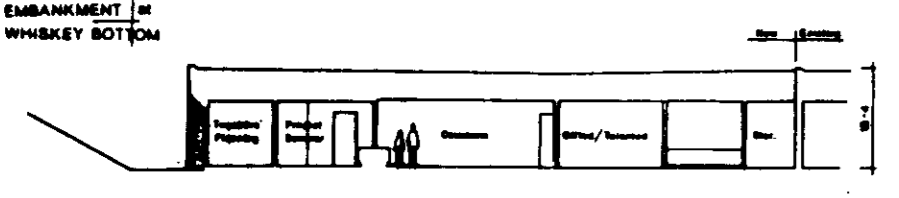


VICINITY MAP
SCALE 1" = 2000'

TOTAL AREA OF PROPERTY = 11.22 AC



Section - A



West Elevation



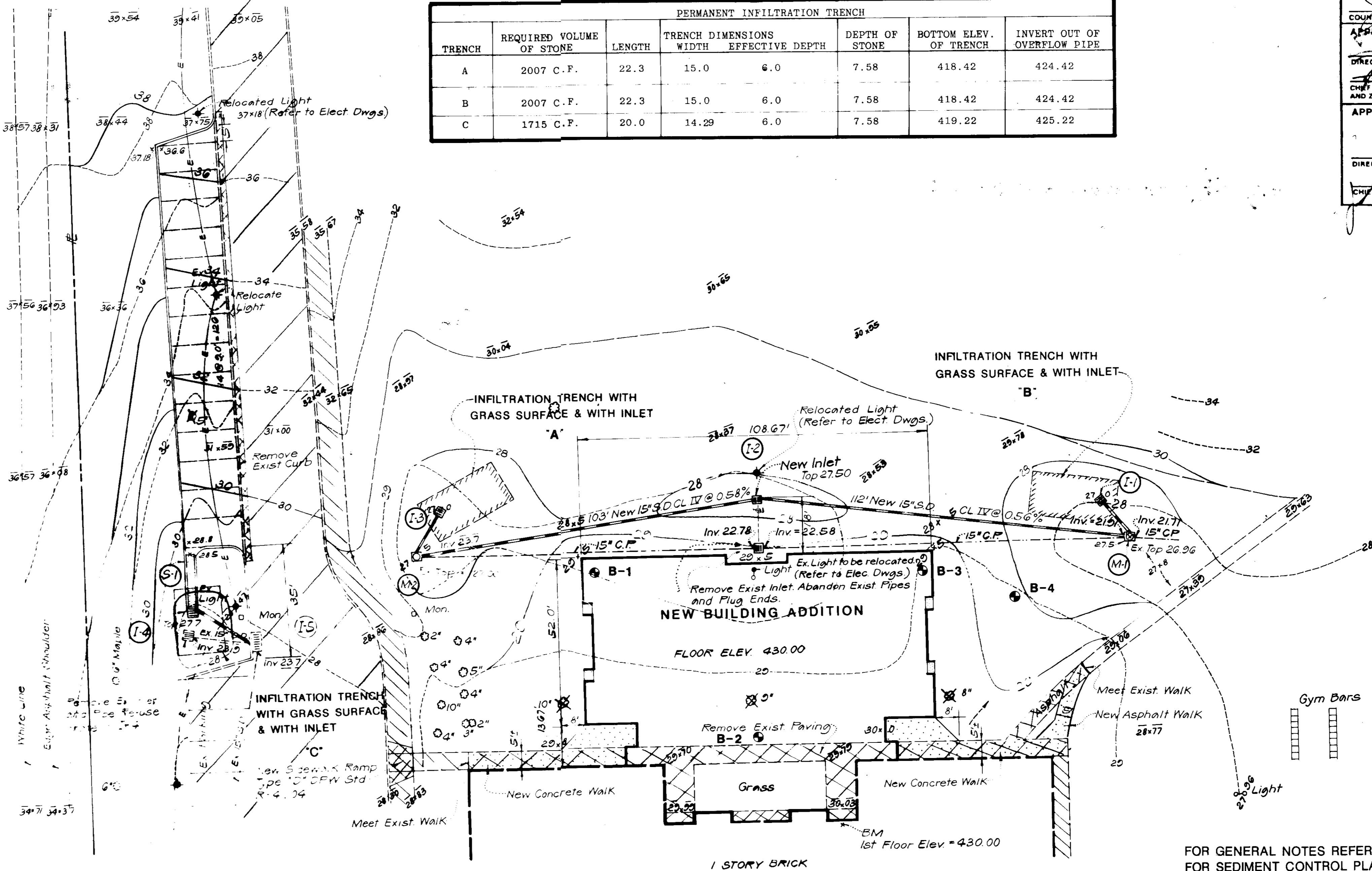
North Elevation

Centennial Lane



PERMANENT INFILTRATION TRENCH							
TRENCH	REQUIRED VOLUME OF STONE	LENGTH	TRENCH DIMENSIONS	EFFECTIVE DEPTH	DEPTH OF STONE	BOTTOM ELEV. OF TRENCH	INVERT OUT OF OVERFLOW PIPE
A	2007 C.F.	22.3	15.0	6.0	7.58	418.42	424.42
B	2007 C.F.	22.3	15.0	6.0	7.58	418.42	424.42
C	1715 C.F.	20.0	14.29	6.0	7.58	419.22	425.22

