

SHEET INDEX			
DRAWING NO.	SHEET NO.	SET NO.	TITLE
TC-1	1 OF 20		TITLE SHEET
C-1	2 OF 20		EXISTING CONDITIONS AND DEMOLITION PLAN
C-2	3 OF 20		LAYOUT PLAN
C-3	4 OF 20		GEOMETRY PLAN
C-4	5 OF 20		GRADING PLAN
C-5	6 OF 20		UTILITY PLAN
C-6	7 OF 20	1 OF 3	EROSION AND SEDIMENT CONTROL PLAN
C-7	8 OF 20	2 OF 3	EROSION AND SEDIMENT CONTROL NOTES
C-8	9 OF 20	3 OF 3	EROSION AND SEDIMENT CONTROL DETAILS
C-9	10 OF 20		SITE DETAILS
C-10	11 OF 20		LANDSCAPE PLAN
C-11	12 OF 20		LANDSCAPE DETAILS
C-12	13 OF 20	1 OF 5	STORM WATER MANAGEMENT PLAN
C-13	14 OF 20	2 OF 5	STORM WATER MANAGEMENT DETAILS
C-14	15 OF 20	3 OF 5	STORM WATER MANAGEMENT DETAILS AND NOTES
C-15	16 OF 20	4 OF 5	STORM WATER MANAGEMENT - BAYS/SAVERS
C-16	17 OF 20	5 OF 5	STORM WATER MANAGEMENT BORINGS
C-17	18 OF 20		STORM DRAIN DRAINAGE AREA MAP
C-18	19 OF 20		TRAFFIC CONTROL PLAN
C-19	20 OF 20		UTILITY PROFILES

SITE DATA ANALYSIS

- A. TOTAL PROJECT AREA: 4.351 AC. (189,515SF)
- B. AREA OF PLAN SUBMISSION: 4.351 AC. (189,515SF)
- C. LIMIT OF DISTURBED AREA: 3.04 AC. (131,992 SF)
- D. PRESENT ZONING: R-20 AND NEW TOWN - OPEN SPACE NON-CREDITED

- E. PROPOSED USE OF SITE: RELIGIOUS & CHILD DAYCARE FACILITIES
 - PHASE 1: ADDITION TO CHURCH (2 STORIES) - 7000 SF. CONVERSION OF PARSONAGE TO DAYCARE - 2,110 SF. MAXIMUM NO. OF CHILDREN IN DAYCARE - 30
 - PHASE 2: ADDITION TO CHURCH (2 STORIES) - 6,000 SF.
 - PHASE 3: ADDITION TO CHURCH MEETING SPACE AND CLASSROOMS (2 STORIES) - 7,000 SF.
- F. FLOOR SPACE ON EACH LEVEL OF BUILDINGS PER USE:

EXISTING	
PARSONAGE	2,110 SF.
CHURCH	4,600 SF.
LOWER FLOOR	4,600 SF.
UPPER FLOOR	4,600 SF.
TOTAL	9,200 SF.

- G. PROPOSED: PHASE I ONLY
 - DAYCARE (CONVERSION OF PARSONAGE) - 2110 SF.
 - FELLOWSHIP HALL - 4570 SF.
 - LOWER FLOOR - 4570 SF.
 - UPPER FLOOR - 9140 SF.
 - PAVED AREA: 47,418 SF.

- H. NUMBER OF PARKING SPACES REQUIRED ON SITE:

CHURCH USE:	1 PARKING SPACE PER 3 SEATS
EXISTING SEATS:	235
PROPOSED SEATS:	115
TOTAL SEATS:	350
DAY CARE CENTER USE:	3 SP/1000 SF. - 2110=7 SP.

- I. BUILDING COVERAGE OF SITE:
 - EX. DAYCARE + EXISTING BLDG. = 3.9%
 - PHASE I CONST. = 2.5%
 - TOTAL BLDG. COVERAGE PROPOSED = 6.4%
- J. APPLICABLE DPZ FILE REFERENCE: BA 99-10E
 - F-01-138; F-96-102; FDP-222-A-1, PART V
 - BA-92.30-E AND V

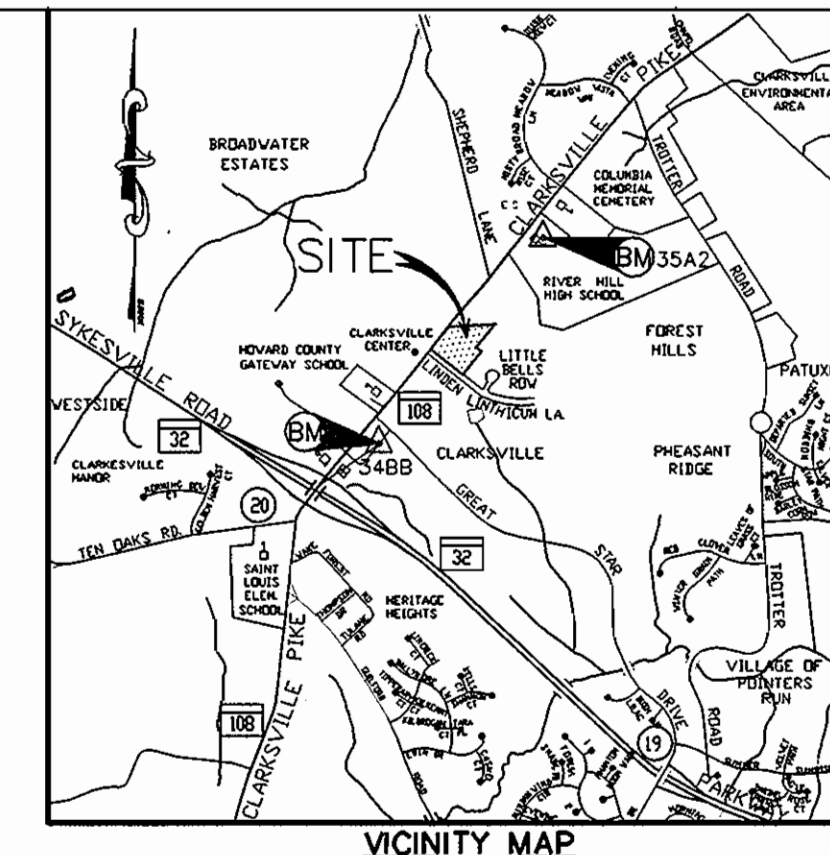
DECISION AND ORDER

IN THE MATTER OF * BEFORE THE
 LINDEN-LINTHICUM * HOWARD COUNTY
 UNITED METHODIST * CHURCH * BOARD OF APPEALS
 Petitioner * BA Case No. 99-10E

It is, this 16th day of NOVEMBER, 1999, by the Howard County Board of Appeals, ORDERED:

- That the Petition of Linden-Linthicum United Methodist Church for a special exception to expand an existing religious facility and to establish a child day care center in an R-20 (Residential: Single) Zoning District, filed pursuant to Sections 131.N.45 and 131.N.17 of the Howard County Zoning Regulations, be, and the same hereby is, GRANTED, subject to the following conditions:
- The special exception for the religious facility and the child day care center shall apply only to the additions and to the associated parking and other improvements as described in the Petition and on the plan, submitted June 17, 1999 February 5, 1999, respectively, and not to any other structures or uses on the property.
 - The Petitioner shall provide at least 117 parking spaces for the assembly use or shall submit a parking study in conjunction with the Site Development Plan that demonstrates that sufficient parking will be available for the assembly use.
 - A Type "E" landscape edge shall be provided along the parking lot closest to Linden Linthicum Lane.
 - The day care center may operate with a maximum of 30 children.
 - Any exterior lighting shall be in conformance with Section 134 of the Zoning Regulations.
 - The Petitioner must specify the drop off and pick up area for passengers for the child day care center.
 - The existing woods along the southeast side of the property shall remain.
 - The Petitioner shall comply with all applicable Federal, State, and County laws and regulations.

SITE DEVELOPMENT PLAN FOR LINDEN LINTHICUM UNITED METHODIST CHURCH HOWARD COUNTY MARYLAND



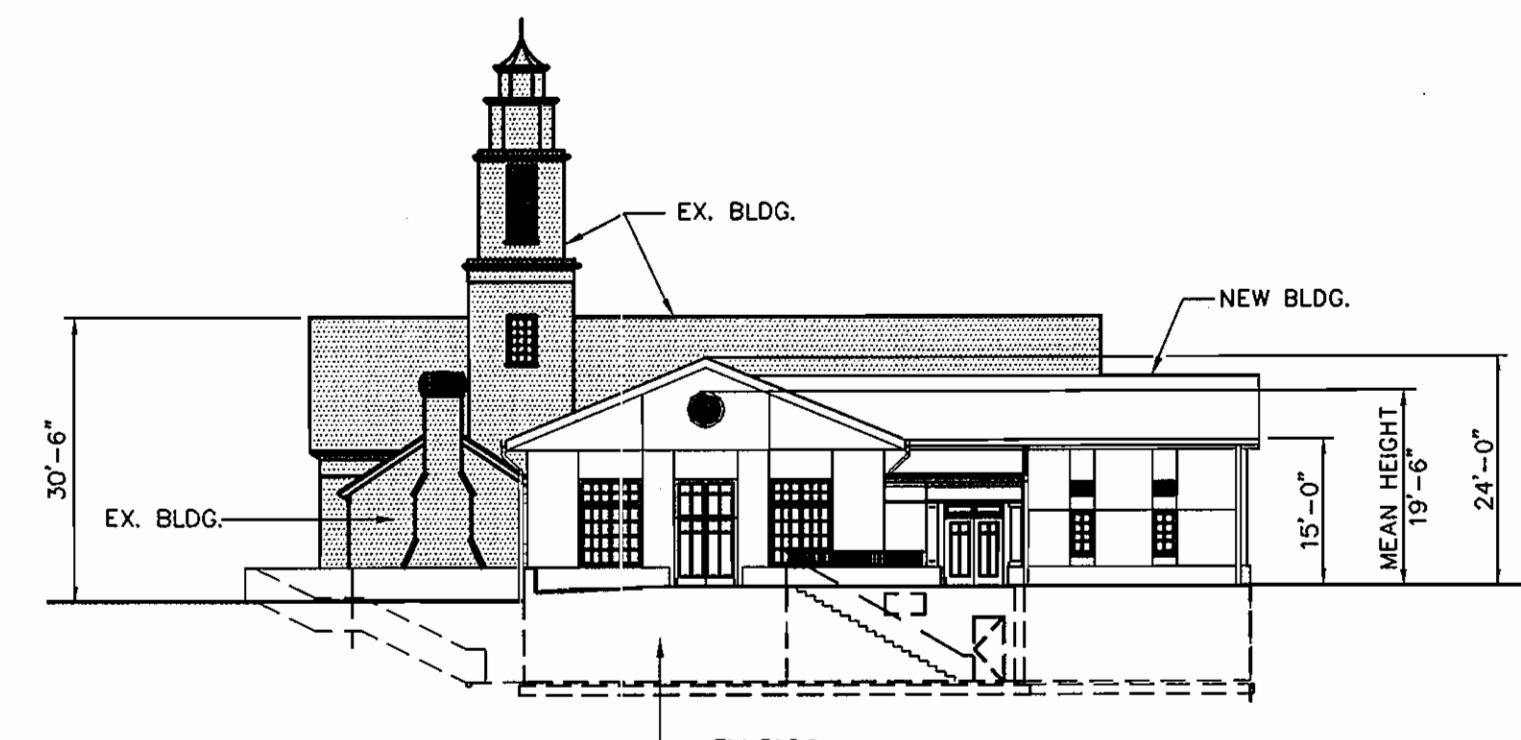
KERNS GROUP ARCHITECTS
 3030 CLARENDON BOULEVARD, SUITE 100
 ARLINGTON, VIRGINIA 22201-2804
 TEL 703.528.1150 FAX 703.528.1151

CIVIL ENGINEER
 WHITNEY, BAILEY, COX & MAGNANI, LLP
 849 FAIRMONT AVENUE, SUITE 200
 BALTIMORE, MARYLAND 21286
 410.512.4500 FAX 410.324.4100

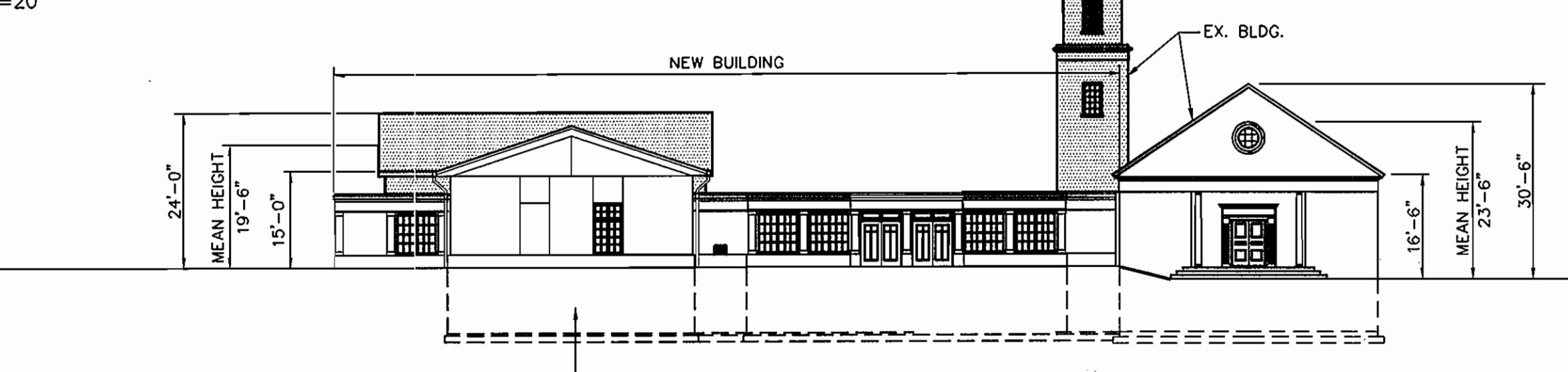
STRUCTURAL ENGINEER
 WBSN ASSOCIATES, P.C.
 904 PRINCE STREET, SUITE 201
 ALEXANDRIA, VIRGINIA 22314
 703.884.8864 FAX 703.546.8353

MPE ENGINEER
 BANSAL & ASSOCIATES, INC.
 50 SOUTH PICKETT STREET, SUITE 116
 ALEXANDRIA, VIRGINIA 22304
 703.823.4694 FAX 703.823.4697

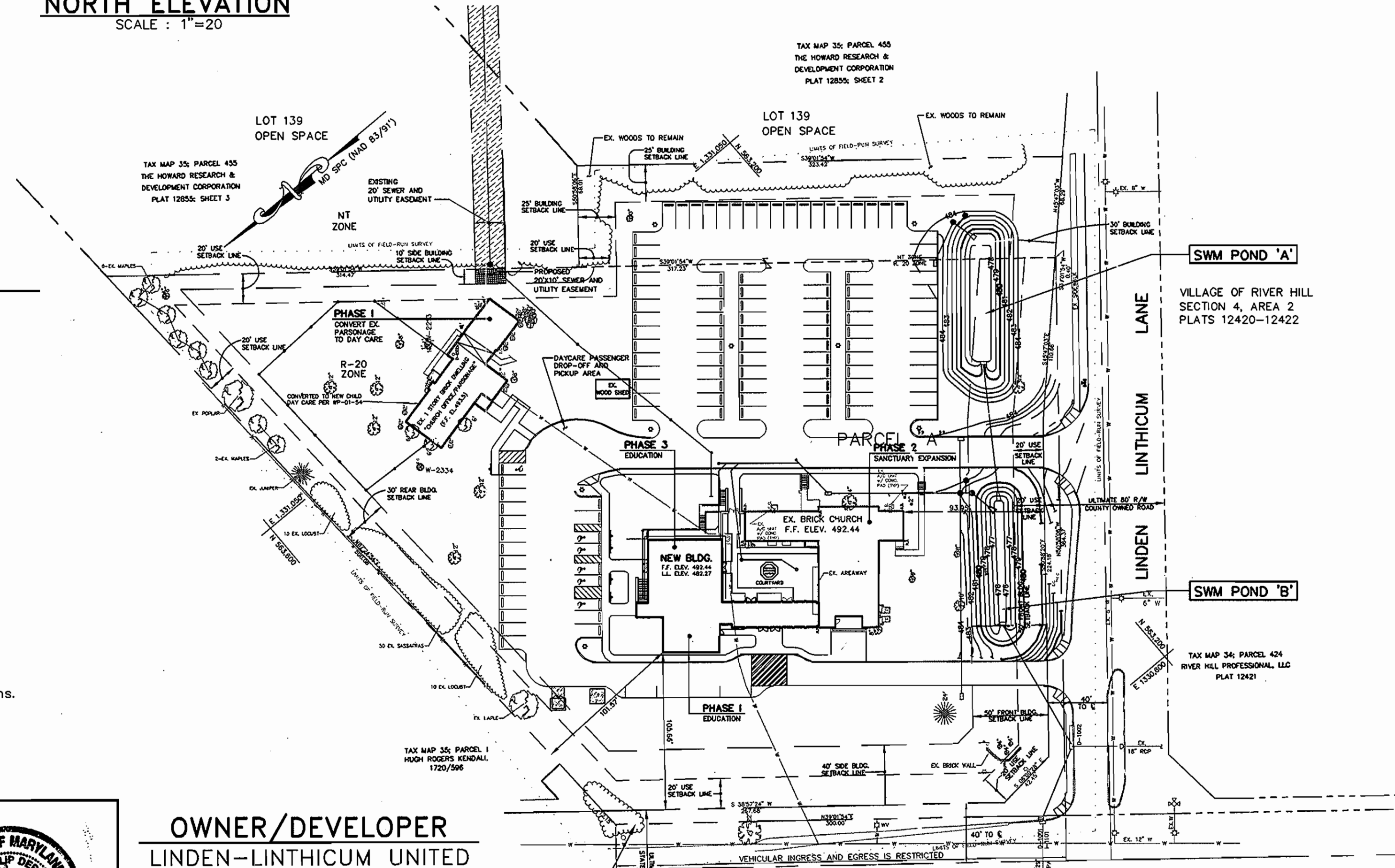
CONTRACTOR
 STRUEVER BROS. ECCLES & ROUSE, INC.
 519 NORTH CHARLES STREET
 BALTIMORE, MARYLAND 21201
 410.332.7402 FAX 410.576.9021



EAST ELEVATION
SCALE: 1"=20'



NORTH ELEVATION
SCALE: 1"=20'



MD ROUTE 108 - CLARKSVILLE PIKE
(MINOR ARTERIAL)

SITE PLAN
SCALE: 1" = 60'

REFERENCE NOTE
FOR LEGEND SEE SHEET C-2.

GENERAL NOTES

- THE TOPOGRAPHY SHOWN IS BASED UPON A FIELD RUN TOPOGRAPHIC SURVEY PERFORMED BY WHITNEY, BAILEY, COX & MAGNANI, LLP IN MAY 1999 AND REFLECTS SITE CONDITIONS AS OF THAT DATE.
- COORDINATES AND DIRECTIONS SHOWN HEREON ARE REFERRED TO THE MARYLAND STATE PLANE COORDINATE SYSTEM, NAD 83(91), AS DETERMINED FROM THE FOLLOWING HOWARD COUNTY GEODETIC SURVEY CONTROL MONUMENTS:
 3488 N 562,176.459 E 1,329,641.876 MTL DISC ON TOP OF CONC. COLUMN 35A2 N 564,154.802 E 1,331,201.085 MTL DISC ON TOP OF CONC. COLUMN
- ELEVATIONS SHOWN HEREON ARE REFERRED TO THE N.G.V.D. 29 AS DETERMINED FROM THE FOLLOWING HOWARD COUNTY GEODETIC SURVEY CONTROL SURVEY MONUMENTS:
 3488 ELEV. 485.254
 35A2 ELEV. 488.642
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ACTUAL SITE CONDITIONS PRIOR TO THE START OF ANY WORK. THERE IS NO WARRANTY OR GUARANTEE ON THE COMPLETENESS OR CORRECTNESS OF THE EXISTING CONDITION INFORMATION. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT PRIOR TO THE START OF ANY WORK.
- THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THE EXACT LOCATION OF ALL EXISTING UNDERGROUND UTILITIES BEFORE COMMENCING ANY WORK. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE COST OF REPAIR OF ANY AND ALL DAMAGES WHICH OCCUR AS A RESULT OF A FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL EXISTING UTILITIES TO REMAIN.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "MISS UTILITY" AT 1-800-257-7777 THREE DAYS PRIOR TO THE START OF ANY EXCAVATION WORK.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITY INVERTS AND CLEARANCES FROM NEW WORK PRIOR TO START OF ANY WORK.
- ALL DISTURBED AREAS NOT STABILIZED WITH STRUCTURES, PAVING, AND PLANTINGS SHALL BE STABILIZED WITH FOUR INCHES OF TOPSOIL, SEED, MULCH, AND WATER TO ESTABLISH AN ADEQUATE GROWTH OF VEGETATION.
- ALL WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS.
- THE TOPS OF ALL FRAMES, GRATES, AND COVERS OF ALL EXISTING UTILITIES WITHIN THE LIMITS OF CONTRACT AND/OR DISTURBANCE SHALL BE ADJUSTED TO THE NEW GRADES.
- CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
- NUMERICAL DIMENSIONS AND ELEVATIONS SHOWN SHALL SUPERSEDE ANY DISCREPANCY IN THE SCALING OF THE DRAWINGS.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY AND THE MD. STATE HWY. ADMINISTRATION.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST (5) FIVE WORKING DAYS PRIOR TO THE START OF WORK.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- ALL EXTERIOR LIGHT FIXTURES SHALL BE ORIENTED TO DIRECT LIGHT INWARDS AND DOWNWARDS ON-SITE AWAY FROM ALL ADJOINING RESIDENTIAL USE PROPERTIES. OUTDOOR LIGHTING SHALL BE IN ACCORDANCE WITH SECTION 134 OF THE HOWARD COUNTY ZONING REGULATIONS.
- WATER IS PUBLIC. CONTRACT NO. 34-3523-D SHEET 3.
- SEWER IS PUBLIC. CONTRACT NO. 34-3586-D SHEET 2.
- STORM WATER MANAGEMENT WILL BE PROVIDED BY MEANS OF 2 SURFACE PONDS WITH 2 BAY SAVER WATER QUALITY DEVICES.
- THE MAXIMUM HEIGHT ALLOWED IN THE R-20 ZONING DISTRICT FOR RELIGIOUS FACILITIES IS 34 FEET UNLESS OTHERWISE APPROVED BY THE BOARD OF APPEALS. SPIRALS, STEEPLES AND BELRIES ARE EXEMPT FROM HEIGHT REQUIREMENTS PER SECTION 128.A.3.G OF THE HOWARD COUNTY ZONING REGULATIONS.
- EXISTING UTILITIES ARE BASED ON FIELD-RUN SURVEY.
- THERE IS NO KNOWN FLOOD PLAIN ON THIS SITE.
- THERE ARE NO KNOWN WETLANDS ON THIS SITE PER STUDY PERFORMED BY WBCM ON 3/5/01.
- APFD ROADS TEST TRAFFIC STUDY, DATED NOVEMBER 2000, WAS PROVIDED FOR THIS PROJECT BY WBCM. APPROVAL DATE: 3/7/01.
- THIS SITE WAS THE SUBJECT OF HOWARD COUNTY BOARD OF APPEALS ZONING CASE NO 99-10E, SEE ZONING ORDER ON THIS SHEET.
- AA. THIS PROJECT COMPLIES WITH THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION WITH THE FILING OF DECLARATION OF INTENT (DOI) FOR A SINGLE LOT CLEARING LESS THAN 40,000 SF. OF FOREST.
- BB. NO CEMETERY OR BURIAL GROUNDS ONSITE.
- CC. WAIVER PETITION: WP-01-54 WAS SUBMITTED REQUESTING A WAIVER FROM SITE DEVELOPMENT PLAN REQUIREMENTS FOR THE DAYCARE CONVERSION.
 ACTION TAKEN: APPROVED
 APPROVAL DATE: MARCH 9, 2001
- DD. THE MINIMUM BUILDING SETBACK RESTRICTIONS FROM THE PROPERTY LINES AND ROAD R/W FOR THE NEW TOWN ZONED PORTION OF PARCEL A IS TO BE IN ACCORDANCE WITH FDP-222-A-1, PART V.

ADDRESS CHART	
LOT/PARCEL NO.	STREET ADDRESS
PARCEL A	12101 LINDEN LINTHICUM LANE

PERMIT INFORMATION CHART				
SUBDIVISION NAME:	SECTION/AREA	PARCEL/LOT NO.	TAX MAP ELECT. DISTR.	CENSUS TRACT NO.
VILLAGE OF RIVER HILL LINDEN-LINTHICUM UNITED METHODIST CHURCH	VRH 4/5	PARCELS A (218 AND 455)	35	6055
PLAT NO. OR L/F	BLOCK NO.	ZONING	TAX MAP ELECT. DISTR.	CENSUS TRACT NO.
14690	1	R-20 NT OS	35	6055
WATER CODE	SEWER CODE			
34-3523-D SHEET 3	34-3586-D SHEET 2			

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

DATE: 8/16/01

DATE: 8/16/01

DATE: 8/17/01



OWNER/DEVELOPER
 LINDEN-LINTHICUM UNITED
 METHODIST CHURCH
 12101 LINDEN LINTHICUM LANE
 CLARKSVILLE, MD 21043
 (410) 531-5653
 DEED REFERENCE = 359/489

RELIGIOUS FACILITY EXPANSION AND
 CONVERSION FOR CHILD DAY CARE FACILITY

TITLE SHEET

SDP-01-15
DRAWING NO.

TC-1

SHEET 1 OF 20

SDP-01-15

3030 CLARENDON BOULEVARD, SUITE 100
ARLINGTON, VIRGINIA 22201-2804
TEL 703.528.1150 FAX 703.528.1151

CIVIL ENGINEER
WHITNEY, BAILEY, COX & MAGNANI, LLP
849 FAIRMONT AVENUE, SUITE 200
BALTIMORE, MARYLAND 21286
410.512.4500 FAX 410.324.4100

STRUCTURAL ENGINEER
MBSSEN ASSOCIATES, P.C.
904 PRINCE STREET, SUITE 201
ALEXANDRIA, VIRGINIA 22314
703.684.8864 FAX 703.548.6353

MPE ENGINEER
BANSAL & ASSOCIATES, INC.
50 SOUTH PICKETT STREET, SUITE 1116
ALEXANDRIA, VIRGINIA 22304
703.823.4894 FAX 703.823.4897

CONTRACTOR
STRUEVER BROS. ECCLES & ROUSE, INC.
619 NORTH CHARLES STREET
BALTIMORE, MARYLAND 21201
410.332.7402 FAX 410.576.9021

LEGEND

DESCRIPTION	EXISTING	NEW	DEMOLITION
BUILDING	EX. BLDG.	NEW BLDG.	
PAVING	EX. PAVING	LIGHT DUTY	EX. PAVING
CONCRETE SIDEWALK	EX. WALK		EX. WALK
CURB			*****
STORM DRAIN	D		--- --- ---
SANITARY	SS		
WATER	W		
GAS	G		
TELEPHONE	T		
OVER HEAD ELECTRIC	OHE		--- --- ---
GAS VALVE			X
POWER POLE			
CLEANOUT			
WATER METER			
VALVE			
HYDRANT			
MANHOLE			
INLET			
WALL			
CONTOUR	---492--- ---490---	---492--- ---490---	
SPOT ELEVATION	x 490	+ 490	
FFNCE	X		
TREE	⊗ 32"	⊙	⊗ 32"
TREELINE			
SIGN			*
LIGHT POLE			
LIMIT OF DISTURBANCE			
STEEP SLOPES 25 % OR GREATER			

CONSTRUCTION NOTES

- N-1 RESET EXISTING FLAGSTONE PAVING.
- N-2 NEW LIGHT DUTY BITUMINOUS PAVING, SEE DETAIL 2, SHEET C-9.
- N-3 NEW CONCRETE SIDEWALK, SEE DETAIL 3, SHEET C-9.
- N-4 ALL SIDEWALKS ADJACENT TO THE CURB SHALL BE A MINIMUM 5' WIDE.
- N-5 NEW WHEEL STOP (TOTAL OF 59), SEE DETAIL 4, SHEET C-9.
- N-6 NEW HANDICAP PARKING SIGN (TOTAL OF 3) SEE DETAIL 6, SHEET C-9.
- N-7 NEW VAN ACCESSIBLE HANDICAPPED PARKING SIGN (TOTAL OF 3), SEE DETAIL 6, SHEET C-9.
- N-8 NEW HANDICAP PARKING PAVEMENT MARKING (TOTAL OF 6), SEE DETAIL 7, SHEET C-9.
- N-9 NEW PARKING STRIPING, SEE DETAIL 8, SHEET C-9.
- N-10 NEW CROSSWALK STRIPING, SEE DETAIL 9, SHEET C-9.
- N-11 NEW PEDESTRIAN RAMP, SEE DETAIL 10, SHEET C-9.
- N-12 NEW CONCRETE CURB AND GUTTER, SEE HOWARD COUNTY STD. DETAIL R-3.01.
- N-13 SEE ARCH. DWG. A.2.2 FOR COURTYARD LAYOUT AND NOTES.
- N-14 NEW NOSE DOWN CURB, SEE DETAIL 5, SHEET C-9.
- N-15 NEW CONCRETE STAIRS, SEE DETAIL 12, SHEET C-9.
- N-16 NEW CONCRETE WALL, SEE ARCHITECTURAL DWGS.
- N-17 NEW TRANSFORMER PAD, SEE DETAIL 13, SHEET C-9.
- N-18 MEET EXISTING CONDITIONS.
- N-19 NEW PEDESTRIAN RAMP, SEE HOWARD COUNTY STD. DETAIL R-4.03.
- N-20 MILL EXISTING PAVING 6" WIDE AND OVERLAP NEW SURFACE COURSE TO CREATE SMOOTH JOINT.
- N-21 NEW DUMPSTER ENCLOSURE AND PAD, SEE DETAILS 11 AND 14, SHEET C-9.
- N-22 RELOCATED WOOD SHED (BY OWNER).
- N-23 9000 S.F. FENCED ENCLOSURE FOR OUTDOOR PLAY AREA. EQUIPMENT TO BE SELECTED BY OWNER (BY OTHERS). **6' HIGH FENCE**
- N-24 NEW CONCRETE SIDEWALK (BY OTHERS).
- N-25 NEW CANOPY (BY OTHERS).
- N-26 NEW SIDEWALK RAMP TYPE 'A', SEE HOWARD COUNTY STD. DETAIL R-4.01.

