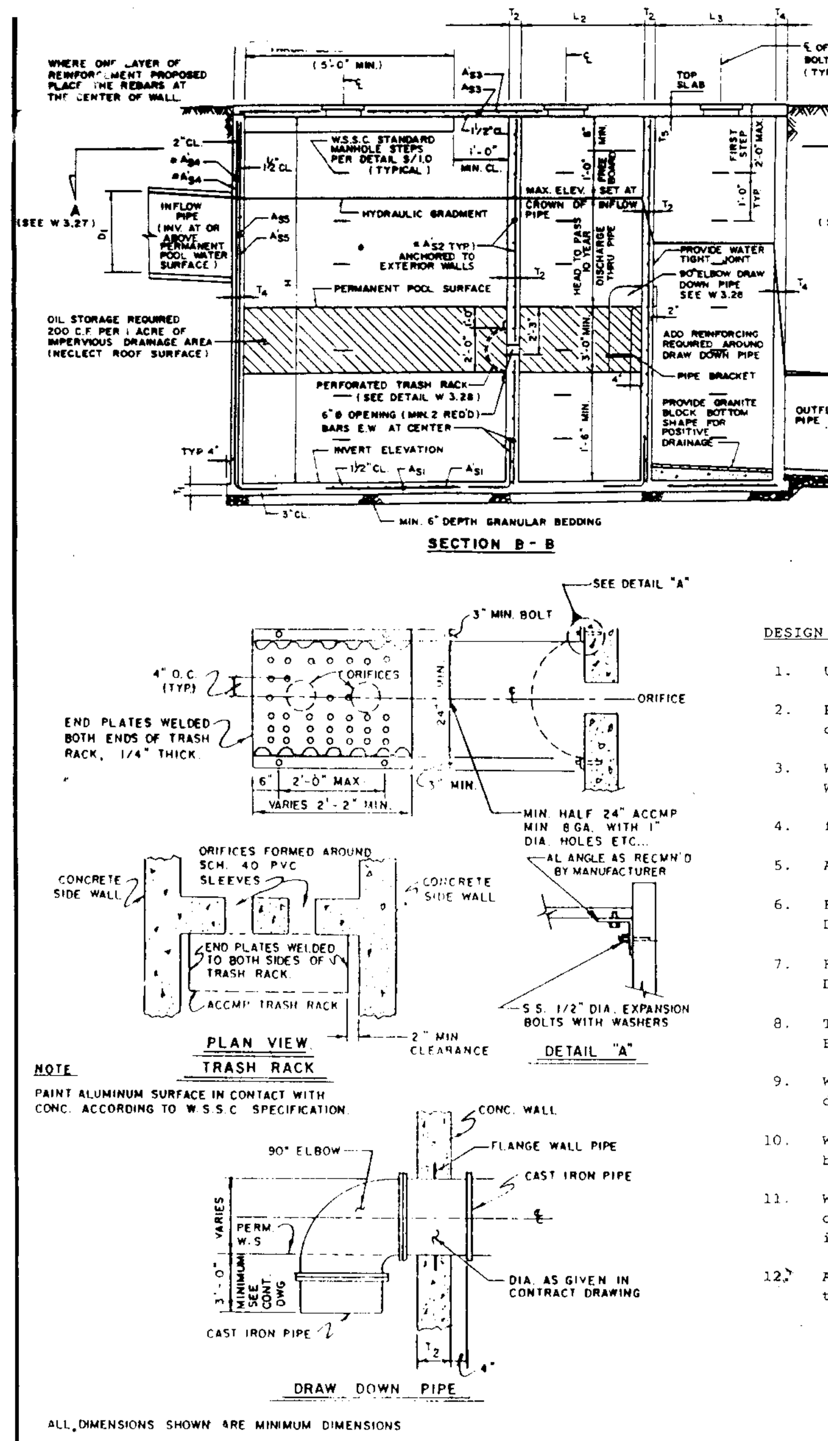
WP-90-54, ZB CASE 867M
S-89-82 WP-89-143 F-90-92

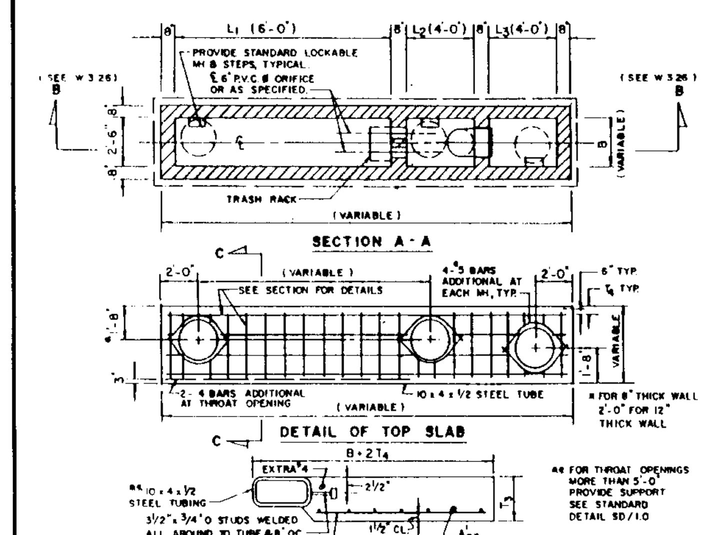
DESIGNED BY: M.G.K.
DRAWN BY: D.J.E.
PROJECT NO: 90108
DATE: APRIL 3, 1991
SCALE: AS SHOWN
DRAWING NO. 28 OF 40

AS BUILT CERTIFICATE

ARTHUR E. MUEGGE #8707 DATE

SDP-90-74





LIMITS			BASE SLAB			PARTITION WALLS			TOP SLAB			OUTER WALLS			
B FT	H FT	L FT	T_1 INS	A_{S1}	A'_{S1}	T_2 INS	A_{S2}	A'_{S2}	T_3 INS	A_{S3}	A'_{S3}	T_4 INS	A_{S4}	A_{S5}	A'_{S5}
5	8	10	6"	#5 @ 7"	#4 @ 12"	8"	#4 @ 6"	#4 @ 6"	6"	#5 @ 6"	#4 @ 6"	8"	#5 @ 5"	#4 @ 12"	
8	12	15	8"	#6 @ 6"	#4 @ 12"	12"	#6 @ 6"	#6 @ 6"	8"	#6 @ 6"	#5 @ 6"	12"	#7 @ 7"	#4 @ 12"	#5 @ 6" / #5 @ 6"

CAST IN PLACE CONCRETE f'c = 4000 psi @ 28 DAYS. REINFORCING STEEL IN ACCORDANCE WITH ASTM A 615 GRADE 60

NOTE: FOR SECTION AND DETAILS REFER TO SD/7.0a AND SD/7.0b

DOWELS	A	B
#4	18	18
#5	27	27
#6	30	30

WATER QUALITY STRUCTURES

DESIGN AND GENERAL NOTES:

1. Use poured-in place concrete for the entire structure.
2. Refer to Maryland State Highway Administration for materials and methods of construction.
3. Wall thickness shall be as follows: per Howard County Standard Details W3.26 and W3.27.
4. f'c = 4,000 psi at 28 days
5. All reinforcing steel to be ASTM A615, GR.60.
6. For details concerning throat openings, refer to Howard County Standard Detail SD.4.01.
7. For details not noted in this standard, refer to Howard County Standard Detail SD.4.01, W3.26, W3.27 and W3.38.
8. The top 4 inches of walls may be brick masonry for leveling, if required. Brick masonry shall comply with the latest SHA specification.
9. When grate opening is used, refer to the appropriate SHA Standard for details. Details shall be shown on the plans.
10. When inside width of structure is greater than 4'-00", reinforcing shall be revised as needed.
11. When structure is subject to traffic loading, reinforcing shall be designed for the appropriate traffic loads. Design loads shall be indicated on the plan.
12. All inlets and incoming pipes shall be checked for possible backwater or tailwater problems.

CONSTRUCTION NOTES:

1. Silt and debris shall not be allowed to enter the structures until contributing drainage areas have been permanently stabilized.
2. All openings to structures shall be protected with the appropriate sediment control measures during construction.

INSPECTION NOTES:

1. Prior to start of construction on water quality structures, the Howard County Department of Public Works inspector must be called 48 hours in advance at 792-2630.
2. The Howard County Department of Public Works inspector must be notified (792-2630) at each of the following stages:
   A. Approval of subgrade for footings.
   B. Footing formed and steel set prior to pouring.
   C. Structure sides formed and steel set prior to pouring.
   D. Prior to top slab and manholes being set, Howard County Department of Public Works inspector must check structure and all debris and silt in structure removed.
   E. When site is permanently stabilized and sediment control measures to protect inlet are to be removed.

MAINTENANCE NOTES (WATER QUALITY STRUCTURE WASTE)

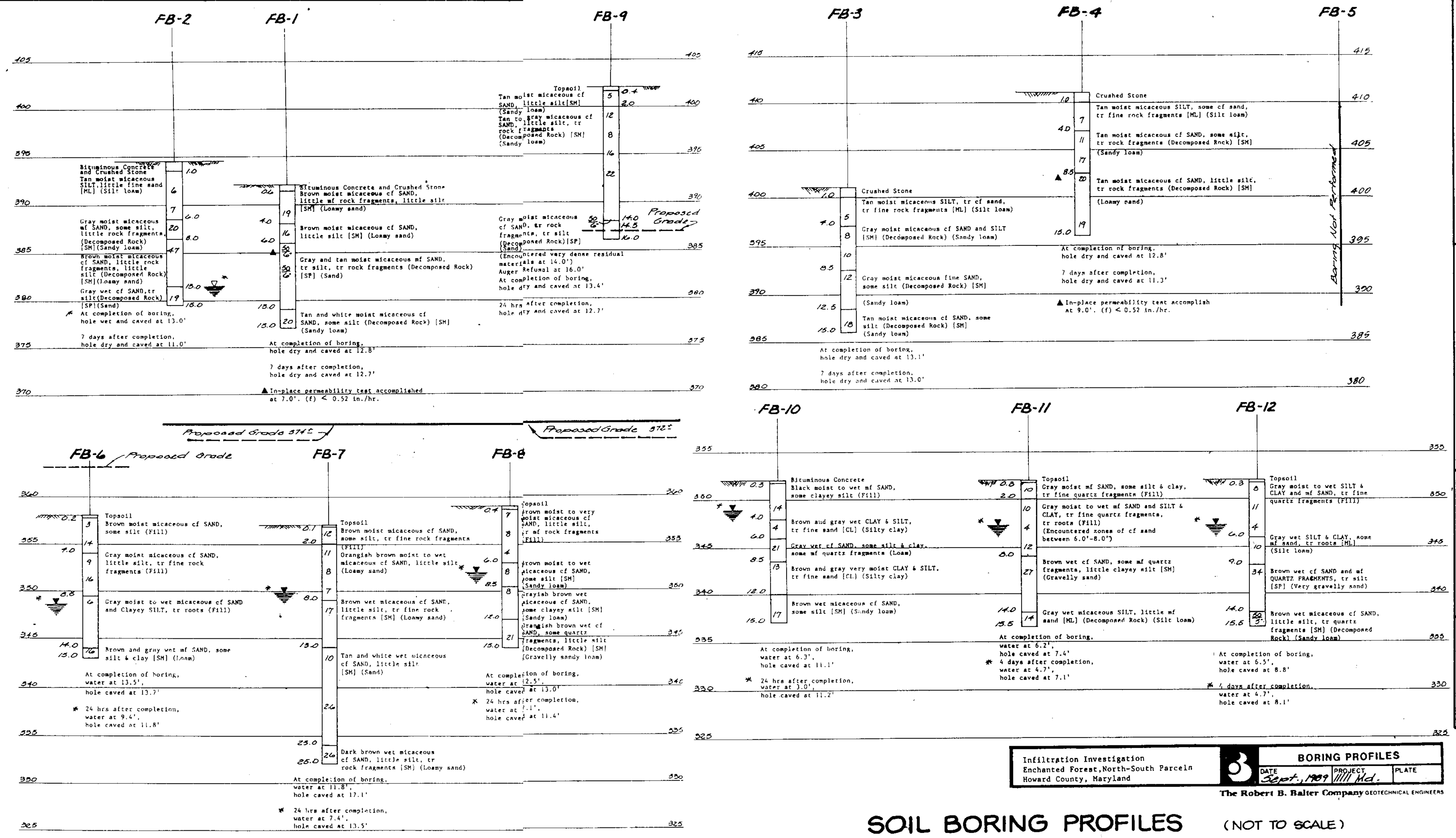
1. Water Quality Structures will require periodical cleaning. Owners of these facilities will have to clean them as needed or on a frequency that the County determines is appropriate. Owners of water quality structures will be notified by the County of the frequency of maintenance.
2. Maintenance of these facilities will consist of cleaning out the separator and disposal of the waste and the repair of the facility as needed.
3. The disposal of the liquid and solid matter should be as follows:
   A. All liquid material in the separator inlet shall be pumped into a suitable tank truck and disposed of at an approved sanitary district discharge manhole or be taken to an approved sewage treatment plan for discharge.
   B. The solid material shall be landfilled in an approved sanitary landfill.
4. The inlet pipes, trash racks, grates, and structural parts shall be repaired as needed.

WATER QUALITY STRUCTURE CHART

STRUCT. NUMBER	PAVED AREA (AC.)	OIL STORAGE REQUIRED (CF)	OIL STORAGE PROVIDED (CF)	DIMENSIONS L1	L2	L3	B	H	FLOOR SLAB ELEV.	DRAW DOWN PIPE DIA.	INV.	THROAT LENGTH IF REQ'D	TOP SLAB ELEV. UP	DOWN	ORIFICE AMOUNT	SIZE
I-16	0.37	74	120	6'-0"	4'-0"	4'-0"	4'-0"	15.30'	352.30	18"	356.80	5'	367.60	367.30	3	8"
I-21	0.20	40	75	6'-0"	4'-0"	4'-0"	2'-6"	10.52'	380.87	12"	385.37	10'	392.06	391.47	2	6"
I-22	0.19	38	75	6'-0"	4'-0"	4'-0"	2'-6"	9.18'	383.75	12"	388.25	5'	394.00	393.60	2	6"
I-23	0.31	128	120	8'-0"	4'-3"	4'-0"	3'-6"	14.83	382.65	24"	387.15	5'	397.48	397.10	2	12"
I-25	0.37	74	120	6'-0"	4'-0"	4'-0"	4'-0"	11.87	402.08	18"	406.58	5	414.62	414.30	3	8"
I-28	0.56	112	112	6'-0"	4'-8"	4'-0"	3'-6"	11.17	401.76	18"	406.26	5	413.94	413.60	3	6"
I-29	0.38	76	105	6'-0"	4'-0"	4'-0"	3'-6"	9.63	403.80	15"	408.30	5'	414.47	414.10	3	6"

WATER QUALITY STRUCTURES NOTES AND DETAILS

NO SCALE



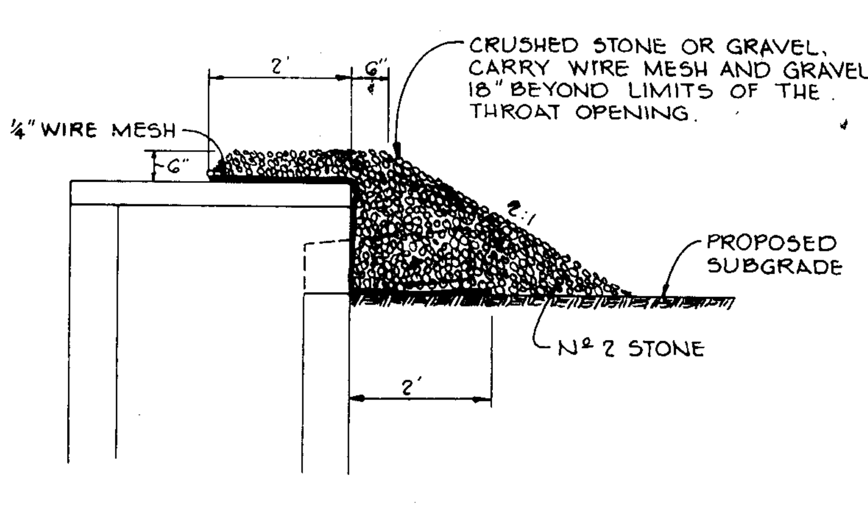
SOIL BORING PROFILES (NOT TO SCALE)

NORTH SITE
SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT.
2. INSTALL STABILIZED CONSTRUCTION ENTRANCE, TRAPS 1, 2, 4, 5 AND 7, SILT FENCE, SNOW FENCE, TEMPORARY SWALE, 18" FLEX PIPE TO EXISTING POND, STONE FILTER INLET PROTECTION FOR EXISTING INLETS ALONG ROUTE 40. DRAIN EXISTING POND (SEE NOTE THIS SHEET). INSTALL CORE TRENCH, OUTLET STRUCTURE AND WIDEN DAM. STABILIZE IN ACCORDANCE WITH TEMPORARY SEEDING NOTES. MAINTAIN TRAP #3 AS SHOWN ON SDP-90-187. (7 DAYS)
3. REMOVE EXISTING STRUCTURES. ROUGH GRADE SITE. STABILIZE IN ACCORDANCE WITH TEMPORARY SEEDING NOTES. (21 DAYS)
4. INSTALL RETAINING WALLS. INSTALL TRAP 6 WITH FLEX PIPE TO OUTFALL ONTO STONE OUTLET OF TRAP 5. REMOVE REMAINDER OF TRAP 5 WITH APPROVAL OF SEDIMENT INSPECTOR. STABILIZE DISTURBED AREAS IN ACCORDANCE WITH TEMPORARY SEEDING NOTES. (10 DAYS)
5. (1) INSTALL STORM DRAIN SYSTEM FROM E-1 THRU I-2. BEGIN BUILDING CONSTRUCTION. FINISH STORM DRAIN I-2 THRU I-11, I-2 THRU I-4, I-8 THRU M-6 AND I-12 THRU I-14. WITH APPROVAL OF SEDIMENT INSPECTOR REMOVE TRAP 3 AS SHOWN ON SDP-90-187 AND INSTALL TRAP 3 AS SHOWN ON SHEET 21. REMOVE TRAP 7 TO INSTALL STORM DRAIN SYSTEM E-3 THRU I-17. INSTALL TRAP 8 AT I-17. INSTALL REMAINDER OF STORM DRAIN SYSTEM AND UTILITIES. INSTALL TRAP 9 AT I-38. INSTALL STONE FILTER INLET PROTECTION (SFIP) AT ALL INLETS WHERE SHOWN. STABILIZE AREAS TO BE PAVED WITH BASE COURSE UP TO TRAPS. (TRAPS 6 AND 8 ARE TO REMAIN IN OPERATION) STABILIZE ALL OTHER DISTURBED AREAS IN ACCORDANCE WITH TEMPORARY SEEDING NOTES.
6. WITH APPROVAL OF SEDIMENT INSPECTOR, REMOVE TRAP 1 AND BEGIN BUILDING CONSTRUCTION. STABILIZE DISTURED AREAS IN ACCORDANCE WITH TEMPORARY SEEDING NOTES.
7. INSTALL CURB AND GUTTER AND BEGIN PAVING. TRAP 6 AND 8 ARE TO REMAIN IN PLACE. (7 DAYS)
8. COMPLETE BUILDING CONSTRUCTION. STABILIZE DISTURBED AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES.
9. WITH APPROVAL OF SEDIMENT INSPECTOR REMOVE TRAPS 6 AND 8 AND FINALIZE PAVING. REMOVE REMAINING TRAPS AND FINAL GRADE. STABILIZE ALL REMAINING DISTURBED AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES. (3 DAYS)

NOTE FOR EXISTING POND DRAINING

1. OBTAIN ALL NECESSARY PERMITS.
2. DRAIN EXISTING POND BY PUMPING WATER ON TO A STABILIZED OUTFALL.
3. BEGINING 4' FROM THE EDGE OF EXISTING DAM (SEE PROFILE THRU PRINCIPAL SPILLWAY, SHEET 16) BEGIN REMOVING REMAINDER OF EXISTING DAM TO ALLOW FOR CORE TRENCH INSTALLATION. INSTALL TEMPORARY DEWATERING DEVICE. FINISH DAM BY WIDENING TO A TOP WIDTH OF 16' AND INSTALL PRINCIPAL SPILLWAY.