CENTENNIAL LANE



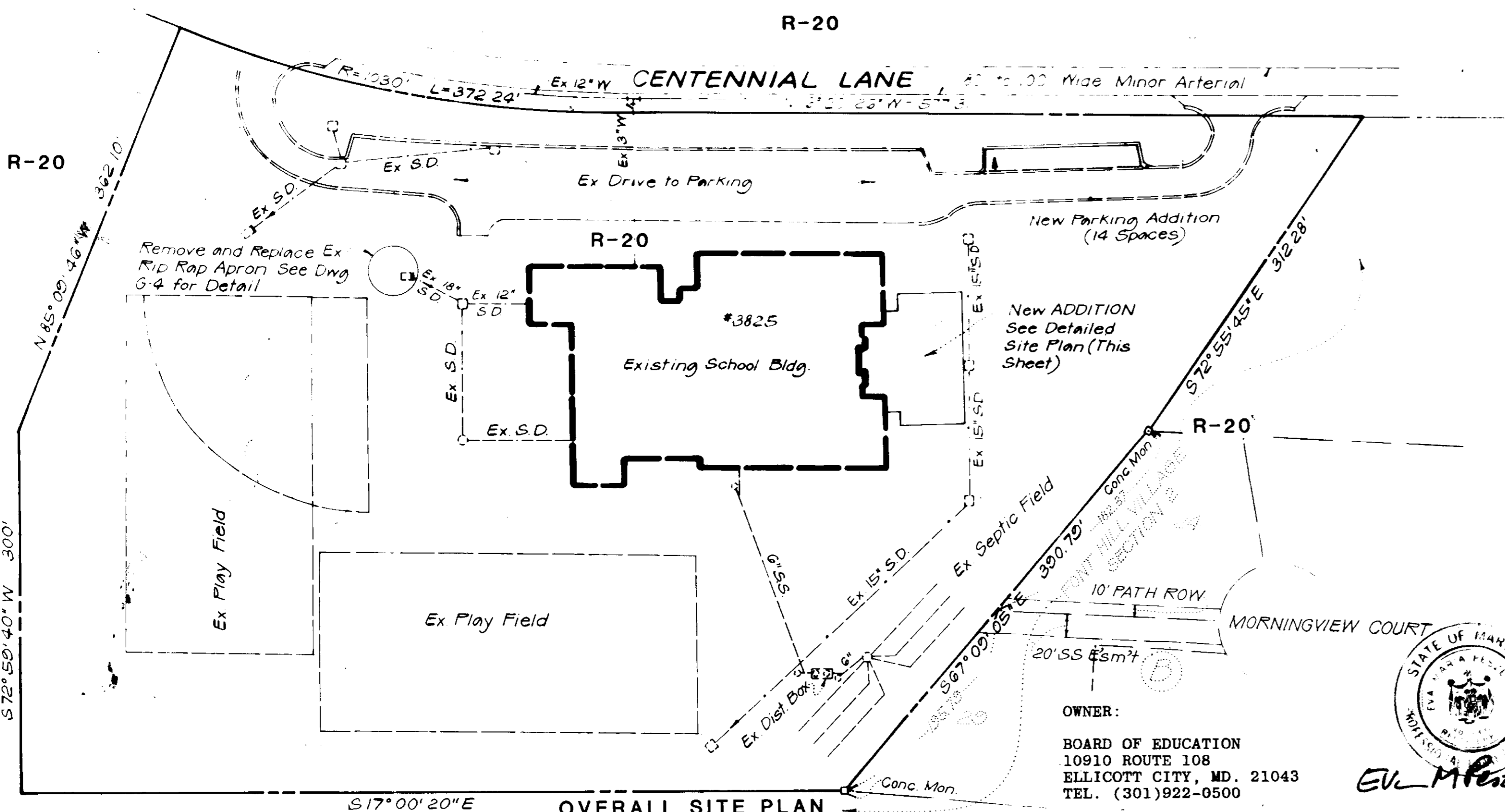
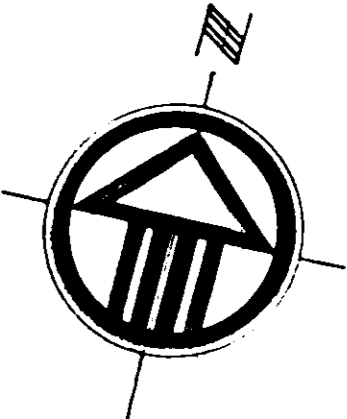
FOR GENERAL NOTES REFER TO DWG. G-4
FOR SEDIMENT CONTROL PLAN REFER TO DWG. G-2

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS,
HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER: *[Signature]* DATE: 10-7-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
DIRECTOR: *[Signature]* DATE: 10-8-86
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR: *[Signature]* DATE: 10-5-86
CHIEF BUREAU OF ENGINEERING

APPROVED
DIVISION OF LAND DEVELOPMENT
ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE: 8-26-86
[Signature]



OVERALL SITE PLAN
SCALE: 1" = 80'

SITE INFORMATION:
OWNER: BOARD OF EDUCATION
ADDRESS: 10910 ROUTE 108, ELLICOTT CITY, MD 21043
TELEPHONE: (301) 922-0500
SITE LOCATION: 3825 CENTENNIAL LANE, ELLICOTT CITY, MD 21043
ELECTION DISTRICT: #2
TAX MAP: 24, TAX PARCEL 1029
AREA OF PROPERTY: 11.22 AC
ZONING: R-20
PROPERTY RECORDED IN LIBER 540, FOLIO 235 AND LIBER 540, FOLIO 243
PARKING REQUIRED: 66
PARKING SPACES EXISTING: 52
NEW PARKING PROVIDED: 14
TOTAL PARKING PROVIDED: 66