REFERENCE NOTES
FOR GENERAL NOTES, SEE SHEET TC-1

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

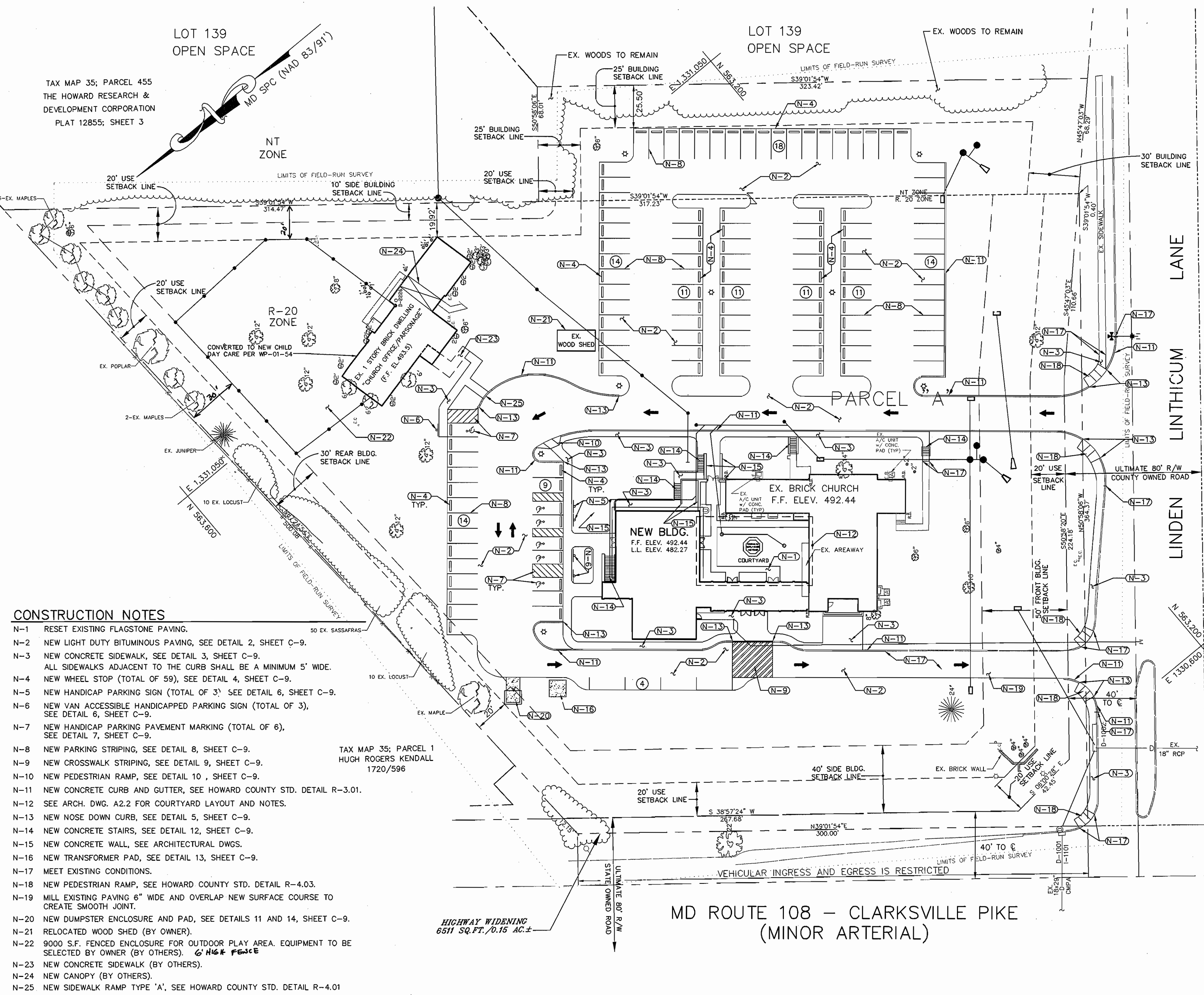
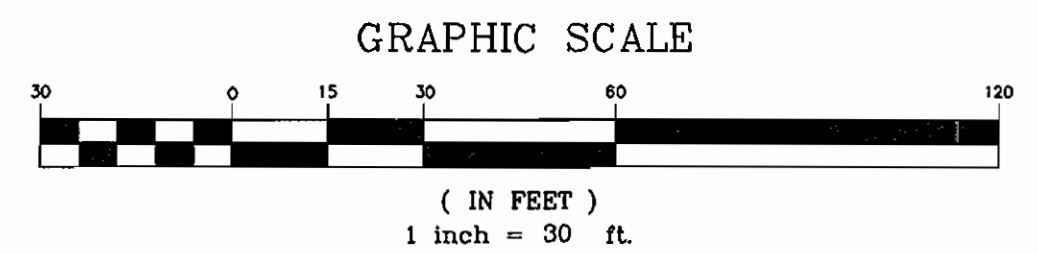
CHIEF, DEVELOPMENT ENGINEERING DIVISION
[Signature] 8/7/01 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT
[Signature] 8/16/01 DATE

DIRECTOR
[Signature] 8/17/01 DATE



**MD ROUTE 108 - CLARKSVILLE PIKE
(MINOR ARTERIAL)**



TAX MAP 34; PARCEL 424
RIVER HILL PROFESSIONAL, LLC
PLAT 12421



**LINDEN-LINTHICUM
UNITED METHODIST
CHURCH**
CLARKSVILLE, MARYLAND

RELIGIOUS FACILITY EXPANSION AND
CONVERSION FOR CHILD DAY CARE FACILITY

LAYOUT PLAN

SDP-01-15

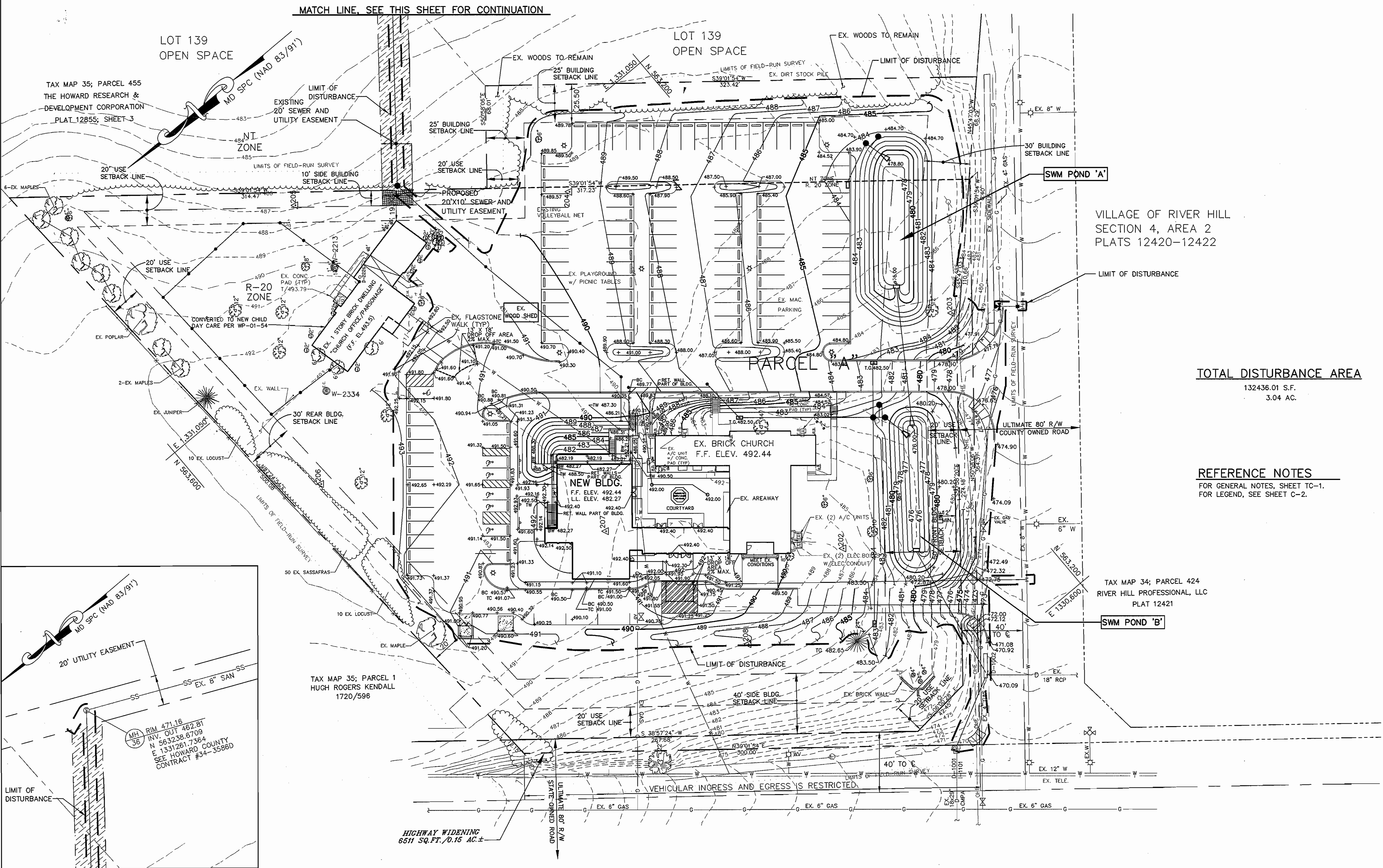
DRAWING NO.

C-2

SHEET 3 OF 20

SDP-01-15

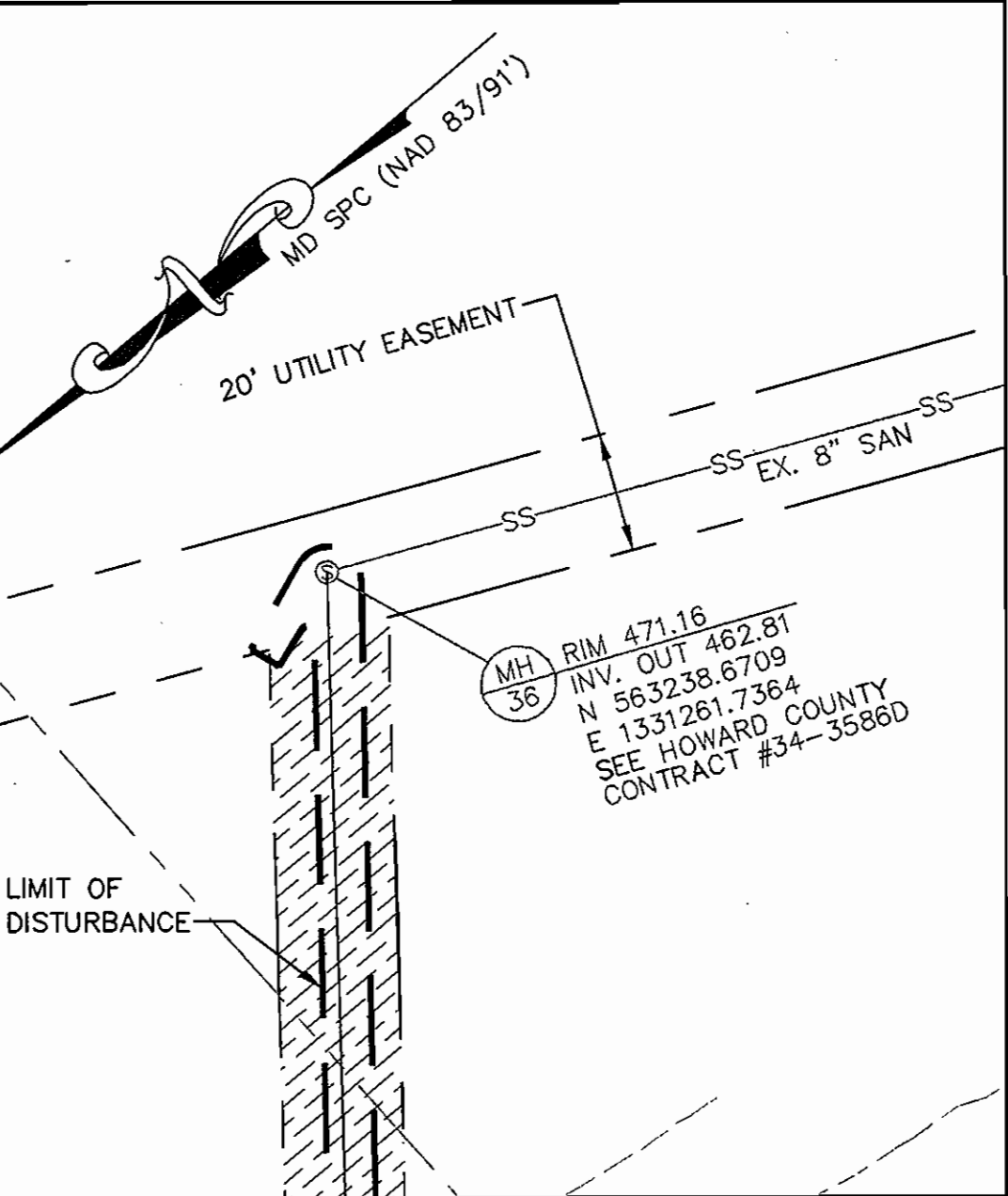
5/98 PROJECT NO. 792.01



VILLAGE OF RIVER HILL
SECTION 4, AREA 2
PLATS 12420-12422

TOTAL DISTURBANCE AREA
132436.01 S.F.
3.04 AC.

REFERENCE NOTES
FOR GENERAL NOTES, SHEET TC-1.
FOR LEGEND, SEE SHEET C-2.



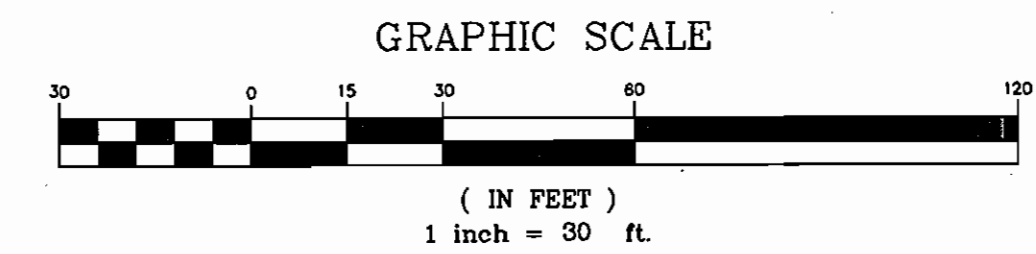
MATCH LINE, SEE THIS SHEET FOR CONTINUATION

TAX MAP 35; PARCEL 1
HUGH ROGERS KENDALL
1720/596

TAX MAP 34; PARCEL 424
RIVER HILL PROFESSIONAL, LLC
PLAT 12421

HIGHWAY WIDENING
6511 SQ. FT. / 0.15 AC. ±

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.
Howard Co. Dept. of Planning & Zoning
CHIEF, DEVELOPMENT ENGINEERING DIVISION
8/16/01 DATE
Butcher for CH
CHIEF, DIVISION OF LAND DEVELOPMENT
8/16/01 DATE
James J. McLaughlin
DIRECTOR
8/17/01 DATE



KERNS GROUP ARCHITECTS

3030 CLARENDON BOULEVARD, SUITE 100
ARLINGTON, VIRGINIA 22201-2804
TEL 703.528.1150 FAX 703.528.1151

CIVIL ENGINEER

WHITNEY, BAILEY, COX & MAGNANI, LLP
640 FAIRMONT AVENUE SUITE 200
BALTIMORE, MARYLAND 21286
410.512.4500 FAX 410.324.4100

STRUCTURAL ENGINEER

HESEN ASSOCIATES, P.C.
904 PRINCE STREET, SUITE 201
ALEXANDRIA, VIRGINIA 22304
703.584.0664 FAX 703.548.6553

MPE ENGINEER

BANSAL & ASSOCIATES, INC.
50 SOUTH PICKETT STREET, SUITE 110
ALEXANDRIA, VIRGINIA 22304
703.823.4694 FAX 703.823.4697

CONTRACTOR

STRUEVER BROS. ECCLES & ROUSE, INC.
519 NORTH CHARLES STREET
BALTIMORE, MARYLAND 21201
410.332.7482 FAX 410.576.9821



LINDEN-LINTHICUM UNITED METHODIST CHURCH
CLARKSVILLE, MARYLAND

RELIGIOUS FACILITY EXPANSION AND
CONVERSION FOR CHILD DAY CARE FACILITY

GRADING PLAN

SDP-01-15

DRAWING NO.

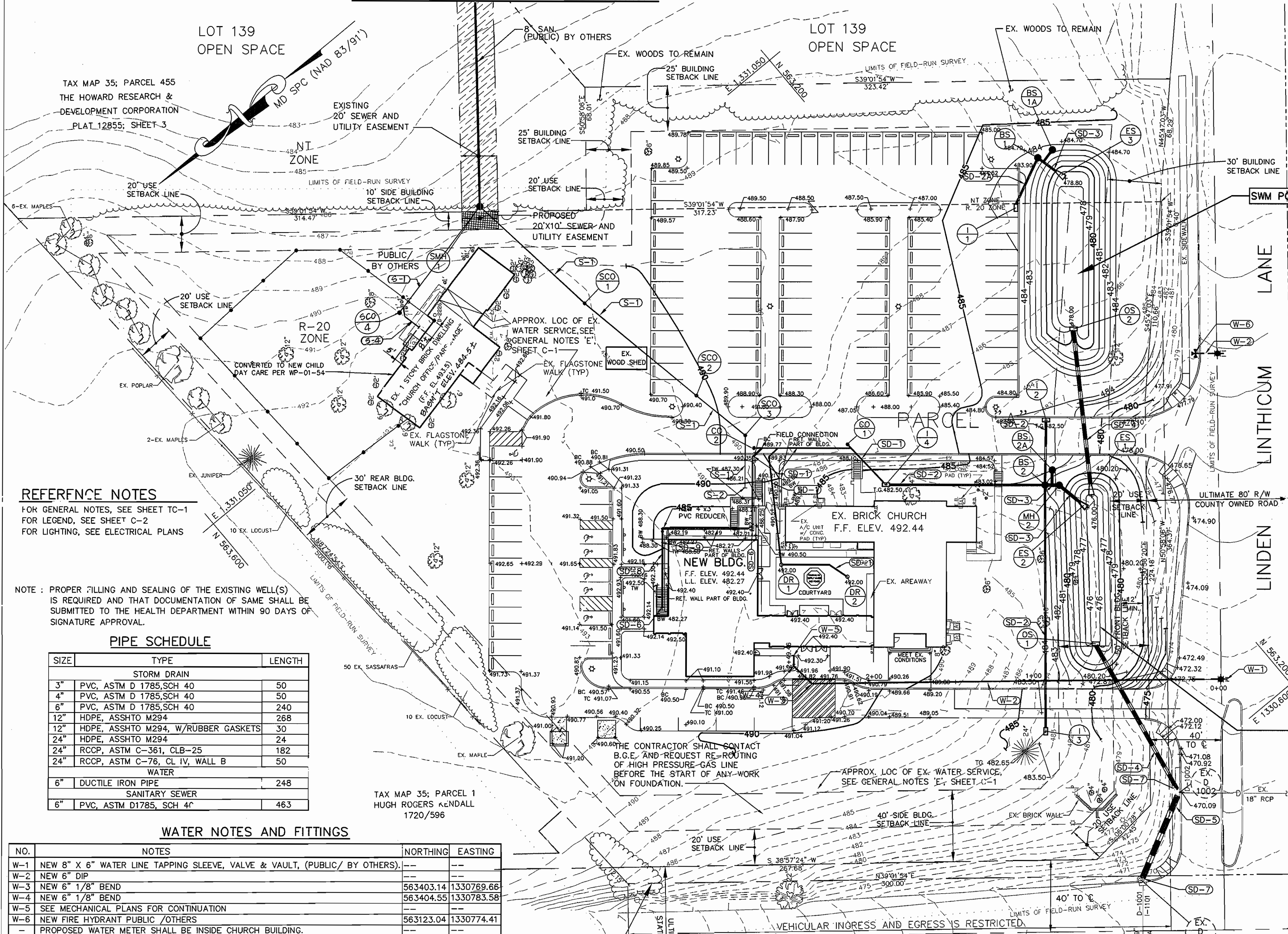
C-4

SHEET 5 OF 20

SDP-01-15

ESEA PROJECT NO. 724.01

MATCH LINE, SEE THIS SHEET FOR CONTINUATION



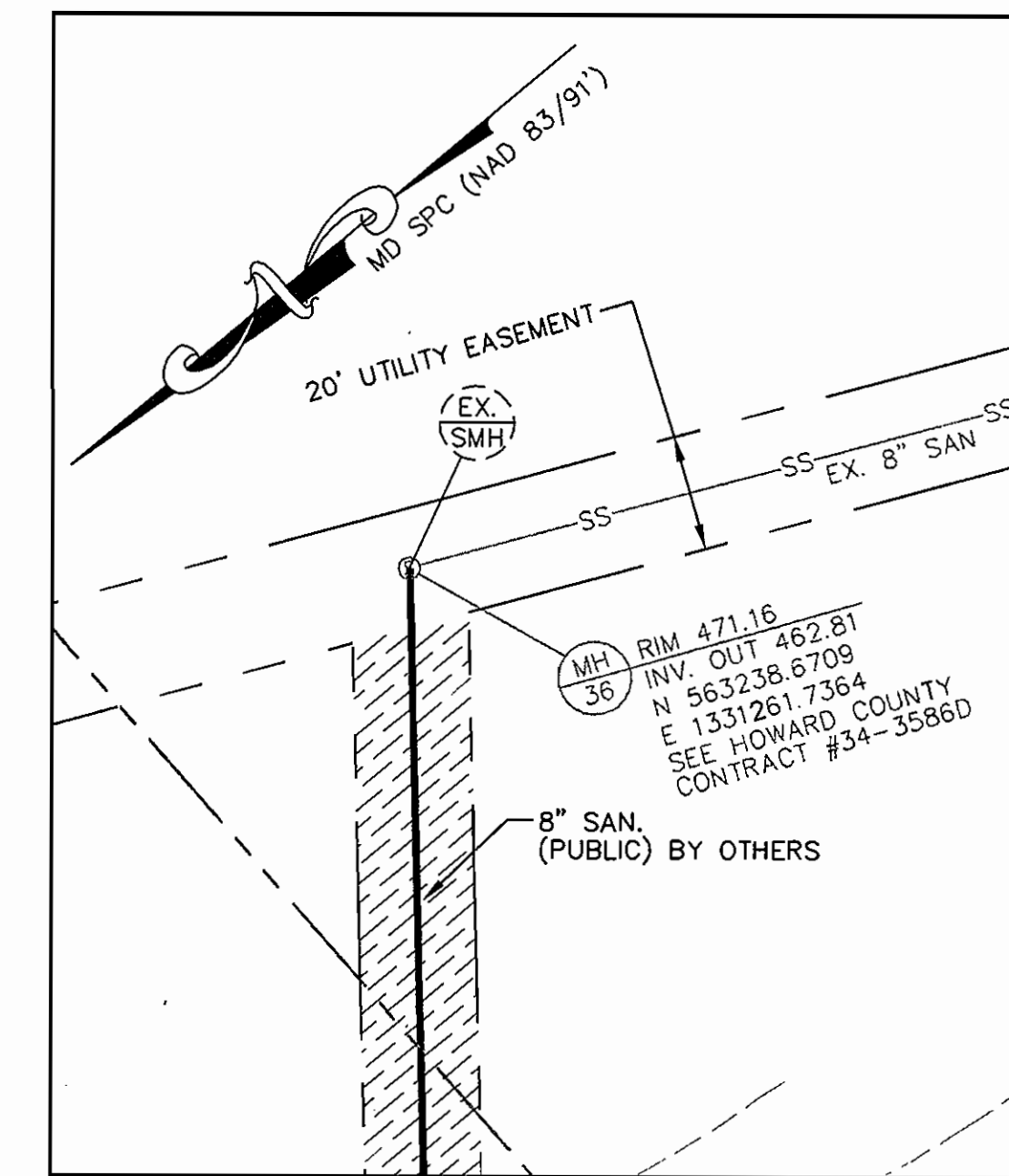
STORM DRAIN NOTES

- SD-1 NEW 6" PVC, ASTM D 1785, SCH 40
- SD-2 NEW 12" HDPE, ASSHTO M 294
- SD-2A NEW 12" HDPE, ASSHTO M 294, W/RUBBER GASKETS
- SD-3 NEW 24" HDPE, ASSHTO M 294, W/RUBBER GASKETS
- SD-4 NEW 24" RCCP, ASTM C-361, CL. B-25
- SD-5 NEW 24" RCCP, ASTM C-76, CL. IV, WALL B
- SD-6 SEE MECHANICAL PLANS FOR CONTINUATION
- SD-7 CONNECT TO EXISTING INLET
- SD-8 NEW 3" PVC, ASTM D 1785, SCH 40
- SD-9 TYPE M NEENAH TRENCH DRAIN (R-4995)

SANITARY NOTES

- S-1 NEW 6" PVC, ASTM D 1785, SCH 40
- S-2 SEE MECHANICAL PLANS FOR CONTINUATION
- S-3 NEW 8" PUBLIC (BY OTHERS)
- S-4 CONNECT TO EXISTING SANITARY SEWER PIPING. CONTRACTOR TO VERIFY TYPE, SIZE AND LOCATION OF EXISTING PIPING PRIOR TO STARTING WORK WATCH EX. PIPING @ TIE-IN POINT.

VILLAGE OF RIVER HILL
SECTION 4, AREA 2
PLATS 12420-12422



MATCH LINE, SEE THIS SHEET FOR CONTINUATION

REFERENCE NOTES

- 1- FOR GENERAL NOTES, SEE SHEET TC-1
- 2- FOR LEGEND, SEE SHEET C-2
- 3- FOR LIGHTING, SEE ELECTRICAL PLANS

NOTE: PROPER FILLING AND SEALING OF THE EXISTING WELL(S) IS REQUIRED AND THAT DOCUMENTATION OF SAME SHALL BE SUBMITTED TO THE HEALTH DEPARTMENT WITHIN 90 DAYS OF SIGNATURE APPROVAL.

PIPE SCHEDULE

SIZE	TYPE	LENGTH
STORM DRAIN		
3"	PVC, ASTM D 1785, SCH 40	50
4"	PVC, ASTM D 1785, SCH 40	50
6"	PVC, ASTM D 1785, SCH 40	240
12"	HDPE, ASSHTO M294	268
12"	HDPE, ASSHTO M294, W/RUBBER GASKETS	30
24"	HDPE, ASSHTO M294	24
24"	RCCP, ASTM C-361, CLB-25	182
24"	RCCP, ASTM C-76, CL IV, WALL B	50
WATER		
6"	DUCTILE IRON PIPE	248
SANITARY SEWER		
6"	PVC, ASTM D1785, SCH 40	463

WATER NOTES AND FITTINGS

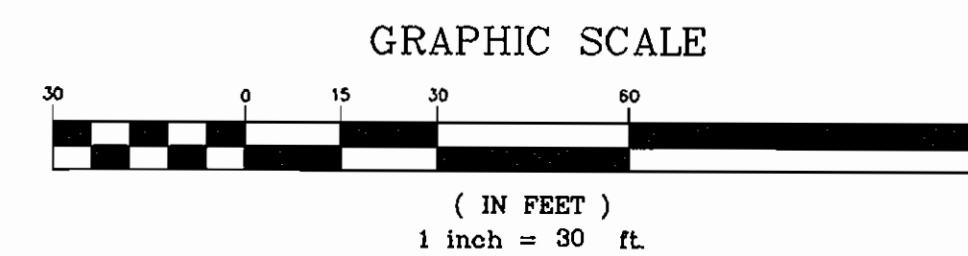
NO.	NOTES	NORTHING	EASTING
W-1	NEW 8" X 6" WATER LINE TAPPING SLEEVE, VALVE & VAULT, (PUBLIC/ BY OTHERS).		
W-2	NEW 6" DIP		
W-3	NEW 6" 1/8" BEND	563403.14	1330789.66
W-4	NEW 6" 1/8" BEND	563404.55	1330783.58
W-5	SEE MECHANICAL PLANS FOR CONTINUATION		
W-6	NEW FIRE HYDRANT PUBLIC /OTHERS	563123.04	1330774.41
-	PROPOSED WATER METER SHALL BE INSIDE CHURCH BUILDING.		

SANITARY SCHEDULE

NO.	INV. IN	INV. OUT	RIM	NORTHING	EASTING	COMMENTS
SMH-1	470.25	---	488.25	563374.72	1331090.54	PUBLIC BY OTHERS
SCO-1	472.68	---	491.15	563364.58	1331012.15	MAIN LINE CLEANOUT, SEE HO. CO. PLATE S-3.21
SCO-2	475.21	---	490.24	563343.29	1330899.06	MAIN LINE CLEANOUT, SEE HO. CO. PLATE S-3.21
SCO-3	476.31	---	489.68	563349.76	1330933.46	MAIN LINE CLEANOUT, SEE HO. CO. PLATE S-3.21

STORM DRAIN SCHEDULE

NO.	INV. IN	INV. OUT	RIM/TOP OF GRATE	NORTHING	EASTING	COMMENTS
I-1	---	480.20	483.70	563147.81	1330899.86	TYPE S INLET, SEE HO. CO. PLATE SD-4.22
I-2	---	479.00	482.50	563210.26	1330798.86	TYPE S INLET, SEE HO. CO. PLATE SD-4.22
I-3	---	479.15	482.65	563320.92	1330686.42	TYPE S INLET, SEE HO. CO. PLATE SD-4.22
I-4	477.60	477.40	482.00	563301.15	1330828.13	PRECAST WR INLET, SEE HO. CO. PLATE SD-4.37
MH-1	479.60	479.35	484.00	563120.81	1330913.34	---
MH-2	478.64	478.44	480.50	563227.76	1330766.45	STANDARD HO. CO. MANHOLE, PLATE G-5.13
MH-3	478.30	478.72	481.00	563333.77	1330771.54	---
EX. D 1001	465.18	464.51	465.30	563333.41	1330589.53	EX. INLET, SEE PROFILE ON SHEET C-12
EX. D 1002	---	---	---	563286.27	1330593.19	EX. COG-15 INLET, SEE PROFILE ON SHEET C-12
CO-1	477.55	477.55	487.60	563303.11	1330838.88	MAIN LINE CLEANOUT, SEE HO. CO. PLATE S-3.21
CO-2	---	---	489.5	563344.05	1330800.57	MAIN LINE CLEANOUT, SEE HO. CO. PLATE S-3.21
ES-1	---	478.00	---	563214.09	1330756.95	STANDARD 24" CONCRETE END SECTION
ES-2	---	478.00	476.36	563224.98	1330751.86	STANDARD 24" HDPE END SECTION
ES-3	---	478.00	---	563117.73	1330900.98	STANDARD 24" HDPE END SECTION
OS-1	---	---	---	563268.49	1330886.12	SEE DETAILS ON SHEET C-14
OS-2	---	---	---	563116.34	1330877.93	SEE DETAILS ON SHEET C-14
BS-1	---	---	484.00	563111.77	1330911.59	BAYSAVER, SEE DETAILS ON SHEET C-15
BS-2	---	---	482.25	563225.41	1330775.38	BAYSAVER, SEE DETAILS ON SHEET C-15



APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

CHIEF, DEVELOPMENT ENGINEERING DIVISION
Kat Chelunok /for CH
DATE: 8/16/01

CHIEF, DIVISION OF LAND DEVELOPMENT
Shawna C. Taylor
DATE: 8/17/01

STATE OF MARYLAND
PROFESSIONAL ENGINEER
DATE: 8/16/01



KERNS GROUP ARCHITECTS

3030 CLARENDON BOULEVARD, SUITE 100
ARLINGTON, VIRGINIA 22201-2804
TEL 703.528.1150 FAX 703.528.1151

CIVIL ENGINEER

WHITNEY, BAILEY, COX & MACMILLAN, LLP
849 FAIRBURY AVENUE, SUITE 200
BALTIMORE, MARYLAND 21286
410.512.4500 FAX 410.324.4100