INLET BLOCKING DETAIL

(NO SCALE)

AS BUILT CERTIFICATION

ENGINEER J. Parekh

PE # ______ DATE 2.18.94

SOUTH SITE
SEQUENCE OF CONSTRUCTION

1. Obtain a Grading Permit.
2. INSTALL SCE, SILT FENCE AND EARTH DIKES & TRAPS 11 & 12 (5 DAYS)
3. INSTALL STORM DRAIN SYSTEM FROM E-2 TO S-2. INSTALL TRAP 10 AND SFIP AS NECESSARY ---------- (7 DAYS)
4. ROUGH GRADE ONLY FOR REMAINDER OF STORM DRAIN INSTALLATION
5. INSTALL SEDIMENT 13 AND STORM DRAIN FOR UPPER PARKING AREA INCLUDING SFIP AS NECESSARY, EXTEND STONE OUTLET TRAPS 11 AND 12 TO INLET OPENINGS AT I-28 AND I-29.
6. Perform grading. Contractor to maintain positive drainage on all earth dikes. Install remainder of storm drain as site is graded to subgrade ---------- (3 weeks)
7. Begin building construction.
8. Stabilize disturbed areas in accordance with the temporary seeding notes ---------- (2 days)
9. Install curb and gutter and begin paving.
10. Complete construction.
11. Upon approval of the Sediment Control Inspector, remove the pipe outlet sediment trap and install the SWM storage pipes in that area converting temporary riser to modified manhole ---------- (1 week)
12. Finish curb and gutter and paving of entrance to Route 40 --- (2 days)
13. Stabilize all disturbed areas in accordance with the permanent seeding notes ---------- (1 day)
14. Upon permission of the Sediment Control Inspector, remove remainder of sediment controls and stabilize all areas disturbed with paving or in accordance with the permanent seeding notes.

BY THE DEVELOPER:

"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

DEVELOPER ______ DATE 4/3/91

BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

ENGINEER Arthur E. Muegge DATE 4.3.91

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

U.S. SOIL CONSERVATION SERVICE ______ DATE 4-17-91

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED Robert W. Ziehm HOWARD S.C.D. DATE 4/17/91

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER ______ DATE 5-2-91

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR ______ DATE 5/3/91

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT ______ DATE 5/3/91

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR ______ DATE 4/26/91

CHIEF, BUREAU OF ENGINEERING ______ DATE 4-26-91

DATE	NO.	REVISION
5-3-91	1	CHANGE NOTE #5.

OWNER/DEVELOPER

STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON, MARYLAND 21204

PROJECT: A COMMERCIAL CENTER

THE ENCHANTED FOREST

PARCEL 'A' AND PARCEL '68'

AREA TAX MAP No. 24 PARCELS 454, 564, 19, 68
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: **WATER QUALITY STRUCTURE DETAILS, BORING PROFILES & DETAILS**

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

SDP-90-187
WP-90-54, ZB CASE 867M
S-89-82 WP89-143 F-90-32

DATE 4.3.91

ARTHUR E. MUEGGE No. 8707

DESIGNED BY: M.G.K.
DRAWN BY: G.D.H.
PROJECT NO: 30108
DATE: APRIL 3, 1991
SCALE: AS SHOWN
DRAWING NO. 24 OF 40

SDP-90-74

MARYLAND BLUEPRINT CO., INC. N20007

SOIL CONSERVATION SERVICE
MARYLAND
CONSTRUCTION SPECIFICATIONS
FOR
PONDS

These specifications are appropriate to ponds within the scope of the Standard for practice 378.

I. SITE PREPARATION

Areas designated for borrow areas, embankment, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other objectionable material shall be removed. Channel banks and sharp breaks shall be sloped to no steeper than 1:1.

Areas to be covered by the pond or reservoir will be cleared of all trees, brush, logs, fences, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush and stumps shall be cut approximately level with the ground surface.

All cleared and grubbed material shall be disposed of outside and below the limits of the dam and reservoir as directed by the owner or his representative. When specified, a sufficient quantity of topsoil will be stockpiled in a suitable location for use on the embankment and other designated areas.

II. EARTH FILL

Material

The fill material shall be taken from approved designated borrow area or areas. It shall be free of roots, stumps, wood, rubbish, oversize stones, frozen or other objectionable materials. The embankment shall be constructed to an elevation which provides for anticipated settlement to the design elevation. The fill height all along the length of the embankment shall be increased above the design elevation (including freeboard) as shown on the plans.

Placement

Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in 8-inch maximum thickness (before compaction) layers which are to be continuous over the entire length of the fill. The most porous borrow material shall be placed in the downstream portions of the embankment.

Compaction

The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of the equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction can be obtained with the equipment used.

Where a minimum required density is specified, each layer of fill shall be compacted as necessary to obtain that density and is to be certified by the Engineer.

Cutoff Trench

Where specified, a cutoff trench shall be excavated along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be as shown on the drawings, with the minimum width being four feet. The depth shall be at least four feet or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill material for the cutoff trench shall be the most impervious material available and shall be compacted with equipment or rollers to assure maximum density and minimum permeability.

III. STRUCTURAL BACKFILL

Backfill material shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a concrete structure or pipe unless there is a compacted fill of twenty-four inches or greater over the structure or pipe.

IV. PIPE CONDUITS

All pipes shall be circular in cross section.

A. Corrugated Metal Pipe

1. Materials - (Steel Pipe) - This pipe and its appurtenances shall be galvanized and fully bituminous coated and shall conform to the requirements of AASHTO Specification M-190 Type A with watertight coupling bands. Any bituminous coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound.

   Steel pipes with polymeric coatings shall have a minimum coating thickness of 0.01 inch (10 mil) on both sides of the pipe. The following coatings are commercially available: Nexon, Plasti-Cote, Blac-Klad, and Beth-Cu-Loy. Coated corrugated steel pipe shall meet the requirements of AASHTO M-245 and M-246.

   Materials - (Aluminized Steel Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-274-79I with watertight coupling bands or flanges.

   Materials - (Aluminum Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-196 or M-211 with watertight coupling bands or flanges. Coupling bands, anti-seep collars, end sections, etc. must be composed of the same material as the pipe. Metals must be insulated from dissimilar materials with use of rubber or plastic insulating materials at least 24 mils in thickness. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer. Hot dip galvanized bolts may be used for connections. The pH of the surrounding soils shall be less than 9 and greater than 4.

2. Connections - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around when the pipe and riser are metal. Watertight coupling bands or flanges shall be used at all joints. Anti-seep collars shall be connected to the pipe in such a manner as to the completely watertight. Dimple bands are not considered to be watertight.

3. Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.

4. Laying pipe - The pipe shall be placed with inside circumferential laps pointing downstream and with the longitudinal laps at the sides.

5. Backfilling shall conform to structural backfill as shown above.

6. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

B. Reinforced Concrete Pipe

1. Materials - Reinforced concrete pipe shall have a rubber gasket joint and shall equal or exceed ASTM Specification C-361. An approved equivalent is AWWA Specification C-301.

2. Bedding - All reinforced concrete pipe conduits shall be laid in a concrete bedding for their entire length. This bedding shall consist of high slump concrete placed under the pipe and up the sides of the pipe at least 10% of its outside diameter with a minimum thickness of 3", or as shown on the drawings.

3. Laying pipe - Bell and spigot pipe shall be placed with the bell end upstream. Joints shall be made in accordance with recommendations of the manufacturer of the material. After the joints are sealed for the entire line, the bedding shall be placed so that all spaces under the pipe are filled. Care shall be exercised to prevent any deviation from the original line and grade of the pipe.

4. Backfilling shall conform to structural backfill as shown above.

5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

C. For pipes of other materials, specific specifications shall be shown on the drawings.

V. CONCRETE

1. Materials

a. Cement - Normal Portland cement shall conform to the latest ASTM Specification C-150.

b. Water - The water used in concrete shall be clean, free from oil, acid, alkali, scales, organic matter or other objectionable substances.

c. Sand - The sand used in concrete shall be clean, hard, strong and durable, and shall be well graded with 100 percent passing a one-quarter inch sieve. Limestone sand shall not be used.

d. Coarse Aggregate - The coarse aggregate shall be clean, hard, strong and durable, and free from clay or dirt. It shall be well graded with a maximum size of one and one-half (1-1/2) inches.

e. Reinforcing Steel - The reinforcing steel shall be deformed bars of intermediate grade billet steel or rail steel conforming to ASTM Specification A-615.

2. Design Mix - The concrete shall be mixed in the following proportions, measured by weight. The water-cement ratio shall be 5-1/2 to 6 U.S. Gallons of water per 94 pound bag of cement. The proportion of materials for the trial mix shall be 1:2:3-1/2. The combination of aggregates may be adjusted to produce a plastic and workable mix that will not produce harshness in placing or honeycombing in the structure.

3. Mixing - The concrete ingredients shall be mixed in batch mixers until the mixture is homogeneous and of uniform consistency. The mixing of each batch shall continue for not less than one and one-half minutes after all the ingredients, except the full amount of water, are in the mixer. The minimum mixing time is predicted on proper control of the speed of rotation of the mixer and of the introduction of the materials, including water, into the mixer. Water shall be added prior to, during, and following the mixer-charging operations. Excessive overmixing requiring the addition of water to preserve the required concrete consistency shall not be permitted. Truck mixing will be allowed provided that the use of this method shall cause no violation of any applicable provisions of the specifications given here.

4. Forms - The forms shall have sufficient strength and rigidity to hold the concrete and to withstand the necessary pressure, tamping, and vibration without deflection from the prescribed lines. They shall be mortar-tight and constructed so that they can be removed without hammering or prying against the concrete.

   The inside of forms shall be oiled with a non-staining mineral oil or thoroughly wetted before concrete is placed.

   Forms may be removed 24 hours after the placement of concrete. All wire ties and other devices used shall be recessed from the surface of the concrete.

5. Reinforcing Steel - All reinforcing material shall be free of dirt, rust, scale, oil, paint or any other coatings. The steel shall be accurately placed and securely tied and blocked into position so that no movement of the steel will occur during placement of concrete.

6. Consolidating - Concrete shall be consolidated with internal type mechanical vibrators. Vibration shall be suplemented by spading and hand tamping as necessary to insure smooth and dense concrete along form surfaces, in corners, and around embedded items.

7. Finishing - Defective concrete, honeycombed areas, voids left by the removal of tie rods, ridges on all concrete surfaces permanently exposed to view or exposed to water on the finished structure, shall be repaired immediately after the removal of forms. All voids shall be reamed and completely filled with dry-patching mortar.

8. Protection and Curing - Exposed surfaces of concrete shall be protected from the direct rays of the sun for at least the first three (3) days. All concrete shall be kept continuously moist for at least ten (10) days after being placed. Moisture may be applied by spraying or sprinkling as necessary to prevent the concrete from drying. Concrete shall not be exposed to freezing during the curing period. Curing compunds may also be used.

9. Placing Temperature - Concrete may not be placed at temperatures below 37° F with the temperature falling, or 34° with the temperature rising.

VI. STABILIZATION

All borrow areas shall be graded to provide proper drainage and left in a sightly condition. All exposed surfaces of the embankment, spillway, spoil and borrow areas, and berms shall be stabilized by seeding, liming, fertilizing and mulching (if required) in accordance with the vegetative treatment specifications or as shown on the accompanying drawings.

VII. EROSION AND SEDIMENT CONTROL

Construction operations will be carried out in such a manner that erosion will be controlled and water and air pollution minimized. State and local laws concerning pollution abatement will be followed. Construction plans shall detail erosion and sediment control measures to be employed during the construction process.

SEDIMENT CONTROL NOTES

1. A minimum of 24 hours notice must be given to the Howard County Office of Inspections and Permits prior to the start of any construction (992-2437).

2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

3. Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.

4. All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.

5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51) sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.

6. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.

7. Site Analysis:

Total Area of Site	36.76	acres
Area Disturbed	28.80	acres
Area to be roofed or paved	10.50	acres
Area to be vegetatively stabilized	8.81	acres
Total Cut	53,082	Cu. yds.
Total Fill	50,000	Cu. yds.

8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.

9. Additional sediment controls must be provided, if deemed necessary by the Howard County Department of Public Works Sediment Control Inspector.

10. Site grading will begin only after all perimeter sediment control measures have been installed and are in a functioning condition.

11. Sediment will be removed from traps when its depth reaches the clean out elevation shown on the plans.

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.

Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.

Soil Amendments: Apply 600 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq. ft.).

Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2½ bushel per acre of annual rye (3.2 lbs./1000 sq. ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (.07 lbs./1000 sq. ft.). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

Mulching: Apply 1½ to 2 tons per acre (70 to 90 lbs./1000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal./1000 sq. ft.) of emulsified asphalt on flat areas. On slopes, 8 ft. or higher, use 348 gal. per acre (8 gal./1000 sq. ft.) for anchoring.

Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.

Soil Amendments: In lieu of soil test recommendations, use one of the following schedules:

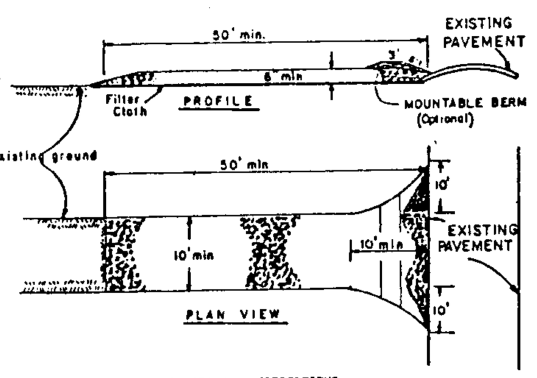
1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq ft).

2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil.

Seeding: For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs. per acre (1.4 lbs./1000 sq. ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (.05 lbs/1000 sq ft) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) 2 tons per acre of well-anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well-anchored straw.

Mulching: Apply 1½ to 2 tons per acre (70 to 90 lbs./1000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal./1000 sq. ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal./1000 sq. ft.) for anchoring.

Maintenance: Inspect all seeded areas and make needed repairs, replacements and reseedings.

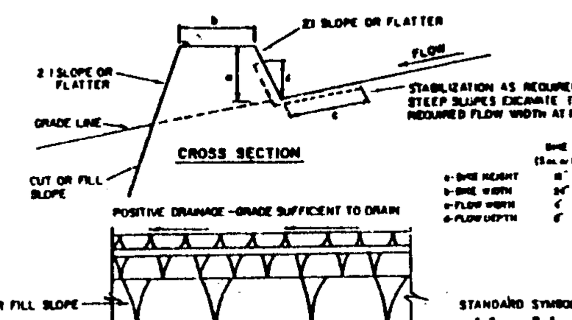


CONSTRUCTION SPECIFICATIONS

1. Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
2. Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
3. Thickness - Not less than six (6) inches.
4. Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
8. Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
9. Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE

NO SCALE



CONSTRUCTION SPECIFICATIONS

1. ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
2. ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
3. TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
4. FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
5. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. RUNOFF SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT ADEQUATELY STABILIZED.
6. STABILIZATION SHALL BE: (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH OR STRAW MULCH IF NOT IN SEEDING SEASON, (B) FLOW CHANNEL AS PER THE CHART BELOW.