ASSOCIATED ENGINEERS, INC.
8555 SIXTEENTH STREET
SILVER SPRING, MARYLAND 20910
TEL: 301-888-7311

SITE PLAN
SCALE: 1" = 20'

LEGEND:

EXISTING CONTOURS	---	428
DESIGN CONTOURS	---	428
EXISTING SPOT GRADES	---	29x78
DESIGN SPOT GRADES	---	29x75
EXISTING STORM DRAIN PIPES AND STRUCTURES	---	
NEW STORM DRAIN PIPES AND STRUCTURES	---	
INFILTRATION TRENCH	---	
EXISTING PAVING TO BE REMOVED	---	
EXISTING PAVING	---	
NEW CONCRETE WALK	---	
NEW BITUMINOUS CONCRETE WALK	---	
NEW SOIL BORINGS TAKEN	---	
NEW COMBINATION CURB & GUTTER	---	
NEW BITUMINOUS CONCRETE PAVING	---	

ADDRESS CHART

SUBDIVISION NAME	BLK.	AREA	LOT/PARCEL #
1029	3825 Centennial Lane	ELLICOTT CITY, MD 21043	1029

Parking and Building Addition to SDP 72-115
Abrahs Eddy and Eckhardt Architects,
PO Box 477 Great Falls, Va. 22066 (703) 759-5500

Centennial Lane
Elementary School
Howard County Public Schools
2nd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

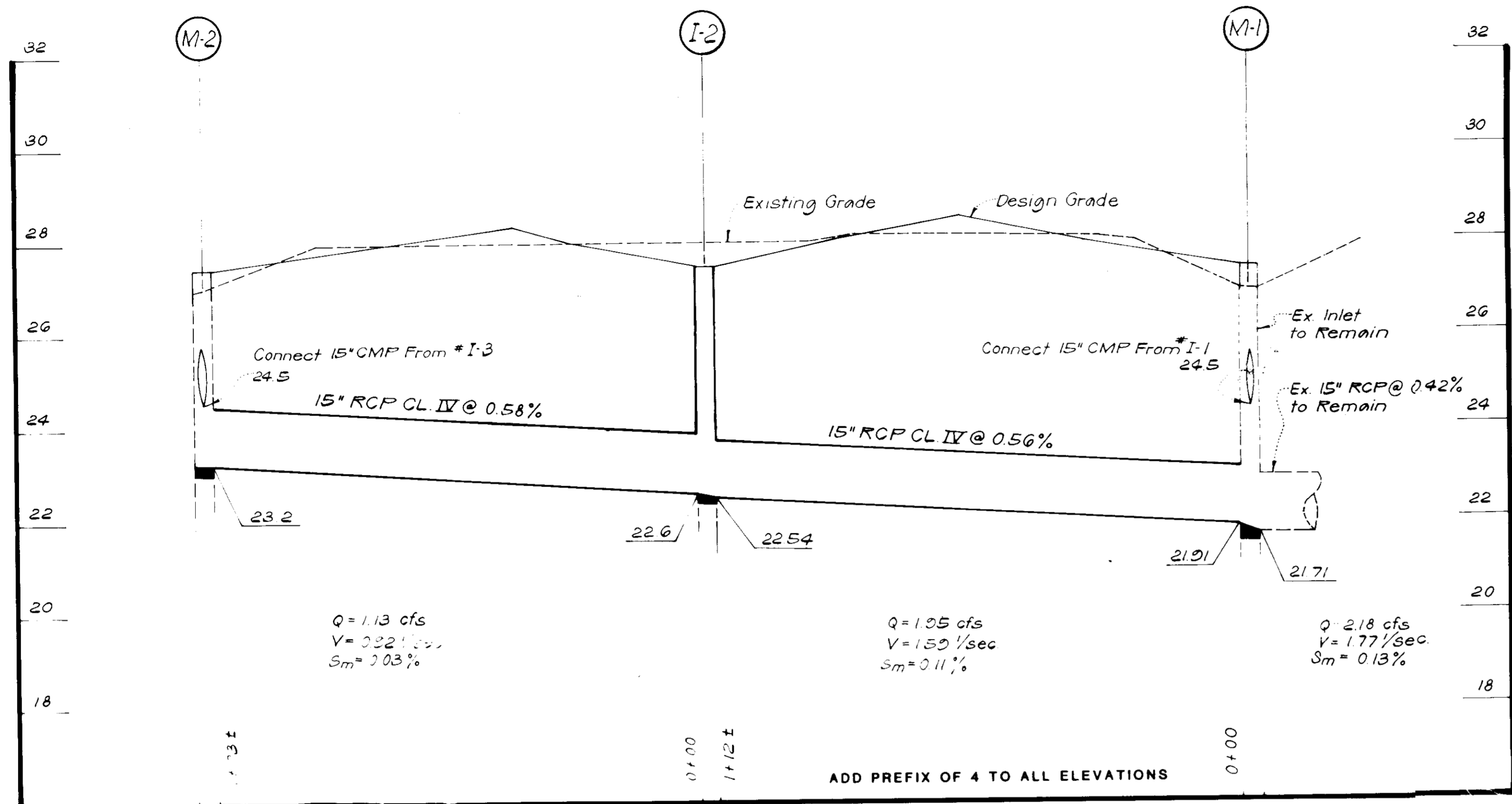
SDP-86-267

SITE PLAN	G-1
	SHEET
	1 OF 6

9/18/86 - REVISED TO MEET COUNTY COMMENTS DATED AUG.26,1986

SDP-86-267

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
 HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: *James Boyd* DATE: 10-7-86
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 DIRECTOR: *John W. ...* DATE: 10-8-86
 CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION
 APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: *John F. ...* DATE: 10-7-86
 CHIEF BUREAU OF ENGINEERING: *...* DATE: 10-2-86