STRUCTURAL ENGINEER

MESNR ASSOCIATES, P.C.
904 PRINCE STREET, SUITE 201
ALEXANDRIA, VIRGINIA 22304
703.684.8684 FAX 703.548.6353

MPE ENGINEER

BANSAL & ASSOCIATES, INC.
50 SOUTH PICKETT STREET, SUITE 110
ALEXANDRIA, VIRGINIA 22304
703.623.4694 FAX 703.623.4697

CONTRACTOR

STRUEVER BROS. ECCLES & ROUSE, L.C.
519 NORTH CHARLES STREET
BALTIMORE, MARYLAND 21201
410.582.7402 FAX 410.517.8921



LINDEN-LINTHICUM UNITED METHODIST CHURCH
CLARKSVILLE, MARYLAND

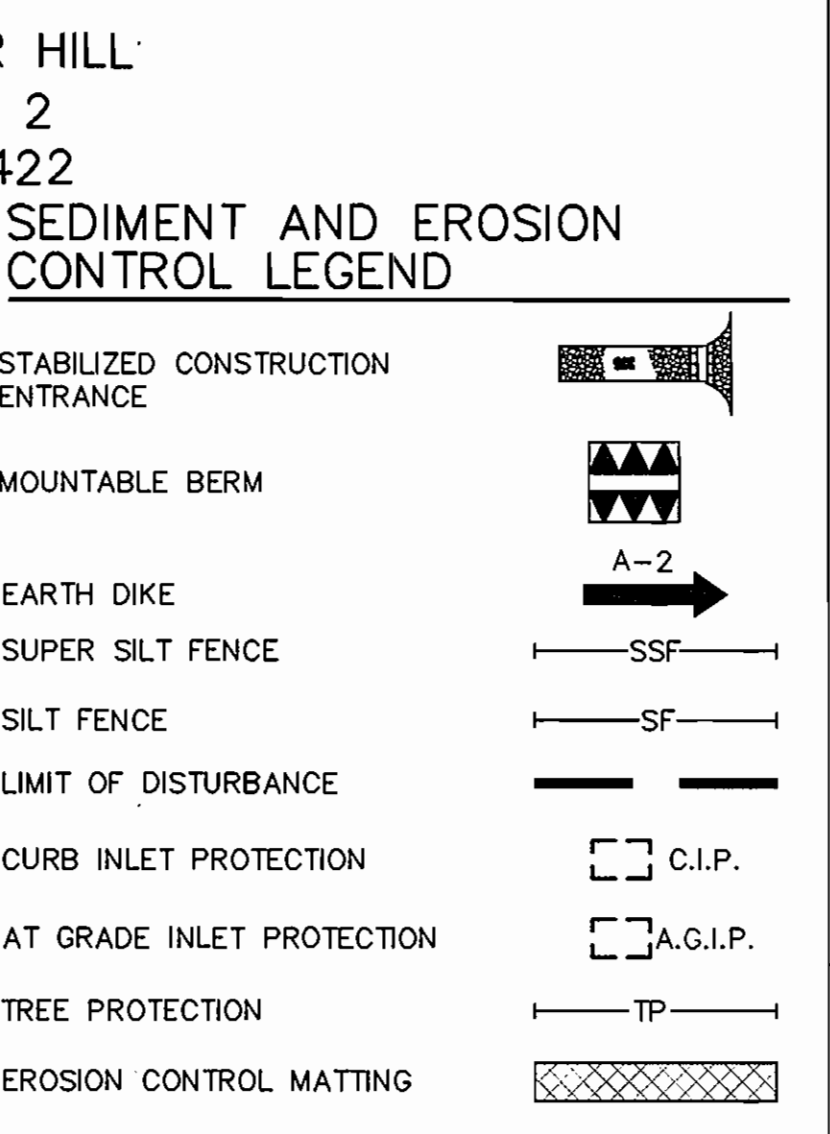
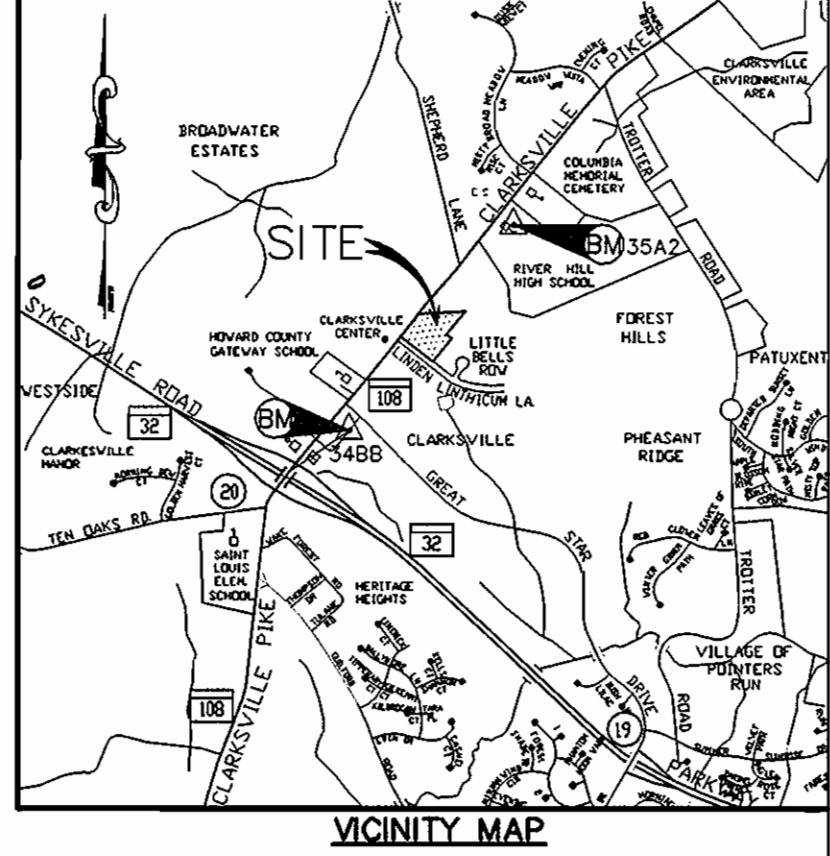
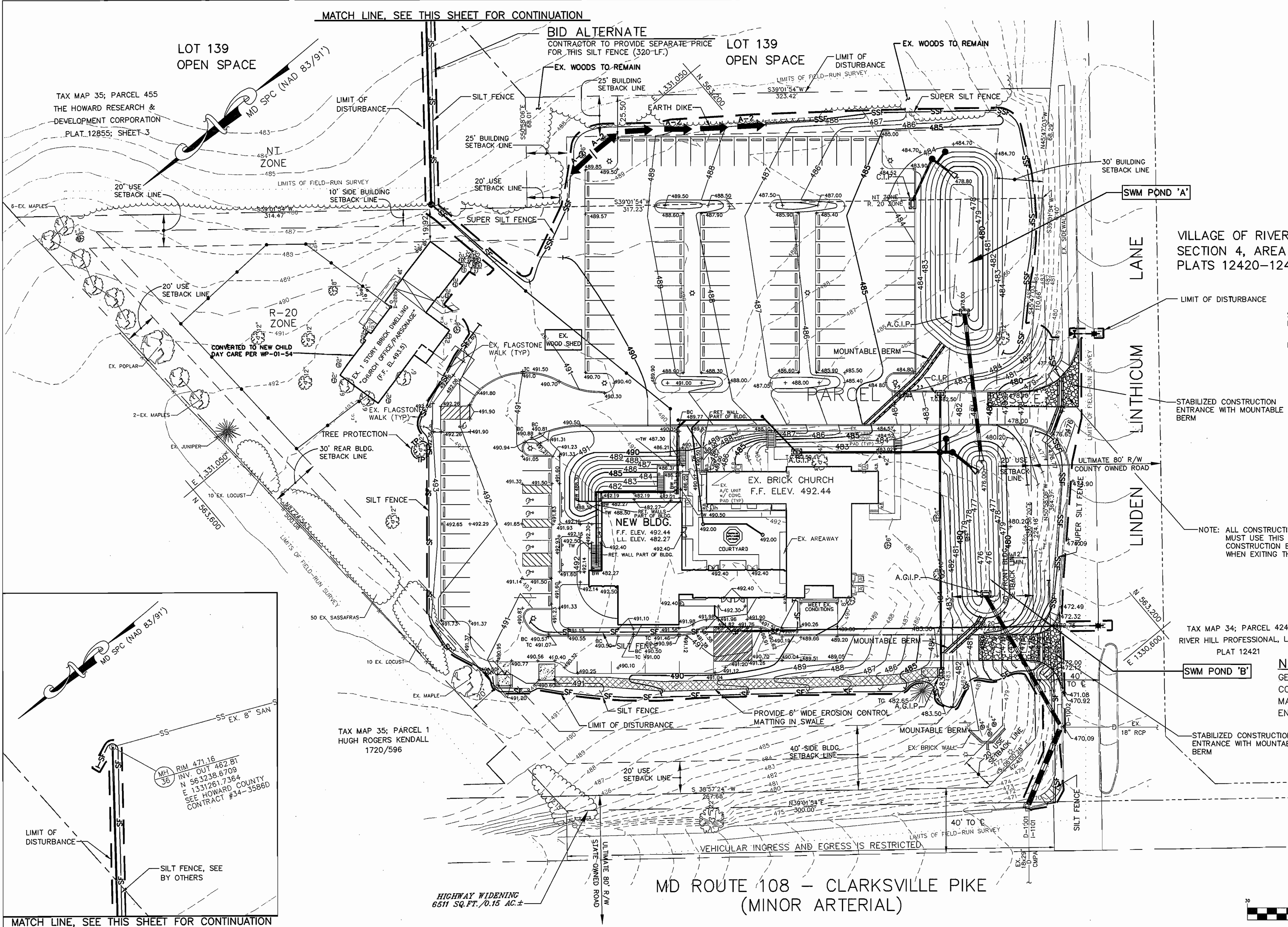
2-18-02	SANITARY SEWER FOR DAYCARE BUILDING.
---------	--------------------------------------

RELIGIOUS FACILITY EXPANSION AND CONVERSION FOR CHILD DAY CARE FACILITY

UTILITY PLAN
SDP-01-15

DRAWING NO.
C-5
SHEET 6 OF 20

SDP-01-15



NOTE: ALL CONSTRUCTION VEHICLES MUST USE THIS STABILIZED CONSTRUCTION ENTRANCE WHEN EXITING THE SITE

TAX MAP 34; PARCEL 424
RIVER HILL PROFESSIONAL, LLC
PLAT 12421

SWM POND 'B'

NOTE
GENERAL CONTRACTOR TO COORDINATE WITH CONSTRUCTION MANAGER AND OWNER TO MAINTAIN OPERATION OF FACILITIES DURING ENTIRE DURATION OF CONSTRUCTION.

TOTAL DISTURBANCE AREA
132436.01 S.F.
3.04 AC.

GRAPHIC SCALE
1 inch = 30 ft.

MATCH LINE, SEE THIS SHEET FOR CONTINUATION

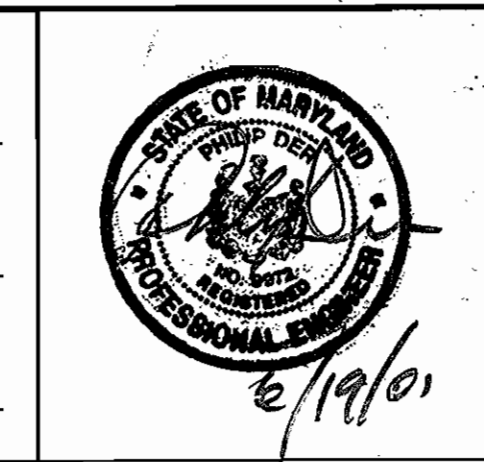
MATCH LINE, SEE THIS SHEET FOR CONTINUATION

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

8/1/01 DATE

8/16/01 DATE

8/17/01 DATE



REFERENCE NOTES
FOR GENERAL NOTES, SEE SHEET TC-1
FOR LEGEND, SEE SHEET C-2

Reviewed for Howard SCD and meets Technical Requirements

8/3/01 DATE

8/3/01 DATE

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

6/19/01 DATE

DEVELOPER'S CERTIFICATE
I certify that all development and construction will be done according to this plan for sediment and erosion control, and that all personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Training Program for the Control of Sediment and Erosion before beginning the project. I also certify that a site inspection by the Howard Soil Conservation District.

6/21/01 DATE

RELIGIOUS FACILITY EXPANSION AND CONVERSION FOR CHILD DAY CARE FACILITY

EROSION AND SEDIMENT CONTROL PLAN

SDP-01-15

DRAWING NO.

C-6

SHEET 7 OF 20
ESC 1 OF 3

KERNS GROUP ARCHITECTS

3030 CLARENDON BOULEVARD, SUITE 100
ARLINGTON, VIRGINIA 22201-2804
TEL 703.528.1150 FAX 703.528.1151

CIVIL ENGINEER
WHITNEY, BAILEY, COX & MAGNANI, LLP
849 FAIRMONT AVENUE, SUITE 200
BALTIMORE, MARYLAND 21286
410.512.4500 FAX 410.524.4190

STRUCTURAL ENGINEER
MRSN ASSOCIATES, P.C.
904 FAIRMONT AVENUE, SUITE 201
ALEXANDRIA, VIRGINIA 22314
703.684.8864 FAX 703.546.6353

MPE ENGINEER
RANSAL & ASSOCIATES, INC.
50 SOUTH PICKETT STREET, SUITE 201
ALEXANDRIA, VIRGINIA 22304
703.623.4694 FAX 703.623.4697

CONTRACTOR
STRUEVER BROS. ECCLES & ROUSE, INC.
519 NORTH CHARLES STREET
BALTIMORE, MARYLAND 21201
410.332.7402 FAX 410.576.9021



LINDEN-LINTHICUM UNITED METHODIST CHURCH
CLARKSVILLE, MARYLAND

SDP-01-15

SECTION I - VEGETATIVE STABILIZATION METHODS AND MATERIALS

- A. SITE PREPARATION**
- EROSION AND SEDIMENT CONTROL STRUCTURES (EITHER TEMPORARY OR PERMANENT) SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, BERMS, WATERWAYS, OR SEDIMENT CONTROL BASINS.
 - PERFORM ALL GRADING OPERATIONS AT RIGHT ANGLES TO THE SLOPE. FINAL GRADING AND SHAPING IS NOT USUALLY NECESSARY FOR TEMPORARY SEEDING.
 - CHEDULE REQUIRED SOIL TESTS TO DETERMINE SOIL AMENDMENT COMPOSITION AND APPLICATION RATES FOR SITES HAVING DISTURBED AREA OVER 5 ACRES.
- B. SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS)**
- SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATIOS AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OVER 5 ACRES. SOIL ANALYSIS MAY BE PERFORMED BY THE UNIVERSITY OF MARYLAND OR A RECOGNIZED COMMERCIAL LABORATORY. SOIL SAMPLES TAKEN FOR ENGINEERING PURPOSES MAY ALSO BE USED FOR CHEMICAL ANALYSIS.
 - FERTILIZERS SHALL BE UNIFORM IN COMPOSITION, FREE FLOWING, AND SUITABLE FOR ACCURATE APPLICATION BY APPROVED EQUIPMENT. MANURE MAY BE SUBSTITUTED FOR FERTILIZER WITH PRIOR APPROVAL FROM THE APPROPRIATE APPROVAL AUTHORITY. FERTILIZERS SHALL BE DELIVERED TO THE SITE, FULLY LABELED ACCORDING TO APPLICABLE STATE FERTILIZER LAWS AND SHALL BEAR THE NAME, TRADE NAME OR TRADEMARK, AND WARRANTY OF THE PRODUCER.
 - LIME MATERIALS SHALL BE GROUND LIMESTONE (HYDRATED OR BURNT LIME MAY BE SUBSTITUTED) WHICH CONTAINS AT LEAST 50% TOTAL OXIDES (CALCIUM OXIDE PLUS MAGNESIUM OXIDE). LIMESTONE SHOULD BE GROUND TO SUCH FINENESS THAT AT LEAST 50% WILL PASS THROUGH A #100 MESH SIEVE, AND 98 TO 100% WILL PASS THROUGH A #20 MESH SIEVE.
 - INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 - 5" OF SOIL BY DISKING OR OTHER SUITABLE MEANS.
- C. SEEDING PREPARATION**
- TEMPORARY SEEDING
 - SEEDING PREPARATION SHALL CONSIST OF LOOSENING SOIL TO A DEPTH OF 3 INCHES TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT, SUCH AS DISC HARROWS, CHisel FLOWS, OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. AFTER THE SOIL IS LOOSEND, IT SHOULD NOT BE ROLLED OR DRAGGED SMOOTH, BUT LEFT IN THAT DISBURBED CONDITION. SLOPES GREATER THAN 3:1 SHOULD BE TRACKED BY A DOZER LEAVING THE SURFACE IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE.
 - APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS.
 - INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.
 - PERMANENT SEEDING
 - MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT
 - SOIL PH SHALL BE BETWEEN 6.0 AND 7.0.
 - SOLUBLE SALTS SHALL BE LESS THAN 500 PARTS PER MILLION (PPM).
 - THE SOIL SHALL CONTAIN LESS THAN 2% FREE CARBON OR ORGANIC MATTER. GRANULATED MATERIAL (200 SIFT PLUS CLAY) TO PROVIDE THE CAPACITY TO HOLD A MODERATE AMOUNT OF MOISTURE. AN EXCEPTION IS FOR LOESS OR SERCIA LESPEDEZA IS TO BE PLANTED, THEN A SANDY SOIL (<20% SILT PLUS CLAY) WOULD BE ACCEPTABLE.
 - SOIL SHALL CONTAIN 1.5% MINIMUM ORGANIC MATTER BY WEIGHT.
 - SOIL MUST CONTAIN SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION.
 - IF THESE CONDITIONS CANNOT BE MET BY SOILS ON SITE, ADDING TOPSOIL IS REQUIRED IN ACCORDANCE WITH SECTION 21.
 - STANDARD AND SPECIFIC REQUIREMENTS FOR TOPSOILS OF THE 1994 MD STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
 - AREAS PREVIOUSLY GRADED IN CONFORMANCE WITH THE DRAWINGS SHALL BE MAINTAINED IN A TRUE AND EVEN GRADE, THEN SCARIFIED OR OTHERWISE LOOSEND TO A DEPTH OF 3 TO 5 INCHES TO PERMIT ROOTING OF THE TOPSOIL TO THE SURFACE AREA AND TO COUNTERACT EROSION CHECK HORIZONTAL SLOPES TO PREVENT TOPSOIL FROM SLIDING DOWN A SLOPE.
 - APPLY SOIL AMENDMENTS AS PER SOIL TEST OR AS INCLUDED IN THE CONTRACT DOCUMENTS.
 - MIX SOIL AMENDMENTS INTO THE TOP 3 - 5 INCHES OF TOPSOIL BY DISKING OR OTHER SUITABLE MEANS. LAWN AREAS SHOULD BE RAKED TO SMOOTH THE SURFACE. REMOVE LARGE OBJECTS LIKE STONES AND BRANCHES, AND READY THE AREA FOR SEED APPLICATION. WHERE SITE CONDITIONS WILL NOT PERMIT NORMAL SEEDING PREPARATION, LOOSEN SURFACE SOIL BY DRAGGING WITH HEAVY CHAIN OR OTHER EQUIPMENT TO ROUGHEN THE SURFACE. STEEP SLOPES (STEEPER THAN 3:1) SHOULD BE TRACKED BY A DOZER LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. THE TOP 1 - 3 INCHES OF SOIL SHOULD BE LOOSE AND FRAGILE. SEEDING LOOSENING MAY NOT BE NECESSARY ON NEWLY DISTURBED AREAS.

SECTION II: TEMPORARY SEEDING

- VEGETATION - ANNUAL GRASS OR GRAM USED TO PROVIDE COVER ON DISTURBED AREAS FOR UP TO TWELVE MONTHS. FOR LONGER DURATION OF VEGETATIVE COVER, PERMANENT SEEDING IS REQUIRED.**
- SECTION IV - SOD TO PROVIDE QUICK COVER ON DISTURBED AREAS (2:1 GRADE OR FLATTER)**

- A. GENERAL SPECIFICATIONS**
- CLASS OF TURFGRASS SHALL BE MARYLAND OR VIRGINIA STATE CERTIFIED OR APPROVED. SOD LABELS SHALL BE MADE AVAILABLE TO THE JOB FOREMAN AND INSPECTOR.
 - SOD SHALL BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF 3/4", PLUS OR MINUS 1/4", AT THE TIME OF CUTTING. MEASUREMENT FOR THICKNESS SHALL EXCLUDE TOP GROWTH AND THATCH. INDIVIDUAL PIECES OF SOD SHALL BE CUT TO THE SUPPLIER'S WIDTH AND LENGTH. MAXIMUM ALLOWABLE DEVIATION FROM STANDARD WIDTHS AND LENGTHS SHALL BE 5 PERCENT. BROKEN PADS AND TORN OR UNEVEN EDGES WILL NOT BE ACCEPTABLE.
 - STANDARD SIZE SECTIONS OF SOD SHALL BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP ON THE UPPER 10 PERCENT OF THE SECTION.
 - DO NOT SHALL NOT BE HARVESTED OR TRANSPORTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS SURVIVAL.
 - SOD SHALL BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD NOT TRANSPORTED WITHIN THIS PERIOD SHALL BE APPROVED BY AN AGRONOMIST OR SOIL SCIENTIST PRIOR TO ITS INSTALLATION.
- B. SOD INSTALLATION**
- DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE OR IN AREAS HAVING DRY SUBSOIL, THE SUBSOIL SHALL BE LIGHTLY IRRIGATED IMMEDIATELY PRIOR TO LAYING THE SOD.
 - THE FIRST ROW OF SOD SHALL BE LAID IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO AND TIGHTLY WEDGED AGAINST EACH OTHER. LATERAL JOINTS SHALL BE STAGGERED TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. ENSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE AIR DRYING OF THE ROOTS.
 - WHEREVER POSSIBLE, SOD SHALL BE LAID WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH STAGGERING JOINTS. SOD SHALL BE ROLLED AND TAMPED, PEGGED, OR OTHERWISE SECURED TO PREVENT SLAGGAGE ON SLOPES AND TO ENSURE SOLID CONTACT BETWEEN SOD ROOTS AND THE UNDERLYING SOIL SURFACE.
 - SOD SHALL BE WATERED IMMEDIATELY FOLLOWING ROLLING OR TAMPING UNTIL THE UNDERSIDE OF THE NEW SOD PAD AND SOIL SURFACE BELOW THE SOD ARE THOROUGHLY WET. THE OPERATIONS OF LAYING, TAMPING, AND IRRIGATING FOR ANY PIECE OF SOD SHALL BE COMPLETED WITHIN EIGHT HOURS.

- C. SOD MAINTENANCE**
- IN THE ABSENCE OF ADEQUATE RAINFALL, WATERING SHALL BE PERFORMED DAILY OR AS OFTEN AS NECESSARY DURING THE FIRST WEEK AND IN SUFFICIENT QUANTITIES TO MAINTAIN MOIST SOIL TO A DEPTH OF 4". WATERING SHOULD BE DONE DURING THE HEAT OF THE DAY TO PREVENT WILTING.
 - AFTER THE FIRST WEEK, SOD WATERING IS REQUIRED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE CONTENT.
 - THE FIRST MOWING OF SOD SHOULD NOT BE ATTEMPTED UNTIL THE FINAL SOD IS FIRMLY ROOTED. NO MORE THAN 1/3 OF THE GRASS LEAF SHALL BE REMOVED BY THE INITIAL CUTTING OR SUBSEQUENT CUTTINGS. GRASS HEIGHT SHALL BE MAINTAINED BETWEEN 2" AND 3", UNLESS OTHERWISE SPECIFIED.

- SECTION V - TURFGRASS ESTABLISHMENT**
- AREAS WHERE TURFGRASS MAY BE DESIRED INCLUDE LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE. AREAS TO RECEIVE SEED SHALL BE TILLED BY DISKING OR OTHER APPROVED METHODS TO A DEPTH OF 2 TO 4 INCHES, LEVELLED, AND RAKED TO PREPARE A PROPER SEEDBED. STONES AND DEBRIS OVER 1-1/2 INCHES IN DIAMETER SHALL BE REMOVED. THE RESULTING SEEDBED SHALL BE IN SUCH CONDITION THAT FUTURE MOWING OF GRASSES WILL POSE NO DIFFICULTY.
- NOTE: CHOICE CERTIFIED MATERIAL. CERTIFIED MATERIAL IS THE BEST GUARANTEE OF CULTIVAR PURITY. THE CERTIFICATION PROGRAM OF THE MARYLAND DEPARTMENT OF AGRICULTURE, TURF AND SEED SECTION PROVIDES A RELIABLE MEANS OF CONSUMER PROTECTION AND ASSURES A PURE GENETIC LINE.**
- A. TURFGRASS MIXTURES**
- KENTUCKY BLUEGRASS - FULL SUN MIXTURE - FOR USE IN AREAS THAT RECEIVE INTENSIVE MANAGEMENT. IRRIGATION REQUIRED IN THE AREAS OF CENTRAL MARYLAND AND THE EASTERN SHORE. RECOMMENDED CERTIFIED KENTUCKY BLUEGRASS CULTIVARS SEEDING RATE: 1.5 TO 2.0 POUNDS/1000 SQUARE FEET. A MINIMUM OF THREE BLUEGRASS CULTIVARS SHOULD BE CHOSEN, RANGING FROM A MINIMUM OF 10% TO A MAXIMUM OF 35% OF THE MIXTURE BY WEIGHT.
 - KENTUCKY BLUEGRASS/PERENNIAL RYE - FULL SUN MIXTURE - FOR USE IN FULL SUN AREAS WHERE RAPID ESTABLISHMENT IS NECESSARY AND WHEN TURF WILL RECEIVE MEDIUM TO INTENSIVE MANAGEMENT. CERTIFIED PERENNIAL RYEGRASS CULTIVARS/CERTIFIED KENTUCKY BLUEGRASS SEEDING RATE: 2 POUNDS MIXTURE/1000 SQUARE FEET. A MINIMUM OF TWO KENTUCKY BLUEGRASS CULTIVARS MUST BE CHOSEN, WITH EACH CULTIVAR RANGING FROM 10% TO 35% OF THE MIXTURE BY WEIGHT.
 - TALL FESCUE/KENTUCKY BLUEGRASS - FULL SUN MIXTURE - FOR USE IN DROUGHT PRONE AREAS AND/OR FOR AREAS RECEIVING LOW TO MEDIUM MAINTENANCE IN FULL SUN TO MEDIUM SHADE. RECOMMENDED MIXTURE INCLUDES: CERTIFIED TALL FESCUE CULTIVARS 95% - 100% CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 0 - 5%. SEEDING RATE: 5 TO 8 POUNDS/1000 SQUARE FEET. ONE OR MORE CULTIVARS MAY BE BLEND.
 - KENTUCKY BLUEGRASS/FINE FESCUE - SHADE MIXTURE - FOR USE IN AREAS WITH SHADE IN BLUEGRASS LAWNS. FOR ESTABLISHMENT IN HIGH QUALITY, INTENSIVELY MANAGED TURF AREA. MIXTURE INCLUDES: CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 50-40% AND CERTIFIED FINE FESCUE AND 50 - 75% SEEDING RATE: 1-1/2 TO 3 POUNDS/1000 SQUARE FEET. A MINIMUM OF 3 KENTUCKY BLUEGRASS CULTIVARS MUST BE CHOSEN, WITH EACH CULTIVAR RANGING FROM A MINIMUM OF 10% TO A MAXIMUM OF 35% OF THE MIXTURE BY WEIGHT.
- NOTE: TURFGRASS VARIETIES SHOULD BE SELECTED FROM THOSE LISTED IN THE MOST CURRENT UNIVERSITY OF MARYLAND PUBLICATION, AGRONOMY MIMED #77, "TURFGRASS CULTIVAR RECOMMENDATIONS FOR MARYLAND."**
- B. IDEAL TIMES OF SEEDING**
- WESTERN MARYLAND: MARCH 15 - JUNE 1; AUGUST 1 - OCTOBER 1 (HARDNESS ZONES - 5b, 6c)
CENTRAL MARYLAND: MARCH 1 - MAY 15; AUGUST 15 - OCTOBER 15 (HARDNESS ZONES - 6b)
SOUTHERN MARYLAND, EASTERN SHORE: MARCH 1 - MAY 15, AUGUST 15 - OCTOBER 15 (HARDNESS ZONES - 7a, 7b)
- C. IRRIGATION**
- IF SOIL MIXTURE IS DEFICIENT, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER FOR PLANT GROWTH (1/2" - 1" EVERY 3 TO 4 DAYS, DEPENDING ON SOIL TEXTURE) UNTIL THEY ARE FIRMLY ESTABLISHED. THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE LATE IN THE PLANTING SEASON, IN ABNORMALLY DRY OR HOT SEASON, OR ON ADVERSE SITES.
- D. REPAIRS AND MAINTENANCE**
- INSPECT ALL SEEDING AREAS FOR FAILURES AND MAKE NECESSARY REPAIRS, REPLACEMENTS, AND RESEEDINGS WITHIN THE PLANTING SEASON.
- ONCE THE VEGETATION IS ESTABLISHED, THE SITE SHOULD HAVE 95% GROUND COVER TO BE CONSIDERED ADEQUATELY STABILIZED.
 - IF THE STAND PROVIDES LESS THAN 40% GROUND COVERAGE, REESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER, SEEDING PREPARATION, AND SEEDING RECOMMENDATIONS.
 - IF THE STAND PROVIDES BETWEEN 40% AND 94% GROUND COVERAGE, OVERSEEDING AND FERTILIZING USING HALF OF THE RATES ORIGINALLY APPLIED MAY BE NECESSARY.
 - MAINTENANCE FERTILIZER RATES FOR PERMANENT SEEDINGS ARE SHOWN IN TABLE 24. FOR LAWNS AND OTHER MEDIUM TO HIGH MAINTENANCE TURFGRASS AREAS, REFER TO THE UNIVERSITY OF MARYLAND PUBLICATION, "LAWN CARE IN MARYLAND", BULLETIN NO. 171.

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

CHEF, DEVELOPMENT ENGINEERING DIVISION

DATE: 8/14

CHEF, DIVISION OF LAND DEVELOPMENT

DATE: 8/16/01

DIRECTOR

DATE: 8/15/01

SEAL OF MARYLAND DEPARTMENT OF ENVIRONMENTAL ENGINEERING

Reviewed for Howard SCD and meets Technical Requirements

Signature: Jim Meyer Date: 8/3/01

Signature: John M. ... Date: 8/3/01

This document is for the purpose of soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

TOPSOILING SPECIFICATIONS

- SECTION I - SITE PREPARATION (WHERE TOPSOIL IS TO BE ADDED)**
- WHEN TOPSOILING, MAINTAIN NECESSARY EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, BERMS, DIKES, WATERWAYS AND SEDIMENT BASINS.
 - AREAS TO BE TOPSOILED ON THE AREAS TO BE TOPSOILED WHICH HAVE BEEN PREVIOUSLY ESTABLISHED SHALL BE MAINTAINED.
 - LIMING: WHERE THE SUBSOIL IS EITHER HIGHLY ACID OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 4-8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET). LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.
 - TILING: AFTER THE AREAS TO BE TOPSOILED HAVE BEEN BROUGHT TO GRADE, AND IMMEDIATELY PRIOR TO DISPENSING AND APPLICATION OF TOPSOIL, THE SURFACE SHALL BE LOOSEND BY DISKING OR BY SCARPING TO A DEPTH OF AT LEAST 3 INCHES TO PERMIT ROOTING OF THE TOPSOIL TO THE SUBSOIL. THIS MAY BE ACCOMPLISHED BY A BUILDORER UP AND DOWN OVER THE ENTIRE SURFACE AREA OF THE SLOPE TO CREATE HORIZONTAL EROSION CHECK SLOTS TO PREVENT TOPSOIL FROM SLIDING DOWN THE SLOPE.
- SECTION II - TOPSOIL MATERIAL AND APPLICATION**
- NOTE: TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED BUT IT SHOULD MEET THE SAME STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. THE DEPTH OF TOPSOIL TO BE SALVAGED SHALL BE NO MORE THAN THE DEPTH DESCRIBED AS A REPRESENTATIVE PROFILE FOR THAT PARTICULAR SOIL TYPE AS DESCRIBED IN THE SOIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL STATION.**
- A. MATERIALS**
- TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND OR OTHER SOIL AS APPROVED BY AN AGRONOMIST OR SOIL SCIENTIST. IT SHALL NOT HAVE A MIXTURE OF CONTRASTING TEXTURED SUBSOIL AND CONTAIN NO MORE THAN 5 PERCENT BY VOLUME OF CONCRETE, STONES, SLAG, COARSE FRAGMENT, GRAVEL, STICKS, ROOTS, TRASH OR OTHER EXTRANEIOUS MATERIALS LARGER THAN 1-1/2 INCHES IN DIAMETER. TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS OF BERMOUDA GRASS, QUACKGRASS, JOHNSON GRASS, NUTBUSH, POISON IVY, THISTLES, OR OTHERS AS SPECIFIED. ALL TOPSOIL SHALL BE TESTED BY A RECOGNIZED LABORATORY FOR ORGANIC MATTER CONTENT, PH AND SOLUBLE SALTS. A PH OF 6.0 TO 7.5 AND AN ORGANIC CONTENT OF NOT LESS THAN 1.5 PERCENT BY WEIGHT IS REQUIRED. IF PH VALUE IS LESS THAN 6.0, IT SHALL BE APPLIED IN CONJUNCTION WITH A TOPSOIL TO ADJUST THE PH TO 6.5 OR HIGHER. TOPSOIL CONTAINING SOLUBLE SALTS GREATER THAN 500 PARTS PER MILLION SHALL NOT BE USED.
- NOTE: NO SOD OR SEED SHALL BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILIZANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED TO PERMIT OSSIPATION OF TOXIC MATERIALS.**
- NOTE: TOPSOIL SUBSTITUTES OR AMENDMENTS AS APPROVED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST MAY BE USED IN LIEU OF NATURAL TOPSOIL.**
- B. GRADING**
- THE TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED AND COMPACTED TO A MINIMUM OF 4 (FOUR) INCHES. SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SOODING OR SEEDING CAN BE ACCOMPLISHED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS. TOPSOIL SHALL NOT BE PLACED WHILE IN A FROZEN OR MUDDY SUBGRADE IS EXCESSIVELY WET, OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDING PREPARATION. ALTERNATIVE FOR PERMANENT SEEDING
- AS AN OPTION TO APPLYING THE FULL AMOUNTS OF LIME AND COMMERCIAL FERTILIZER, APPLY COMPOSED SLUDGE AS SPECIFIED BELOW, A POTASSIUM FERTILIZER AT THE RATE OF 4 POUNDS PER 1,000 SQUARE FOOT AND 1/3 THE NORMAL LIME APPLICATION RATE. COMPOSED SLUDGE MATERIAL
- COMPOSED SLUDGE FOR USE AS A SOIL AMENDMENT OR CONDITIONER SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
- BE SUPPLIED BY OR ORIGINATE FROM A PERSON OR PERSONS THAT ARE PERMITTED (AT THE TIME OF ACQUISITION OF THE COMPOST) BY THE MARYLAND DEPARTMENT OF HEALTH AND MENTAL HYGIENE UNDER REGULATION 10.17.10.
 - SHALL CONTAIN AT LEAST 1 PERCENT NITROGEN, 1.5 PERCENT PHOSPHORUS AND .2% POTASSIUM AND HAVE A PH OF 7.0 AND 8.0.
 - IF COMPOST DOES NOT MEET THESE REQUIREMENTS, THE APPROPRIATE CONSTITUENTS MUST BE ADDED SO THAT THE REQUIREMENTS ARE MET PRIOR TO USE OF THE COMPOST.
 - BE APPLIED AT A RATE OF 2,000 POUNDS PER 1,000 SQUARE FEET.