FLOW CHANNEL STABILIZATION

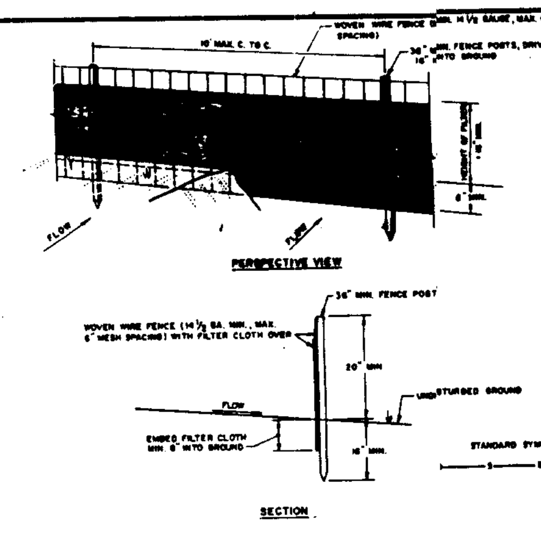
TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	.5-3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.0%	SEED AND STRAW MULCH	SEED USING JUTE, OR EXCELSIOR; SOD; 2" STONE
3	5.1-8.0%	SEED WITH JUTE, OR SOD; 2" STONE	LINED RIP-RAP 4-8"
4	8.1-20%	LINED RIP-RAP 4-8"	ENGINEERING DESIGN

A. STONE TO BE 2 INCH STONE, OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER AT LEAST 5 INCHES IN THICKNESS AND BE PRESSED INTO THE SOIL WITH CONSTRUCTION EQUIPMENT.
B. RIP-RAP TO BE 4-8 INCHES IN A LAYER AT LEAST 8 INCHES THICKNESS AND PRESSED INTO THE SOIL.
C. APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.
7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

EARTH DIKE

NO SCALE

NOTE:
CUT AND FILL QUANTITIES PROVIDED UNDER SITE ANALYSIS DO NOT REPRESENT BID QUANTITIES. THESE QUANTITES DO NOT DISTINGUISH BETWEEN TOPSOIL, STRUCTURAL FILL OR EMBANKMENT MATERIAL, NOR DO THEY REFLECT CONSIDERATION OF UNDERCUTTING OR REMOVAL OF UNSUITABLE MATERIAL. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH SITE CONDITIONS AND SUB-SURFACE TEST REPORTS AND SHALL MAKE ALL ADDITIONAL TESTS AND INVESTIGATIONS AS HE DEEMS NECESSARY TO DETERMINE QUANTITIES OF WORK AND PHYSICAL CONDITIONS WHICH MAY AFFECT THE WORK.



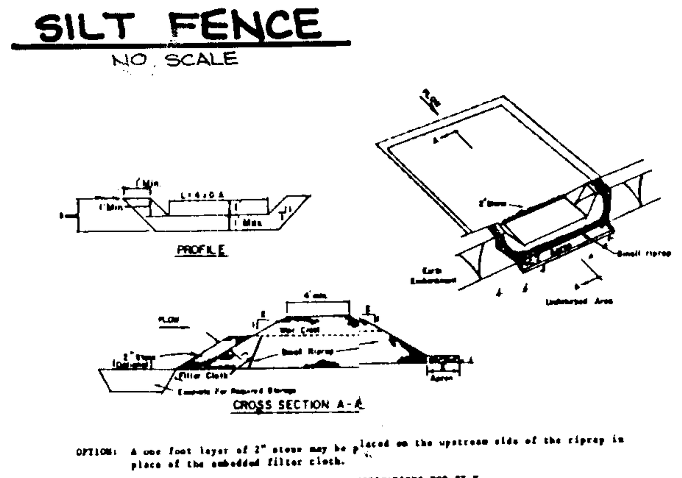
CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD
FENCE: WOVEN WIRE, 14 GA. 6" MAX. MESH OPENING
FILTER CLOTH: FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL
PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL.

SILT FENCE

NO SCALE



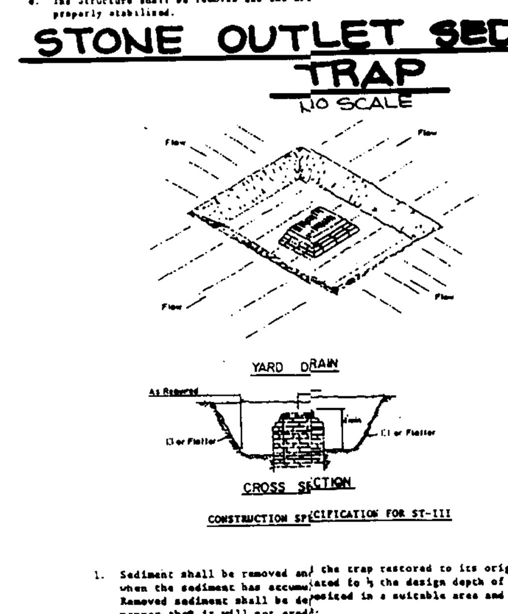
OPTION: A one foot layer of 2" stone may be placed on the upstream side of the riprap in place of the embedded filter cloth.

CONSTRUCTION SPECIFICATIONS FOR ST-V

1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
2. The fill material for the embankment shall be free of roots and other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed.
3. All cut and fill slopes shall be 2:1 or flatter.
4. The stone used in the outlet shall be small riprap 4"-8" along with a 1' thickness of 2" aggregate placed on the up-grade side on the small riprap or embedded filter cloth in the riprap.
5. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to ½ the design depth of the trap.
6. The structure shall be inspected after each rain and repairs made as needed.
7. Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
8. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

STONE OUTLET SEDIMENT TRAP

NO SCALE



CONSTRUCTION SPECIFICATION FOR ST-III

1. Sediment shall be removed and the trap restored to its original dimensions when the sediment has accumulated to ½ the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
2. The volume of sediment storage shall be 1800 cubic feet per acre of contributory drainage.
3. The structure shall be inspected after each rain and repairs made as needed.
4. Construction operations shall be carried out in such a manner that erosion and water pollution shall be minimized.
5. The sediment trap shall be removed and the area stabilized when the constructed drainage area has been properly stabilized.
6. All cut slopes shall be 1:1 or flatter.

STORM INLET SEDIMENT TRAP

NO SCALE

Pipe Outlet Trap
CONSTRUCTION SPECIFICATION FOR ST-I

1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
2. The fill material for the embankment shall be free of roots or other woody vegetation as well as oversized stones, rocks, organic material, or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed.
3. Volume of sediment storage shall be 1800 cubic feet per acre of contributory drainage.
4. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
5. The structure shall be inspected after each rain and repairs made as needed.
6. Construction operations shall be carried out in such a manner that erosion and water pollution are minimized.
7. The structure shall be removed and area stabilized when the drainage area has been properly stabilized.
8. All fill slopes shall be 2:1 or flatter; cut slopes 1:1 or flatter.
9. All pipe connections shall be watertight.
10. The top 2/3 of the riser shall be perforated with one (1) inch diameter holes or slits spaced six(6) inches vertically and horizontally and placed in the concave portion of pipe. No holes will be allowed within six(6) inches of the horizontal barrel.
11. The riser shall be wrapped with 1/4 to 1/2 inch hardware cloth wire then wrapped with filter cloth (having an equivalent sieve size of 40 - 80). The filter cloth shall extend six (6) inches above the highest hole and six (6) inches below the lowest hole. Where ends of filter cloth come together, they shall be overlapped, folded and stapled to prevent bypass.
12. Straps or connecting bands shall be used to hold the filter cloth and wire fabric in place. They shall be placed at the top and bottom of the cloth.
13. Fill material around the pipe spillway shall be hand compacted in four(4) inch layers. A minimum of two (2) feet of hand-compacted backfill shall be placed over the pipe spillway before crossing it with construction equipment.
14. The riser shall be anchored with either a concrete base or steel plate base to prevent flotation. For concrete bases the depth shall be 12

NOTE:
FOR SEQUENCE OF CONSTRUCTION SEE SHEET 24.

I. Materials

A. Wooden frame is to be constructed of 2" x 4" construction grade lumber.

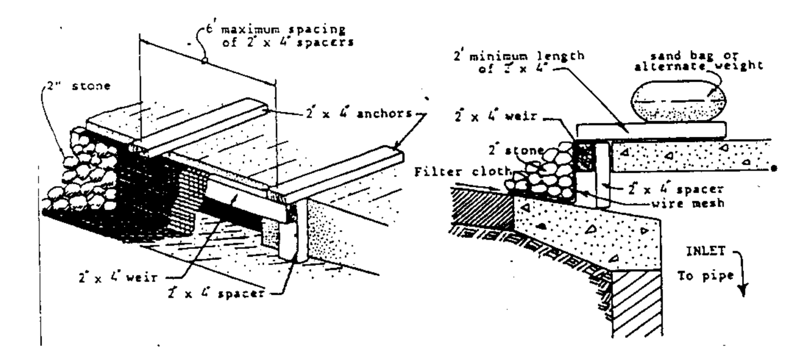
B. Wire mesh must be of sufficient strength to support filter fabric, and stone for curb inlets, with water fully impounded against it.

C. Filter cloth must be of a type approved for this purpose; resistant to sunlight with sieve size, EOS, 40-85, to allow sufficient passage of water and removal of sediment.

4. Stone is to be 2" in size and clean, since fines would clog the cloth.

B. Curb Inlet Protection.

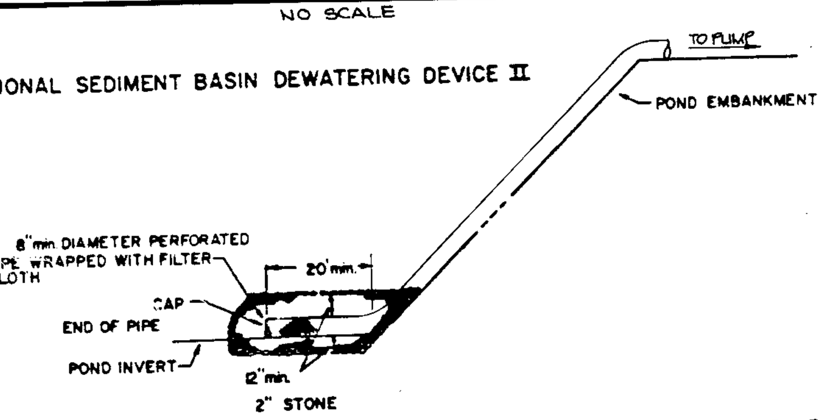
1. Attach a continuous piece of wire mesh (30" min. width by throat length plus 4') to the 2" x 4" weir (measuring throat length plus 2') as shown on the standard drawing.
2. Place a piece of approved filter cloth (40-85 sieve) of the same dimensions as the wire mesh over the wire mesh and securely attach to the 2" x 4" weir.
3. Securely nail the 2" x 4" weir to 9" long vertical spacers to be located between the weir and inlet face (max. 6' apart).
4. Place the assembly against the inlet throat and nail (minimum 2' lengths of 2" x 4" to the top of the weir at spacer locations. These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.
5. The assembly shall be placed so that the end spacers are a minimum 1' beyond both ends of the throat opening.
6. Form the wire mesh and filter cloth to the concrete gutter and against the face of curb on both sides of the inlet. Place clean 2" stone over the wire mesh and filter fabric in such a manner as to prevent water from entering the inlet under or around the filter cloth.
7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.
8. Assure that storm flow does not bypass inlet by installing temporary earth or asphalt dikes directing flow into inlet.



STONE FILTER INLET PROTECTION

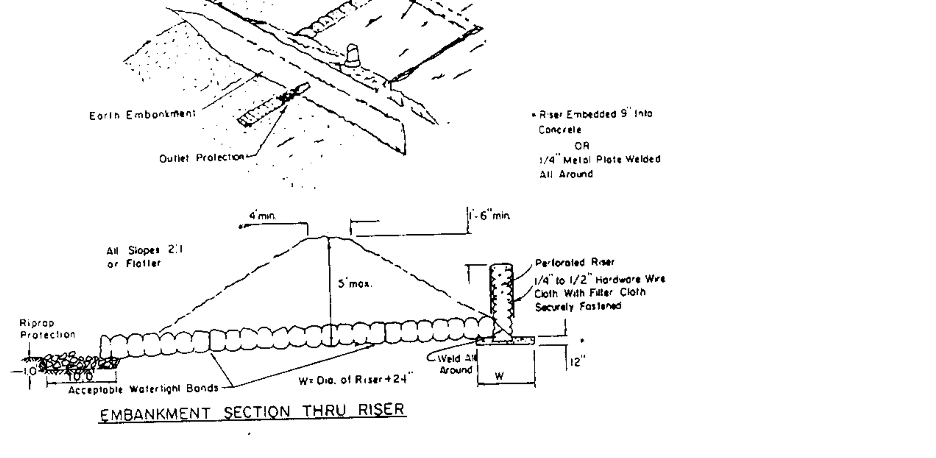
NO SCALE

OPTIONAL SEDIMENT BASIN DEWATERING DEVICE II



TEMPORARY DEWATERING DEVICE FOR POND / BASIN DRAINING

NO SCALE



SIZES OF PIPE NEEDED

Barrel Diameter ________.
Riser Diameter ________.

Note:
For Construction Specification see sheet 16.08
Max. Drainage Area: 5 Acres

PIPE OUTLET TRAP

NO SCALE

AS BUILT CERTIFICATION

ENGINEER ____________
PE # ________ DATE ________

BY THE DEVELOPER:

"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

[signature] DEVELOPER — 4/3/91 DATE

BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

[signature] ENGINEER — 4.3.91 DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

[signature] U.S. SOIL CONSERVATION SERVICE — 4-17-91 DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED [signature] HOWARD S.C.D. — 4/17/91 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

[signature] COUNTY HEALTH OFFICER — 5-2-91 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

[signature] DIRECTOR — 5/3/91 DATE

[signature] CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — 5/3/91 DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[signature] DIRECTOR — 4/26/91 DATE

[signature] CHIEF, BUREAU OF ENGINEERING — 4-26-91 DATE

DATE	NO.	REVISION

OWNER/DEVELOPER

STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON, MARYLAND 21204

PROJECT: A COMMERCIAL CENTER
THE ENCHANTED FOREST
PARCEL 'A' AND PARCEL '68'

AREA TAX MAP NO. 24 PARCELS 454, 564, 19, 68
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: S.W.M. POND SPECS AND SEDIMENT CONTROL NOTES AND DETAILS

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

SDP-90-187

4-3-91
DATE

STATE OF MARYLAND — ARTHUR E. MUEGGE III — NO. 8707 — REGISTERED PROFESSIONAL ENGINEER

[signature]
ARTHUR E. MUEGGE 8707

WP-90-54, ZB CASE 867 M
S-89-82 WP 89-143 F-90-32

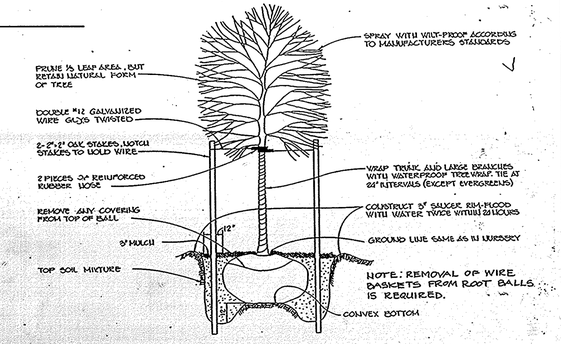
DESIGNED BY: J.J.B.
DRAWN BY: G.D.H.
PROJECT NO: 30108
DATE: APRIL 3, 1991
SCALE: AS SHOWN
DRAWING NO. 25 OF 40

SDP-90-74

MARYLAND BLUEPRINT CO., INC.

PLAN

SCALE: 1" = 40'



TREE PLANTING DETAIL

NO SCALE

PREPARED BY:
KIMLEY-HORN
11400 COMMERCE PARK DRIVE, SUITE 400
RESTON, VA 20191
PHONE: 703-674-1300

NOTE: PLANT LIST SUMMARY FOR THIS SHEET SHOWN ON SHEET # 28.

NOTE: - KIMLEY-HORN IS RESPONSIBLE FOR 8/22/14 REDLINE REVISIONS ONLY.
- BOHLER MUEGGE AND ASSOCIATES IS RESPONSIBLE FOR ORIGINAL DESIGN.
- REFER TO EVGO FREEDOM STATION AT ENCHANTED FOREST CONSTRUCTION DRAWINGS FOR ADDITIONAL INFORMATION AND ADA REQUIREMENTS.

STATE OF MARYLAND KYLE BOHLER 43412 PROFESSIONAL ENGINEER
08/22/2014

REVISED PROFESSIONAL CERTIFICATION

I, MICHAEL J. GESELL, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO: 44097 EXPIRATION: 6/9/15

LEGEND

- DOUBLE LIGHT POLE
- SINGLE LIGHT POLE

FOR REVISION 4 ONLY:
BY: BOHLER ENGINEERING

STATE OF MARYLAND MICHAEL J. GESELL No. 44097 PROFESSIONAL ENGINEER
09/12/14

GARRETT/GEORGE ASSOCIATES INCORPORATED
800 N. EASTON ROAD, WILLOW GROVE, PA.