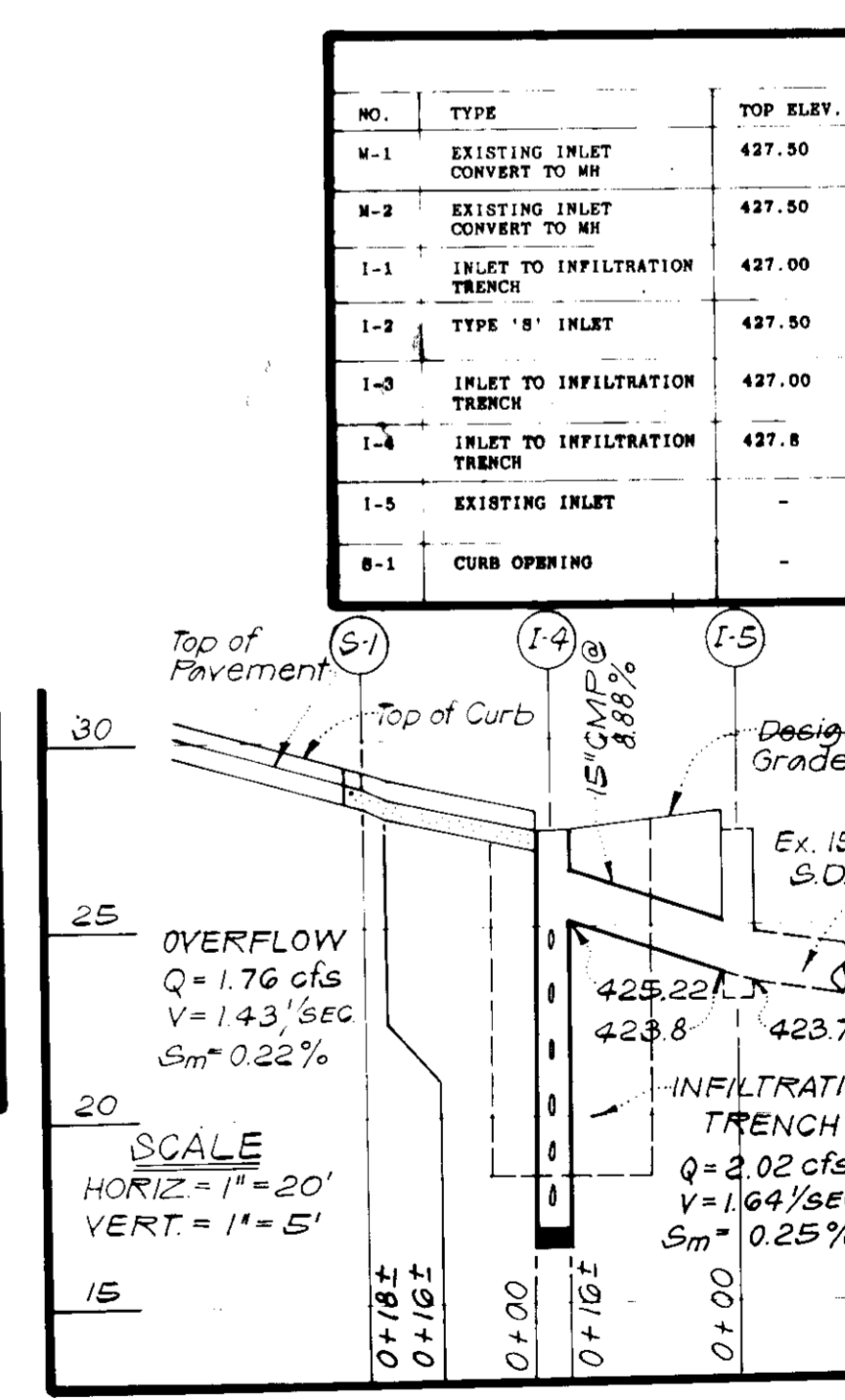
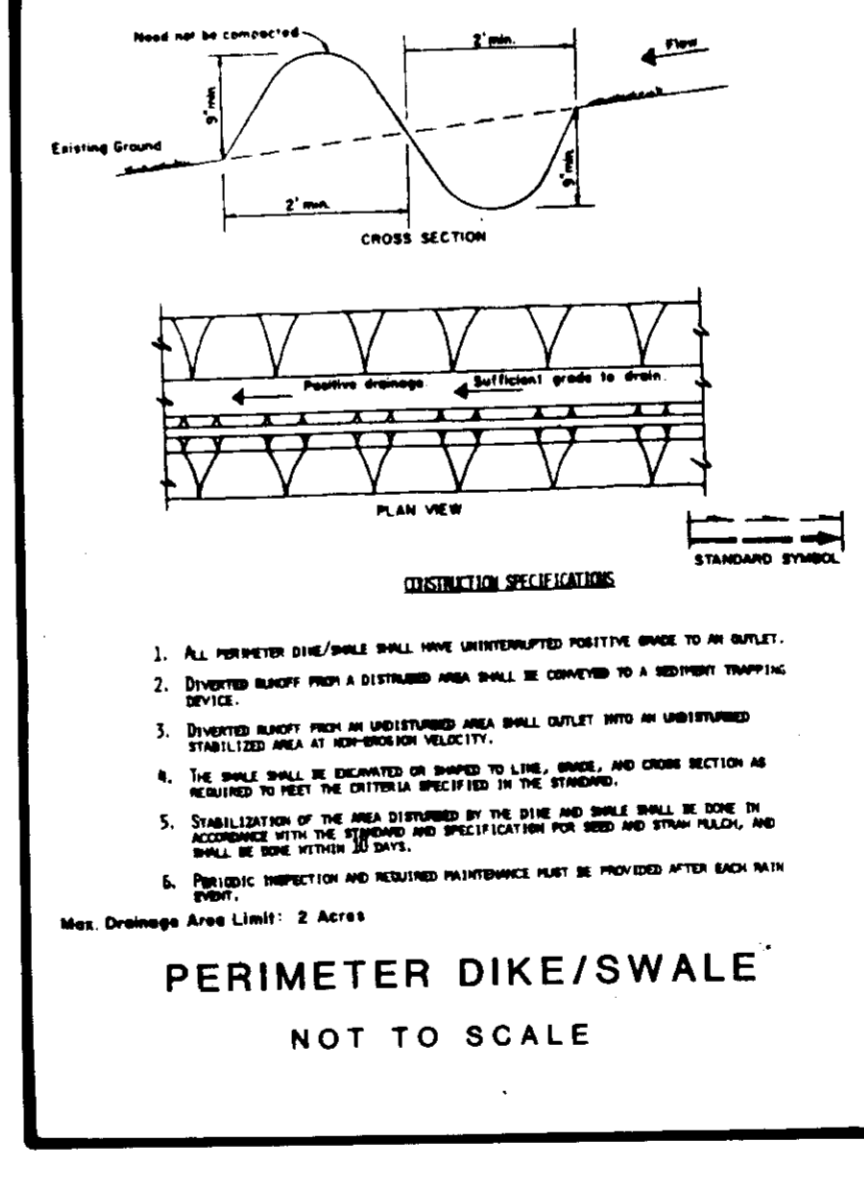