- SEQUENCE OF CONSTRUCTION**
1. INSTALL STABILIZED CONSTRUCTION ENTRANCES AS SHOWN ON THE PLANS. 0.5 DAYS
 2. INSTALL TREE PROTECTION FENCE AND SIGNS (75' O.C.) AT THE LIMIT OF TREE REMOVAL. 1.5 DAYS
 3. INSTALL PERIMETER SEDIMENT CONTROLS AS SHOWN ON PLANS. CONTROL DEVICES INCLUDE EARTH DIKES, MOUNTED BERMS, SILT FENCE AND SUPER SILT FENCE. 3 DAYS
 4. WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, COMPLETE CLEARING AND GRUBBING AND COMMENCE ROUGH GRADING. 10 DAYS
 5. WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, CONCURRENT WITH THE ROUGH GRADING, COMMENCE CONSTRUCTION OF THE BUILDING. 6 MOS.
 6. WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, CONCURRENT WITH THE ROUGH GRADING, COMMENCE CONSTRUCTION OF THE STORMWATER MANAGEMENT FACILITIES. 15 DAYS
 7. WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, CONCURRENT WITH THE ROUGH GRADING, COMMENCE UTILITY INSTALLATION INCLUDING WATER SERVICE, SANITARY SEWER AND STORM DRAINS. 20 DAYS
 8. PROVIDE AND INSTALL PROTECTION FOR NEW INLETS AS THEY ARE COMPLETED. 2 DAYS
 9. COMPLETE CONSTRUCTION OF SITEWORK. 30 DAYS
 10. PERFORM FINAL GRADING FOR SITE TO THE INDICATED SURFACE AND SUBGRADE ELEVATIONS AS SHOWN ON THE PLANS. 5 DAYS
 11. STABILIZE DISTURBED AREAS IMMEDIATELY WITH PERMANENT VEGETATION OR PAVING BASE COURSE. 5 DAYS
 12. IMPLEMENT THE APPROVED TRAFFIC CONTROL PLAN FOR LINDEN LITHICUM AND CLARKSVILLE ROADS. THEN INSTALL PAVING, SIDEWALKS AND HANDICAP ACCESS. 10 DAYS
 13. CONSTRUCT CONCRETE CURBS, BITUMINOUS PAVING AND CONCRETE SIDEWALKS AS SHOWN ON THE PLANS. 20 DAYS
 14. PROVIDE AND INSTALL LANDSCAPING AS SHOWN ON THE PLANS. 5 DAYS
 15. WHEN STABILIZATION IS EVIDENT ON SITE, WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL DEVICES. 2 DAYS
 16. STABILIZE ALL AREAS DISTURBED BY SEDIMENT CONTROL REMOVAL. 2 DAYS

- REFERENCES**
1. GUIDELINE SPECIFICATIONS, SOIL PREPARATION AND SOODING, MD-VIA, PUB. #1, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF MARYLAND AND VIRGINIA POLYTECHNIC INSTITUTES, REVISED 1973.

PERMANENT SEEDING SUMMARY - TABLE 25

NO.	SEED MIXTURE (HARDNESS ZONE 7A) (FROM TABLE 25)			SEEDING DEPTHS	FERTILIZER RATE (10-20-20)			LIME RATE
	SPECIES	APPLICATION RATE (lb/oo)	DATES		N	P205	K20	
3	TALL FESCUE (65%)	125	3/1-5/15	1/4"	90 lb/oo	175 lb/oo	175 lb/oo	2 tons/oo
	PERENNIAL BLUEGRASS (100%) KENTUCKY BLUEGRASS (5%)	15	8/15-11/15	1/4"	(2.0 lb/oo)	(4 lb/oo)	(100 lb/oo)	
8	REED CANARYGRASS (75%) BIRDFOOT TREEFOIL (15%)	40 3 10	3/1-5/15 8/15-11/15	1/4"	1000 st	1000 st	1000 st	

TEMPORARY SEEDING SUMMARY - TABLE 26

NO.	SEED MIXTURE (HARDNESS ZONE 7A) (FROM TABLE 26)			SEEDING DEPTHS	FERTILIZER RATE (10-10-10)	LIME RATE
	SPECIES	APPLICATION RATE (lb/oo)	DATES			
	RYE	140	2/1-4/30 8/15-11/30	1"-2"	600 lb/oo	2 tons/oo
	RYE PLUS FOXTAIL MILLET	150	2/1-4/30 5/1-8/14 8/15-11/30	1"	(15 lb/1000 st)	(100 lb/1000 st)

DUST CONTROL

- Definition:**
- Controlling dust blowing and movement on construction sites and roads.
- Purpose:**
- To prevent blowing and movement of dust from exposed soil surfaces, reduce on and off-site damage, health hazards, and improve traffic safety.
- Conditions Where Practice Applies:**
- This practice is applicable to areas subject to dust blowing and movement where on and off-site damage is likely without treatment.

- Temporary Methods:**
1. Mulches - See standards for vegetative stabilization with mulches only. Mulch should be crimped or tacked to prevent blowing.
 2. Vegetative Cover - See standards for temporary vegetative cover.
 3. Tillage - To roughen surface and bring clods to the surface. This is an emergency measure which should be used before soil blowing starts. Begin plowing on windward side of site. Chisel-type plows spaced about 12' apart, spring-toothed harrows, and similar plows are examples of equipment which may produce the desired effect.
 4. Irrigation - This is generally done as an emergency treatment. Site is sprinkled with water until the surface is moist. Repeat as needed. At no time should the site be irrigated to the point that runoff begins to flow.
 5. Barriers - Solid board fences, silt fences, snow fences, burlap fences, straw bales, and similar material can be used to control air currents and soil blowing. Barriers placed at right angles to prevailing currents at intervals of about 10 times their height are effective in controlling soil blowing.
 6. Calcium Chloride - Apply at rates that will keep surface moist. May need retreatment.
- Permanent Method:**
1. Permanent Vegetation - See standards for permanent vegetative cover, and permanent stabilization with sod. Existing trees or large shrubs may afford valuable protection if left in place.
 2. Topsoiling - Cover surface with less erosive soil materials. See standards for topsoiling.
 3. Stone - Cover surface with crushed stone or coarse gravel.

- References:**
1. Agricultural Handbook 345. Wind Erosion Forces in the United States and Their Use in Stabilizing Soil Loss.
 2. Agriculture Information Bulletin 354. How to Control Wind Erosion, USDA-ARS.

STANDARD SEDIMENT CONTROL NOTES

1. A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (313-1855).
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 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.
3. Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within:
 - a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes, and all slopes steeper 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 7 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 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding, sod, temporary seeding, and mulching (Sec. C). Temporary stabilization with mulch alone shall 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 = 4.5 Acres
Area Disturbed = 3.04 Acres
Area to be roofed or paved = 1.42 Acres
Area to be vegetatively stabilized = 1.62 Acres
Total Cut = 15000 Cu. Yds.
Total Fill = 15000 Cu. Yds.
Offsite waste/borrow area location = N/A
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 control must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
10. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other blading or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.

Trenches for the construction of utilities is limited to three pipe lengths or that which shall be backfilled and stabilized within one working day, whichever is shorter.

ENGINEER'S CERTIFICATE

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

Signature (print name below signature): PHILIP DEER Date: 6/16/01

DEVELOPER'S CERTIFICATE

"I/We certify that all development and construction will be done according to this plan for sediment and erosion control, and that all construction work involved in the construction project will have a Certificate of Attendance at a Department of Sediment and Erosion Control Training Program for the Control of Sediment and Erosion before beginning the project."

Signature (print name below signature): Date: 6/16/01

KERNS GROUP ARCHITECTS

3030 CLARENDON BOULEVARD, SUITE 100
ARLINGTON, VIRGINIA 22201-2804
TEL 703.528.1150 FAX 703.528.1151

CIVIL ENGINEER

WHITNEY, BAILEY, COX & MAGNANI, LLP
849 FAIRMONT AVENUE, SUITE 201
BALTIMORE, MARYLAND 21286
410.512.4500 FAX 410.324.4100

STRUCTURAL ENGINEER

MESEN ASSOCIATES, P.C.
904 PRINCE STREET, SUITE 201
ALEXANDRIA, VIRGINIA 22314
703.684.8664 FAX 703.548.0353

MPE ENGINEER

BANSAL & ASSOCIATES, INC.
58 SOUTH PICKETT STREET, SUITE 1111
ALEXANDRIA, VIRGINIA 22304
703.823.4694 FAX 703.823.4697

CONTRACTOR

STRUEVER BROS. ECCLES & ROUSE, INC.
519 NORTH CHARLES STREET
BALTIMORE, MARYLAND 21201
410.332.7402 FAX 410.576.9021

LINDEN-LINTHICUM UNITED METHODIST CHURCH

CLARKSVILLE, MARYLAND

RELIGIOUS FACILITY EXPANSION AND CONVERSION FOR CHILD DAY CARE FACILITY

EROSION AND SEDIMENT CONTROL NOTES

SDP-01-15

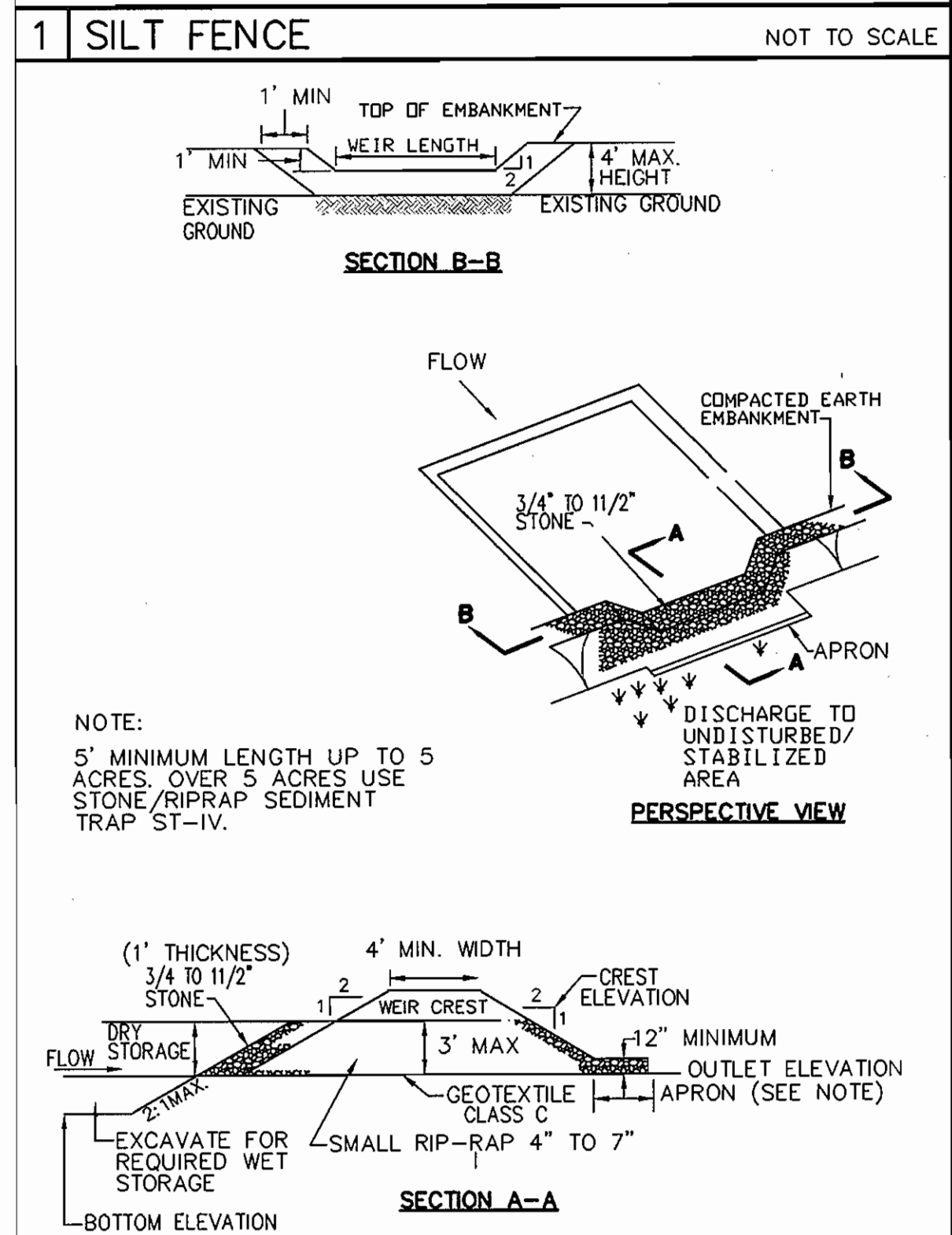
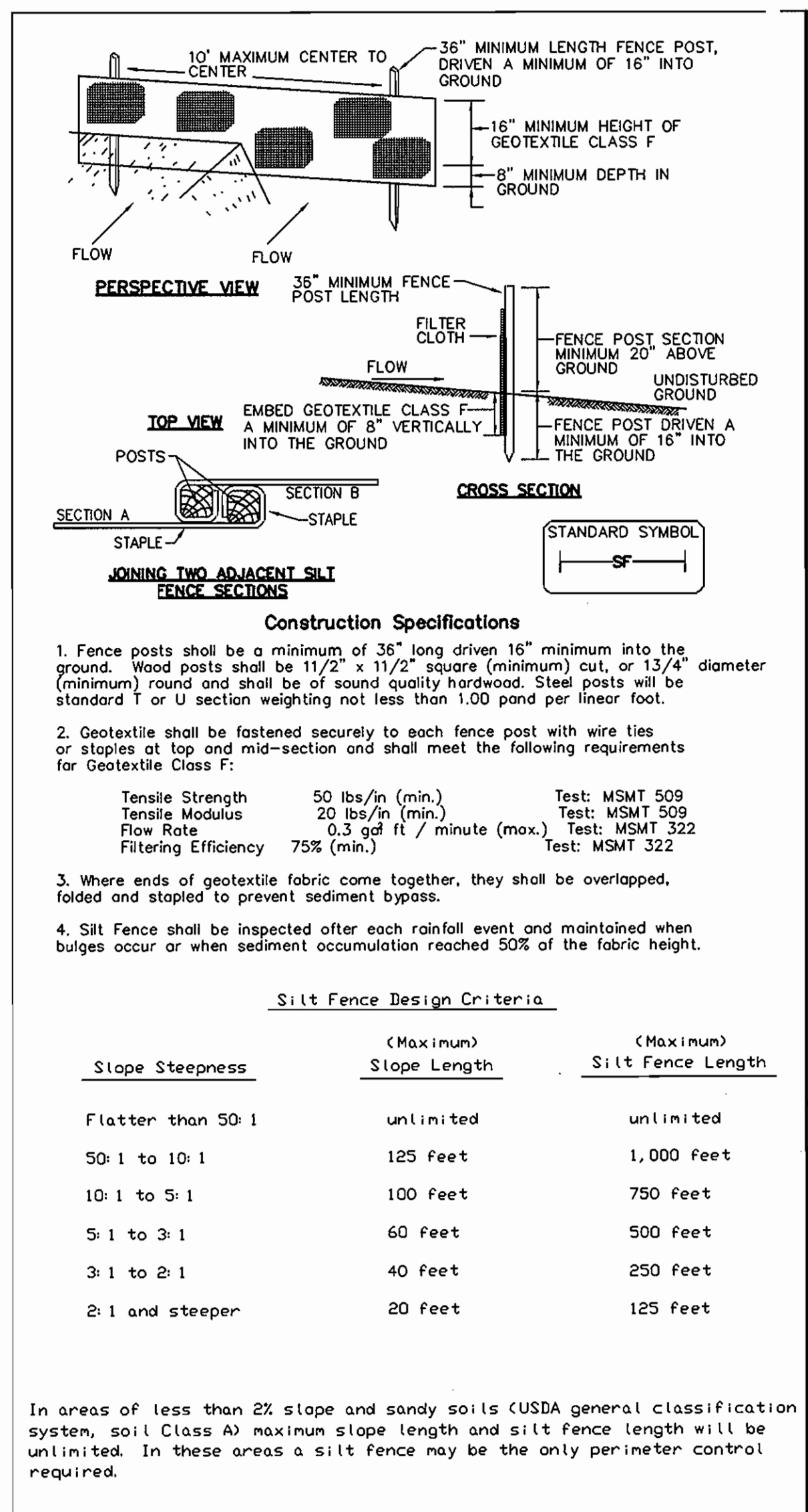
DRAWING NO.

C-7

SHEET 8 OF 20
ESC 2 OF 3

SDP-01-15

JOB PROJECT NO. 724-01



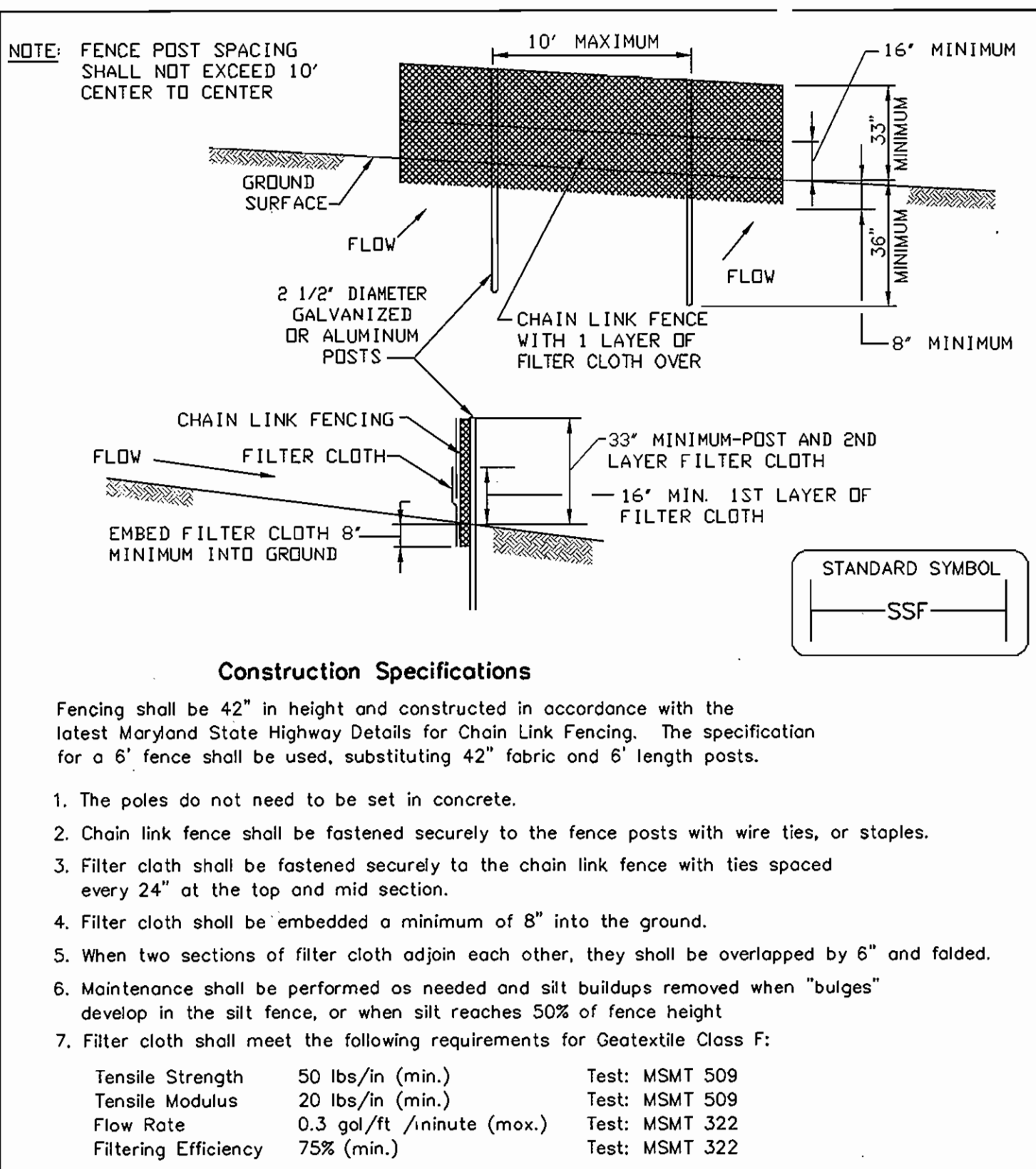
6 STONE OUTLET STRUCTURE NOT TO SCALE

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 8/16/01

CHIEF, DIVISION OF LAND DEVELOPMENT DATE: 8/16/01

DIRECTOR DATE: 8/16/01



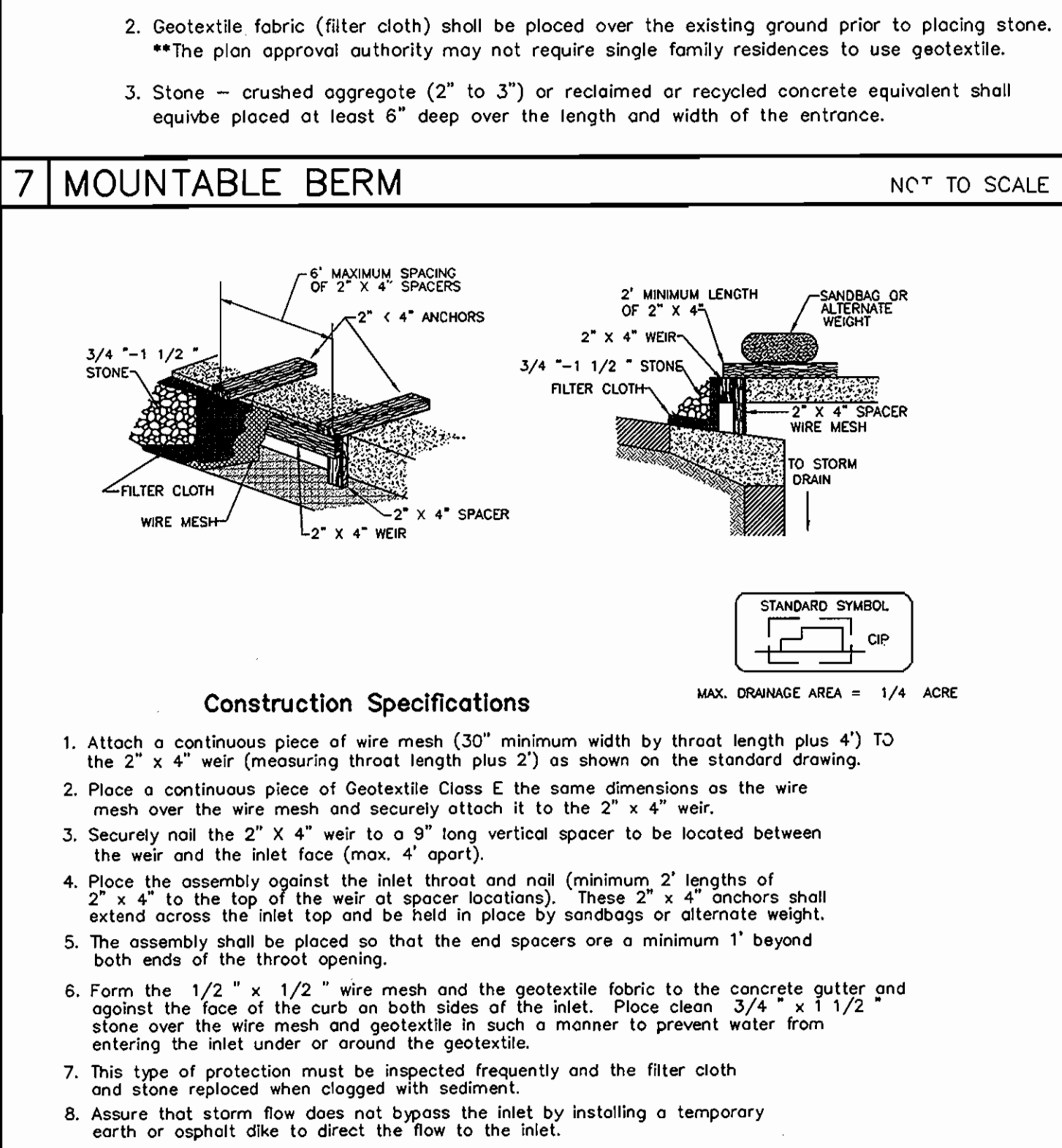
2 SUPER SILT FENCE NOT TO SCALE

NOTE: FENCE POST SPACING SHALL NOT EXCEED 10' CENTER TO CENTER

Construction Specifications

- Fence posts shall be 42" in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6" fence shall be used, substituting 42" fabric and 6" length posts.
- The poles do not need to be set in concrete.
- Chain link fence shall be fastened securely to the fence posts with wire ties, or staples.
- Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.
- Filter cloth shall be embedded a minimum of 8" into the ground.
- When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
- Maintenance shall be performed as needed and silt buildups removed when "bulges" develop in the silt fence, or when silt reaches 50% of fence height
- Filter cloth shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal/ft /minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322



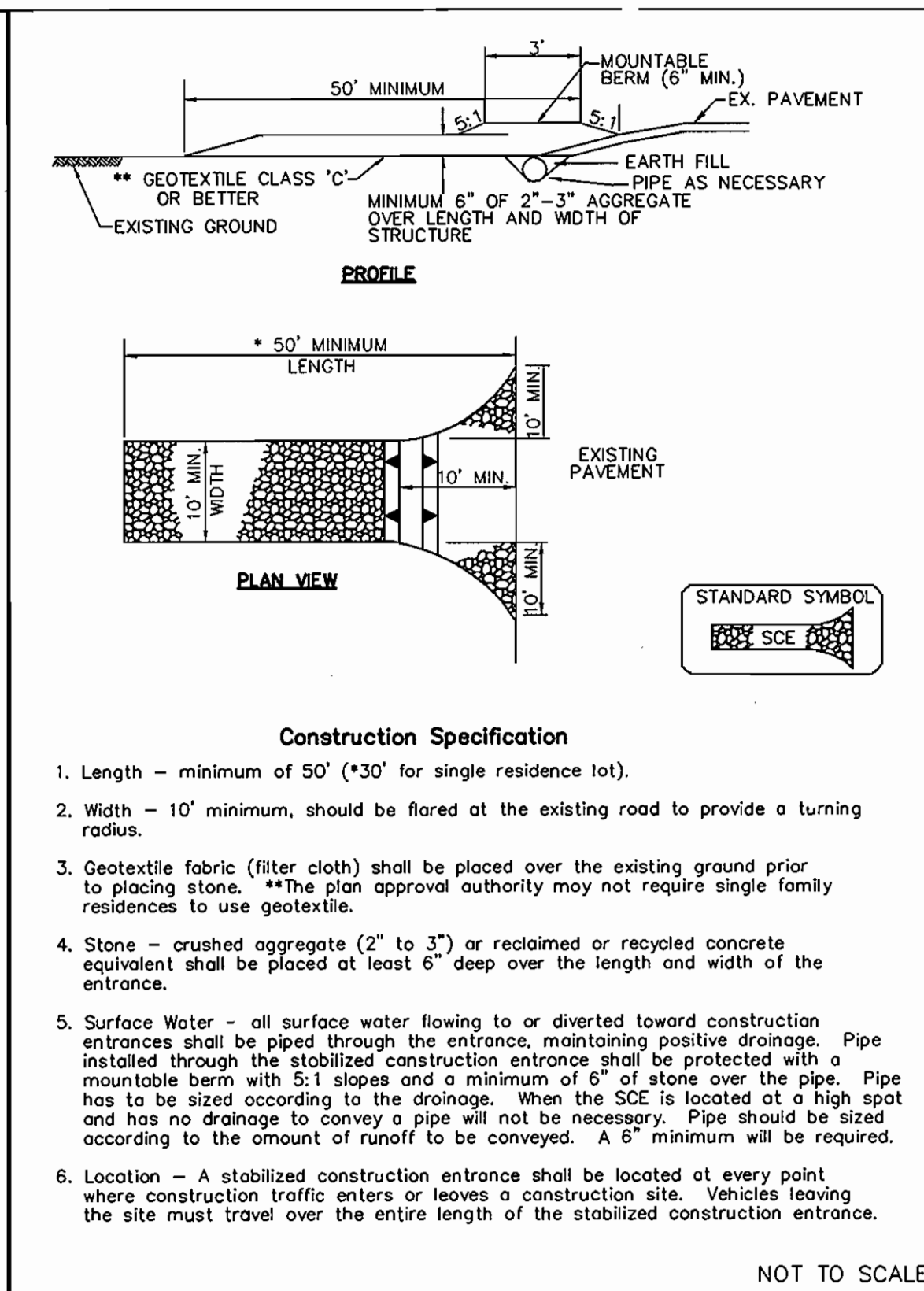
7 MOUNTABLE BERM NOT TO SCALE

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 8/16/01

CHIEF, DIVISION OF LAND DEVELOPMENT DATE: 8/16/01

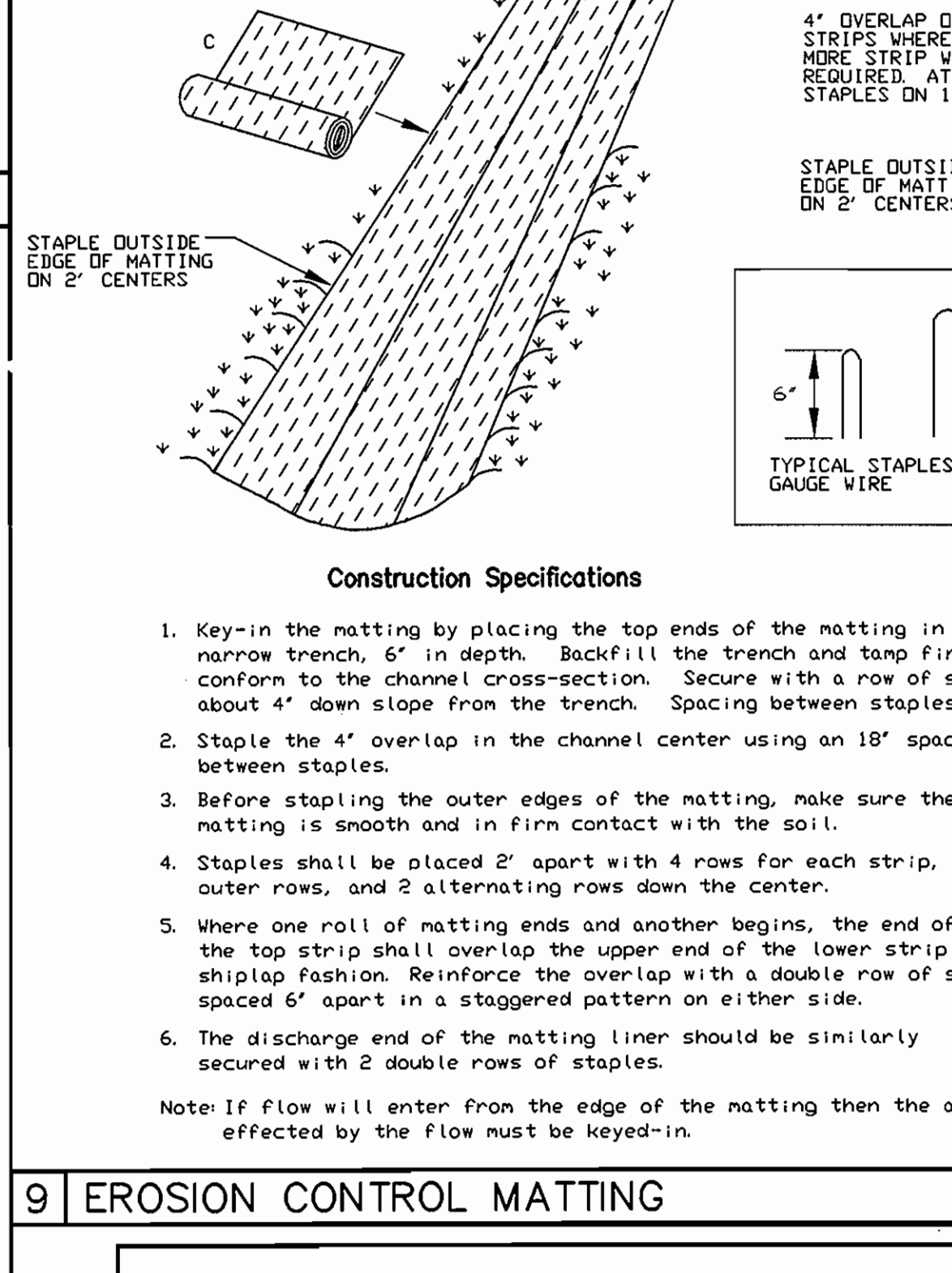
DIRECTOR DATE: 8/16/01



3 STABILIZED CONSTRUCTION ENTRANCE NOT TO SCALE

Construction Specifications

- Length - minimum of 50' (*30' for single residence lot).
- Width - 10' minimum, should be flared at the existing road to provide a turning radius.
- Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. **The plan approval authority may not require single family residences to use geotextile.
- Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.
- Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.
- Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.