BOARD OF ARCHITECTS 9394 JOHN L. WALKER STATE OF MARYLAND
DATE: 12/12/14
ENGINEER/ARCHITECT

STATE OF MARYLAND EARLE D. CLAYTON No. 9753 PROFESSIONAL ENGINEER

1. LOADING DOCK ADDITION BY GARRETT/GEORGE ASSOCIATES INCORPORATED. (215) 658-1380
2. Designate 9 Reserved Spaces for CORG in front of Bldg. 'C' by Fisher Collins & Carter, Inc. 1-5-05
3. ADDITION OF ELECTRIC VEHICLE CHARGING STATION BY KIMLEY-HORN. 8/22/14
4. REVISED GRADING TO FRONT LANDSCAPE BUFFER BY BOHLER ENGINEERING, 09/12/14 (LANDSCAPE SHEETS REPLACED)

AS BUILT CERTIFICATION

ENGINEER JAYKANT D. PARIKH
PE # 10168 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 5-2-91

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 5/2/91

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 5/2/91

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 4/26/91

CHIEF, BUREAU OF ENGINEERING — DATE A-26-91

DATE	NO.	REVISION
		Continued Below Left
12-16-90	1	REVISE PLANTING & PLANT LIST

OWNER/DEVELOPER

~~STONEHENGE LIMITED PARTNERSHIP~~
~~46 YORK ROAD~~
~~TOWSON, MARYLAND 21204~~
CURRENT OWNER: ENCHANTED FOREST LLC.
8888 NEW HYDE PARK ROAD.
NEW HYDE PARK, NY 11042 ATTN: TROY A. BROWN

PROJECT: A COMMERCIAL CENTER
THE ENCHANTED FOREST
PARCEL 'A' AND PARCEL '68'

AREA TAX MAP NO. 24 PARCELS 454, 564, 15, 68
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: LANDSCAPE PLAN

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

SDP-50-187

4-3-91
DATE

STATE OF MARYLAND MELANIE MOSER No. 661 LANDSCAPE ARCHITECT

MELANIE MOSER #661

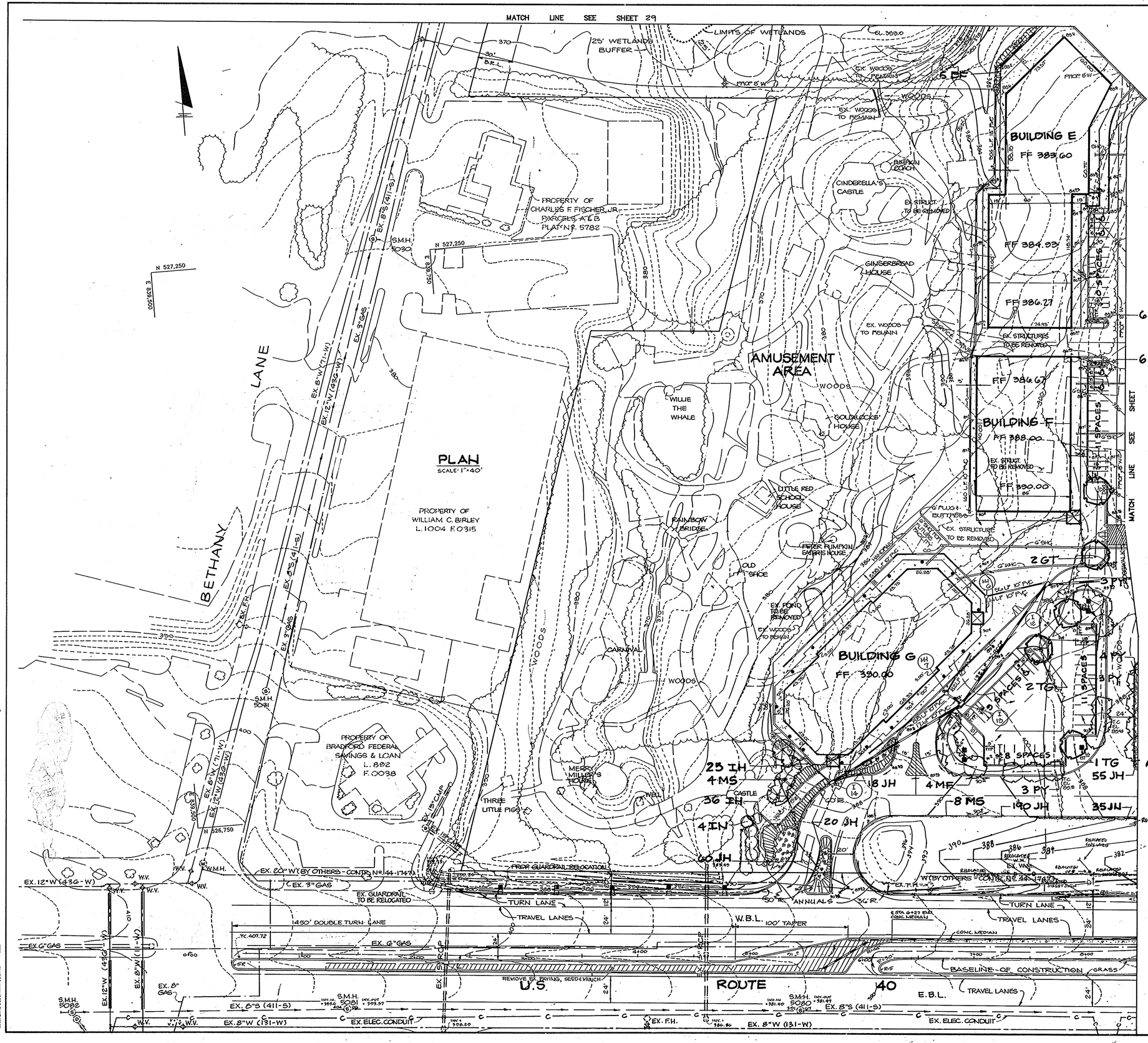
WP-90-54, 2B CASE 89-7M
S-85-82 WP-89-143 F-90-92

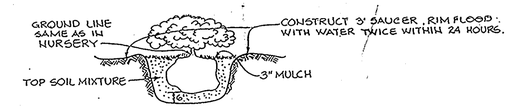
DESIGNED BY: Z.L.K.
DRAWN BY: Z.L.K.
PROJECT NO: 30108
DATE: APRIL 8, 1991
SCALE: AS SHOWN
DRAWING NO. 26 OF 42

SDP-90-74

AS-BUILT

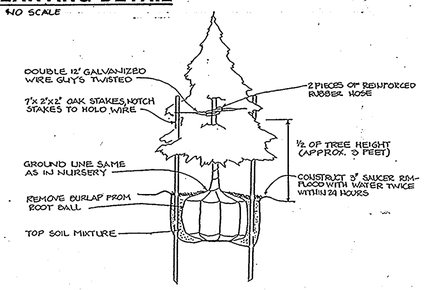
MARYLAND BLUEPRINT CO., INC. 1120007





SHRUB PLANTING DETAIL

NO SCALE



EVERGREEN PLANTING DETAIL

NO SCALE

AS BUILT CERTIFICATION

ENGINEER JAYKANT D. PARIKH

PE # 10106 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 5-2-91

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 5/3/91

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 5/3/91

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 4/26/91

CHIEF, BUREAU OF ENGINEERING — DATE 4-26-91

REV4: PROFESSIONAL CERTIFICATE

I, MICHAEL J. GESSEL, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO: 44097 EXPIRATION DATE: 6/9/15

LEGEND

DOUBLE LIGHT POLE

SINGLE LIGHT POLE

FOR REVISION 4 ONLY:
BY: BOHLER ENGINEERING

10/17/14

NOTE: PLANT LIST SUMMARY FOR THIS SHEET SHOWN ON SHEET #28.

⚠ REVISED GRADING TO FRONT ISLAND PAVED BY BOHLER ENGINEERING. 06/24/14 (LANDSCAPE SHEETS ARE REPLACED)

DATE	NO	REVISION
12-16-90	1	REVISE PLANTING & PLANT LIST

OWNER/DEVELOPER
STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON MARYLAND 21204

PROJECT: A COMMERCIAL CENTER
THE ENCHANTED FOREST
PARCEL 'A' AND PARCEL 'G8'

AREA TAX MAP No. 24 PARCELS 454, 564, 19, 68
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: LANDSCAPE PLAN

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

4.3.91 DATE

STATE OF MARYLAND MELANIE MOSER No. 661 LANDSCAPE ARCHITECT

MELANIE MOSER #661

WP-90-54, SB-CASE 867M S-89-82 WP-89-145 F-90-32

DESIGNED BY: Z.L.K.
DRAWN BY: Z.L.K.
PROJECT NO: 90108
DATE: APRIL 3, 1991
SCALE: AS SHOWN
DRAWING NO. 27 OF 42

SDP-90-74

AS-BUILT

PLANT LIST FOR SHEETS 26, 27, 28 & 29

Qty.	Symbol	Name	Size	Remarks
84	AG	ABELIA GRANDIFLORA Glossy Abelia	24-30" Ht.	Cont. 4' O.C.
50	CL	CUPRESSOCYPARIS LEYLANDII Leyland Cypress	5-6' Ht.	B & B
342	EF	EYONYMUS FORTUNEI COLORATUS Wintercreeper	Flats of 100 rooted cuttings	9" O.C. Double row at base of retaining wall
28	GT	GLEDITSIA TRIACANTHOS INERMIS 'Moraine' Moraine Honey Locust	2½-3" cal.	B & B
39	HH	HEDERA HELIX English Ivy	Flats of 100 rooted cuttings	9" O.C.
88	IC	ILEX CRENATA 'COMPACTA' Compact Japanese Holly	24-30" Ht.	3' O.C.
61	IH	ILEX CRENATE 'HELLERI' Helleri Hapanese Holly	15-18" spread	Cont. 3' O.C.
4	IN	ILEX X 'NELLIE R. STEVENS' Nellie Stevens Holly	6-7' Ht.	B & B
366	JH	JUNIPERUS HORIZONTALIS 'PLUMOSA COMPACT' Dwarf Andora Juniper	18-24" spread	3' O.C.
13	MF	MALUS FLORIBUNDA Japanese Flowering Crabapple	8-10' Ht.	B & B
7	MS	MAGNOLIA STELLATA Star Magnolia	7-8' Ht.	B & B 3 Stems/Tree
24	PK	PRUNUS SERRULATA 'KWANZAN' Kwanzan Cherry	8-10'	B & B
107	PS	PINUS STROBUS White Pine	5-6' Ht.	B & B Natural
27	PY	PRUNUS YEDOENSIS Yoshino Cherry	8-10' Ht.	B & B
32	TC_1	TSUGA CANADENSIS Canadian Hemlock	6-7' Ht.	B & B Unsheared
12	TC_2	TSUGA CANADENSIS Canadian Hemlock	7-8' Ht.	B & B Unsheared
31	TC	TILIA CORDATA 'GREENSPIRE' Greenspire Littleleaf Linden	2½-3" cal. 12-14' Ht.	B & B Full crown
30	VO	VIBURNUM OPULUS 'NANUM' Dwarf European Cranberrybush Viburnum	15-18"	2½' O.C. Cont.
15	VP	VIBURNUM PLICATUM TOMENTOSUM 'MARIESI' Maresi Doublefile Viburnum	3-4' Ht.	B & B

PLAN
SCALE: 1"=40'

FOR REVISION 4 ONLY:
BY: DOHLER ENGINEERING

10/17/14

PROFESSIONAL CERTIFICATION
I, MICHAEL J. GESELL, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 14097
EXPIRATION DATE: 6/9/15

4 REVISED GRADING TO FRONT ISLAND BUFFER. BY DOHLER ENGINEERING. 6/24/14

AS BUILT CERTIFICATION

ENGINEER JAYKANT D. PARIKH
PE # 10149 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 5-2-91

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 5/3/91

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 5/3/91

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 4/26/91

CHIEF, BUREAU OF ENGINEERING — DATE 4-26-91

DATE	NO.	REVISION
12-16-90	1	REVISE PLANTING & PLANT LIST

OWNER/DEVELOPER
STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON MARYLAND 21204

PROJECT: A COMMERCIAL CENTER
THE ENCHANTED FOREST
PARCEL 'A' AND PARCEL '68'

AREA TAX MAP NO. 24 PARCELS 454, 564, 19.68
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: LANDSCAPING PLAN AND PLANT LIST

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

SDP-30-167

4-3-91
DATE
STATE OF MARYLAND MELANIE MOSER No. 651 REGISTERED LANDSCAPE ARCHITECT
Melanie Moser
MELANIE MOSER #651

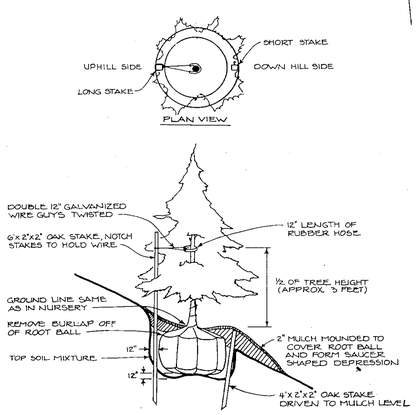
WP-90-54, 28 CASE 8071M
S-80-82 WP-89-143 F-90-32

DESIGNED BY: Z.L.K.
DRAWN BY: Z.L.K.
PROJECT NO: 30108
DATE: APRIL 3, 1991
SCALE: AS SHOWN
DRAWING NO. 28 OF 42

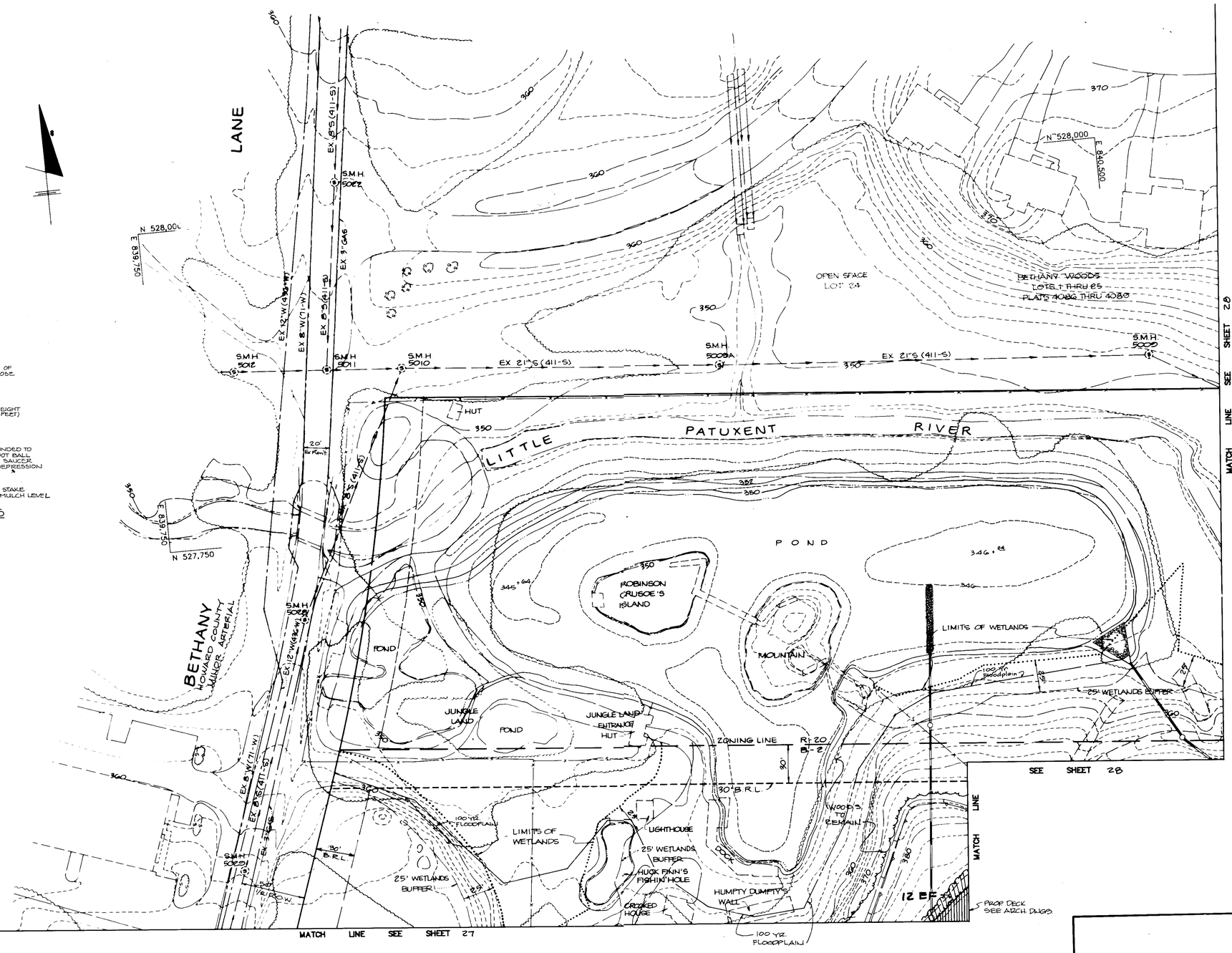
SDP-90-74

AS-BUILT

MARYLAND BLUEPRINT CO., INC. H10007



PLANTING DETAIL FOR STEEP SLOPES
NO SCALE



PLAN
SCALE 1" = 40'

NOTE: PLANT LIST SUMMARY FOR THIS SHEET SHOWN ON SHEET # 28.

AS BUILT CERTIFICATION

ENGINEER _____
PE # _____ DATE _____

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 5-2-91

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 5/3/91

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 5/3/91

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 4/26/91

CHIEF, BUREAU OF ENGINEERING — DATE 4-26-91

DATE	NO	REVISION

OWNER/DEVELOPER
STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON MARYLAND 21204

PROJECT A COMMERCIAL CENTER
THE ENCHANTED FOREST
PARCEL 'A' AND PARCEL '68'

AREA TAX MAP NO. 24 PARCELS 454, 564, 19 68
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: LANDSCAPE PLAN

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

SDP-90-187

4-3-91
DATE

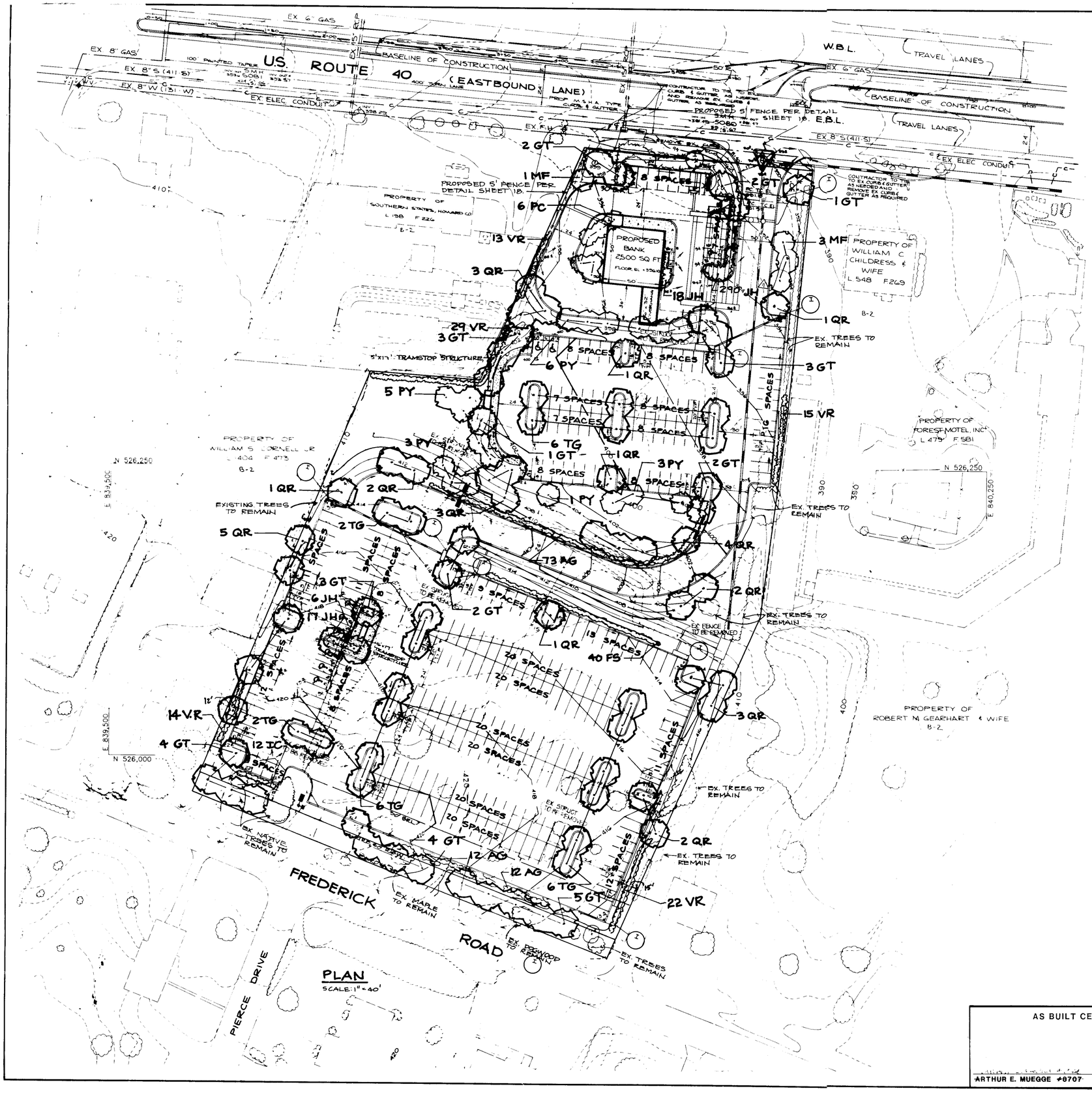
STATE OF MARYLAND — MELANIE MOSER — LANDSCAPE ARCHITECT — 551

MELANIE MOSER #551

WP-90-54, ZB CASE 867M
S-89-82 WP-89-143 F-90-32

DESIGNED BY: Z.L.K.
DRAWN BY: Z.L.K.
PROJECT NO: 90108
DATE: APRIL 3, 1991
SCALE: AS SHOWN
DRAWING NO. 20 OF 40

SDP-90-74



PLAN
SCALE: 1" = 40'