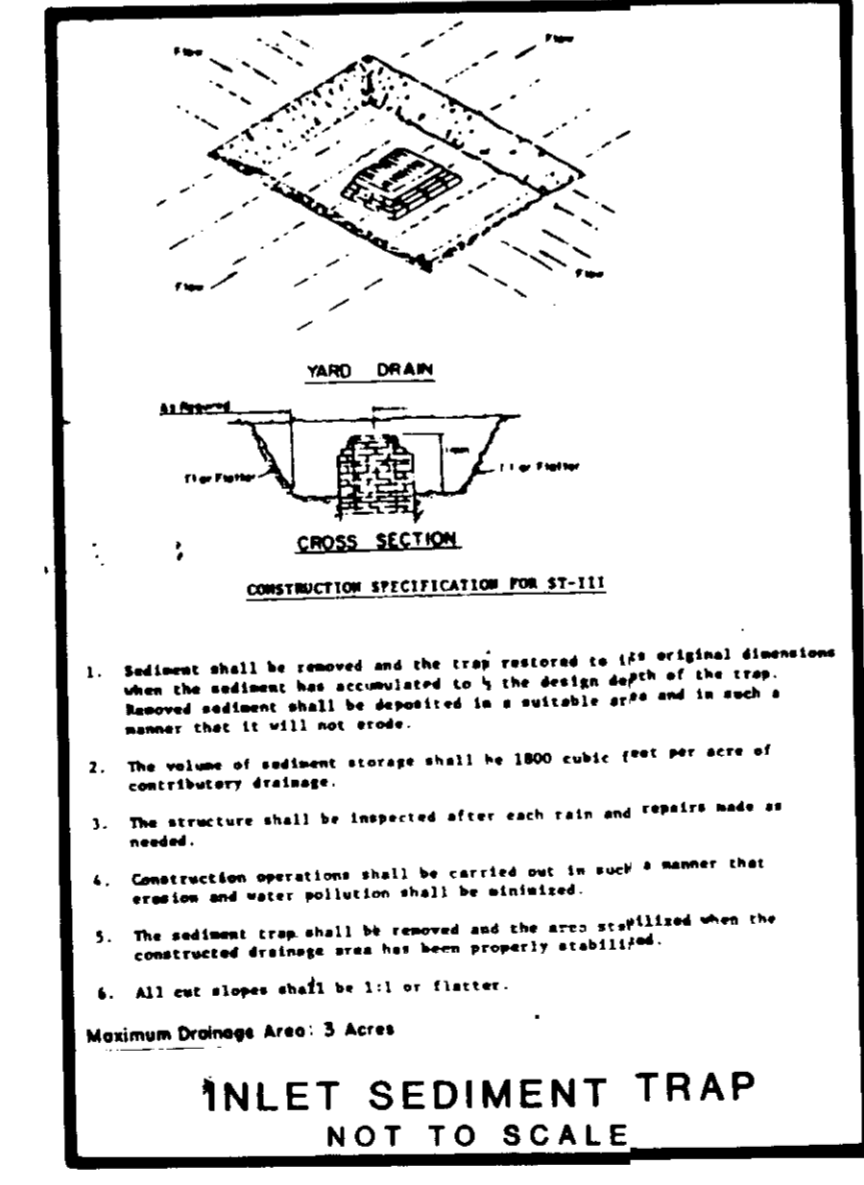
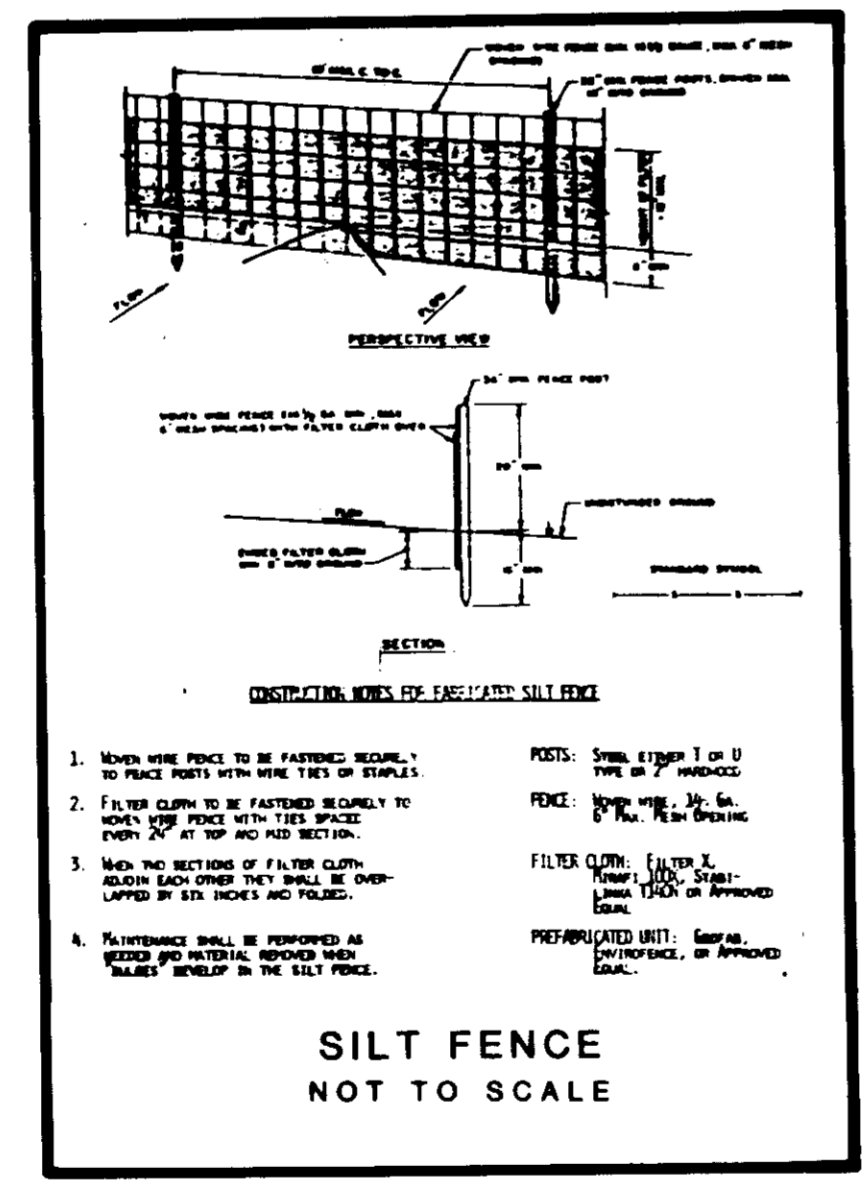