9 EROSION CONTROL MATTING NOT TO SCALE

ENGINEER'S CERTIFICATE

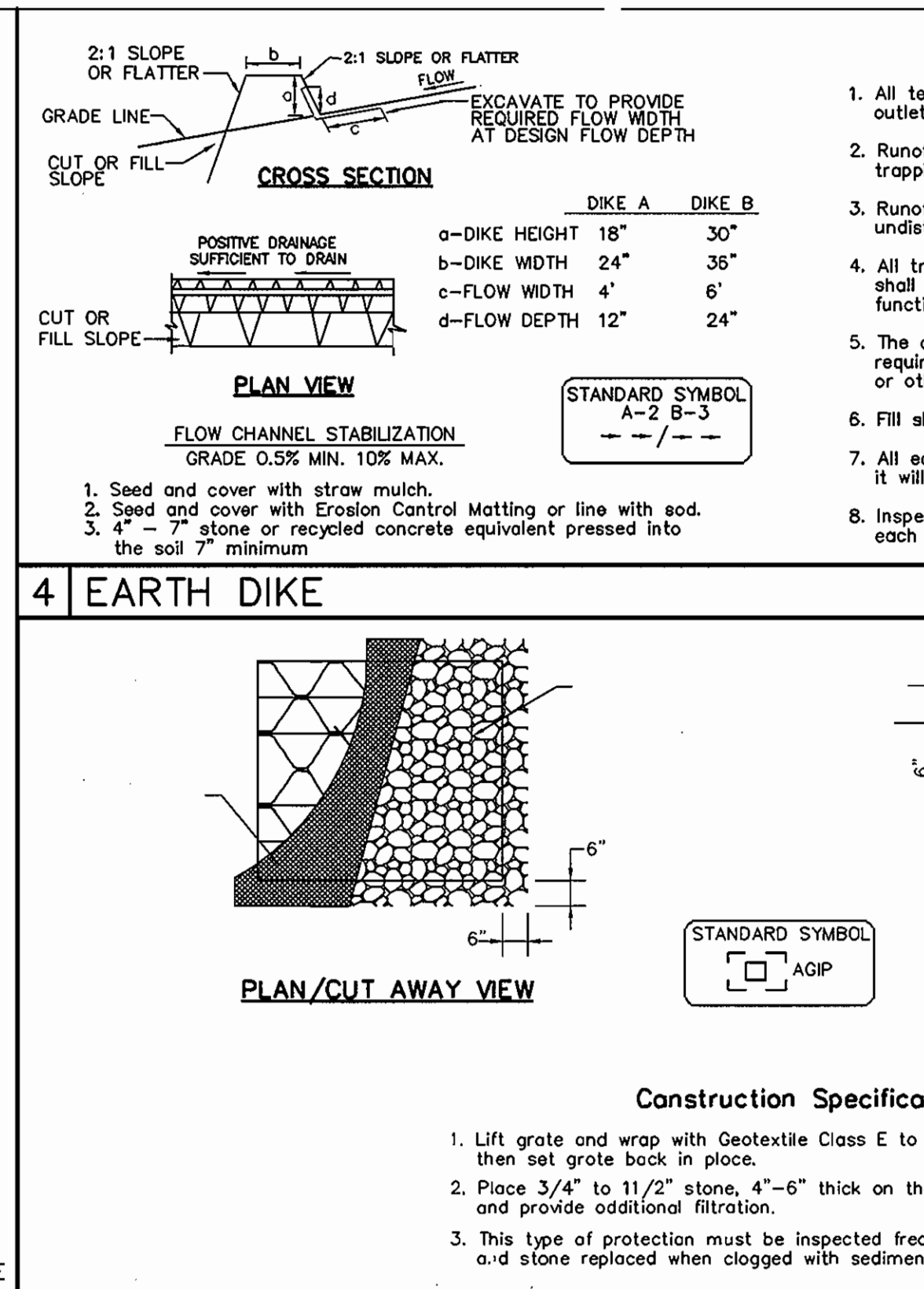
"I certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

Signature: PHILIP DEW Date: 8/19/01

DEVELOPER'S CERTIFICATE

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

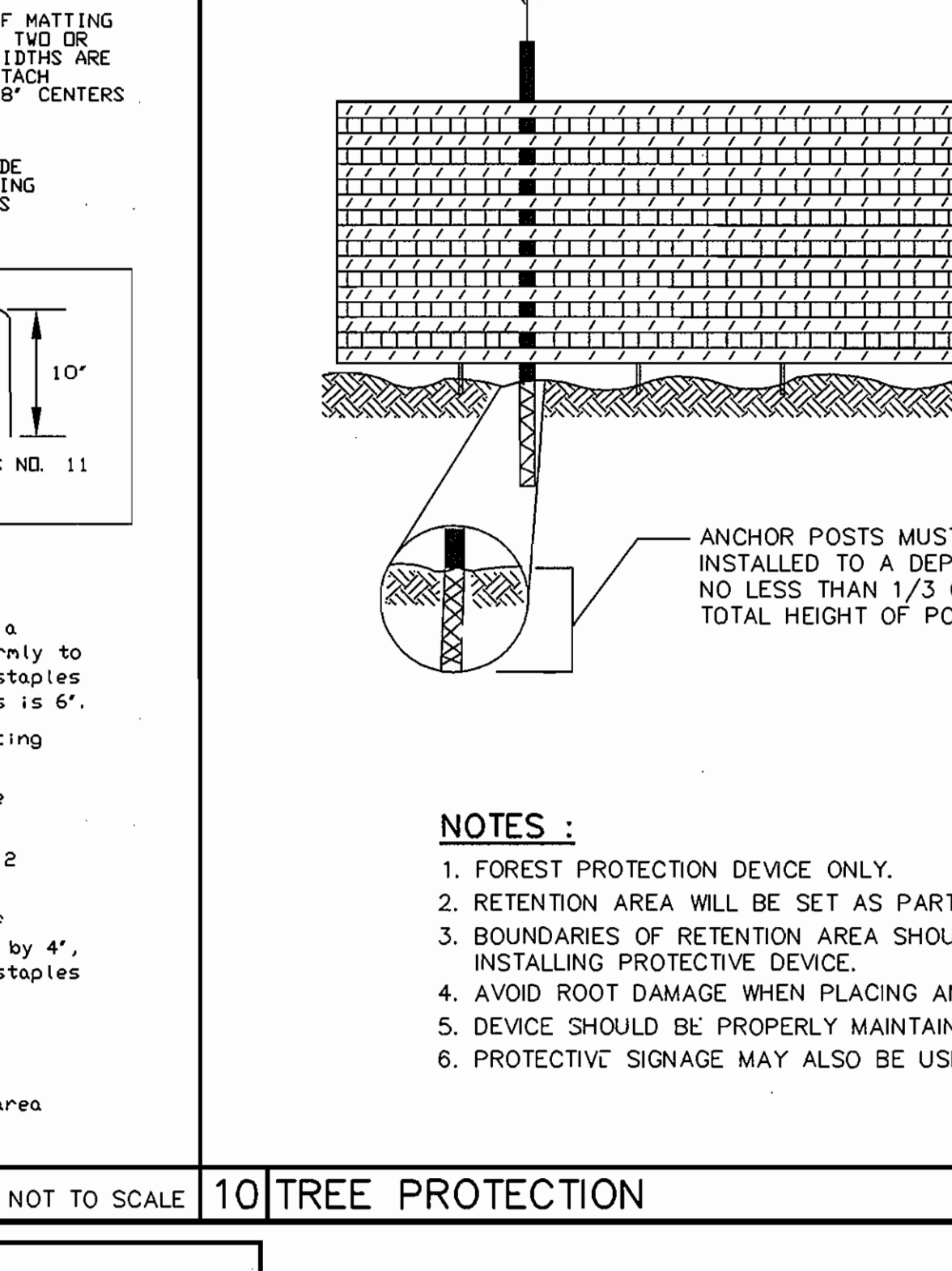
Signature: JOHN M. SMITH Date: 8/21/01



4 EARTH DIKE NOT TO SCALE

Construction Specifications

- Lift grate and wrap with Geotextile Class E to completely cover all openings, then set grate back in place.
- Place 3/4" to 1 1/2" stone, 4"-6" thick on the grate to secure the fabric and provide additional filtration.
- This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.



10 TREE PROTECTION NOT TO SCALE

RELIGIOUS FACILITY EXPANSION AND CONVERSION FOR CHILD DAY CARE FACILITY

EROSION AND SEDIMENT CONTROL DETAILS

SDP-01-15

DRAWING NO. C-8

SHEET 9 OF 20

ESC 3 OF 3

KERNS GROUP ARCHITECTS

3030 CLARENDON BOULEVARD, SUITE 100
ARLINGTON, VIRGINIA 22201-2804
TEL 703.528.1150 FAX 703.528.1151

CIVIL ENGINEER

WHITNEY, BAILEY, COX & MAGNANI, LLP
849 FAIRMONT AVENUE, SUITE 200
BALTIMORE, MARYLAND 21286
410.512.4500 FAX 410.324.4100

STRUCTURAL ENGINEER

MESEN ASSOCIATES, P.C.
904 PRINCE STREET, SUITE 201
ALEXANDRIA, VIRGINIA 22314
703.884.8664 FAX 703.548.6553

MPE ENGINEER

BANSAL & ASSOCIATES, INC.
50 SOUTH PICKETT STREET, SUITE 116
ALEXANDRIA, VIRGINIA 22304
703.823.4894 FAX 703.823.4897

CONTRACTOR

STRUYVER BROS. ECCLES & ROUSE, INC.
519 NORTH CHARLES STREET
BALTIMORE, MARYLAND 21201
410.392.7402 FAX 410.576.9821

Catch the Spirit

LINDEN-LINTHICUM UNITED METHODIST CHURCH
CLARKSVILLE, MARYLAND

RELIGIOUS FACILITY EXPANSION AND CONVERSION FOR CHILD DAY CARE FACILITY

EROSION AND SEDIMENT CONTROL DETAILS

SDP-01-15

DRAWING NO. C-8

SHEET 9 OF 20

ESC 3 OF 3

SDP-01-15

KERNS GROUP ARCHITECTS

3030 CLARENDON BOULEVARD, SUITE 100
ARLINGTON, VIRGINIA 22201-2804
TEL 703.528.1150 FAX 703.528.1151

CIVIL ENGINEER
WHITNEY BAILEY, COX & MAGNANI, LLP
849 FAIRMONT AVENUE, SUITE 200
BALTIMORE, MARYLAND 21286
410.512.4500 FAX 410.324.4100

STRUCTURAL ENGINEER
MBSSEN ASSOCIATES, P.C.
904 PRINCE STREET, SUITE 201
ALEXANDRIA, VIRGINIA 22314
703.684.8864 FAX 703.548.6353

MPE ENGINEER
BANSAL & ASSOCIATES, INC.
50 SOUTH PICKETT STREET, SUITE 116
ALEXANDRIA, VIRGINIA 22304
703.623.4694 FAX 703.623.4697

CONTRACTOR
STRUEVER BROS. ECCLES & ROUSE, INC.
519 NORTH CHARLES STREET
BALTIMORE, MARYLAND 21201
410.332.7402 FAX 410.576.9921

TEST BORING LOG

PROJECT : Linden Linthicum Church BORING NO : SWM-1
LOCATION : 12101 Linden Linthicum Lane, Clarksville, MD ELEVATION : 485
CLIENT : Kerns Group Architects DATE DRILLED : 6-18-99
HAMMER : 140lbs @ 30 inch drop PROJECT NO : 99438

DEPTH (FT)	SPT Blows/6"	DESCRIPTION	ASTM	STRA -TUM	MOIS-TURE(%)
0	9	8" topsoil	FILL	A	
1	10	Reddish brown sandy silt, some mica, moist			
2	10				
3	9	2.5' Reddish brown sandy SILT, some mica, moist	ML	B	
4	13				
5	16				
6	7	5.0' Brown silty SAND, some mica, moist	SM		
7	10				
8	6				
9	7				
10	11				
11	7				
12	9				
13	8				
14	7				
15	9				
16	11				
17	14				
18	12				
19	11				
20	12	20.0'			
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

WATER ENCOUNTERED AT: None NOTE:
AFTER 24 Hours WATER AT: Dry
CAVED AT: 15.3'

TEST BORING LOG

PROJECT : Linden Linthicum Church BORING NO : SWM-2
LOCATION : 12101 Linden Linthicum Lane, Clarksville, MD ELEVATION : 485
CLIENT : Kerns Group Architects DATE DRILLED : 6-18-99
HAMMER : 140lbs @ 30 inch drop PROJECT NO : 99438

DEPTH (FT)	SPT Blows/6"	DESCRIPTION	ASTM	STRA -TUM	MOIS-TURE(%)
0	9	8" topsoil	FILL	A	
1	11	Reddish brown sandy silt, mica, moist			
2	10				
3	12	2.5' Reddish brown sandy SILT, some mica, moist	ML	B	
4	14				
5	9				
6	10				
7	6	6.5' Light brown silty SAND, moist	SM		
8	8				
9	8				
10	10				
11	11				
12	10				
13	17				
14	18				
15	21				
16					
17					
18	10				
19	12				
20	12	20.0'			
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

WATER ENCOUNTERED AT: None NOTE:
AFTER 24 Hours WATER AT: Dry
CAVED AT: 15.5'

TEST BORING LOG

PROJECT : Linden Linthicum Church BORING NO : SWM-3
LOCATION : 12101 Linden Linthicum Lane, Clarksville, MD ELEVATION : 485
CLIENT : Kerns Group Architects DATE DRILLED : 6-18-99
HAMMER : 140lbs @ 30 inch drop PROJECT NO : 99438

DEPTH (FT)	SPT Blows/6"	DESCRIPTION	ASTM	STRA -TUM	MOIS-TURE(%)
0	8	8" topsoil	ML	B	13.2
1	12	Brown sandy SILT, mica, moist			
2	6				
3	6				
4	10				
5	8				
6	8				
7	6	6.5' Light brown silty SAND, some mica, moist	SM		
8	6				
9	6				
10	4				
11	6				
12	6				
13	5				
14	3				
15					
16					
17					
18	5				
19	8				
20	8	20.0' dark brown below 18.5'			
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

WATER ENCOUNTERED AT: None NOTE:
AFTER 24 Hours WATER AT: Dry
CAVED AT: 15.3'

SHEET NO: 7

TEST BORING LOG

PROJECT : Linden Linthicum Church, SWM Pond BORING NO : B-1
LOCATION : Clarksville, MD ELEVATION : 483
CLIENT : Kerns Group Architect DATE DRILLED : 11-13-00
HAMMER : 140lbs @ 30 inch drop PROJECT NO : 99438A

DEPTH (FT)	SPT Blows/6"	DESCRIPTION	ASTM	STRA -TUM	MOIS-TURE(%)
0	6	2" topsoil	FILL	A	
1	6	Reddish brown sandy silt with mica, rootlets, rock fragments, moist			
2	3				
3	4				
4	3				
5	3				
6	2	-brown, layer of decayed roots, wet at 6.0'			
7	2	7.0' Brown sandy SILT, wet	ML	B	
8	3	<silt Loam>			
9	6	-rock fragments at 9.0'			21.9
10	12				
11					
12					
13					
14	11	14.0' Light brown silty SA ^h , with rock fragments, moist	SM		
15	12	<Loamy Sand>			
16	7				
17	11				
18	12				
19					
20		20.0'			
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

WATER ENCOUNTERED AT: None NOTE:
AFTER 2 Hours WATER AT: Dry
CAVED AT: 14.8'

GEOTECH ENGINEERS, INC.

SHEET NO: 8

TEST BORING LOG

PROJECT : Linden Linthicum Church, SWM Pond BORING NO : B-2
LOCATION : Clarksville, MD ELEVATION : 481
CLIENT : Kerns Group Architect DATE DRILLED : 11-13-00
HAMMER : 140lbs @ 30 inch drop PROJECT NO : 99438A

DEPTH (FT)	SPT Blows/6"	DESCRIPTION	ASTM	STRA -TUM	MOIS-TURE(%)
0	2	5" topsoil	FILL	A	
1	7	Brown sandy silt with rock fragments, moist			
2	3				
3	4				
4	3	4.5' Brown SILT with sand, trace rock fragments, moist	ML	B	
5	3	<Silt Loam>			
6	10	6.5' Brown silty SAND with rock fragments, moist	SM		13.4
7	18	<Sandy Loam>			
8	10				
9	7				
10	7				
11					
12					
13					
14	8				
15	14				
16	14				
17					
18	5	-wet at 18.5'			
19	7				
20	7	20.0'			
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

WATER ENCOUNTERED AT: None NOTE:
AFTER 24 Hours WATER AT: Dry
CAVED AT: 14.9'

GEOTECH ENGINEERS, INC.

SHEET NO: 9

TEST BORING LOG

PROJECT : Linden Linthicum Church, SWM Pond BORING NO : B-3
LOCATION : Clarksville, MD ELEVATION : 481
CLIENT : Kerns Group Architect DATE DRILLED : 11-13-00
HAMMER : 140lbs @ 30 inch drop PROJECT NO : 99438A

DEPTH (FT)	SPT Blows/6"	DESCRIPTION	ASTM	STRA -TUM	MOIS-TURE(%)
0	2	0' Brown sandy silt with rock fragments, moist	FILL	A	
1	4				
2	3				
3	3				
4	3	4.5' Brown and red silty SAND with rock fragments, moist	SM	B	
5	8	<Sandy Loam>			
6	8				13.0
7	13	-brown at 7.0'			
8	29	-dense below 7'			
9					
10	100/1-1/2"	-weathered rock at 9.5'			
11	13				
12	17				
13					
14	24	-weathered rock layer at 14.5'			
15	42/3"				
16					
17					
18	4				
19	5				
20	7	20.0'			
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

WATER ENCOUNTERED AT: None NOTE:
AFTER 24 Hours WATER AT: Dry
CAVED AT: 15.2'

GEOTECH ENGINEERS, INC.



LINDEN-LINTHICUM UNITED METHODIST CHURCH
CLARKSVILLE, MARYLAND

RELIGIOUS FACILITY EXPANSION AND CONVERSION FOR CHILD DAY CARE FACILITY

STORM WATER MANAGEMENT BORINGS

SDP-01-15

DRAWING NO.

C-16

SHEET 17 OF 20
SWM 5 OF 5

SDP-01-15

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

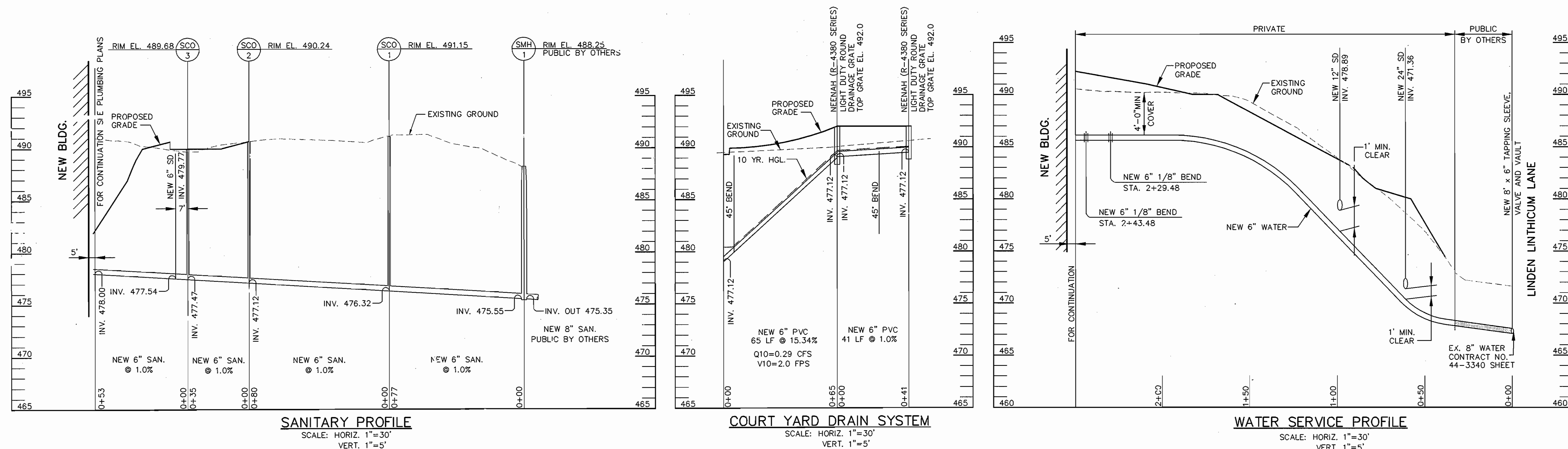
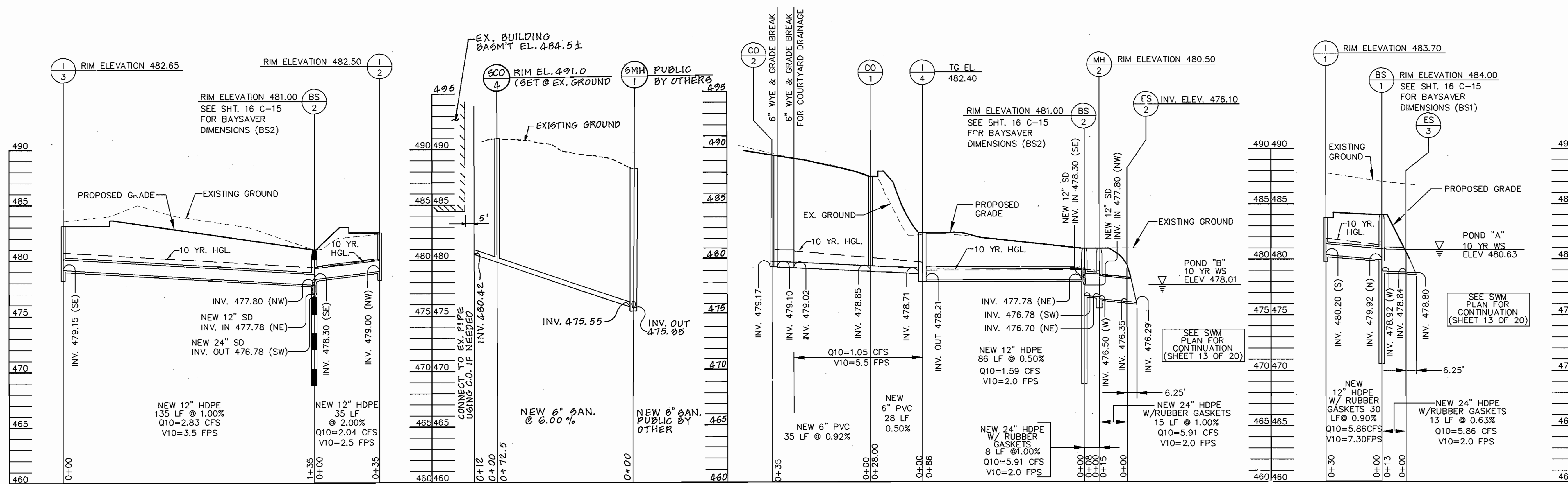
CHIEF, DEVELOPMENT ENGINEERING DIVISION
[Signature] 8/16/01 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT
[Signature] 8/16/01 DATE

DIRECTOR
[Signature] 8/16/01 DATE



SWM PROJECT NO. 724-01



LINDEN-LINTHICUM
UNITED METHODIST
CHURCH
CLARKSVILLE, MARYLAND

2-18-02 SANITARY SEWER FOR
DAYCARE BUILDING.

RELIGIONS FACILITY EXPANSION AND
CONVERSION FOR CHILD DAY CARE FACILITY

UTILITY PROFILES

SDP-01-15

DRAWING NO.

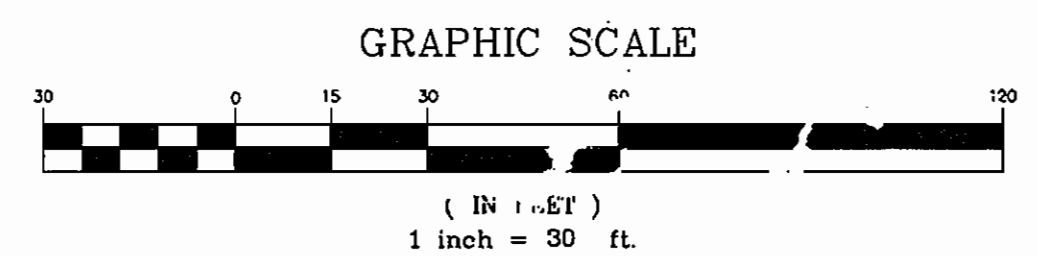
C-19

SHEET 20 OF 20

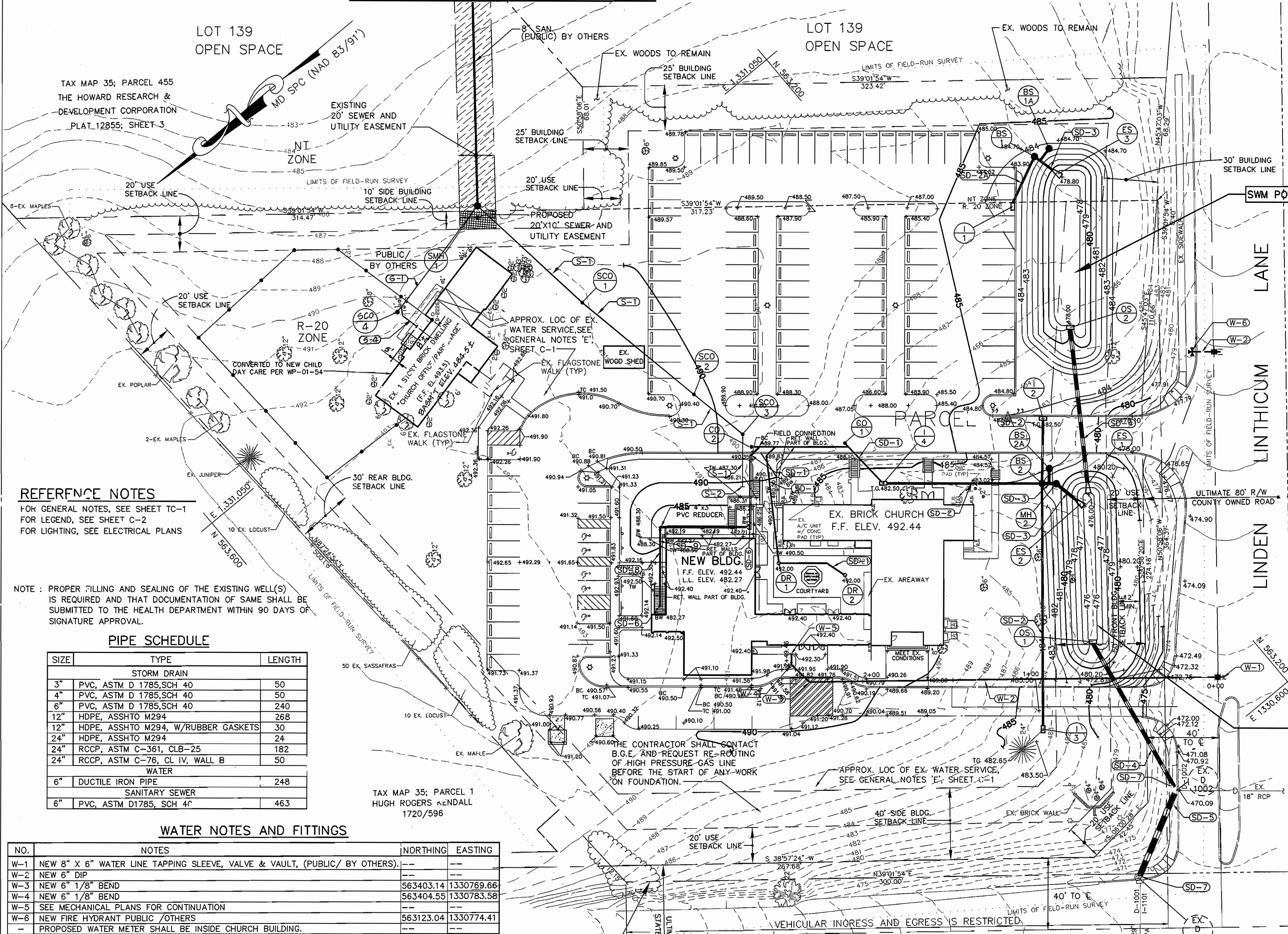
APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

CHIEF DEVELOPMENT ENGINEERING DIVISION
Karl Shearlock DATE 8/16/01
CHIEF, DIVISION OF LAND DEVELOPMENT
David S. DeLughe DATE 8/17/01

STATE OF MARYLAND
PROFESSIONAL ENGINEER
8/19/01



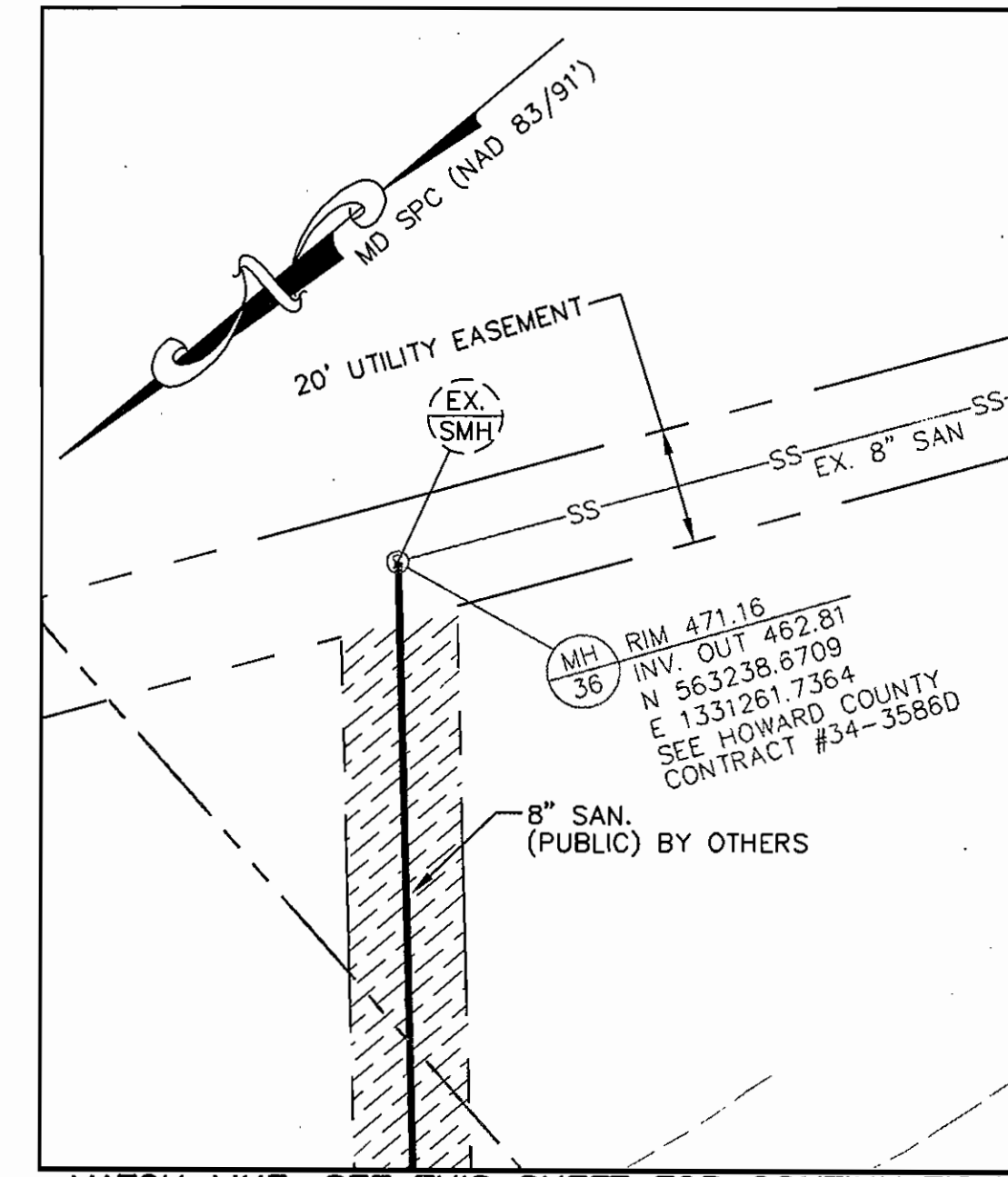
MATCH LINE, SEE THIS SHEET FOR CONTINUATION



STORM DRAIN NOTES
 SD-1 NEW 6" PVC, ASTM D 1785, SCH 40
 SD-2 NEW 12" HDPE, ASSHTO M 294
 SD-2A NEW 12" HDPE, ASSHTO M 294, W/RUBBER GASKETS
 SD-3 NEW 24" HDPE, ASSHTO M 294, W/RUBBER GASKETS
 SD-4 NEW 24" RCCP, ASTM C-361, CL. B-25
 SD-5 NEW 24" RCCP, ASTM C-76, CL. IV, WALL B
 SD-6 SEE MECHANICAL PLANS FOR CONTINUATION
 SD-7 CONNECT TO EXISTING INLET
 SD-8 NEW 3" PVC, ASTM D 1785, SCH 40
 SD-9 TYPE M NEENAH TRENCH DRAIN (R-4995)

SANITARY NOTES
 S-1 NEW 6" PVC, ASTM D 1785, SCH 40
 S-2 SEE MECHANICAL PLANS FOR CONTINUATION
 S-3 NEW 8" PUBLIC (BY OTHERS)
 S-4 CONNECT TO EXISTING SANITARY SEWER PIPING.
 CONTRACTOR TO VERIFY TYPE, SIZE AND LOCATION OF EXISTING PIPING PRIOR TO STARTING WORK MATCH EX. PIPING @ TIE-IN POINT.