PLANT LIST (THIS SHEET ONLY)

Qty.	Symbol	Name	Size	Remarks
32	GT	GLEDITSIA TRIACANTHOS INERMIS 'MORAINE' Moraine Honey Locust	2½-3" cal. 12-14' Ht.	B & B
12	IC	ILEX CRENATA 'COMPACTA' Compact Japanese Holly	24-30" Ht.	3' O.C.
331	JH	JUNIPERUS HORIZONTALIS 'PLUMOSA COMPACTA' Dwarf Andora Juniper	18-24" spread	3' O.C.
4	MF	MALUS FLORIBUNDA Japanese Flowering Crabapple	8-10' Ht.	B & B
6	PC	PYRUS CALLERYANA 'ARISTOCRAT' Aristrocrat Bradford Pear	8-10' Ht.	B & B
29	QR	QUERCUS RUBRA Red Oak	2½-3" cal. 12-14' Ht.	B & B
22	TG	TILIA CORDATA 'GREENSPIRE' Greenspire Littleleaf Linden	2½-3" cal. 12-14' Ht.	B & B
93	VR	VIBURNUM RHYTIDOPHYLLUM Leatherleaf Viburnum	30-36" Ht.	5' O.C.
97	AG	ABELIA GRANDIFLORA Glossy Abelia	24-30" Ht.	4' O.C.
18	PY	PRUNUS YEDOENSIS Yoshino Cherry	8-10' Ht.	B & B
40	FS	FORSYTHIA SUSPENSA WEEPING FORSYTHIA	24-30" Ht.	B & B or CONT.

LEGEND
- DOUBLE LIGHT POLE
- SINGLE LIGHT POLE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 4-2-91

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 5/3/91

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 5-2-91

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 4/26/91

CHIEF, BUREAU OF ENGINEERING — DATE 4-26-91

DATE	NO	REVISION

OWNER/DEVELOPER
STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON MARYLAND 21204

PROJECT A COMMERCIAL CENTER
THE ENCHANTED FOREST
PARCEL 'A' & PARCEL 68

AREA TAX MAP NO 24 PARCELS 454, 564, 19, 68
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: **LANDSCAPING PLAN AND PLANT LIST**

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

SDP-90-187

4-8-91 DATE

STATE OF MARYLAND — MELANIE MOSER — LANDSCAPE ARCHITECT

MELANIE MOSER #651

WP-90-64, ZB CASE 867M S-89-82, WP-89-148 F-90-32

DESIGNED BY: Z.L.K.

DRAWN BY: Z.L.K.

PROJECT NO: 90108

DATE: APRIL 3, 1991

SCALE: AS SHOWN

DRAWING NO. 32 OF 40

AS BUILT CERTIFICATE

ARTHUR E. MUEGGE #8707 — DATE

SDP-90-74

SOILS LIST

ChB2	Chester Silt Loam, 3-8% Slopes, Mod. Eroded
Co	Codorus Silt Loam
Cub	Comus Silt Loam, Local Alluvium, 3-8% Slopes
GlB2	Glenelg Loam, 3-8% Slopes, Mod. Eroded
GlC2	" " , 8-15% " , " "
GlD2	" " , 15-25% " , " "
GnB2	Glenville Silt Loam, 3-8% Slopes, Mod. Eroded
Md	Made Land
MlB2	Manor Loam, 3-8% Slopes, Mod. Eroded
MlC2	" " , 8-15% " , " "
MlD2	" " , 15-25% Slopes, " "

AREA KEY

AREA 1
See W/L Report (Attached)

AREA 2

Virginia Pine	12"
Red Maple	12"
White Maple	12"
Poplar	12"
Hawthorn	2"
Grape Vines	2"

AREA 3

Coniferous	16"
White Pine	16"
Norway Spruce	16"
Hemlock (Northern)	

AREA 4

Red Maple	12"
Aspen	12"
Red Oak	18"
Locust	10"
Virginia Pine	10"

AREA 5

Poplar	16"
White Oak	18"
Red Oak	20"-28"
Some Pine (White Pine)	8"

AREA 6
Manicured Yard

AREA 7
Open

Areas include:
Wild Black Cherry
Red Maple & Silver Maple
Black Locust, Golden rod
Boxelder, Aspen
Smooth Sumac, Sassafras
Multiflora Rose
Japanese Honeysuckle
Red Mulberry, Grasses
(Sheet 33 Only)

LEGEND:

Soils which contain hydric inclusions.
Soils with high potential for soil erosion.
Areas grouped for vegetative analysis.
15-25% Slopes
25% and Above Slopes
Non Tidal Wetlands

AS BUILT CERTIFICATION

ENGINEER JAYKANT D. PARIKH
PE # 10143 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER 5-2-91 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR 5/3/91 DATE

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT 5/6/91 DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR 4/26/91 DATE

CHIEF, BUREAU OF ENGINEERING 4-26-91 DATE

DATE	NO	REVISION
1-5-05	1	Designate 9 Reserved Spaces for CCRS In Front of Bldg. C; by Fisher, Collins & Carter, Inc.

OWNER/DEVELOPER
STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON, MARYLAND 21204

PROJECT A COMMERCIAL CENTER
THE ENCHANTED FOREST
PARCEL 'A' AND PARCEL 'GB'

AREA TAX MAP 24 PARCELS: 19, 454, 564, 68
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE ENVIRONMENTAL ANALYSIS

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

SDP-90-187

4.3.91
DATE

STATE OF MARYLAND MELANIE MOSER #551 REGISTERED LANDSCAPE ARCHITECT

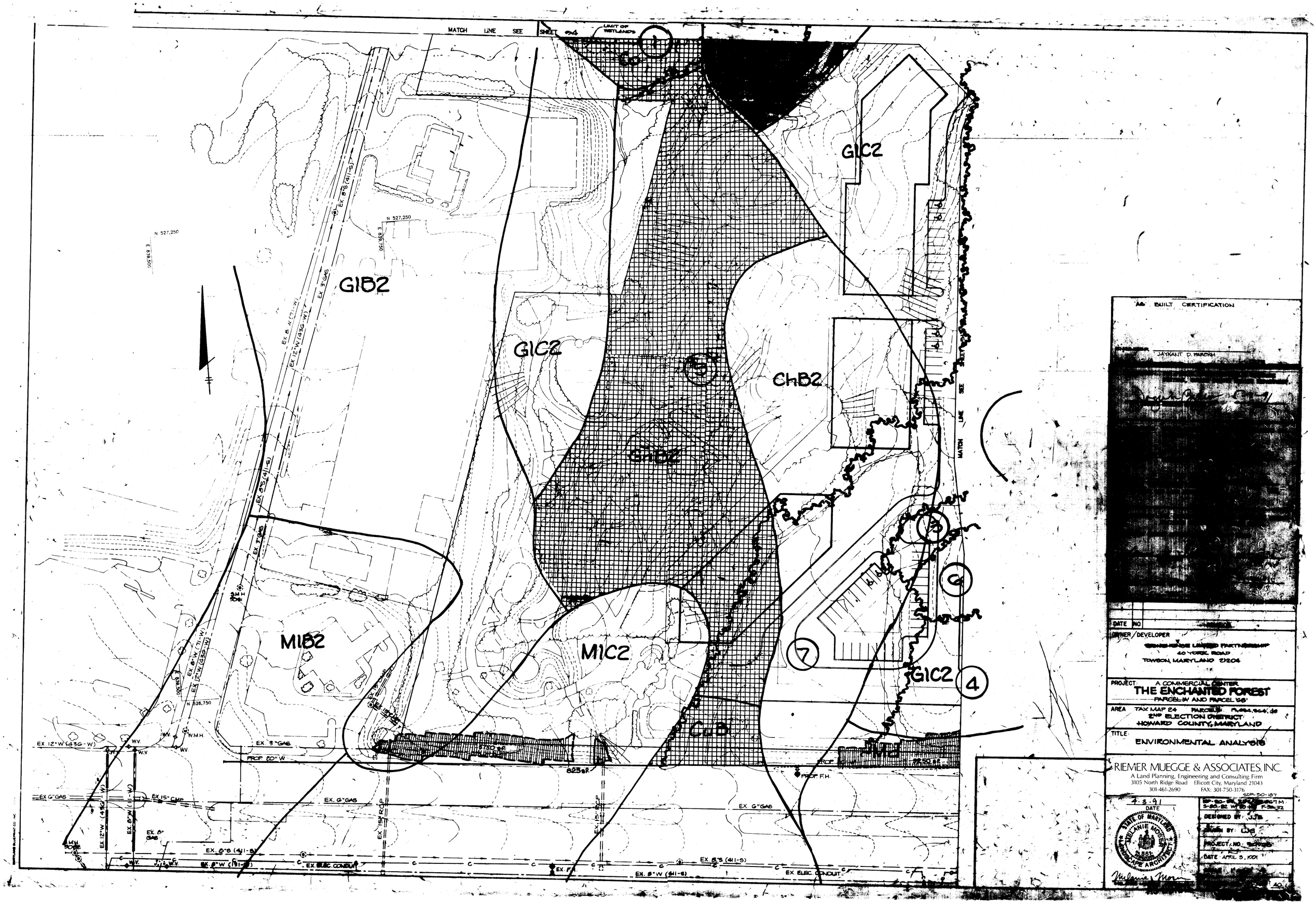
Melanie Moser
MELANIE MOSER #551

WP-90-54, ZB CASE 867M
S-88-82, WP-88-143 F-90-32

DESIGNED BY JJB
DRAWN BY LJG
PROJECT NO 30108
DATE APRIL 3, 1991
SCALE 1"=40'
DRAWING NO. 31 OF 40

SDP-90-74

AS-BUILT


MATCH LINE SEE SHEET 94
LIMIT OF WETLANDS
GIB2
GIC2
GIC2
ChB2
GhB2
MIB2
MIC2
CuB
Md
GIC2
N 527,250
E 839,500
N 526,750
EX. 8"S (411-S)
EX. 3" GAS
EX. 8" W (71-W)
EX. 12" W (436-W)
EX. 6" GAS
EX. 15" CMP
EX. 15" RCP
EX. 8" GAS
EX. 8"S (411-S)
EX. 8" W (411-S)
EX. ELEC. CONDUIT
PROP. 20" W
PROP. F.H.
825 SF
MATCH LINE SEE SHEET
AS BUILT CERTIFICATION
JAYKANT D. PARIKH
DATE
NO.
OWNER/DEVELOPER
40 YORK ROAD
TOWSON, MARYLAND 21204
PROJECT: A COMMERCIAL CENTER
THE ENCHANTED FOREST
PARCEL W AND PARCEL 'GB'
AREA TAX MAP 24 PARCELS
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
TITLE: ENVIRONMENTAL ANALYSIS
RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176
SDP-90-187
4.3.91
DATE
STATE OF MARYLAND
MELANIE MOSER
LANDSCAPE ARCHITECT
DESIGNED BY: JJB
DRAWN BY: LJG
PROJECT NO.
DATE APRIL 5, 1991
40

AS BUILT CERTIFICATION

DATE	NO	REVISION

OWNER / DEVELOPER
STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON, MARYLAND 21204

PROJECT A COMMERCIAL CENTER
THE ENCHANTED FOREST
PARCEL 'A' AND PARCEL 'G8'

AREA TAX MAP 24 PARCELS: 19, 494, 564, 80
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

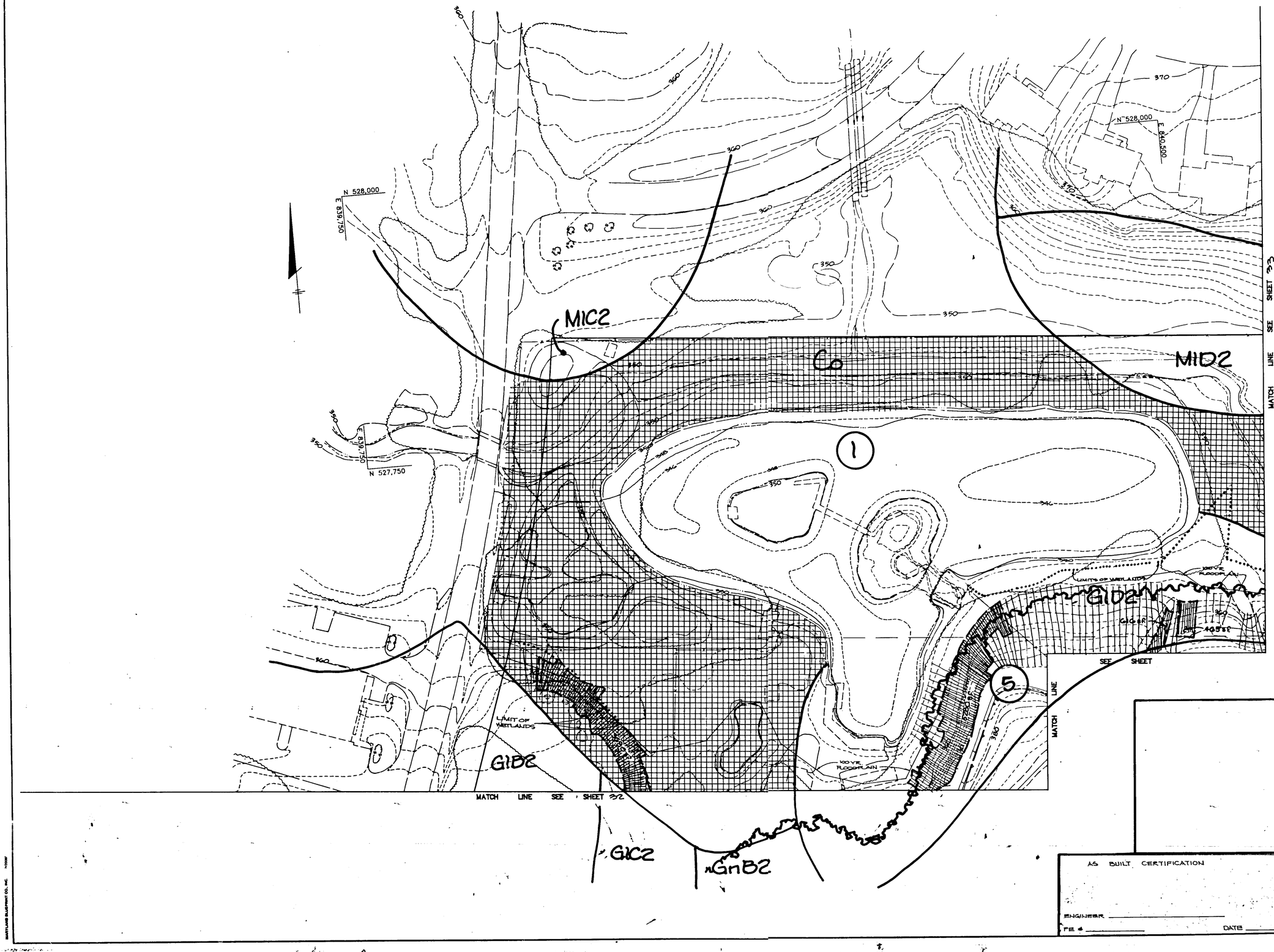
TITLE ENVIRONMENTAL ANALYSIS

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

4.3.91
DATE

WP-90-84, 28 CASE [illegible]
S-88-82 WP [illegible]

DESIGNED BY JJB
DRAWN BY [illegible]
PROJECT NO [illegible]
DATE APRIL 8, 1991
SCALE 1"=40'
DRAWING NO. [illegible] 80



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 5-2-91

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 5/3/91

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 5/3/91

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 4/26/91

CHIEF, BUREAU OF ENGINEERING — DATE 4-26-91

DATE	NO	REVISION

OWNER/DEVELOPER

STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON, MARYLAND 21204

PROJECT: A COMMERCIAL CENTER
THE ENCHANTED FOREST
PARCEL 'A' AND PARCEL '68'