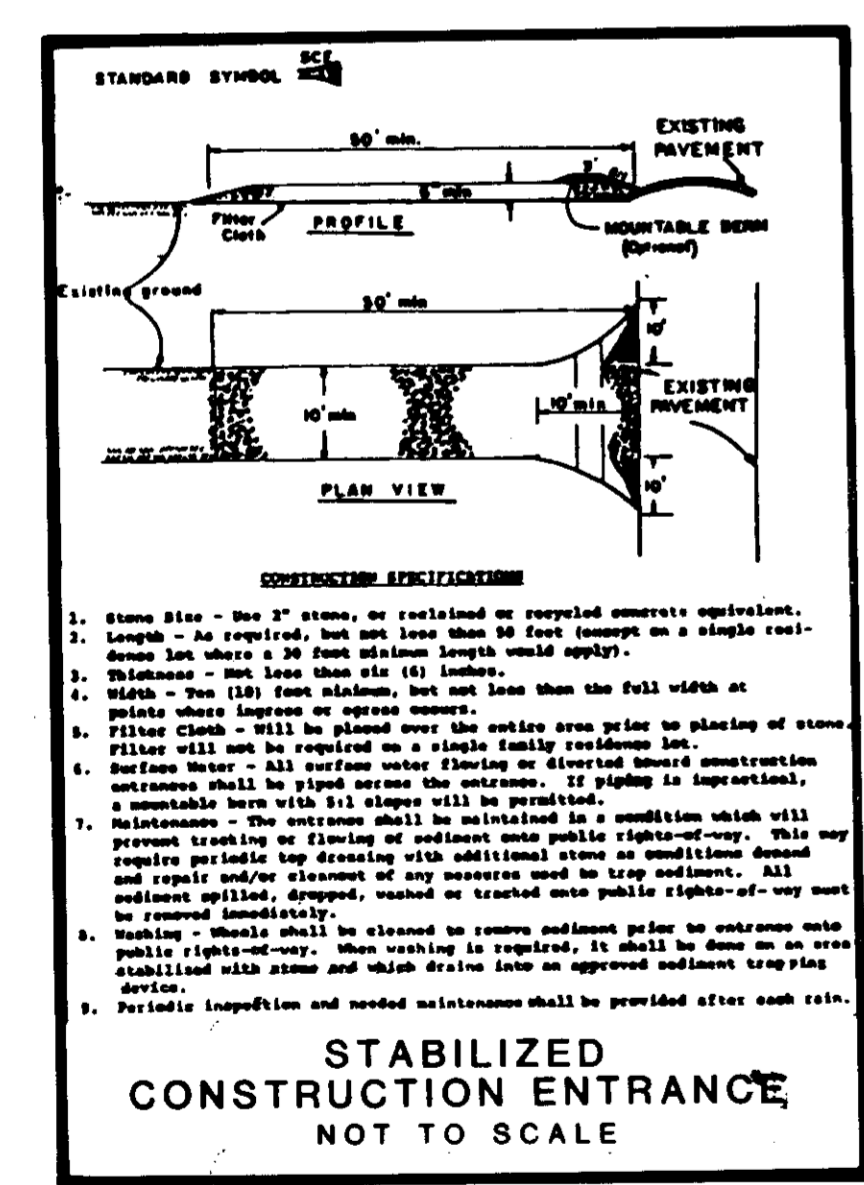
STORM DRAIN PROFILE
 SCALE: HORIZ: 1"=20'
 VERT: 1"=2'