VILLAGE OF RIVER HILL
 SECTION 4, AREA 2
 PLATS 12420-12422



MATCH LINE, SEE THIS SHEET FOR CONTINUATION

REFERENCE NOTES
 FOR GENERAL NOTES, SEE SHEET TC-1
 FOR LEGEND, SEE SHEET C-2
 FOR LIGHTING, SEE ELECTRICAL PLANS

NOTE: PROPER FILLING AND SEALING OF THE EXISTING WELL(S) IS REQUIRED AND THAT DOCUMENTATION OF SAME SHALL BE SUBMITTED TO THE HEALTH DEPARTMENT WITHIN 90 DAYS OF SIGNATURE APPROVAL.

PIPE SCHEDULE

SIZE	TYPE	LENGTH
STORM DRAIN		
3"	PVC, ASTM D 1785, SCH 40	50
4"	PVC, ASTM D 1785, SCH 40	50
6"	PVC, ASTM D 1785, SCH 40	240
12"	HDPE, ASSHTO M294	268
12"	HDPE, ASSHTO M294, W/RUBBER GASKETS	30
24"	HDPE, ASSHTO M294	24
24"	RCCP, ASTM C-361, CLB-25	182
24"	RCCP, ASTM C-76, CL. IV, WALL B	50
WATER		
6"	DUCTILE IRON PIPE	248
SANITARY SEWER		
6"	PVC, ASTM D1785, SCH 40	463

WATER NOTES AND FITTINGS

NO.	NOTES	NORTHING	EASTING
W-1	NEW 8" X 6" WATER LINE TAPPING SLEEVE, VALVE & VAULT, (PUBLIC/ BY OTHERS).	---	---
W-2	NEW 6" DIP	---	---
W-3	NEW 6" 1/8" BEND	563403.14	1330789.66
W-4	NEW 6" 1/8" BEND	563404.55	1330783.58
W-5	SEE MECHANICAL PLANS FOR CONTINUATION	---	---
W-6	NEW FIRE HYDRANT PUBLIC /OTHERS	563123.04	1330774.41
-	PROPOSED WATER METER SHALL BE INSIDE CHURCH BUILDING.	---	---

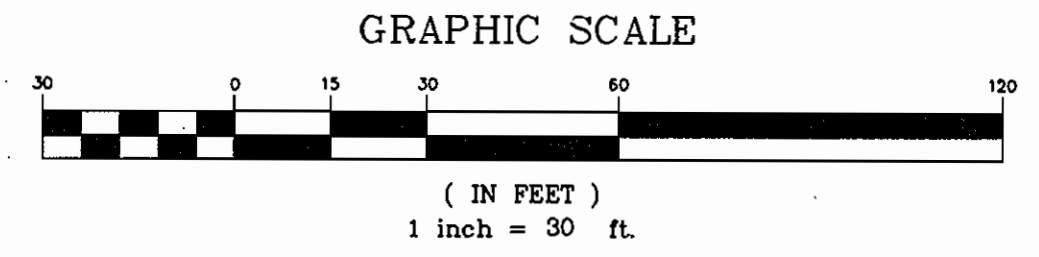
SANITARY SCHEDULE

NO.	INV. IN	INV. OUT	RIM	NORTHING	EASTING	COMMENTS
SMH-1	470.25	---	488.25	563374.72	1331090.54	PUBLIC BY OTHERS
SCO-1	472.68	---	491.15	563364.58	1331012.15	MAIN LINE CLEANOUT, SEE HO. CO. PLATE S-3.21
SCO-2	475.21	---	490.24	563343.29	1330899.06	MAIN LINE CLEANOUT, SEE HO. CO. PLATE S-3.21
SCO-3	476.31	---	489.68	563349.76	1330933.46	MAIN LINE CLEANOUT, SEE HO. CO. PLATE S-3.21

STORM DRAIN SCHEDULE

NO.	INV. IN	INV. OUT	RIM/TOP OF GRATE	NORTHING	EASTING	COMMENTS
I-1	---	480.20	483.70	563147.81	1330899.86	TYPE 3 INLET, SEE HO. CO. PLATE SD-4.22
I-2	---	479.00	482.50	563310.28	1330798.86	TYPE 3 INLET, SEE HO. CO. PLATE SD-4.22
I-3	---	479.15	482.65	563320.82	1330686.42	TYPE 3 INLET, SEE HO. CO. PLATE SD-4.22
I-4	477.60	477.40	482.00	563301.15	1330828.13	PRECAST WR INLET, SEE HO. CO. PLATE SD-4.37
MH-1	479.80	479.35	484.00	563120.81	1330913.34	STANDARD HO. CO. MANHOLE, PLATE G-5.13
MH-2	478.64	478.44	480.50	563227.76	1330766.45	STANDARD HO. CO. MANHOLE, PLATE G-5.13
MH-3	478.30	476.72	481.00	563253.77	1330771.54	STANDARD HO. CO. MANHOLE, PLATE G-5.13
EX. D 1001	465.18	464.51	465.30	563333.41	1330569.53	EX. INLET, SEE PROFILE ON SHEET C-12
EX. D 1002	---	---	---	563286.27	1330593.19	EX. COG-15 INLET, SEE PROFILE ON SHEET C-12
CO-1	477.55	477.55	487.60	563303.11	1331036.08	MAIN LINE CLEANOUT, SEE HO. CO. PLATE S-3.21
CO-2	---	---	---	563344.05	1330890.57	MAIN LINE CLEANOUT, SEE HO. CO. PLATE S-3.21
ES-1	---	476.00	---	563214.08	1330756.05	STANDARD 24" CONCRETE END SECTION
ES-2	---	476.00	476.36	563224.98	1330751.86	STANDARD 24" HDPE END SECTION
ES-3	---	478.00	---	563171.73	1330900.98	STANDARD 24" HDPE END SECTION
OS-1	---	---	---	563266.49	1330886.12	SEE DETAILS ON SHEET C-14
OS-2	---	---	---	563116.34	1330827.93	SEE DETAILS ON SHEET C-14
BS-1	---	---	484.00	563111.77	1330911.59	BAYSAYER, SEE DETAILS ON SHEET C-15
BS-2	---	---	482.25	563225.41	1330775.38	BAYSAYER, SEE DETAILS ON SHEET C-15

WATER NOTES
 PROP. WATER METER WILL BE INSIDE BUILDING.
 1-1/2" DOMESTIC/4" FIRE



APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 8/2/01
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 8/16/01
 DIRECTOR
 DATE: 8/22/01



KERNS GROUP ARCHITECTS

3030 CLARENDON BOULEVARD, SUITE 100
 ARLINGTON, VIRGINIA 22201-2804
 TEL 703.528.1150 FAX 703.528.1151

CIVIL ENGINEER

WHITNEY, BAILEY, COX & MACLEAN, LLP
 849 FAIRMONT AVENUE, SUITE 200
 BALTIMORE, MARYLAND 21286
 410.512.4500 FAX 410.324.4100

STRUCTURAL ENGINEER

MESSEN ASSOCIATES, P.C.
 904 PRINCE STREET, SUITE 201
 ALEXANDRIA, VIRGINIA 22314
 703.684.8664 FAX 703.548.8353

MPE ENGINEER

BANSAL & ASSOCIATES, INC.
 58 SOUTH PICKETT STREET, SUITE 1116
 ALEXANDRIA, VIRGINIA 22304
 703.829.4694 FAX 703.829.4697

CONTRACTOR

STRUEVER BROS. ECLES & ROUSE, INC.
 619 NORTH CHARLES STREET
 BALTIMORE, MARYLAND 21201
 410.332.7402 FAX 410.575.9021



LINDEN-LINTHICUM UNITED METHODIST CHURCH
 CLARKSVILLE, MARYLAND

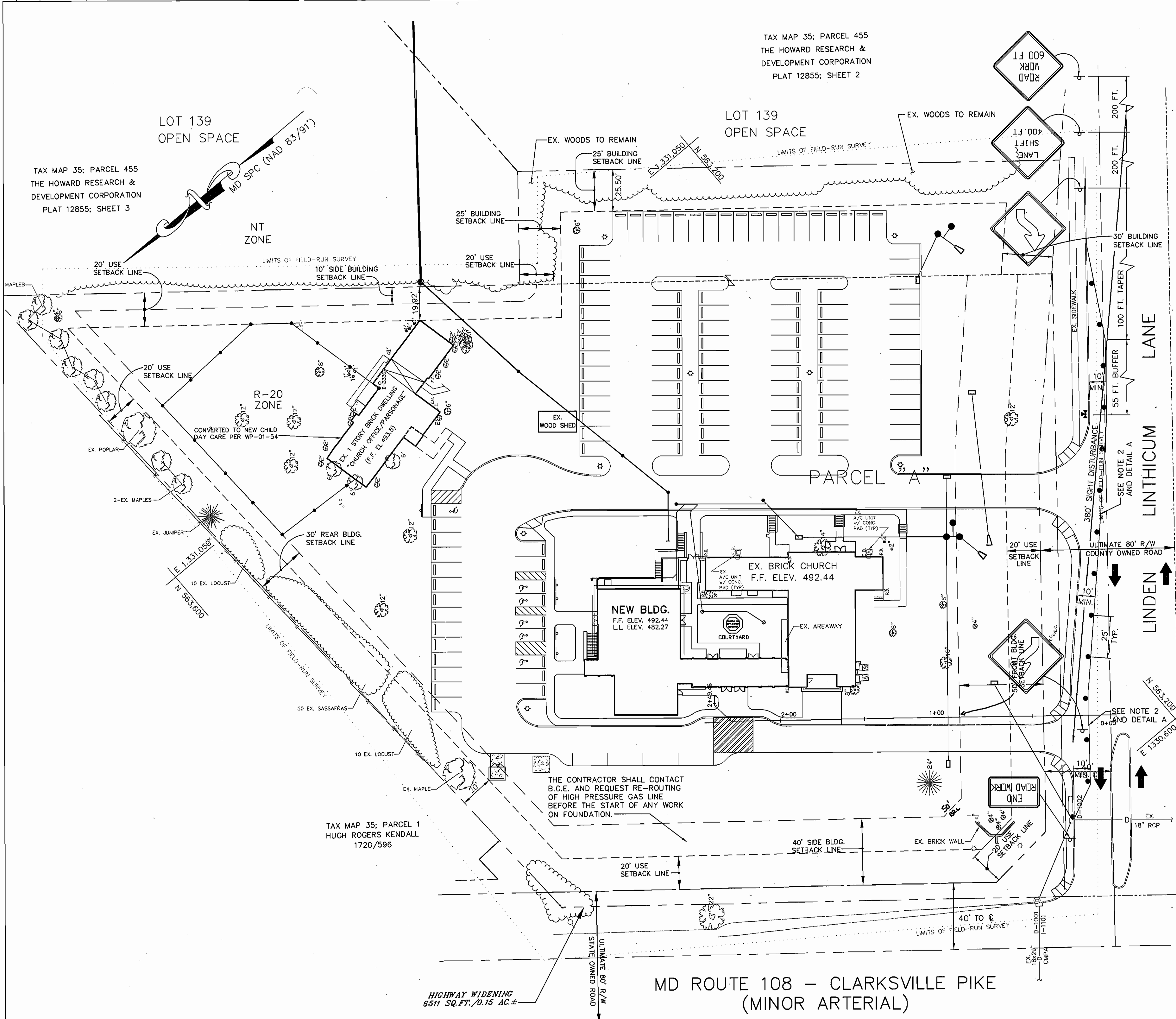
2-18-02 SANITARY SEWER FOR DAYCARE BUILDING.
 12-10-07 ADDING NEW SIDEWALK & STAIRWAY TO BASEMENT

RELIGIOUS FACILITY EXPANSION AND CONVERSION FOR CHILD DAY CARE FACILITY

UTILITY PLAN
 SDP-01-15

DRAWING NO.
C-5
 SHEET 6 OF 20

SDP-01-15



TAX MAP 35; PARCEL 455
THE HOWARD RESEARCH &
DEVELOPMENT CORPORATION
PLAT 12855; SHEET 2

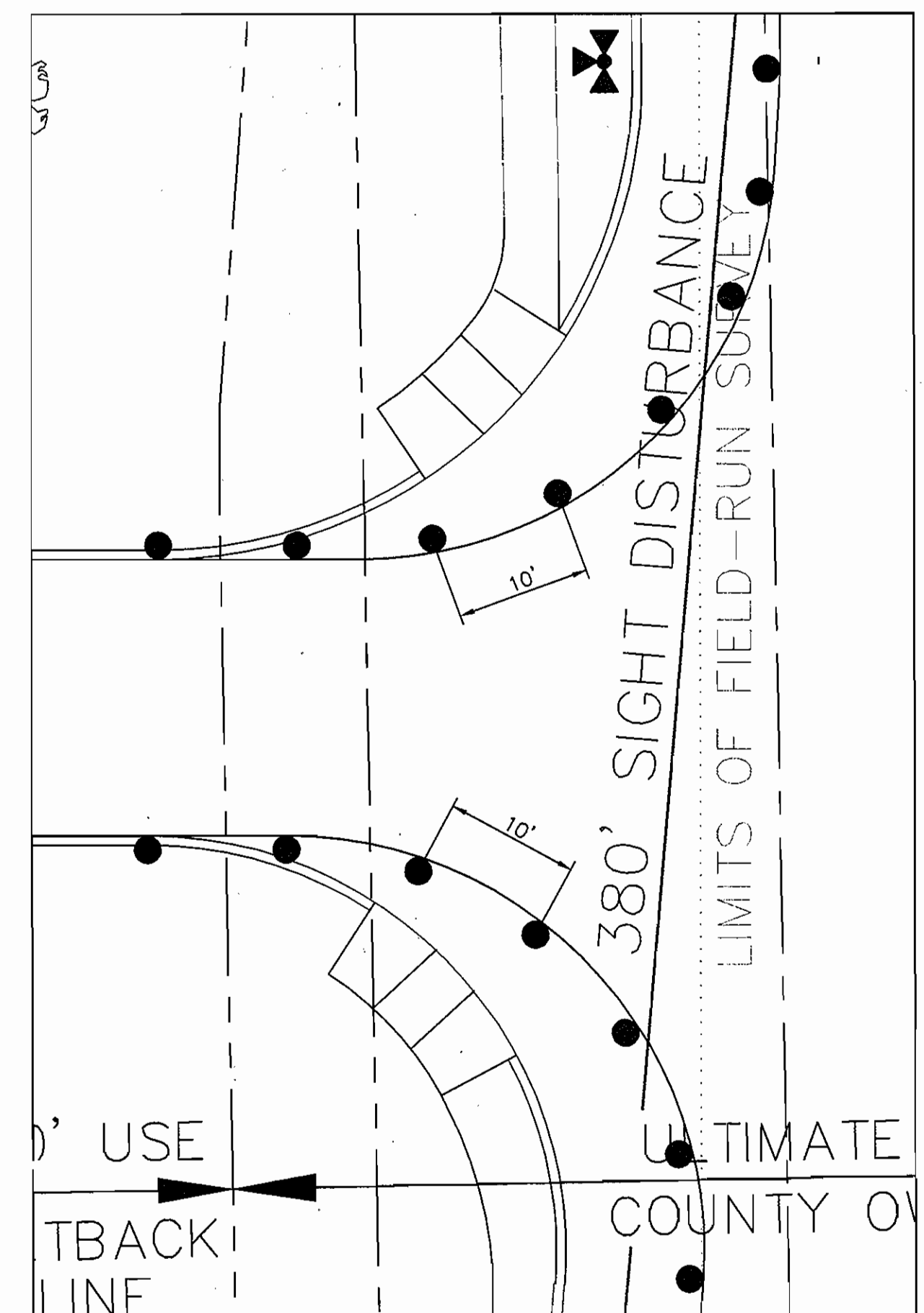
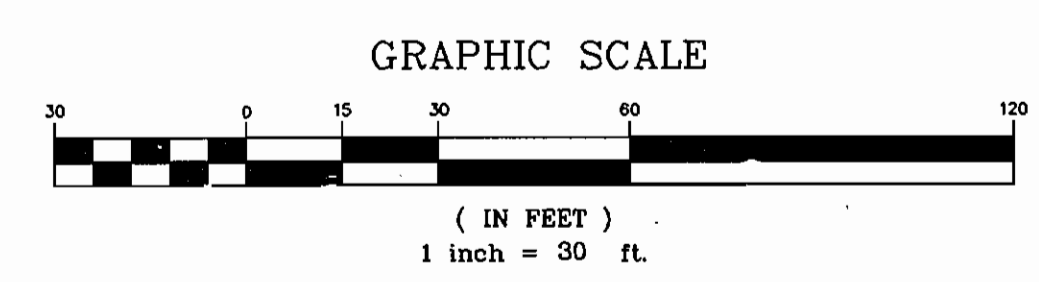
TAX MAP 35; PARCEL 455
THE HOWARD RESEARCH &
DEVELOPMENT CORPORATION
PLAT 12855; SHEET 3

TAX MAP 35; PARCEL 1
HUGH ROGERS KENDALL
1720/596

TAX MAP 34; PARCEL 424
RIVER HILL PROFESSIONAL, LLC
PLAT 12421

MD ROUTE 108 - CLARKSVILLE PIKE
(MINOR ARTERIAL)

PLAN
SCALE: 1"=30'



TRAFFIC CONTROL NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE HOWARD COUNTY STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION AND ALL APPLICABLE ADDENDA.
2. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ONE CHURCH DRIVEWAY AT ALL TIMES. SEE DETAIL 'A' THIS SHEET.
3. CONTRACTOR SHALL RESTORE BOTH CHURCH DRIVEWAYS TO PROPER OPERATING CONDITIONS PRIOR TO WEEKEND WORSHIP SERVICES.
4. MEASURED INTERSECTION SIGHT DISTANCE WAS GREATER THAN 250 FT. THE CONSTRUCTION WORK AT THE CHURCH ACCESS DRIVEWAYS SHALL NOT NEGATIVELY EFFECT EXISTING SIGHT DISTANCE.

LEGEND

- CHANNELIZATION DEVICE
- SIGN AND POST
- DIRECTION OF TRAFFIC

KERNS GROUP ARCHITECTS

3030 CLARENDON BOULEVARD, SUITE 100
ARLINGTON, VIRGINIA 22201-2804
TEL 703.528.1150 FAX 703.528.1151

CIVIL ENGINEER

WHITNEY, BAILEY, COX & MAGNANI, LLP
849 FAIRMONT AVENUE, SUITE 200
BALTIMORE, MARYLAND 21206
410.512.4500 FAX 410.324.4100

STRUCTURAL ENGINEER

MRSN ASSOCIATES, P.C.
904 PRINCE STREET, SUITE 201
ALEXANDRIA, VIRGINIA 22304
703.684.8684 FAX 703.548.6353

MPE ENGINEER

BANSAL & ASSOCIATES, INC.
50 SOUTH PICKETT STREET, SUITE 116
ALEXANDRIA, VIRGINIA 22304
703.623.4694 FAX 703.623.4697

CONTRACTOR

STRUEVER BROS. ECCLES & ROUSE, INC.
515 NORTH CHARLES STREET
BALTIMORE, MARYLAND 21201
410.332.7402 FAX 410.578.9821



LINDEN-LINTHICUM
UNITED METHODIST
CHURCH
CLARKSVILLE, MARYLAND

12/10/07 ADDING NEW SIDEWALK &
STAIRWAY TO BASEMENT

RELIGIOUS FACILITY EXPANSION AND
CONVERSION FOR CHILD DAY CARE FACILITY

TRAFFIC CONTROL
PLAN

SDP-01-15

DRAWING NO.

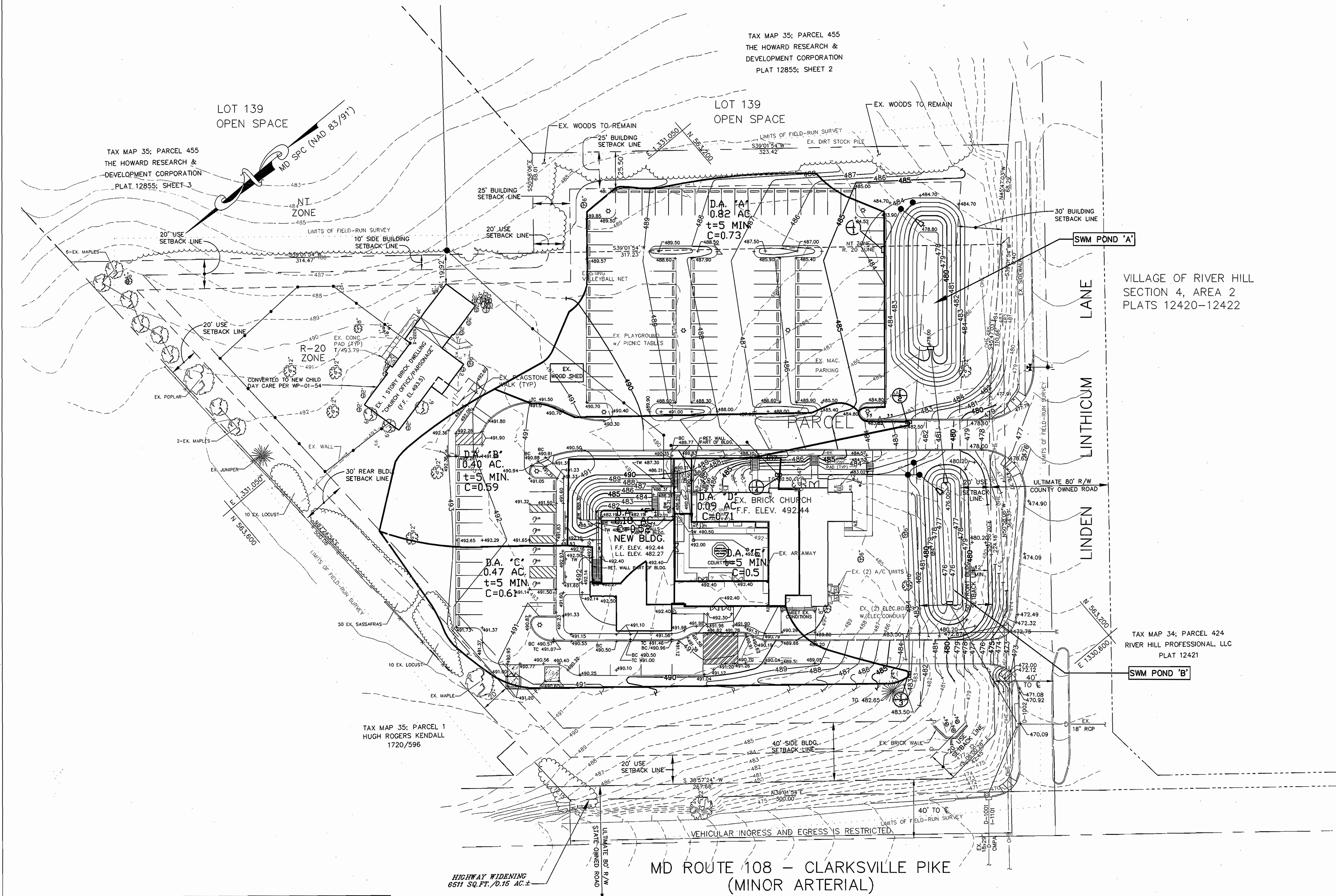
C-18

SHEET 19 OF 20

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

CHIEF, DEVELOPMENT ENGINEERING DIVISION
Kurt Steinhilber /for CH
CHIEF, DIVISION OF LAND DEVELOPMENT
Danish V. D. Taylor
DIRECTOR

DATE: 8/16/01
DATE: 8/16/01
DATE: 8/17/01



TAX MAP 35; PARCEL 455
THE HOWARD RESEARCH &
DEVELOPMENT CORPORATION
PLAT 12855; SHEET 2

TAX MAP 35; PARCEL 455
THE HOWARD RESEARCH &
DEVELOPMENT CORPORATION
PLAT 12855; SHEET 3

VILLAGE OF RIVER HILL
SECTION 4, AREA 2
PLATS 12420-12422

TAX MAP 34; PARCEL 424
RIVER HILL PROFESSIONAL, LLC
PLAT 12421

TAX MAP 35; PARCEL 1
HUGH ROGERS KENDALL
1720/596

MD ROUTE 108 - CLARKSVILLE PIKE
(MINOR ARTERIAL)

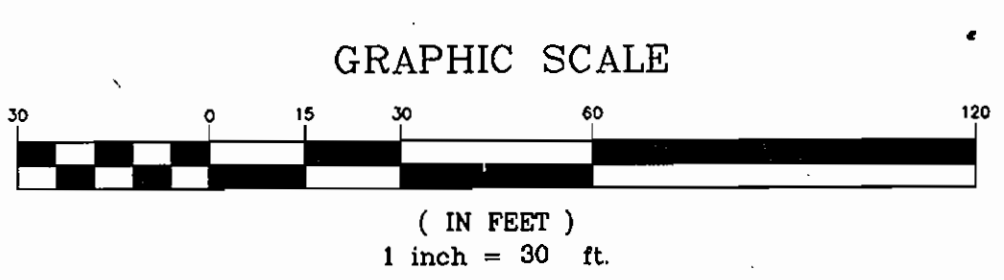
APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

CHIEF, DEVELOPMENT ENGINEERING DIVISION

Karl Shearwood
CHIEF, DIVISION OF LAND DEVELOPMENT

DIRECTOR

DATE: 1/14/01
DATE: 2/16/01
DATE: 8/12/01



**LINDEN-LINTHICUM
UNITED METHODIST
CHURCH**
HOWARD COUNTY, MARYLAND

12/10/01 ADDING NEW SIDEWALK &
STAIRWAY TO BASEMENT

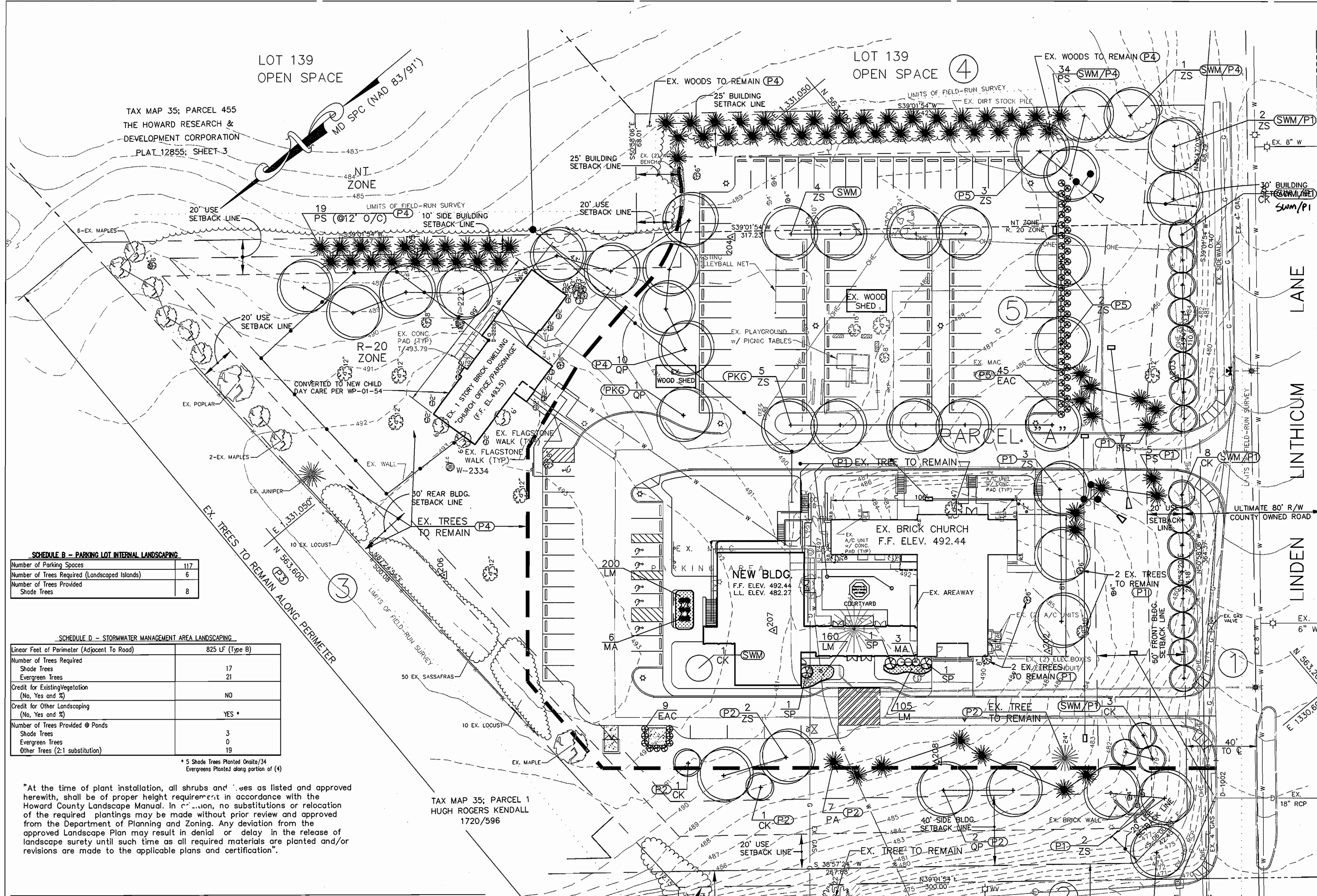
RELIGIOUS FACILITY EXPANSION AND
CONVERSION FOR CHILD DAY CARE FACILITY

DRAINAGE AREA MAP
SDP-01-15
DRAWING NO.