AREA: TAX MAP 24 PARCELS: 19, 454, 564, 68
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: ENVIRONMENTAL ANALYSIS

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176
SDP-90-187

4-3-91
DATE

WP-90-54, 28 CASE 867M
S-89-82 WP-89-143 F-90-32

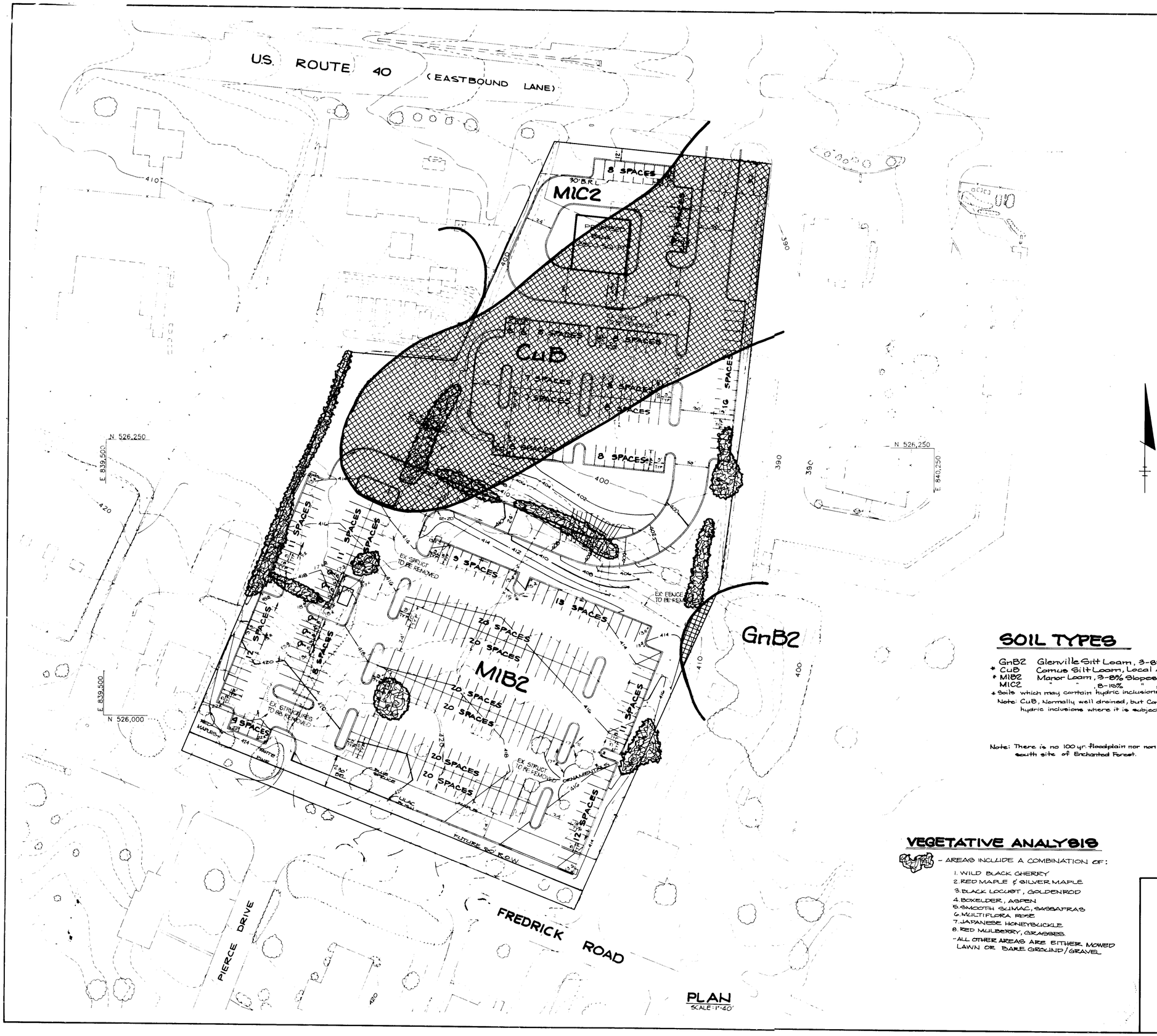
DESIGNED BY: JJB
DRAWN BY: LJG
PROJECT NO: 30108
DATE: APRIL 3, 1991
SCALE: 1"=40'
DRAWING NO. 34 OF 40

MELANIE MOSER #351

AS BUILT CERTIFICATION

ENGINEER _____
PE # _____ DATE _____

SDP-90-74



PLAN
SCALE: 1"=40'

SOIL TYPES

- GnB2 Glenville Silt Loam, 3-8% Slopes, Mod. Eroded.
- * CuB Comus Silt Loam, Local Alluvium, 3-8% Slopes.
- * MIB2 Manor Loam, 3-8% Slopes, Mod. Eroded.
- MIC2 " " 8-15% " " " "

* Soils which may contain hydric inclusions.

Note: CuB, Normally well drained, but Comus soils may contain hydric inclusions where it is subject to frequent flooding.

Note: There is no 100 yr. floodplain nor non tidal wetlands on the south site of Enchanted Forest.

VEGETATIVE ANALYSIS

- AREAS INCLUDE A COMBINATION OF:

1. WILD BLACK CHERRY
2. RED MAPLE & SILVER MAPLE
3. BLACK LOCUST, GOLDENROD
4. BOXELDER, ASPEN
5. SMOOTH SUMAC, SASSAFRAS
6. MULTIFLORA ROSE
7. JAPANESE HONEYSUCKLE
8. RED MULBERRY, GRASSES.

- ALL OTHER AREAS ARE EITHER MOWED LAWN OR BARE GROUND/GRAVEL

AS BUILT CERTIFICATION

ENGINEER _____

PE # _____ DATE _____

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 5-2-91

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 5/3/91

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 5/3/91

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 4/26/91

CHIEF, BUREAU OF ENGINEERING — DATE 4-26-91

DATE	NO	REVISION

OWNER/DEVELOPER

STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON MARYLAND 21204

PROJECT A COMMERCIAL CENTER
THE ENCHANTED FOREST
PARCEL 'A' AND PARCEL 'GB'

AREA TAX MAP NO 24 PARCELS 454, 564, 19, 68
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE
ENVIRONMENTAL ANALYSIS

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

SDP-90-187

4.3.91 DATE

STATE OF MARYLAND — MELANIE MOSER — LANDSCAPE ARCHITECT — 551

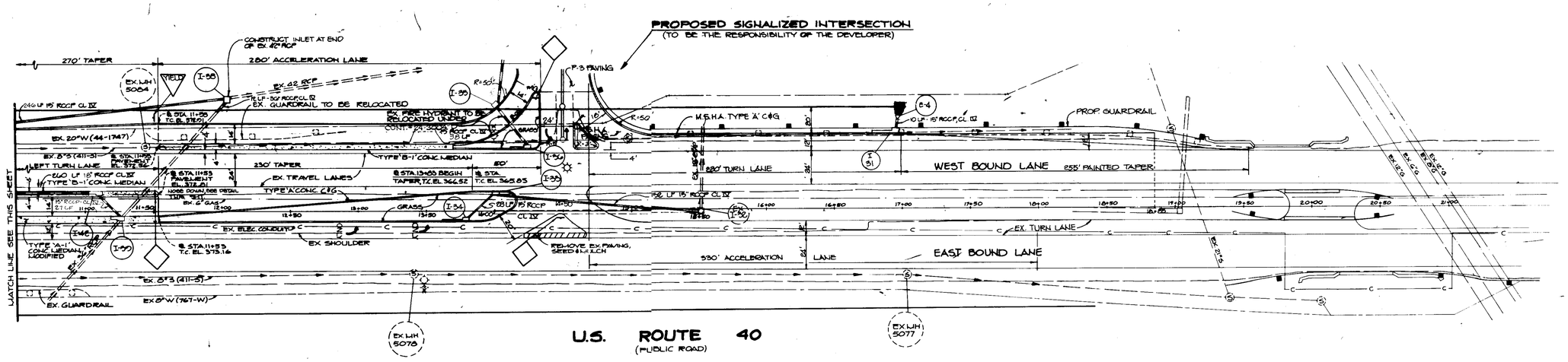
MELANIE MOSER, # 551

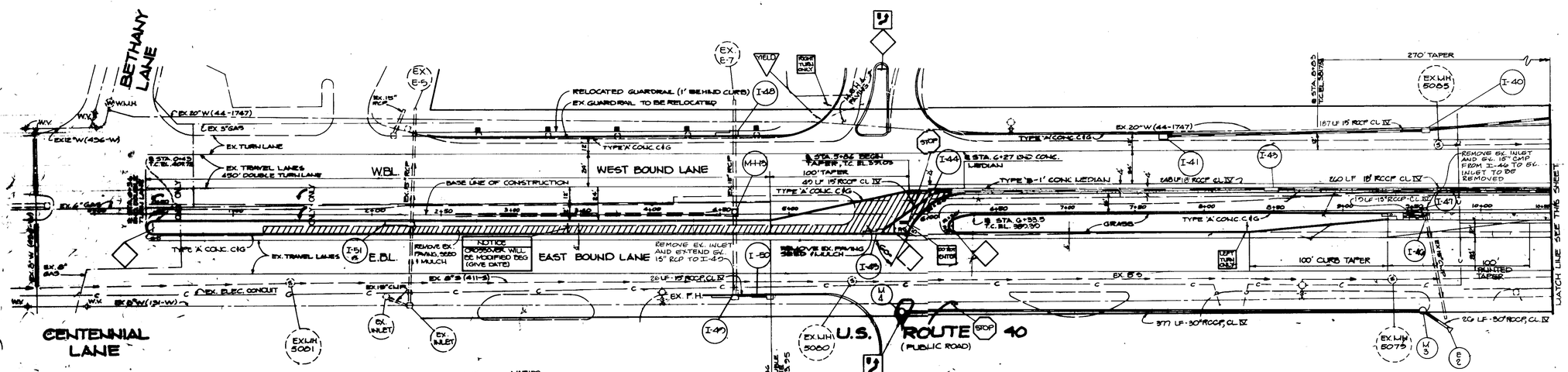
WP-90-54, ZB CASE 867 M
S-89-82 WP 89-143 F-90-32

DESIGNED BY	M.G.K.
DRAWN BY	D.J.E.
PROJECT NO	30108
DATE	APRIL 3, 1991
SCALE	AS SHOWN
DRAWING NO.	35 OF 40

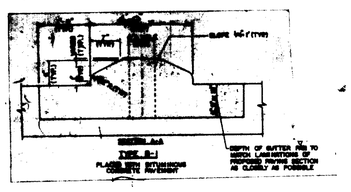
SDP-90-74

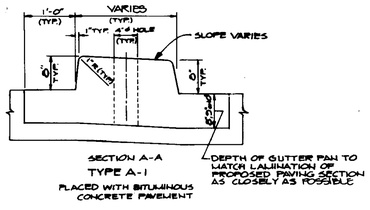
MARYLAND BLUEPRINT CO. INC.

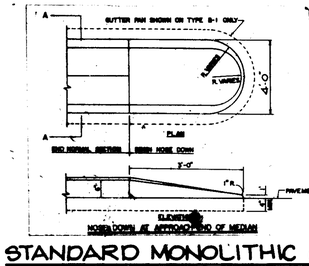




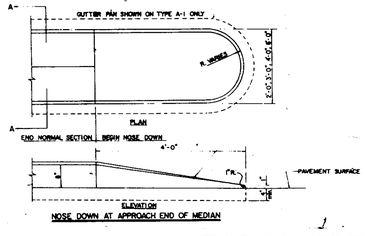
PLAN
SCALE 1" = 40'







STANDARD MONOLITHIC CONCRETE MEDIAN TYPE 'B-1'
NO SCALE



STANDARD MONOLITHIC CONCRETE MEDIAN TYPE 'A-1' (MODIFIED)
NO SCALE

LEGEND

- R1-1 (30" x 30")
- R1-2 (36" x 36" x 36")
- SHA DESIGNATION W18-1 M.U.T.C.D. TYPE-1 OBJECT MARKER (18" x 18")
- NOTICE / CROSSOVER WILL BE MODIFIED DEG (GIVE DATE) — BLACK AND ORANGE, 6" LETTERS; BLACK AND WHITE, 6" LETTERS — SEE NOTE #2
- DO NOT ENTER — R 5-1 (30" x 30")
- R 4-7 (24" x 30")
- RIGHT TURN ONLY — SHA DESIGNATION R-5-1B (24" x 30") LEFT AND RIGHT TURN ONLY

NOTES:
1. FOR DETAILS OF ANY SIGN OR MARKING REFER TO "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," 1988 EDITION.
2. CONTRACTOR / DEVELOPER TO SUPPLY & ERECT SIGNS, SUPPLY DATE & ERECT AT LEAST 10 DAYS PRIOR TO CONSTRUCTION.

AS BUILT CERTIFICATE

LICENSED PROFESSIONAL ENGINEER #12168
ARTHUR E. MUEGGE #8707 — DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
COUNTY HEALTH OFFICER — 1-2-91 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
DIRECTOR — 5/3/91 DATE
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — 5/3/91 DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — 4/26/91 DATE
CHIEF, BUREAU OF ENGINEERING — 4-26-91 DATE

DATE	NO.	REVISION
10/28/91	1	REVISED INLETS & PIPES (RCCP), REVISED SIZES OF PIPES, ADDED NOTES AND AN ISLAND

OWNER / DEVELOPER
STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON MARYLAND 21204

PROJECT: A COMMERCIAL CENTER
THE ENCHANTED FOREST
PARCEL 'A' AND PARCEL 68

AREA TAX MAP NO 24 — PARCELS 454, 564, 170, 68
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: **PLAN OF U.S. ROUTE 40 AND DETAIL SHEET**

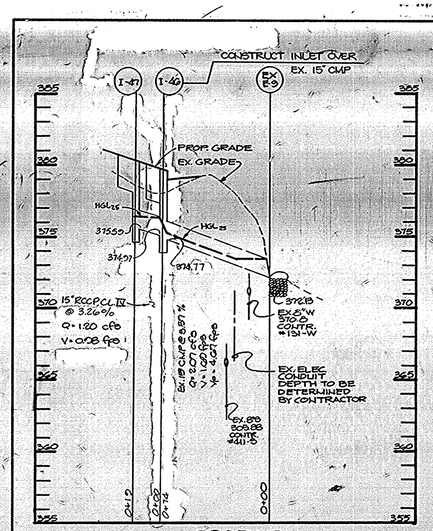
RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

4-3-91 DATE
STATE OF MARYLAND — ARTHUR E. MUEGGE — PROFESSIONAL ENGINEER
ARTHUR E. MUEGGE #8707

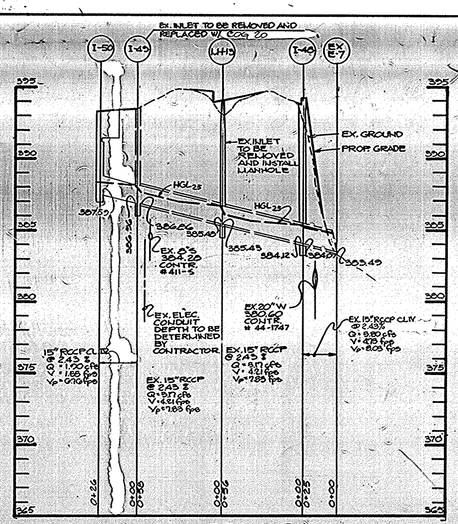
SDP: 2-107
WP-90-54, ZB CASE 867 M, S-89-82 WP-89-145, F-90-92
DESIGNED BY: J.J.B., D.A.W.
DRAWN BY: J.A.B.
PROJECT NO: 90108
DATE: APRIL 3, 1991
SCALE: AS SHOWN
DRAWING NO: 2 OF 40

SDP-90-74

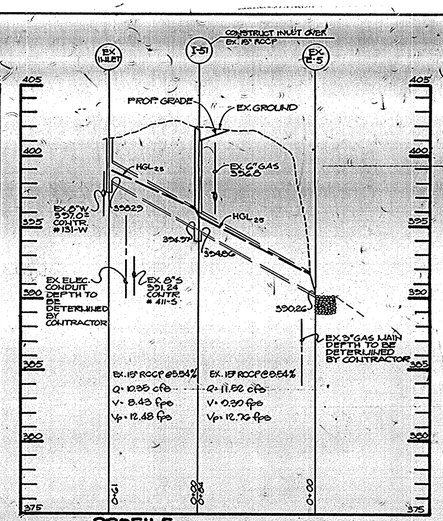
MARYLAND BLUEPRINT CO., INC.