SEDIMENT SILT TRAP SCHEDULE					
TRAP AT STRUCTURE	TRIBUTARY AREA (AC)	REQUIRED STORAGE (1800 CF/AC)	DIMENSION OF TRAP L x W x D (FT)	ACTUAL STORAGE CF/AC	TRAP TYPE
I-2	0.45	810	7' 7' 3.5'	858	ST-III

NOTE: OFFSET TRAP IF NECESSARY TO ALLOW CLEARANCE OF 1 FOOT (MIN.) OVER EXISTING PIPE.

- SEDIMENT CONTROL NOTES:
- A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION (922-2437).
 - ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1983 "MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL."
 - FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
 - ALL SEDIMENT TRAPS/BASINS MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12 OF THE HOWARD COUNTY DESIGN MANUAL, "STORM DRAINAGE."
 - ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1983 "MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" FOR PERMANENT SEEDINGS (SEC. 51) SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52), AND AS SPECIFIED HEREIN.
 - TOPSOIL SHALL MEET ALL APPLICABLE REQUIREMENTS OF THE SPECIFICATIONS FOR MATERIALS, HIGHWAYS, BRIDGES AND INCIDENTAL STRUCTURES OF THE MARYLAND STATE HIGHWAY ADMINISTRATION. TOPSOIL SHALL BE 4 INCHES THICK (COMPACTED).
 - LINE SHALL BE SPREAD AT A RATE OF ONE (1) TON PER ACRE.
 - FERTILIZER 5-10-10 OR EQUIVALENT SHALL BE APPLIED AT A RATE OF 1700 LBS. PER ACRE. BOTH LIME AND FERTILIZER SHALL BE UNIFORMLY APPLIED TO THE LOOSENED TOPSOIL AND SHALL BE RAKED SMOOTH PRIOR TO SEEDING.
 - SEED SHALL BE "KENTUCKY 31" TALL FESCUE APPLIED AT A RATE OF 2 LBS. PER 1,000 SQ. FT. STRAW MULCH SHALL BE UNIFORMLY APPLIED AT THE RATE OF 70 TO 90 LBS. PER 1,000 FT.
 - SOD SHALL BE A CLASS OF TURF GRASS SOD AND SHALL BE MARYLAND STATE CERTIFIED.
- TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- 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.

- APPROVED
 DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
 HOWARD COUNTY, MARYLAND
 DATE: 8-26-86
John F. ...
- SITE ANALYSIS:
 - TOTAL AREA OF SITE: 11.22 AC
 - AREA DISTURBED: 0.70 AC
 - AREA TO BE PAVED AND/OR ROOF AREA ADDED = 0.23 AC
 - PAVING AREA TO BE REMOVED: 0.03 AC
 - NET IMPERVIOUS AREA = 0.20 AC
 - AREA TO BE VEGETATIVELY STABILIZED: 0.47 AC
 - TOTAL CUT: 285 CU FT (EXCLUDING EXCAVATION TOTAL FILL: 180 CU FT) FOR INFILTRATION TRENCHES
 - OFF-SITE WASTE AREA LOCATION: TO BE SUBMITTED
 - OFF-SITE BORROW AREA LOCATION: TO BE SUBMITTED
 - CONTRACTOR WILL BE REQUIRED TO PROVIDE THE ABOVE INFORMATION PRIOR TO ISSUANCE OF THE PERMIT AND SUBMIT A SEDIMENT CONTROL PLAN ACCEPTABLE TO THE SOIL CONSERVATION DISTRICT.
 - ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
 - ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY DPW SEDIMENT CONTROL INSPECTOR.