C-17
SHEET 18 OF 20

SDP-01-15

PROJECT NO. 754.01



PLANTING LEGEND

SHRUBS	⊕
MINOR DECIDUOUS/ SMALL FLOWERING TREE	⊕
SHADE TREE	⊕
EVERGREEN TREE	⊕
EXISTING TREE/TREES	⊕

(P4) DENOTES PERIMETER AREA ASSOCIATED WITH SPECIFIC PLANTING.

VILLAGE OF RIVER HILL
SECTION 4, AREA 2
PLATS 12420-12422

LANDSCAPE NOTES

- ALL PLANT MATERIALS SHALL BE NURSERY GROWN AND SHALL CONFORM TO THE HOWARD COUNTY LANDSCAPE MANUAL AND AMERICAN ASSOCIATION OF NURSERYMEN, INC. STANDARDS, LATEST EDITION.
- ALL PLANTING PROCEDURES AND SPECIFICATIONS SHALL CONFORM TO "LANDSCAPE SPECIFICATION GUIDELINES FOR BALTIMORE WASHINGTON METROPOLITAN AREA" LATEST EDITION.
- THE CONTRACTOR SHALL CONTACT "MISS UTILITY" FOR UNDERGROUND UTILITY LOCATIONS AT LEAST 72 HOURS PRIOR TO THE COMPLETION DATE.
- ALL PLANTS SHALL BE GUARANTEED BY THE CONTRACTOR FOR ONE YEAR FOLLOWING THE INSTALLATION COMPLETION DATE.

DEVELOPER'S/BUILDER'S CERTIFICATE
I/WE CERTIFY THAT THE LANDSCAPE PLANTING SHOWN ON THIS PLAN WILL BE DONE IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

John Adams DATE: 8/16/01

TAX MAP 34; PARCEL 424
RIVER HILL PROFESSIONAL, LLC
PLAT 12421

REFERENCE NOTES
FOR GENERAL NOTES, SHEET TC-1.
FOR LEGEND, SEE SHEET C-2.
FOR PLANTING DETAILS, SEE SHEET C-11.

SCHEDULE B - PARKING LOT INTERNAL LANDSCAPING

Number of Parking Spaces	117
Number of Trees Required (Landscape Islands)	6
Number of Trees Provided	8
Shade Trees	8

SCHEDULE D - STORMWATER MANAGEMENT AREA LANDSCAPING

Linear Feet of Perimeter (Adjacent to Road)	825 LF (Type B)
Number of Trees Required	
Shade Trees	17
Evergreen Trees	21
Credit for Existing Vegetation (No, Yes and %)	NO
Credit for Other Landscaping (No, Yes and %)	YES *
Number of Trees Provided @ Ponds	
Shade Trees	3
Evergreen Trees	0
Other Trees (2:1 substitution)	19

* 5 Shade Trees Planted Orbits/24 Evergreens Planted along portion of (4)

"At the time of plant installation, all shrubs and trees as listed and approved herewith, shall be of proper height requirement in accordance with the Howard County Landscape Manual. In addition, no substitutions or relocation of the required plantings may be made without prior review and approval from the Department of Planning and Zoning. Any deviation from the approved Landscape Plan may result in denial or delay in the release of landscape surety until such time as all required materials are planted and/or revisions are made to the applicable plans and certification."

PLANT LIST

KEY	QUANTITY	BOTANICAL NAME/COMMON NAME	SIZE	ROOT	REMARKS
QP	13	QUERCUS PALUSTRIS/PIN OAK	2"-2 1/2" CAL	B&B	
ZS	25	ZELKOVA SERRATA 'VILLAGE GREEN' / VILLAGE GREEN JAPANESE ZELKOVA	2"-2 1/2" CAL	B&B	
CK	21	CORNUS KOUSA / KOUSA DOGWOOD	1"-1 1/2" CAL	B&B	
PS	58	PINUS STROBUS/WHITE PINE	6"-8" HGT	B&B	15' O/C
PA	7	PICEA ABIES/ NORWAY SPRUCE	6"-8" HGT.	B&B	
SP	3	STEWARTIA PSEUDOCAMELLIA/ JAPANESE STEWARTIA	4" HGT.	B&B	
MA	9	MAHONIA AQUIFOLIUM/OREGON GRAPE HOLLY	3" HGT.	CONT.	3' O/C
EAC	54	EUONYMUS ALATUS COMPACTA/ DWARF WINGED EUONYMUS	24"-30" HGT.	CONT.	
LM	465	LIRIOPE MUSCARI/ BIG BLUE LIRIOPE	1 QT.	CONT.	
INS	7	ILEX x 'NELLIE STEVENS' / NELLIE STEVENS HOLLY	6"-8" HGT.	B&B	

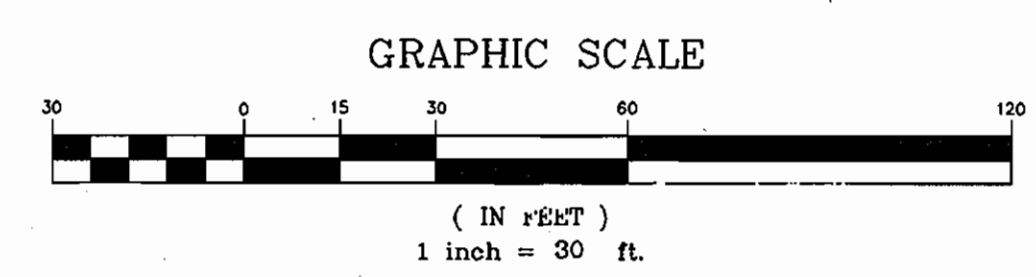
SCHEDULE A - PERIMETER LANDSCAPE EDGE

Category	Adjacent to Roadways (Perimeter 1) Type B	Adjacent to Roadways (Perimeter 2) Type B	Adjacent to Perimeter Properties (3) Type C	Adjacent to Perimeter Properties (4) Type C	Parking Lot Adjacent to Roadway (5) Type E
Landscape Type					
Linear Feet of Roadway Frontage/Perimeter	442'	300'	500'	700'(300')	160'
Credit for Existing Vegetation (Yes, No, Linear Foot) (Describe below if needed)	YES *	Yes *	Yes	YES - 310'	NO
Credit for Wall, Fence or Berm	NO	NO	NO	NO	NO
Number of Plants Required					
Shade Trees	9	6	13	10	4
Evergreen Trees	11	7	25	20	0
Shrubs	0	0	0	0	40
Number of Plants Provided					
Shade Trees	545 EX.	4+1	80 EX.	10	5
Evergreen Trees	12	7+1 EX.	1 EX.	20	0
Other Trees (2:1 substitution)	19	2	0	0	0
Shrubs (10:1 substitution)	0	0	0	0	45

(Describe plant substitution credits below if needed)

* 5 Ex Shade Trees To Remain
* 1 Ex Evergreen Trees To Remain, 1 Shade Tree To Remain
* Ex Woods To Remain
* Ex Woods To Remain Along Portion of (4)

NOTE :
"THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED 65 SHADE TREES, 84 EVERGREEN/ORNAMENTAL TREES AND 40 SHRUBS IN THE AMOUNT OF \$33,300.00 HAS BEEN POSTED AS PART OF THE DPW, DEVELOPER'S AGREEMENT FOR THIS PROJECT."



KERNS GROUP ARCHITECTS

3030 CLARENDON BOULEVARD, SUITE 100
ARLINGTON, VIRGINIA 22201-2804
TEL 703.528.1150 FAX 703.528.1151

CIVIL ENGINEER
WHITNEY, BAILEY, COX & MAGNANI, LLP
849 FAIRBANK AVENUE, SUITE 200
BALTIMORE, MARYLAND 21286
410.512.4500 FAX 410.324.4100

STRUCTURAL ENGINEER
MUSEN ASSOCIATES, P.C.
50 SOUTH PICKETT STREET, SUITE 201
ALEXANDRIA, VIRGINIA 22314
703.684.8664 FAX 703.548.6353

MPE ENGINEER
BANSAL & ASSOCIATES, INC.
50 SOUTH PICKETT STREET, SUITE 201
ALEXANDRIA, VIRGINIA 22304
703.623.4694 FAX 703.823.4697

CONTRACTOR
STRIEVER BROS. ECCLES & ROUSE, INC.
519 NORTH CHARLES STREET
BALTIMORE, MARYLAND 21201
410.332.7402 FAX 410.576.9021



LINDEN-LINTHICUM UNITED METHODIST CHURCH
CLARKSVILLE, MARYLAND

12/10/07 ADDING NEW SIDEWALK & STAIRWAY TO BASEMENT

RELIGIOUS FACILITY EXPANSION AND CONVERSION FOR CHILD DAY CARE FACILITY

LANDSCAPE PLAN
SDP-01-15
DRAWING NO.

C-10

SHEET 11 OF 20

SDP-01-15

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

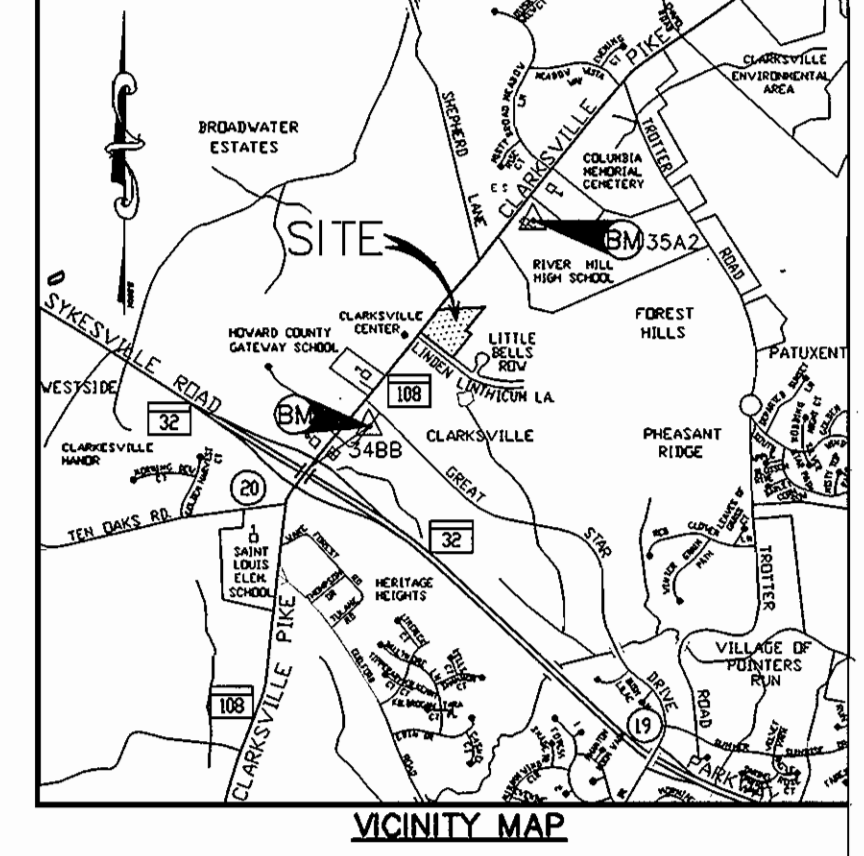
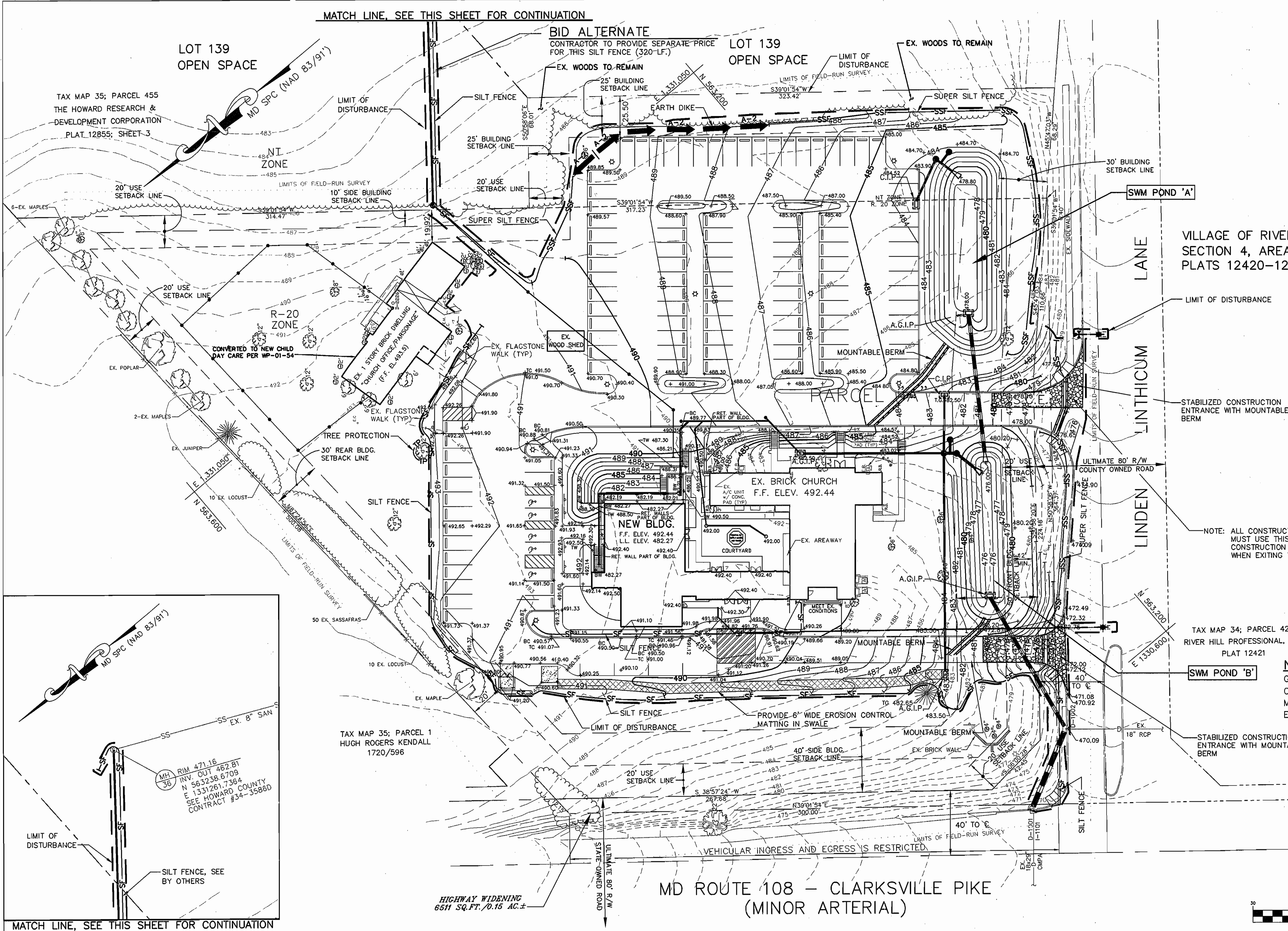
CHIEF, DEVELOPMENT ENGINEERING DIVISION: *8/16/01* DATE

CHIEF, DIVISION OF LAND DEVELOPMENT: *8/16/01* DATE

DIRECTOR: *8/16/01* DATE



GSA PRODUCT NO. 7241



VILLAGE OF RIVER HILL
SECTION 4, AREA 2
PLATS 12420-12422

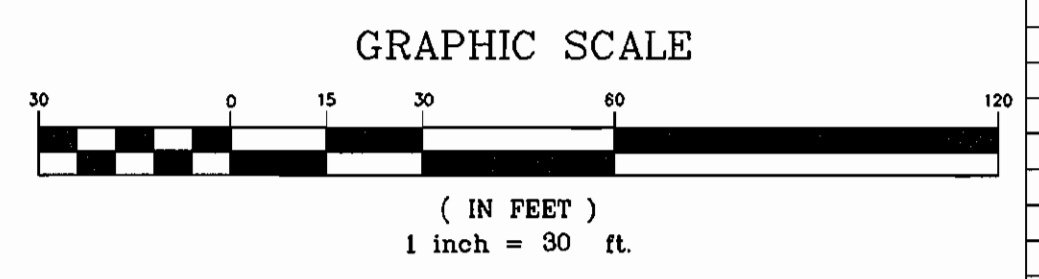
SEDIMENT AND EROSION CONTROL LEGEND

- STABILIZED CONSTRUCTION ENTRANCE
- MOUNTABLE BERM
- EARTH DIKE
- SUPER SILT FENCE
- SILT FENCE
- LIMIT OF DISTURBANCE
- CURB INLET PROTECTION
- AT GRADE INLET PROTECTION
- TREE PROTECTION
- EROSION CONTROL MATTING

NOTE: ALL CONSTRUCTION VEHICLES MUST USE THIS STABILIZED CONSTRUCTION ENTRANCE WHEN EXITING THE SITE

NOTE
GENERAL CONTRACTOR TO COORDINATE WITH CONSTRUCTION MANAGER AND OWNER TO MAINTAIN OPERATION OF FACILITIES DURING ENTIRE DURATION OF CONSTRUCTION.

TOTAL DISTURBANCE AREA
132436.01 S.F.
3.04 AC.



MATCH LINE, SEE THIS SHEET FOR CONTINUATION

MATCH LINE, SEE THIS SHEET FOR CONTINUATION

REFERENCE NOTES

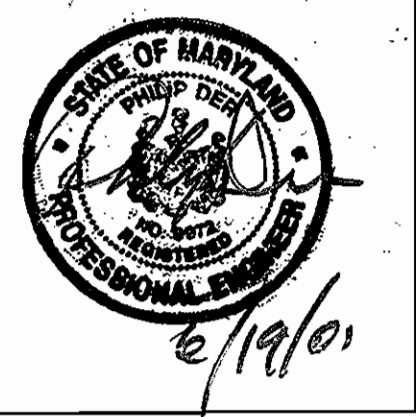
FOR GENERAL NOTES, SEE SHEET TC-1
FOR LEGEND, SEE SHEET C-2

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

Signature: *Philip...* Date: 6/19/01

DEVELOPER'S CERTIFICATE
I certify that all development and construction will be done according to this plan for sediment and erosion control, and that all applicable provisions of the construction project involved in the construction project will have a Certificate of Attendance at a Department of the Environment and Planning Training Program for the Control of Sediment and Erosion before beginning the project. I also certify that on-site inspection by the Howard Soil Conservation District.

Signature: *John R....* Date: 6/19/01



Reviewed for Howard SCD and meets Technical Requirements

Signature: *John Maye* Date: 6/13/01
Signature: *John R....* Date: 6/13/01

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

Signature: *Kat...* Date: 6/16/01
Signature: *...* Date: 6/17/01

KERNS GROUP ARCHITECTS

3030 CLARENDON BOULEVARD, SUITE 100
ARLINGTON, VIRGINIA 22201-2804
TEL 703.528.1150 FAX 703.528.1151

CIVIL ENGINEER

WHITNEY, BAILEY, COX & MAGNANI, LLP
849 FAIRMONT AVENUE, SUITE 200
BALTIMORE, MARYLAND 21206
410.512.4500 FAX 410.324.4100

STRUCTURAL ENGINEER

MESSEN ASSOCIATES, P.C.
904 PRINCE STREET, SUITE 201
ALEXANDRIA, VIRGINIA 22314
703.684.8664 FAX 703.548.6353

MPE ENGINEER

BANSAL & ASSOCIATES, INC.
50 SOUTH PICKETT STREET, SUITE 110
ALEXANDRIA, VIRGINIA 22304
703.823.4694 FAX 703.823.4697

CONTRACTOR

STRUEVER BROS. ECCLES & ROUSE, INC.
519 NORTH CHARLES STREET
BALTIMORE, MARYLAND 21201
410.332.7402 FAX 410.576.9021



LINDEN-LINTHICUM UNITED METHODIST CHURCH
CLARKSVILLE, MARYLAND

12/10/07 ADDING NEW SIDEWALK & STAIRWAY TO BASEMENT

RELIGIOUS FACILITY EXPANSION AND CONVERSION FOR CHILD DAY CARE FACILITY

EROSION AND SEDIMENT CONTROL PLAN

SDP-01-15

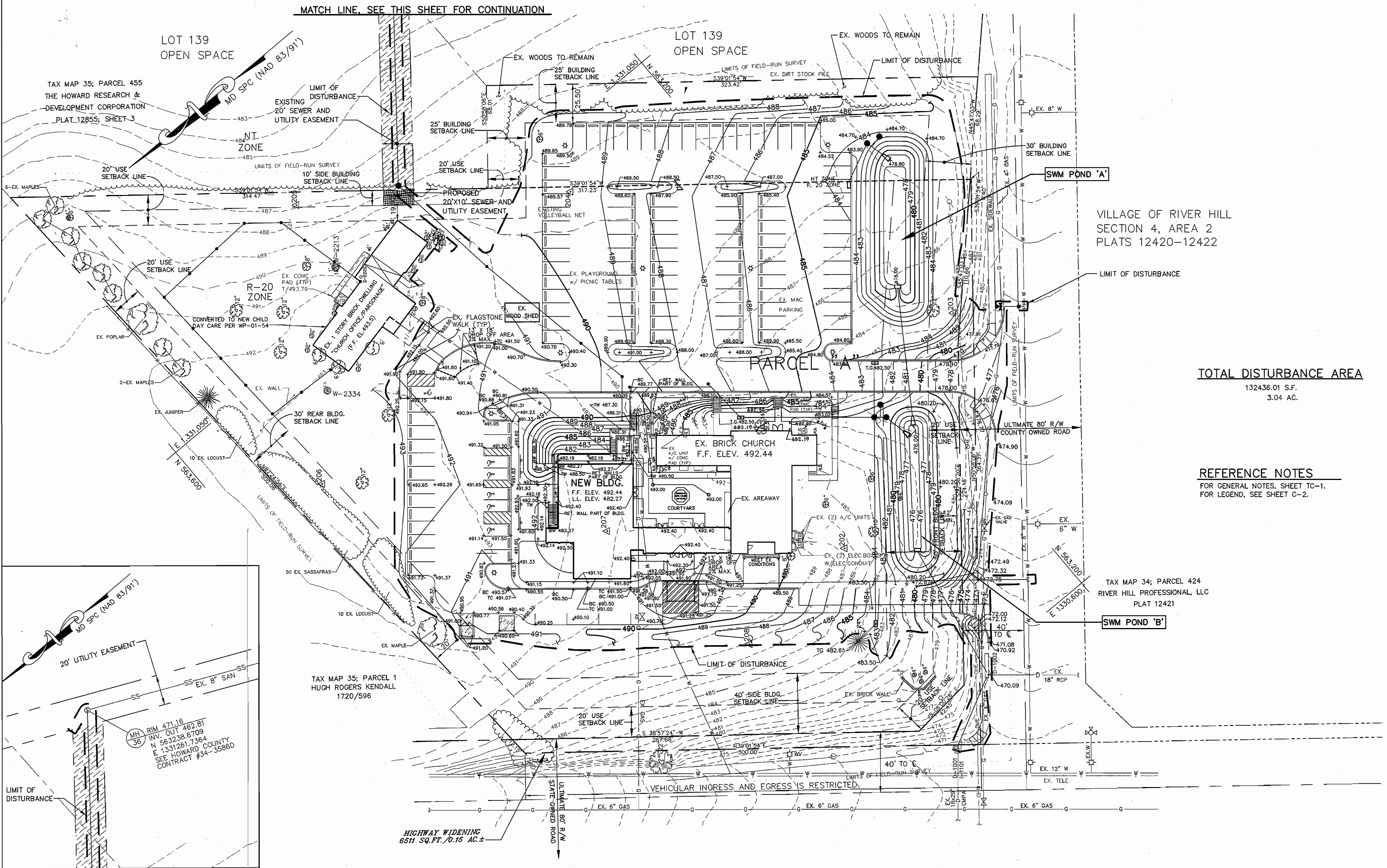
DRAWING NO.

C-6

SHEET 7 OF 20
ESC 1 OF 3

SDP-01-15

REG. PROJECT NO. 724.01



TOTAL DISTURBANCE AREA
132436.01 S.F.
3.04 AC.

REFERENCE NOTES
FOR GENERAL NOTES, SHEET TC-1.
FOR LEGEND, SEE SHEET C-2.

KERNS GROUP ARCHITECTS

3030 CLARENDON BOULEVARD, SUITE 100
ARLINGTON, VIRGINIA 22201-2804
TEL 703.528.1150 FAX 703.528.1151

CIVIL ENGINEER

WHITNEY, BAILEY, COX & MAGNANI, LLP
849 FAIRMONT AVENUE, SUITE 200
BALTIMORE, MARYLAND 21286
410.512.4500 FAX 410.324.4100

STRUCTURAL ENGINEER

MESSEN ASSOCIATES, P.C.
904 PRINCE STREET, SUITE 201
ALEXANDRIA, VIRGINIA 22314
703.684.8864 FAX 703.546.6553

MPE ENGINEER

BANSAL & ASSOCIATES, INC.
50 SOUTH PICKETT STREET, SUITE 110
ALEXANDRIA, VIRGINIA 22304
703.823.4894 FAX 703.823.4897

CONTRACTOR

STRUEVER BROS. ECCLES & ROUSE, INC.
519 NORTH CHARLES STREET
BALTIMORE, MARYLAND 21201
410.332.7402 FAX 410.576.8021



LINDEN-LINTHICUM UNITED METHODIST CHURCH
CLARKSVILLE, MARYLAND

12/10/07 ADDING NEW SIDEWALK & STAIRWAY TO BASEMENT

RELIGIOUS FACILITY EXPANSION AND CONVERSION FOR CHILD DAY CARE FACILITY

GRADING PLAN

SDP-01-15
DRAWING NO.

C-4

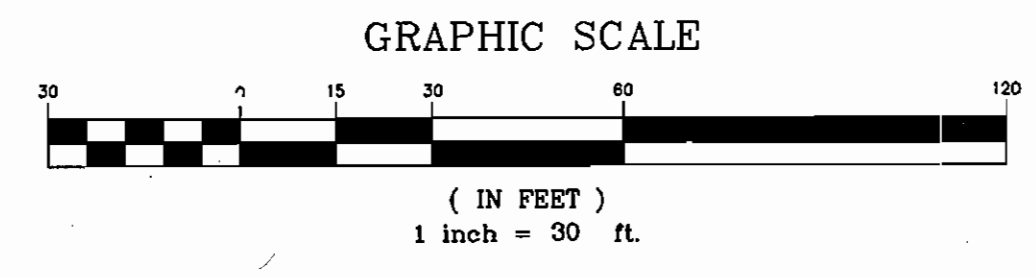
SHEET 5 OF 20
SDP-01-15

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

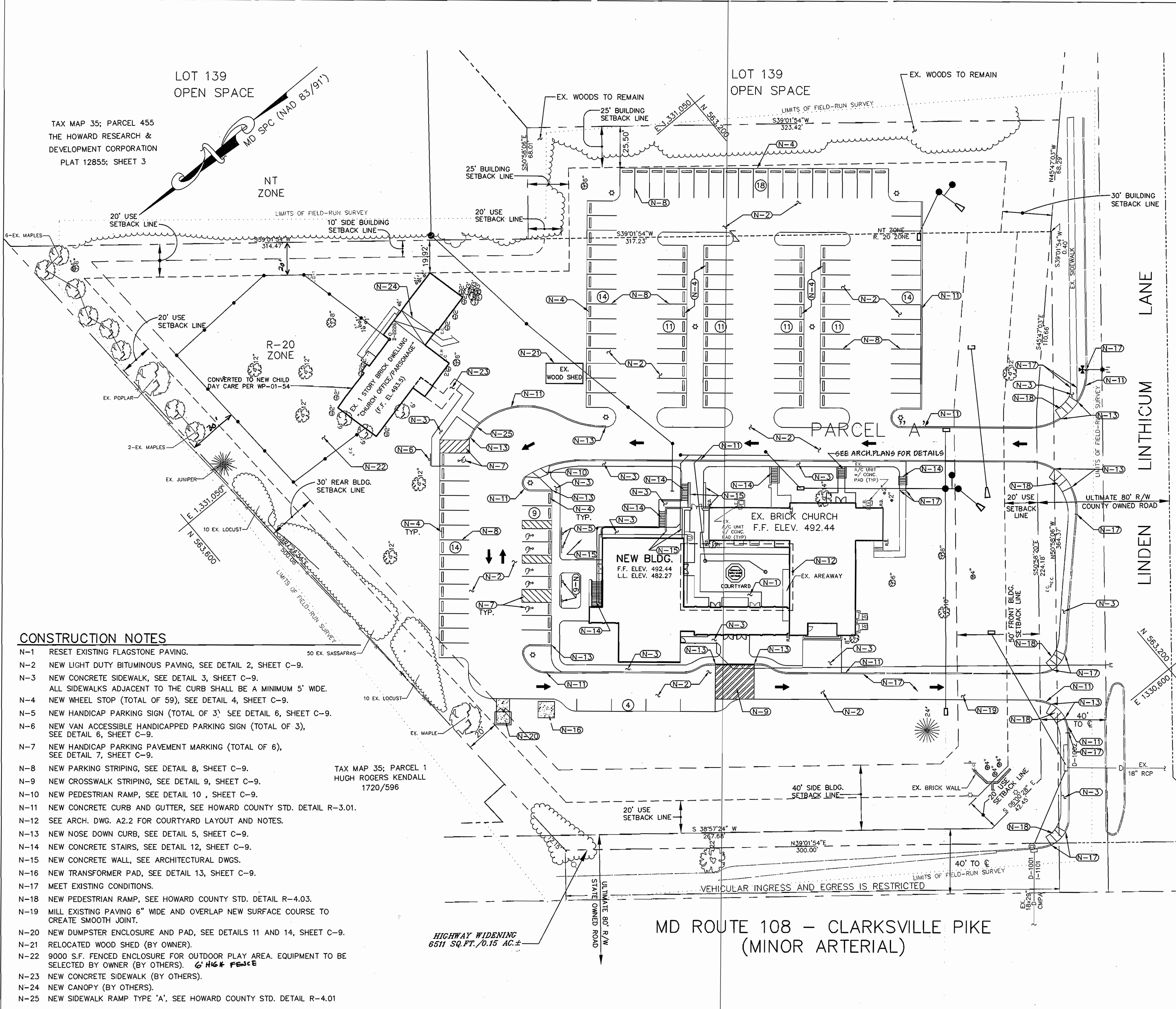
William Dammann 8/16/01 DATE
CHIEF, DEVELOPMENT ENGINEERING DIVISION

But Sheeloh for CH 8/16/01 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT