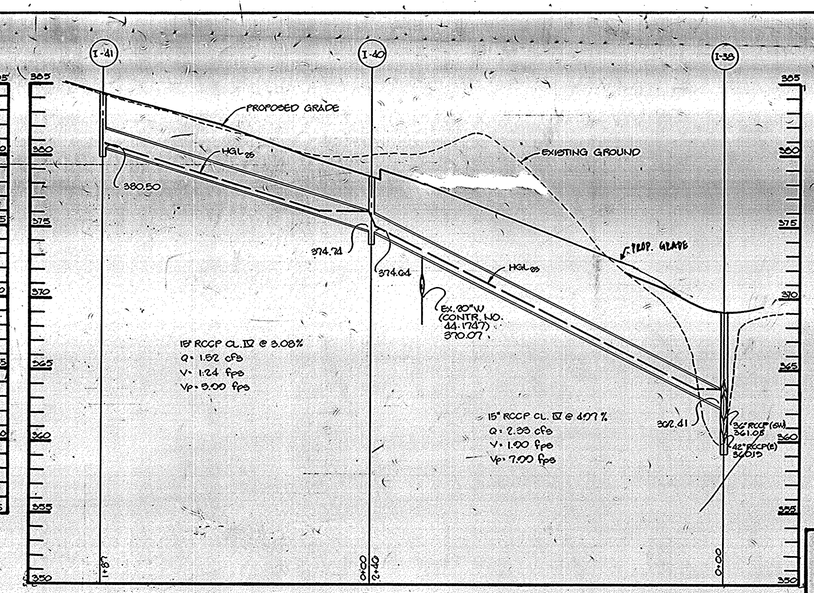
PROFILE
SCALE: HOR.: 1"=50' VERT.: 1"=5'



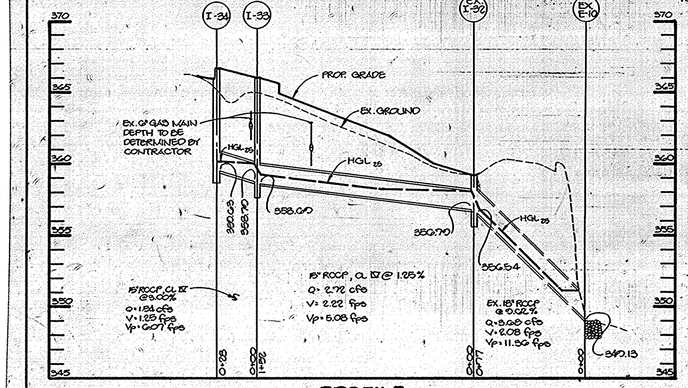
PROFILE
SCALE: HOR.: 1"=50' VERT.: 1"=5'



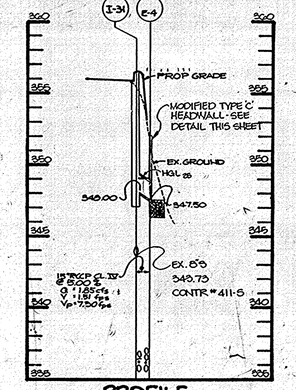
PROFILE
SCALE: HOR.: 1"=50' VERT.: 1"=5'



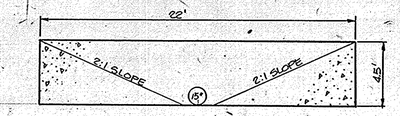
PROFILE
SCALE: HOR.: 1"=50' VERT.: 1"=5'



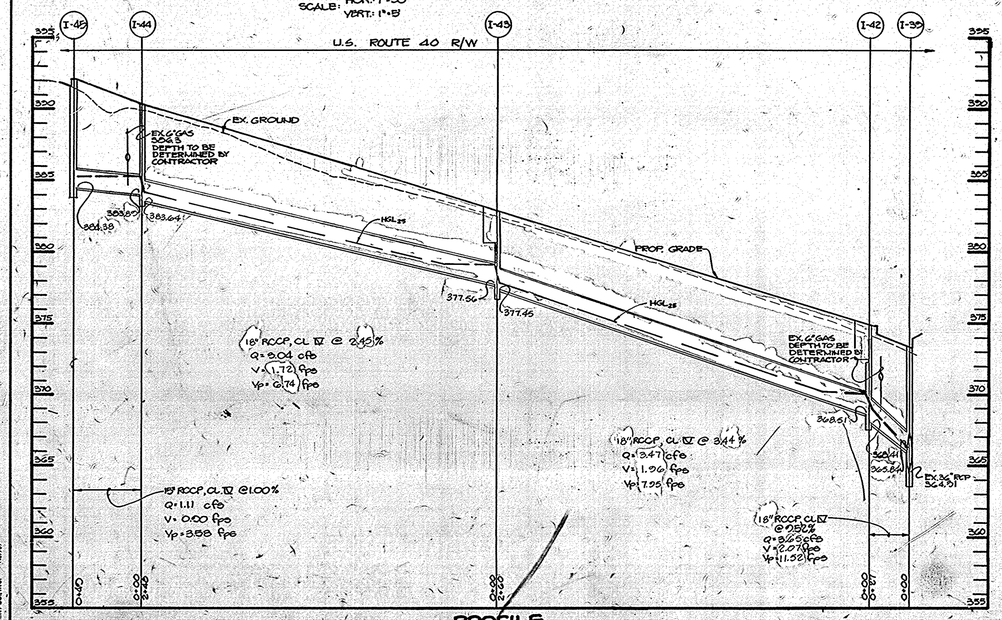
PROFILE
SCALE: HOR.: 1"=50' VERT.: 1"=5'



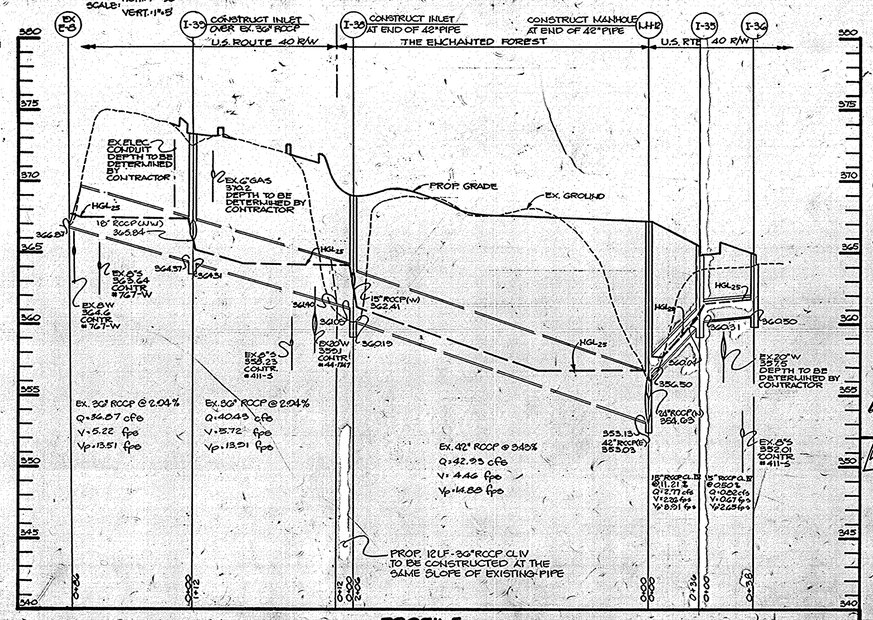
PROFILE
SCALE: HOR.: 1"=50' VERT.: 1"=5'



E-4
MODIFIED TYPE 'C' HEADWALL
NO SCALE



PROFILE
SCALE: HOR.: 1"=50' VERT.: 1"=5'



PROFILE
SCALE: HOR.: 1"=50' VERT.: 1"=5'

REV4: PROFESSIONAL CERTIFICATE

I, MICHAEL J. GESELL, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO: 44097
EXPIRATION DATE: 6/9/15

FOR DASIPN 4 ONLY:
BY: DOHLER ENGINEERING

10/17/14

4 REVISED GRADING OF FRONT ISLAND BUFFER BY DOHLER ENGINEERING. 06/24/14

AS BUILT CERTIFICATE

JAYANT D. PARIKH #12148
ARTHUR E. MUEGGE #8707 — DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 5-2-91

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 5/3/91

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 5/3/91

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 4/26/91

CHIEF, BUREAU OF ENGINEERING — DATE 4-26-91

DATE	NO.	REVISION
10/28/01	1	REVISED PROFILES

OWNER/DEVELOPER
STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON MARYLAND 21204

PROJECT: A COMMERCIAL CENTER
THE ENCHANTED FOREST
PARCEL 'A' AND PARCEL 'B'

AREA TAX MAP NO. 24 PARCELS 454, 564, 19, 68
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE:
STORM DRAIN PROFILES

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

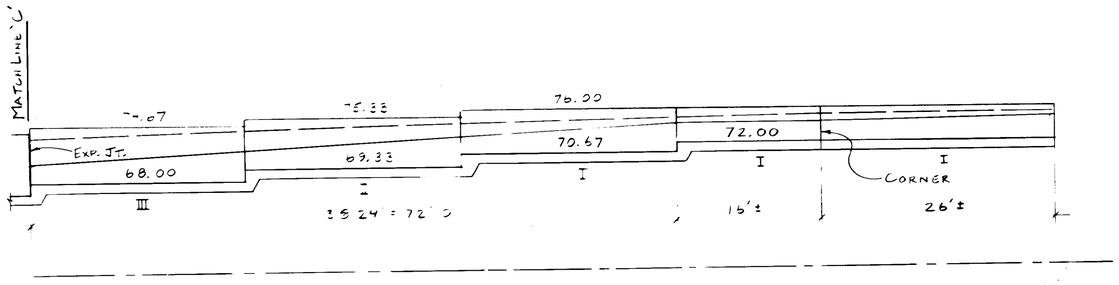
4-3-91
DATE

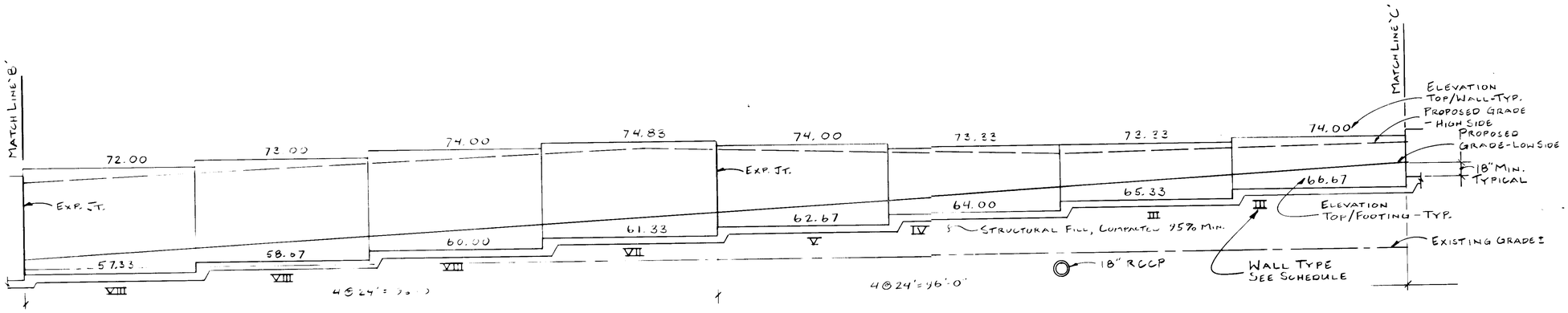
ARTHUR E. MUEGGE 8707

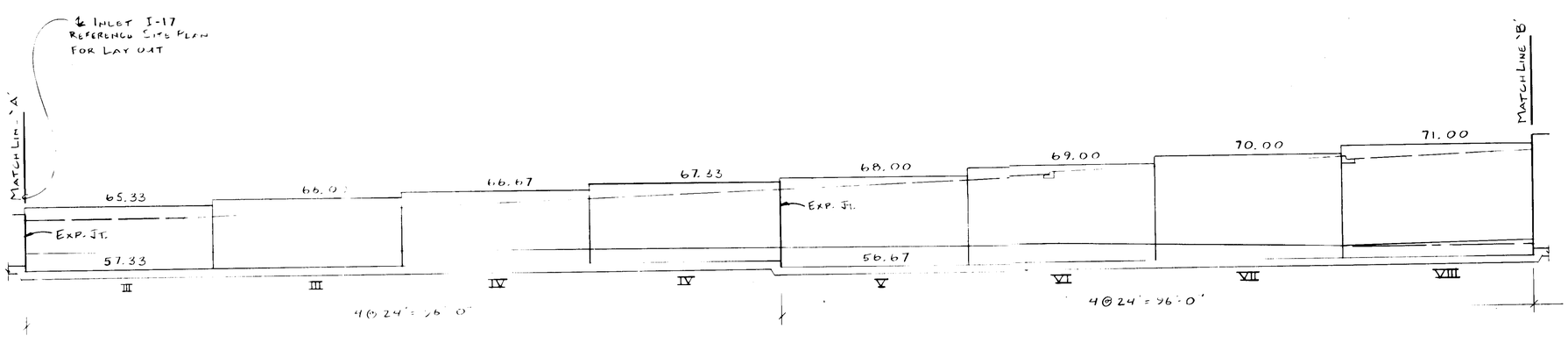
SDP-90-187

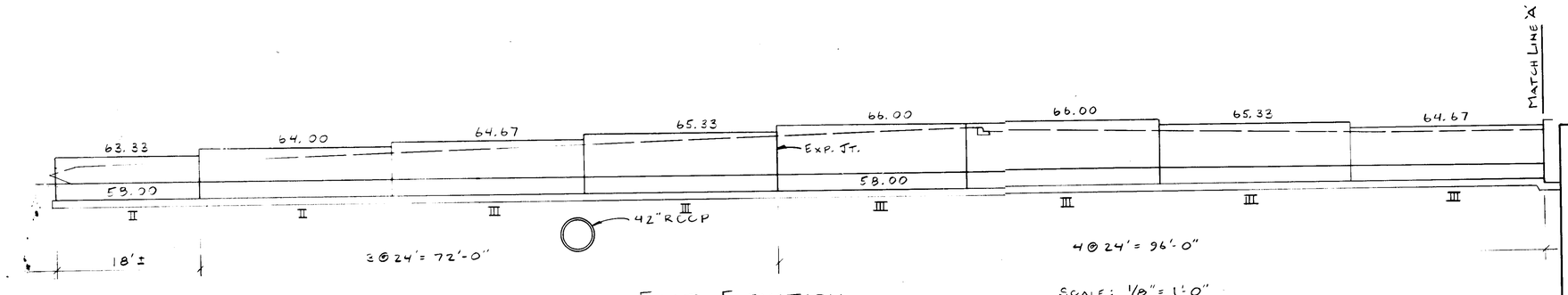
WP-90-54, ZB CASE #07M & 80-82 WP-89-145 & 90-92	
DESIGNED BY: D.A.H.	
DRAWN BY: J.A.B./J.V.	
PROJECT NO: 30108	
DATE: APRIL 3, 1991	
SCALE: AS SHOWN	
DRAWING NO. 37 OF 42	

SDP-90-74 AS-BUILT









EAST ELEVATION

SCALE: 1/8" = 1'-0"

AS BUILT CERTIFICATE

ARTHUR E. MUEGGE #8707 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — 5-2-91 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — 5/3/91 DATE

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — 5-3-91 DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — 4/26/91 DATE

CHIEF, BUREAU OF ENGINEERING — 4-26-91 DATE

DATE	NO	REVISION

OWNER/DEVELOPER
STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON MARYLAND 21204

PROJECT: A COMMERCIAL CENTER
THE ENCHANTED FOREST
PARCEL 'A' - PARCEL 68

AREA TAX MAP NO. 24 PARCELS 454, 504, 19, 68
7TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE:
RETAINING WALL ELEVATION

DONALD SIMMONS ASSOCIATES
Consulting Engineers
4637 S. LEISURE COURT
ELLICOTT CITY, MD 21043
(301) 465-7354

11/15/90
DATE

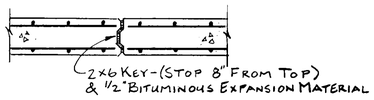
STATE OF MARYLAND — DONALD E. SIMMONS, JR. — NO. 14281 — REGISTERED PROFESSIONAL ENGINEER

DONALD E SIMMONS, JR #14281

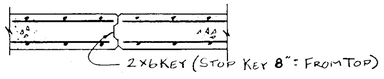
WP-80-54, ZB CASE 807M
S-85-82, WP-88-143, F-90-32

DESIGNED BY: DES, JR
DRAWN BY: DES, JR
PROJECT NO: 30108
DATE: APRIL 3, 1991
SCALE: AS SHOWN
DRAWING NO. 38 OF 40

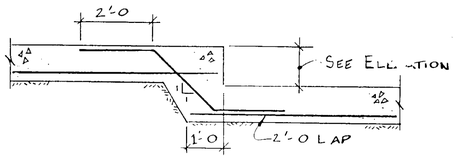
SDP-90-74



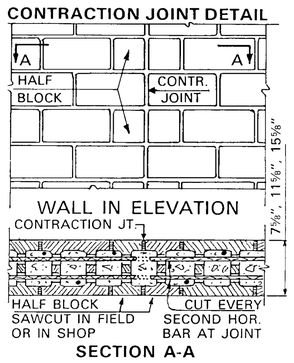
EXPANSION JOINT – "EXP. JT."

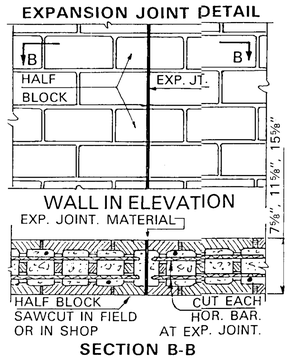


CONTROL JOINT – "CJ"



TYPICAL FOOTING STEP

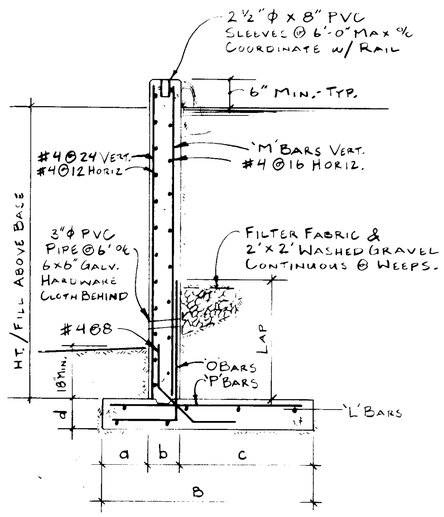




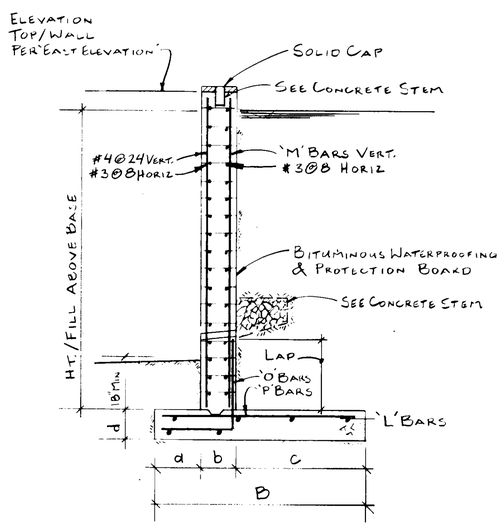
REINFORCED MASONRY DETAILS

		DIMENSIONS							REINFORCING				
	MARK (SEE ELEVATION)	MAX HT./FILL ABOVE BASE	WIDTH/BASE 'B'	TOE 'a'	STEM WIDTH 'b'	HEEL 'c'	FOOTING THICKN'S 'd'	DOWELS 'O' BARS	LAP	TOP/FTG 'P' BARS	LONGITUDINAL 'L' BARS	STEM VERT'S 'M' BARS
REINFORCED MASONRY	I	4'-0	3'-10	10"	12"	2'-0	1'-0	#5@16	26"	#4@16	6#4	#5@16
	II	5'-4	4'-8	1'-0	12"	2'-8	1'-0	#5@16	26"	#4@16	6#5	#5@16
	III	7'-4	5'-10	1'-2	12"	3'-8	1'-0	#5@8	26"	#5@8	6#5	#5@8
	IV	9'-4	7'-0	1'-6	16"	4'-2	1'-2	#6@8	33"	#5@8	6#6	#6@8
	V	11'-4	8'-2	1'-8	16"	5'-2	1'-2	#7@8	45"	#6@8	6#6	#7@8
CONCRETE												
	VI	12'-0	8'-9	2'-2	16"	5'-3	1'-3	#6@8	55"	#6@8	7#6	#5@8
	VII	13'-0	9'-6	2'-8	16"	5'-6	1'-4	#7@10	66"	#6@10	6#7	#5@10
	VIII	14'-0	10'-3	3'-2	16"	5'-9	1'-5	#7@8	74"	#6@8	7#7	#5@8

WALL SCHEDULE



CONCRETE STEM



MASONRY STEM

NOTES :

CODE : 1990 BOCA

LATERAL EARTH LOAD : 45 PSF/FT

SEE SITE PLAN FOR LOCATION AND GRADING
IF FOOTING ELEVATIONS REQUIRE ADJUSTMENT, NOTIFY ENGINEER.

FOUNDATIONS AND EARTH WORK :

A. FOOTINGS ARE DESIGNED FOR AN ALLOWABLE BEARING CAPACITY OF 2500 PSF. BOTTOM OF FOOTINGS SHALL BE 2'-6" MINIMUM BELOW FINISH GRADE AND 1'-0" MINIMUM BELOW EXISTING GRADES OR NEWLY PLACED STRUCTURAL FILL. THE CONTRACTOR SHALL RETAIN THE SERVICES OF A GEOTECHNICAL ENGINEER TO INSPECT AND CERTIFY THE BEARING CAPACITY OF THE SOIL PRIOR TO POURING FOOTINGS.
B. BACKFILL SHALL CONSIST OF CLEAN POROUS MATERIAL, PLACED IN 8" LAYERS AND COMPACTED WITH APPROPRIATE EQUIPMENT.

CONCRETE :

A. ALL CONCRETE SHALL DEVELOP COMPRESSIVE STRENGTH OF 3,500 PSI IN 28 DAYS, AND SHALL HAVE 5% AIR ENTRAINMENT.
B. CONCRETE WORK SHALL CONFORM TO BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, A.C.I. 318, BY THE AMERICAN CONCRETE INSTITUTE, LATEST EDITION.
C. REINFORCING STEEL SHALL BE ASTM A 615 GRADE 60.
D. PROVIDE SPACERS, CHAIRS AND TIES AS REQUIRED TO SUPPORT REINFORCING IN POSITION. PROVIDE 3" CLEARANCE TO BOTTOM FOOTING STEEL AND 2" COVER ON WALL REINFORCING AND TOP FOOTING STEEL.
E. CONTINUOUS REINFORCING SHALL BE LAPPED A MINIMUM OF 36 BAR DIAMETERS AT SPLICES.
F. REMOVE FINS, PATCH ALL TIE HOLES AND APPLY CLEAR SEALER.
G. PROVIDE 3/4" CHAMFER AT EXPOSED EDGES AND JOINTS.
H. THREE CONCRETE CYLINDERS SHALL BE FORMED AND TESTED FOR EACH POUR.

REINFORCED MASONRY :

A. REINFORCING STEEL SHALL BE ASTM A 615 GRADE 60.
B. CONTINUOUS REINFORCING SHALL BE LAPPED A MINIMUM OF 36 BAR DIAMETERS AT SPLICES.
C. CONCRETE MASONRY UNITS SHALL HAVE HAVE A 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI ON NET AREA.
D. BLOCKS SHALL HAVE SLOTS IN WEBS TO HOLD REINFORCING IN POSITION.
E. MORTAR SHALL BE TYPE M CONFORMING TO ASTM C 270, WITH A MINIMUM COMPRESSIVE STRENGTH OF 2800 PSI IN 28 DAYS.
F. GROUT SHALL CONFORM TO ASTM C 476, WITH A COMPRESSIVE STRENGTH OF 3000 PSI IN 28 DAYS, AND SHALL BE A HIGH SLUMP, PEA GRAVEL MIX, VIBRATED INTO CORES TO FILL WALL SOLID.

AS BUILT CERTIFICATE

ARTHUR E. MUEGGE #8707 DATE

APPROVED: FOR PUBLIC WATER AND SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 5-2-91

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 5/3/91

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 5/3/91

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 4/26/91

CHIEF, BUREAU OF ENGINEERING — DATE 4-26-91

DATE	NO	REVISION

OWNER/DEVELOPER
STONEHENGE LIMITED PARTNERSHIP
40 YORK ROAD
TOWSON MARYLAND 21204

PROJECT: A COMMERCIAL CENTER
THE ENCHANTED FOREST
PARCEL 'A' - PARCEL 68

AREA TAX MAP NO. 24 PARCELS 454, 564, 19, 68
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE:
RETAINING WALL DETAILS

DONALD SIMMONS ASSOCIATES
Consulting Engineers
4637 S. LEISURE COURT
ELLICOTT CITY, MD 21043
(301) 465-7334

11/15/90
DATE

STATE OF MARYLAND — DONALD E. SIMMONS — No. 14281 — PROFESSIONAL ENGINEER

DONALD E. SIMMONS, JR #14281

WP-90-54, 28 CASE 867M
S-85-82 WP-85-143 F-90-32

DESIGNED BY: DES, JR

DRAWN BY: DES, JR

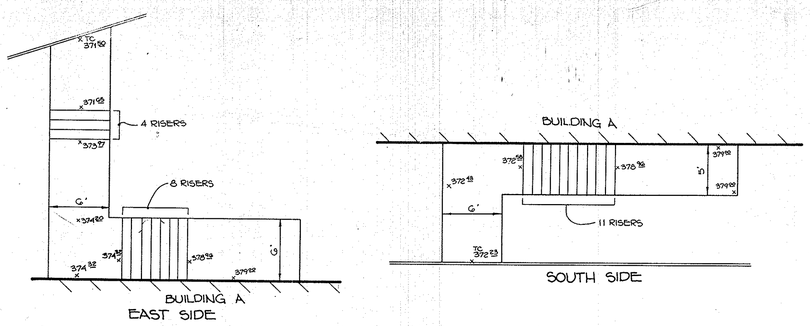
PROJECT NO: 90108

DATE: APRIL 3, 1991

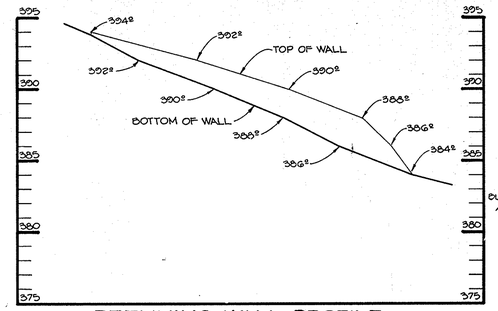
SCALE: AS SHOWN

DRAWING NO. 34 OF 40

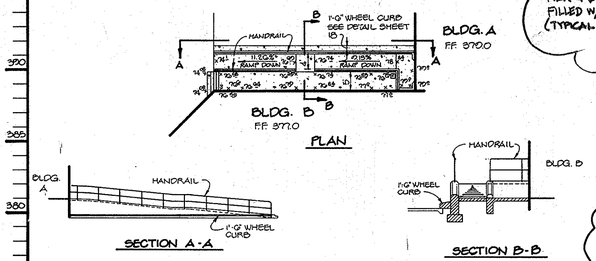
SDP-90-74



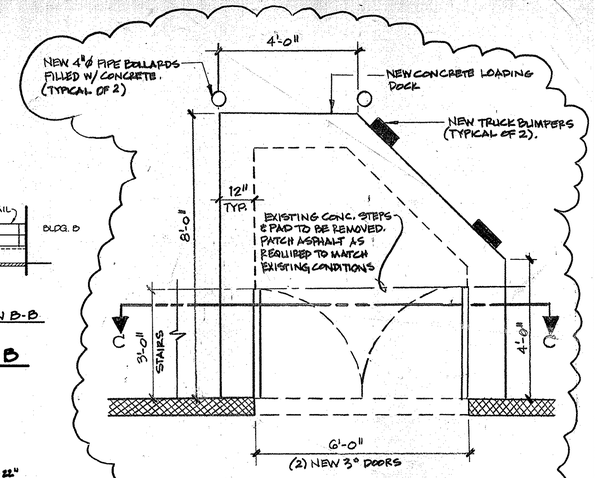
BUILDING 'A' STAIR DETAILS
NO SCALE



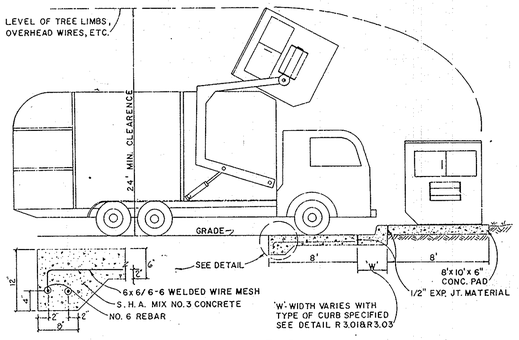
RETAINING WALL PROFILE
SCALE: HOR.: 1"=50' VER.: 1"=5'



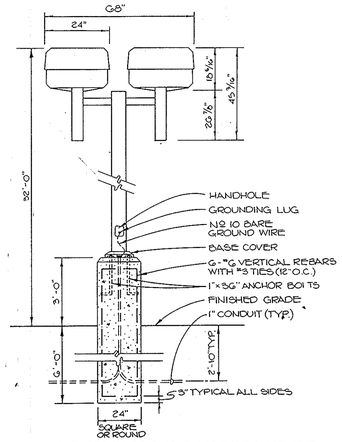
LOADING RAMP FOR BUILDINGS A & B
NO SCALE



NEW LOADING DOCK @ BUILDING C (PLANVIEW)
SCALE: 1/2"=1'-0"

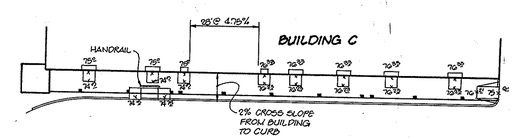


DUMPSTER PAD
NO SCALE

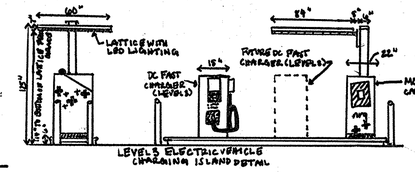


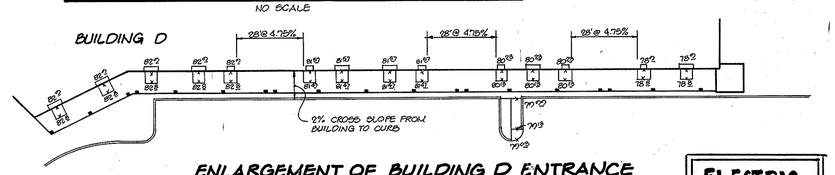
1. ALL LIGHT FIXTURES TO BE SINGLE LUMINAIRE 400 WATT HIGH PRESSURE SODIUM TYPE WITH METAL POLES DIRECTED DOWNWARD.
2. LOCATIONS OF LIGHT FIXTURES ARE SHOWN ON THE PLAN AS: ←■ (SINGLE FIXTURE), AND ■+■ (DOUBLE FIXTURE)
3. LIGHTS TO BE SUPRA-LYTE MODEL AS MANUFACTURED BY WIDELITE.
4. POLE TO BE LOCATED 3' FROM BACK OF CURB.

LIGHT POLE DETAIL
NO SCALE

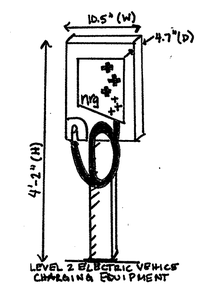


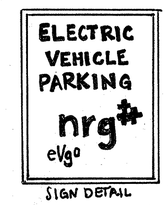
ENLARGEMENT OF BUILDING C ENTRANCE
NO SCALE



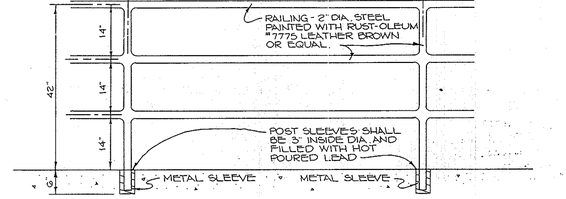


ENLARGEMENT OF BUILDING D ENTRANCE
NO SCALE

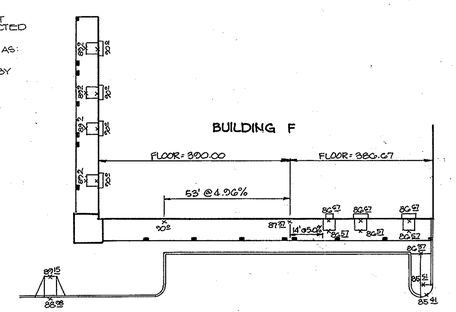


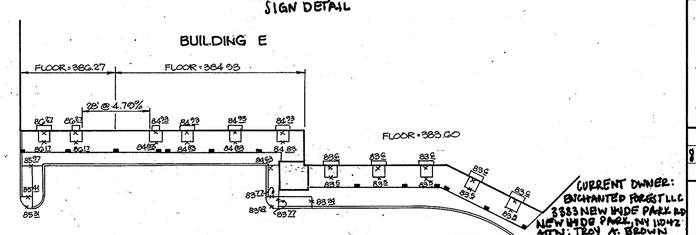


SIGN DETAIL

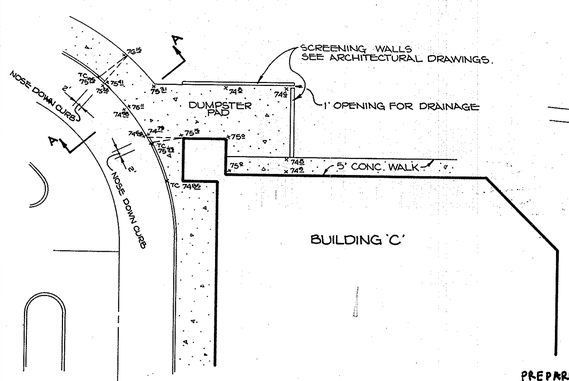


RETAINING WALL HAND RAIL DETAIL
NO SCALE

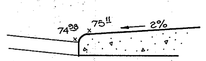




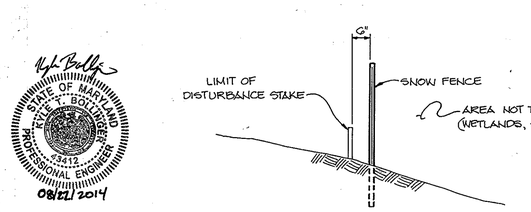
ENLARGEMENT OF BUILDINGS E AND F ENTRANCES
NO SCALE



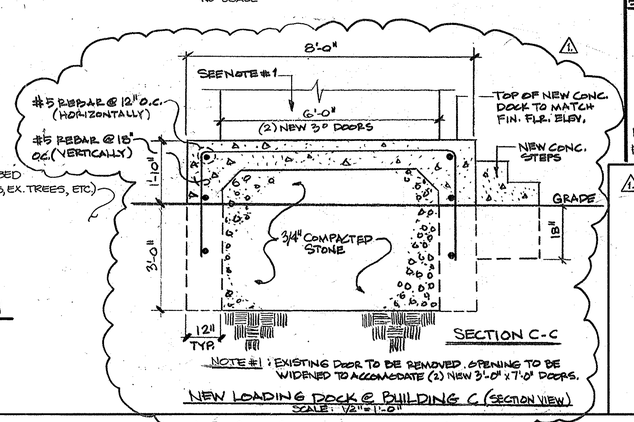
ENLARGEMENT OF DUMPSTER PAD AT BUILDING 'C'
SCALE: 1" = 20'



SECTION A-A
NO SCALE



TYPICAL SNOW FENCE LOCATION
NO SCALE



SECTION C-C

NOTE #1: EXISTING DOOR TO BE REMOVED. OPENING TO BE WIDENED TO ACCOMODATE (2) NEW 3'-0" x 7'-0" DOORS.

NEW LOADING DOCK @ BUILDING C (SECTION VIEW)
SCALE: 1/2"=1'-0"

PREPARED BY:
KIMLEY-HORN
11400 COMMERCE PARK DRIVE SUITE 400
RESTON, VA 20191
PHONE 703-674-1300

NOTE:
- KIMLEY-HORN IS RESPONSIBLE FOR 8/22/14 REDLINE REVISIONS ONLY.
- RIEMER MUEGGE AND ASSOCIATES IS RESPONSIBLE FOR ORIGINAL DESIGN.
- REFER TO EVGO FREEDOM STATION AT ENCHANTED FOREST CONSTRUCTION DRAWINGS FOR ADDITIONAL INFORMATION AND ADA REQUIREMENTS.

STATE OF MARYLAND — KYLE T. BOLTINGER — No. 34412 — PROFESSIONAL ENGINEER — 08/22/2014

GARRETT/GEORGE ASSOCIATES INCORPORATED
1500 N. EASTON ROAD, WILLOW GROVE, PA.

SEAL OF ARCHITECTS — BOARD OF ARCHITECTS — 9394 — JOHN C. WALKER — STATE OF MARYLAND
DATE: 12/4/2008
ENGINEER/ARCHITECT

⚠1 LOADING DOCK ADDITION BY GARRETT/GEORGE ASSOCIATES INCORPORATED. (215)658-1380

AS BUILT CERTIFICATE

JAYKANT O. PARIKH #10143
ARTHUR E. MUEGGE #8707 — DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 5-2-91

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 5/3/91

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

DIRECTOR — DATE 4/26/91

CHIEF, BUREAU OF ENGINEERING — DATE 4-26-91

DATE	NO.	REVISION
8/22/14	1	ADDITION OF ELECTRIC VEHICLE CHARGING STATION BY KIMLEY-HORN

OWNER / DEVELOPER

~~STONEHENGE LIMITED PARTNERSHIP~~
~~40 YORK ROAD~~
~~TOWSON, MARYLAND 21204~~

PROJECT — A COMMERCIAL CENTER
THE ENCHANTED FOREST
PARCEL 'A' AND PARCEL 68

AREA TAX MAP NO. 24 — PARCELS 454, 564, 19, 68
2nd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE
MISCELLANEOUS DETAILS

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

4.3.91 DATE

STATE OF MARYLAND — ARTHUR E. MUEGGE — No. 8707 — REGISTERED PROFESSIONAL ENGINEER

ARTHUR E. MUEGGE #8707

WP-90-54, ZB CASE 867M, S-89-82, WP-89-143, F-90-32, SDP-90-187

DESIGNED BY: J.J.B.
DRAWN BY: DAM
PROJECT NO: 30110
DATE: APRIL 3, 1991
SCALE: AS SHOWN
DRAWING NO. 40 OF 40

SDP-90-74

AS-BUILT