Franklin J. D. Leyle 8/12/01 DATE
DIRECTOR



ECA PROJECT NO. 724.01



LEGEND

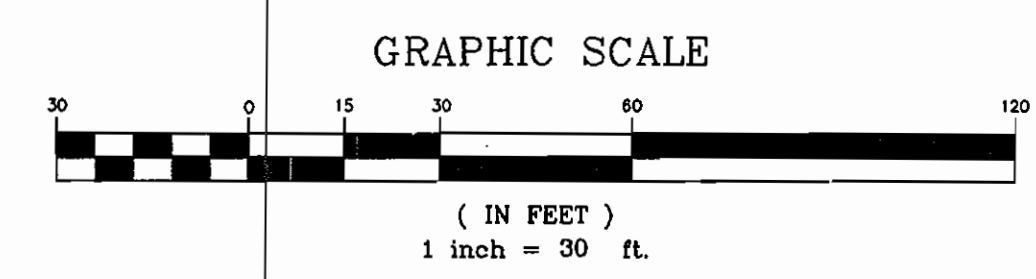
DESCRIPTION	EXISTING	NEW	DEMOLITION
BUILDING	EX. BLDG.	NEW BLDG.	
PAVING	EX. PAVING	LIGHT DUTY	EX. PAVING
CONCRETE SIDEWALK	EX. WALK		EX. WALK
CURB			XXXXXX
STORM DRAIN	D		///-///
SANITARY	SS		
WATER	W		
GAS	G		
TELEPHONE	T		
OVER HEAD ELECTRIC	OHE		---DHE---
GAS VALVE			X
POWER POLE			
CLEANOUT			
WATER METER			
VALVE			
HYDRANT			
MANHOLE			
INLET			
WALL			
CONTOUR	492	490	
SPOT ELEVATION	x 490	+ 490	
FFNCE	X		
TREE	32'		32'
TREELINE			
SIGN			
LIGHT POLE			
LIMIT OF DISTURBANCE			
STEEP SLOPES 25% OR GREATER			

- CONSTRUCTION NOTES**
- N-1 RESET EXISTING FLAGSTONE PAVING.
 - N-2 NEW LIGHT DUTY BITUMINOUS PAVING, SEE DETAIL 2, SHEET C-9.
 - N-3 NEW CONCRETE SIDEWALK, SEE DETAIL 3, SHEET C-9. ALL SIDEWALKS ADJACENT TO THE CURB SHALL BE A MINIMUM 5' WIDE.
 - N-4 NEW WHEEL STOP (TOTAL OF 59), SEE DETAIL 4, SHEET C-9.
 - N-5 NEW HANDICAP PARKING SIGN (TOTAL OF 3) SEE DETAIL 6, SHEET C-9.
 - N-6 NEW VAN ACCESSIBLE HANDICAPPED PARKING SIGN (TOTAL OF 3), SEE DETAIL 6, SHEET C-9.
 - N-7 NEW HANDICAP PARKING PAVEMENT MARKING (TOTAL OF 6), SEE DETAIL 7, SHEET C-9.
 - N-8 NEW PARKING STRIPING, SEE DETAIL 8, SHEET C-9.
 - N-9 NEW CROSSWALK STRIPING, SEE DETAIL 9, SHEET C-9.
 - N-10 NEW PEDESTRIAN RAMP, SEE DETAIL 10, SHEET C-9.
 - N-11 NEW CONCRETE CURB AND GUTTER, SEE HOWARD COUNTY STD. DETAIL R-3.01.
 - N-12 SEE ARCH. DWG. A2.2 FOR COURTYARD LAYOUT AND NOTES.
 - N-13 NEW NOSE DOWN CURB, SEE DETAIL 5, SHEET C-9.
 - N-14 NEW CONCRETE STAIRS, SEE DETAIL 12, SHEET C-9.
 - N-15 NEW CONCRETE WALL, SEE ARCHITECTURAL DWGS.
 - N-16 NEW TRANSFORMER PAD, SEE DETAIL 13, SHEET C-9.
 - N-17 MEET EXISTING CONDITIONS.
 - N-18 NEW PEDESTRIAN RAMP, SEE HOWARD COUNTY STD. DETAIL R-4.03.
 - N-19 MILL EXISTING PAVING 6" WIDE AND OVERLAP NEW SURFACE COURSE TO CREATE SMOOTH JOINT.
 - N-20 NEW DUMPSTER ENCLOSURE AND PAD, SEE DETAILS 11 AND 14, SHEET C-9.
 - N-21 RELOCATED WOOD SHED (BY OWNER).
 - N-22 9000 S.F. FENCED ENCLOSURE FOR OUTDOOR PLAY AREA. EQUIPMENT TO BE SELECTED BY OWNER (BY OTHERS). **6' HIGH FENCE**
 - N-23 NEW CONCRETE SIDEWALK (BY OTHERS).
 - N-24 NEW CANOPY (BY OTHERS).
 - N-25 NEW SIDEWALK RAMP TYPE 'A'. SEE HOWARD COUNTY STD. DETAIL R-4.01

TAX MAP 34; PARCEL 424
RIVER HILL PROFESSIONAL, LLC
PLAT 12421

REFERENCE NOTES
FOR GENERAL NOTES, SEE SHEET TC-1

MD ROUTE 108 - CLARKSVILLE PIKE
(MINOR ARTERIAL)



APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

CHIEF, DEVELOPMENT ENGINEERING DIVISION
[Signature] DATE: 8/16/01

CHIEF, DIVISION OF LAND DEVELOPMENT
[Signature] DATE: 8/13/01

DIRECTOR
[Signature] DATE: 8/13/01



KERNS GROUP ARCHITECTS

3030 CLARENDON BOULEVARD, SUITE 100
ARLINGTON, VIRGINIA 22201-2804
TEL 703.528.1150 FAX 703.528.1151

CIVIL ENGINEER
WHITNEY, BAILEY, COX & MAGNANI, LLP
849 FAIRMONT AVENUE, SUITE 200
BALTIMORE, MARYLAND 21286
410.512.4500 FAX 410.324.4100

STRUCTURAL ENGINEER
MESSEN ASSOCIATES, P.C.
904 PRINCE STREET, SUITE 201
ALEXANDRIA, VIRGINIA 22304
703.684.8664 FAX 703.548.6353

MPE ENGINEER
BANSAL & ASSOCIATES, INC.
50 SOUTH PICKETT STREET, SUITE 116
ALEXANDRIA, VIRGINIA 22304
703.823.4694 FAX 703.823.4697

CONTRACTOR
STRUEVER BROS. ECCLES & ROUSE, INC.
519 NORTH CHARLES STREET
BALTIMORE, MARYLAND 21201
410.332.7402 FAX 410.576.9021



LINDEN-LINTHICUM UNITED METHODIST CHURCH
CLARKSVILLE, MARYLAND

12/10/07 ADDING NEW SIDEWALK & STAIRWAY TO BASEMENT

RELIGIOUS FACILITY EXPANSION AND CONVERSION FOR CHILD DAY CARE FACILITY

LAYOUT PLAN

SDP-01-15

DRAWING NO.

C-2

SHEET 3 OF 20

SDP-01-15

SHEET INDEX			
DRAWING NO.	SHEET NO.	SET NO.	TITLE
TC-1	1	OF 20	TITLE SHEET
C-1	2	OF 20	EXISTING CONDITIONS AND DEMOLITION PLAN
C-2	3	OF 20	LAYOUT PLAN
C-3	4	OF 20	GEOMETRY PLAN
C-4	5	OF 20	GRADING PLAN
C-5	6	OF 20	UTILITY PLAN
C-6	7	OF 20	EROSION AND SEDIMENT CONTROL PLAN
C-7	8	OF 20	EROSION AND SEDIMENT CONTROL NOTES
C-8	9	OF 20	EROSION AND SEDIMENT CONTROL DETAILS
C-9	10	OF 20	SITE DETAILS
C-10	11	OF 20	LANDSCAPE PLAN
C-11	12	OF 20	LANDSCAPE DETAILS
C-12	13	OF 20	STORM WATER MANAGEMENT PLAN
C-13	14	OF 20	STORM WATER MANAGEMENT DETAILS
C-14	15	OF 20	STORM WATER MANAGEMENT DETAILS AND NOTES
C-15	16	OF 20	STORM WATER MANAGEMENT - BAYS/SAVERS
C-16	17	OF 20	STORM WATER MANAGEMENT BORINGS
C-17	18	OF 20	STORM DRAIN DRAINAGE AREA MAP
C-18	19	OF 20	TRAFFIC CONTROL PLAN
C-19	20	OF 20	UTILITY PROFILES

SITE DATA ANALYSIS

- A. TOTAL PROJECT AREA: 4.351 AC. (189,515SF)
- B. AREA OF PLAN SUBMISSION: 4.351 AC. (189,515SF)
- C. LIMIT OF DISTURBED AREA: 3.04 AC. (131,992 SF)
- D. PRESENT ZONING: R-20 AND NEW TOWN - OPEN SPACE NON-CREDITED
- E. PROPOSED USE OF SITE: RELIGIOUS & CHILD DAYCARE FACILITIES
 - PHASE 1: ADDITION TO CHURCH (2 STORIES) - 7000 SF. CONVERSION OF PARSONAGE TO DAYCARE - 2,110 SF. MAXIMUM NO. OF CHILDREN IN DAYCARE - 30
 - PHASE 2: ADDITION TO CHURCH (2 STORIES) - 6,000 SF.
 - PHASE 3: ADDITION TO CHURCH MEETING SPACE AND CLASSROOMS (2 STORIES) - 7,000 SF.
- F. FLOOR SPACE ON EACH LEVEL OF BUILDINGS PER USE:

EXISTING	
PARSONAGE	2,110 SF.
CHURCH	4,600 SF.
LOWER FLOOR	4,600 SF.
UPPER FLOOR	9,200 SF.
TOTAL	9,200 SF.

 - PROPOSED: PHASE 1 ONLY
 - DAYCARE (CONVERSION OF PARSONAGE) - 2,110 SF
 - FELLOWSHIP HALL - 4,570 SF.
 - LOWER FLOOR - 4,570 SF.
 - UPPER FLOOR - 9,140 SF.
 - PAVED AREA - 47,418 SF.
- G. NUMBER OF PARKING SPACES REQUIRED ON SITE:

CHURCH USE:	1 PARKING SPACE PER 3 SEATS
EXISTING SEATS:	235
PROPOSED SEATS:	115
TOTAL SEATS:	350
DAY CARE CENTER USE:	3 SP/1000 SF. - 2110 = 7 SP.

NOTE: FACILITY USE HOURS = SHARED PARKING DAYCARE: M-F, 6:30AM TILL 6:30 PM RELIGIOUS: WEEKENDS AND EVENINGS
- H. NUMBER OF PARKING SPACES PROVIDED ON SITE:

HANDICAPPED SPACES	= 6 SPACES
PARKING SPACES	= 111 SPACES
TOTAL PARKING SPACES	= 117
- I. BUILDING COVERAGE OF SITE:

EX. DAYCARE 4 EXISTING BLDG.	= 3.9%
PHASE 1 CONST.	= 2.5%
TOTAL BLDG. COVERAGE PROPOSED	= 6.4%

MAXIMUM BUILDING COVERAGE ALLOWED FOR RELIGIOUS FACILITIES = 25 %
- J. APPLICABLE DPZ FILE REFERENCE: BA 99-10E F-01-138; F-96-102; FDP-222-A-1, PART V BA-92.30-E AND V

DECISION AND ORDER

IN THE MATTER OF * BEFORE THE LINDEN-LINTHICUM UNITED METHODIST CHURCH * HOWARD COUNTY CHURCH * BOARD OF APPEALS

Petitioner * BA Case No. 99-10E

It is, this 16th day of NOVEMBER, 1999, by the Howard County Board of Appeals, ORDERED:

- That the Petition of Linden-Linthicum United Methodist Church for a special exception to expand an existing religious facility and to establish a child day care center in an R-20 (Residential: Single) Zoning District, filed pursuant to Sections 131.N.45 and 131.N.17 of the Howard County Zoning Regulations, be, and the same hereby is, GRANTED, subject to the following conditions:
- The special exception for the religious facility and the child day care center shall apply only to the additions and to the associated parking and other improvements as described in the Petition and on the plan, submitted June 17, 1999 February 5, 1999, respectively, and not to any other structures or uses on the property.
 - The Petitioner shall provide at least 117 parking spaces for the assembly use or shall submit a parking study in conjunction with the Site Development Plan that demonstrates that sufficient parking will be available for the assembly use.
 - A Type "E" landscape edge shall be provided along the parking lot closest to Linden Linthicum Lane.
 - The day care center may operate with a maximum of 30 children.
 - Any exterior lighting shall be in conformance with Section 134 of the Zoning Regulations.
 - The Petitioner must specify the drop off and pick up area for passengers for the child day care center.
 - The existing woods along the southeast side of the property shall remain.
 - The Petitioner shall comply with all applicable Federal, State, and County laws and regulations.

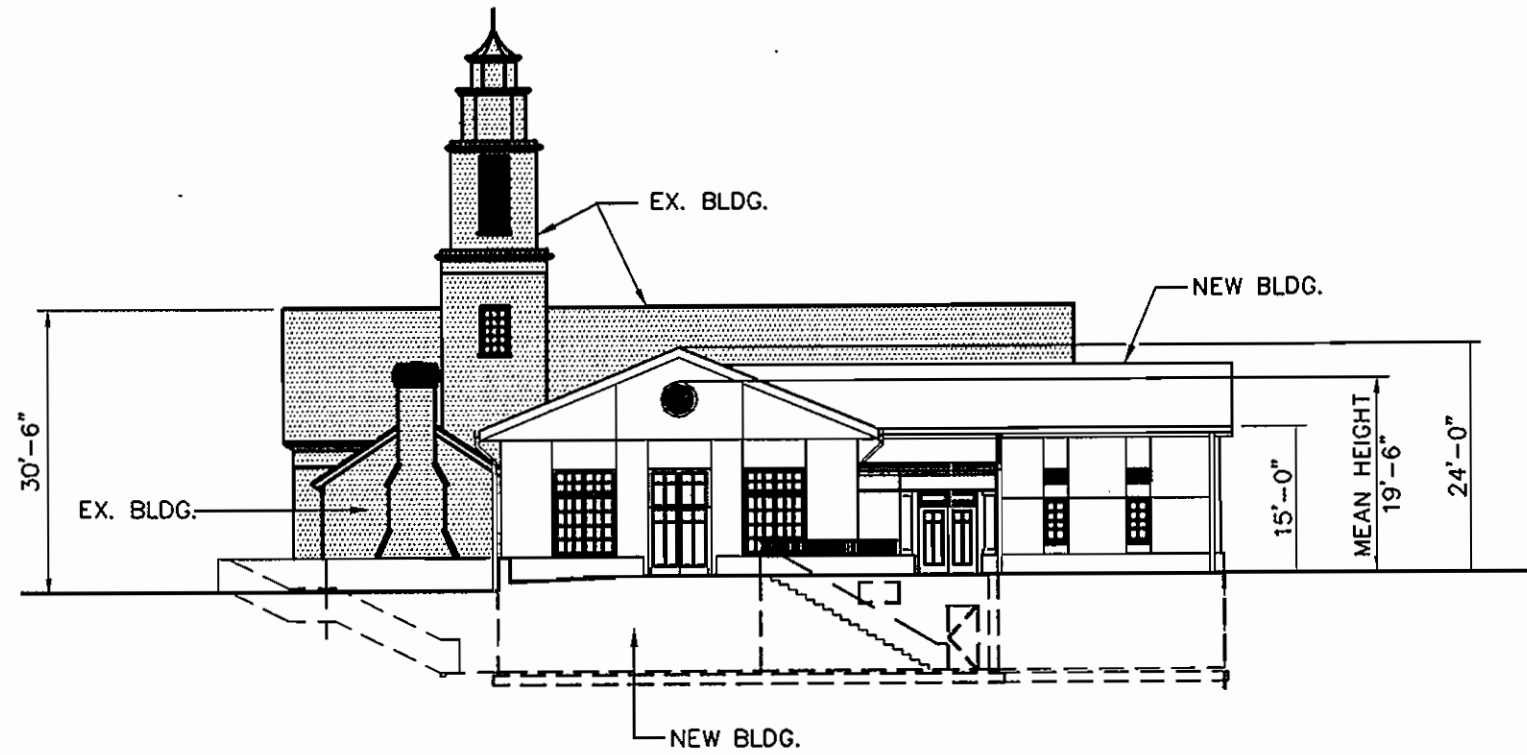
APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

DATE: 8/16/01
 DATE: 8/16/01
 DATE: 8/17/01

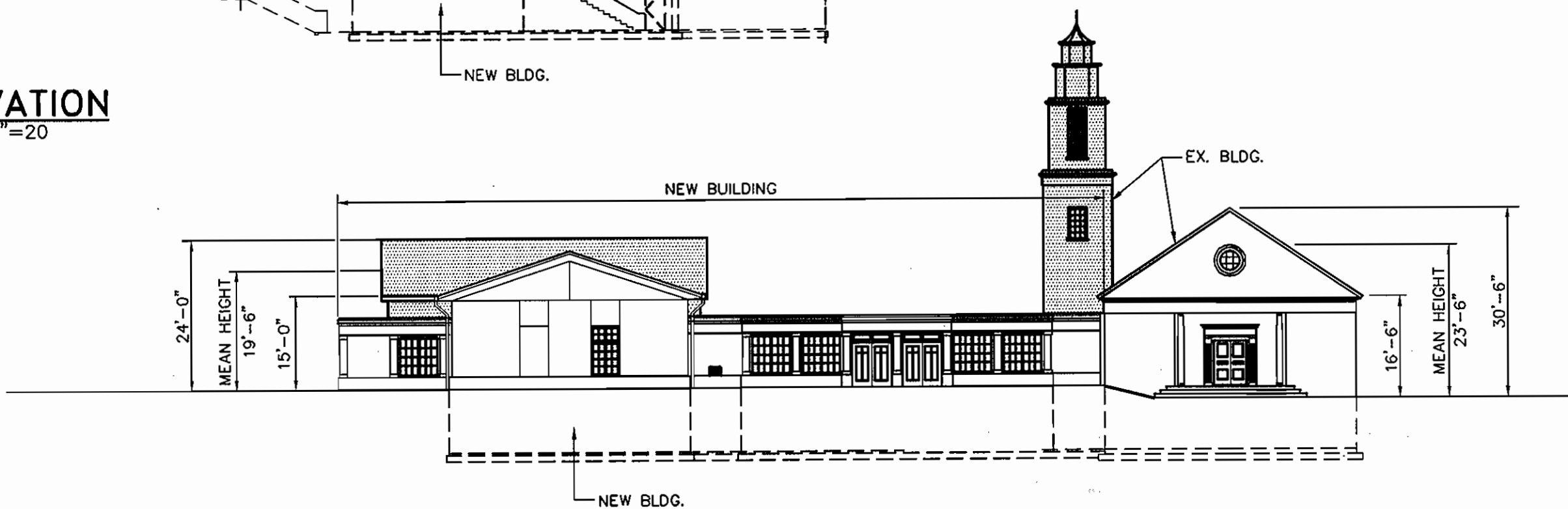


OWNER/DEVELOPER
 LINDEN-LINTHICUM UNITED METHODIST CHURCH
 12101 LINDEN LINTHICUM LANE
 CLARKSVILLE, MD 21043
 (410) 531-5653
 DEED REFERENCE = 359/489

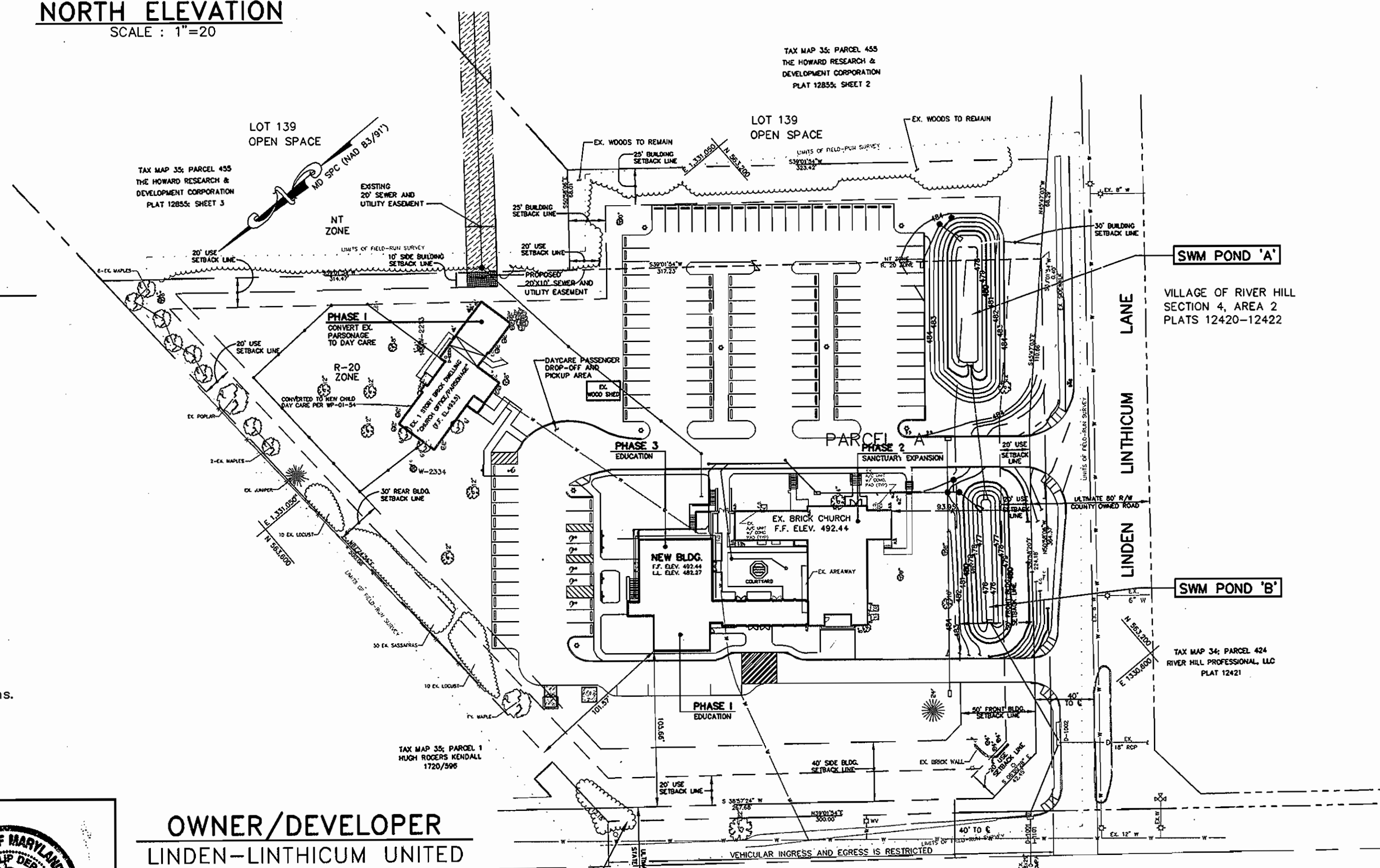
SITE DEVELOPMENT PLAN FOR LINDEN LINTHICUM UNITED METHODIST CHURCH HOWARD COUNTY MARYLAND



EAST ELEVATION
SCALE: 1"=20'

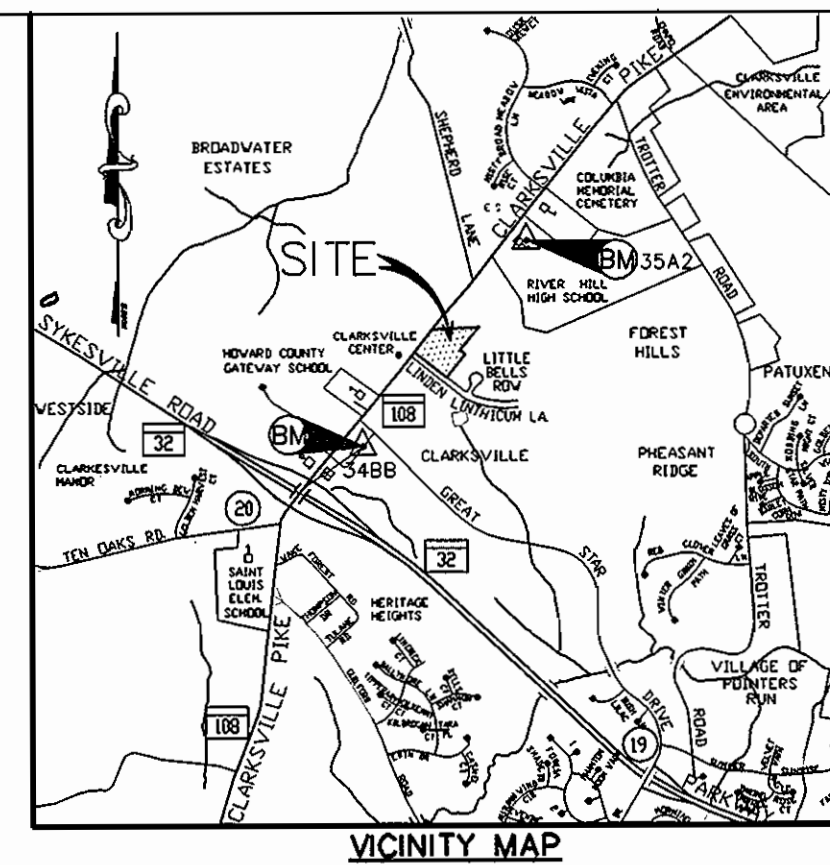


NORTH ELEVATION
SCALE: 1"=20'



SITE PLAN
SCALE: 1"=60'

REFERENCE NOTE
FOR LEGEND SEE SHEET C-2.



GENERAL NOTES

- THE TOPOGRAPHY SHOWN IS BASED UPON A FIELD RUN TOPOGRAPHIC SURVEY PERFORMED BY WHITNEY, BAILEY, COX & MAGNANI, LLP IN MAY 1999 AND REFLECTS SITE CONDITIONS AS OF THAT DATE.
- COORDINATES AND DIRECTIONS SHOWN HEREON ARE REFERRED TO THE MARYLAND STATE PLANE COORDINATE SYSTEM, NAD 83(91), AS DETERMINED FROM THE FOLLOWING HOWARD COUNTY GEODETIC SURVEY CONTROL SURVEY MONUMENTS:
 348B N 562,176.459 E 1,329,641.876 MTL DISC ON TOP OF CONC. COLUMN
 35A2 N 564,154.802 E 1,331,201.065 MTL DISC ON TOP OF CONC. COLUMN
- ELEVATIONS SHOWN HEREON ARE REFERRED TO THE N.G.V.D. 29 AS DETERMINED FROM THE FOLLOWING HOWARD COUNTY GEODETIC SURVEY CONTROL SURVEY MONUMENTS:
 348B ELEV. 485.254
 35A2 ELEV. 488.642
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ACTUAL SITE CONDITIONS PRIOR TO THE START OF ANY WORK. THERE IS NO WARRANTY OR GUARANTEE ON THE COMPLETENESS OR CORRECTNESS OF THE EXISTING CONDITION INFORMATION. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT PRIOR TO THE START OF ANY WORK.
- THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THE EXACT LOCATION OF ALL EXISTING UNDERGROUND UTILITIES BEFORE COMMENCING ANY WORK. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE COST OF REPAIR OF ANY AND ALL DAMAGES WHICH OCCUR AS A RESULT OF A FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL EXISTING UTILITIES TO REMAIN.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "MISS UTILITY" AT 1-800-257-7777 THREE DAYS PRIOR TO THE START OF ANY EXCAVATION WORK.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITY INVERTS AND CLEARANCES FROM NEW WORK PRIOR TO START OF ANY WORK.
- ALL DISTURBED AREAS NOT STABILIZED WITH STRUCTURES, PAVING, AND PLANTINGS SHALL BE STABILIZED WITH FOUR INCHES OF TOPSOIL, SEED, MULCH, AND WATER TO ESTABLISH AN ADEQUATE GROWTH OF VEGETATION.
- ALL WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS.
- THE TOPS OF ALL FRAMES, GRATES, AND COVERS OF ALL EXISTING UTILITIES WITHIN THE LIMITS OF CONTRACT AND/OR DISTURBANCE SHALL BE ADJUSTED TO THE NEW GRADES.
- CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
- NUMERICAL DIMENSIONS AND ELEVATIONS SHOWN SHALL SUPERSEDE ANY DISCREPANCY IN THE SCALING ON THE DRAWINGS.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY AND THE MD. STATE HWY. ADMINISTRATION.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST (5) FIVE WORKING DAYS PRIOR TO THE START OF WORK.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- ALL EXTERIOR LIGHT FIXTURES SHALL BE ORIENTED TO DIRECT LIGHT INWARDS AND DOWNWARDS ON-SITE AWAY FROM ALL ADJOINING RESIDENTIAL USE PROPERTIES. OUTDOOR LIGHTING SHALL BE IN ACCORDANCE WITH SECTION 134 OF THE HOWARD COUNTY ZONING REGULATIONS.
- WATER IS PUBLIC. CONTRACT NO. 34-3523-D SHEET 3
- SEWER IS PUBLIC. CONTRACT NO. 34-3586-D SHEET 2
- STORM WATER MANAGEMENT WILL BE PROVIDED BY MEANS OF 2 SURFACE PONDS WITH 2 BAY SAVER WATER QUALITY DEVICES.
- THE MAXIMUM HEIGHT ALLOWED IN THE R-20 ZONING DISTRICT FOR RELIGIOUS FACILITIES IS 34 FEET UNLESS OTHERWISE APPROVED BY THE BOARD OF APPEALS. SPIRALS, STEEPLES AND BELLRIES ARE EXEMPT FROM HEIGHT REQUIREMENTS PER SECTION 128.A.3.d OF THE HOWARD COUNTY ZONING REGULATIONS.
- EXISTING UTILITIES ARE BASED ON FIELD-RUN SURVEY.
- THERE IS NO KNOWN FLOOD PLAIN ON THIS SITE.
- THERE ARE NO KNOWN WETLANDS ON THIS SITE PER STUDY PERFORMED BY WBCM ON 3/5/01
- APFO ROADS TEST TRAFFIC STUDY, DATED NOVEMBER 2000, WAS PROVIDED FOR THIS PROJECT BY WBCM. APPROVAL DATE: 3/7/01
- THIS SITE WAS THE SUBJECT OF HOWARD COUNTY BOARD OF APPEALS ZONING CASE NO 99-10E, SEE ZONING ORDER ON THIS SHEET.
- THIS PROJECT COMPLIES WITH THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION WITH THE FILING OF DECLARATION OF INTENT (DOI) FOR A SINGLE LOT CLEARING LESS THAN 40,000 SF. OF FOREST.
- NO CEMETERY OR BURIAL GROUNDS ONSITE.
- WAIVER PETITION: WP-01-54 WAS SUBMITTED REQUESTING A WAIVER FROM SITE DEVELOPMENT PLAN REQUIREMENTS FOR THE DAYCARE CONVERSION. ACTION TAKEN: APPROVED APPROVAL DATE: MARCH 9, 2001
- THE MINIMUM BUILDING SETBACK RESTRICTIONS FROM THE PROPERTY LINES AND ROAD R/W FOR THE NEW TOWN ZONED PORTION OF PARCEL A IS TO BE IN ACCORDANCE WITH FDP-222-A-1, PART V.

KERNS GROUP ARCHITECTS

3030 CLARENDON BOULEVARD, SUITE 100
 ARLINGTON, VIRGINIA 22201-2804
 TEL 703.528.1150 FAX 703.528.1151

CIVIL ENGINEER

WHITNEY, BAILEY, COX & MAGNANI, LLP
 849 FAIRMONT AVENUE, SUITE 200
 BALTIMORE, MARYLAND 21286
 410.512.4500 FAX 410.324.4100

STRUCTURAL ENGINEER

M&S ASSOCIATES, P.C.
 904 PRINCE STREET, SUITE 201
 ALEXANDRIA, VIRGINIA 22304
 703.684.8664 FAX 703.549.3553

MPE ENGINEER

BANSAL & ASSOCIATES, INC.
 50 SOUTH PICKETT STREET, SUITE 116
 ALEXANDRIA, VIRGINIA 22304
 703.823.4694 FAX 703.823.4697

CONTRACTOR

STROUVER BROS. BOYLES & ROUSE, INC.
 519 NORTH CHARLES STREET
 BALTIMORE, MARYLAND 21201
 410.332.7402 FAX 410.578.9021



LINDEN-LINTHICUM UNITED METHODIST CHURCH
 CLARKSVILLE, MARYLAND

12/10/07 ADDING NEW SIDEWALK & STAIRWAY TO BASEMENT

RELIGIOUS FACILITY EXPANSION AND CONVERSION FOR CHILD DAY CARE FACILITY

TITLE SHEET

SDP-01-15

DRAWING NO.

TC-1

SHEET 1 OF 20

SDP-01-15