STRUCTURE TABLE					
NO.	TYPE	TOP ELEV.	INV. IN	INV. OUT	REMARKS
M-1	EXISTING INLET CONVERT TO MI	427.50	424.18	421.71	REBUILD TOP OF STRUCTURE AND PROVIDE WITH STANDARD MANHOLE FRAMES AND COVER. CONNECT NEW PIPES AND REPAIR STRUCTURES AS NECESSARY.
M-2	EXISTING INLET CONVERT TO MI	427.50	424.18	423.2	AS DETAILED.
I-1	INLET TO INFILTRATION TRENCH	427.00	-	424.42	AS DETAILED.
I-2	TYPE 'B' INLET	427.50	422.80	422.54	DPW STD. 80-42.2 WITH RECTANGULAR GRATE.
I-3	INLET TO INFILTRATION TRENCH	427.00	-	424.42	AS DETAILED.
I-4	INLET TO INFILTRATION TRENCH	427.8	-	425.22	AS DETAILED.
I-5	EXISTING INLET	-	423.8	423.70	CONNECT NEW PIPE AND REPAIR STRUCTURE AS NECESSARY.
B-1	CURB OPENING	-	-	-	MODIFIED MBSA STD. NO. 64001

SUBDIVISION NAME	SECT./AREA	LOT/PARCEL #
PLAN 1 ON L7 BLOCK 4	ZONE R-20	24
TAX/ZONE MAP	FILE. DIST.	CDNS. TR.
540-230 78.13	24	6023.01
540-230 1/2		
WATER CODE F12	SEWER CODE	

Parking and Building Addition to SDP 72-115
 Abrash Eddy and Eckhardt Architects
 PO Box 477 Great Falls, VA 22066 (703) 759-6500

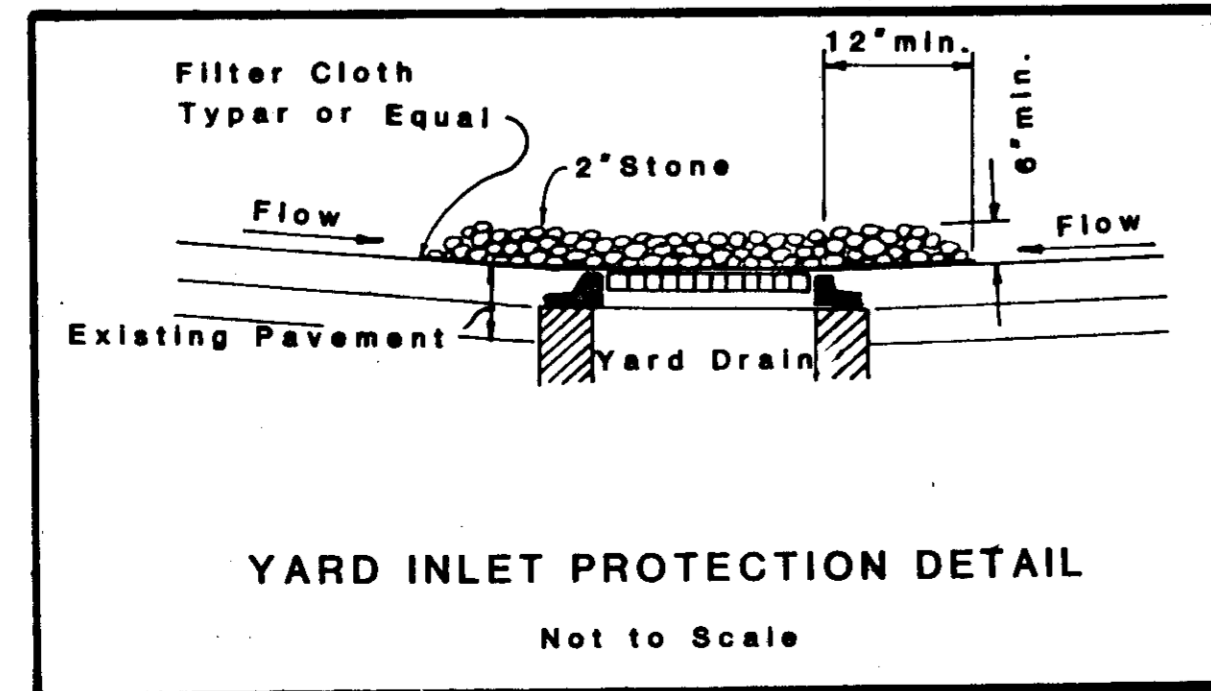
Centennial Lane Elementary School
 Howard County Public Schools
 2nd ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SDP-86-267

PROFILES & DETAILS G-3
 SHEET 3 OF 6

Date: AUG. 14, 1986 Rev.

OWNER:
 BOARD OF EDUCATION
 10910 ROUTE 109
 ELLICOTT CITY, MD. 21043
 TEL. (301)922-0500



Reviewed for _____ S.C.D.
 Name _____
 and meets Technical Requirements
 Signature: *John F. ...* Date: 9-29-86
 U.S. Soil Conservation Service
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY CONSERVATION DISTRICT.
 Approved: *Howard S.C.D.* Date: 9-27-86

ASSOCIATED ENGINEERS, INC.
 8355 SIXTEENTH STREET
 SILVER SPRING, MARYLAND 20910
 TEL. 301-588-7311

9/18/86 - REVISED TO MEET COUNTY COMMENTS DATED AUG.26,1986

SDP-86-267

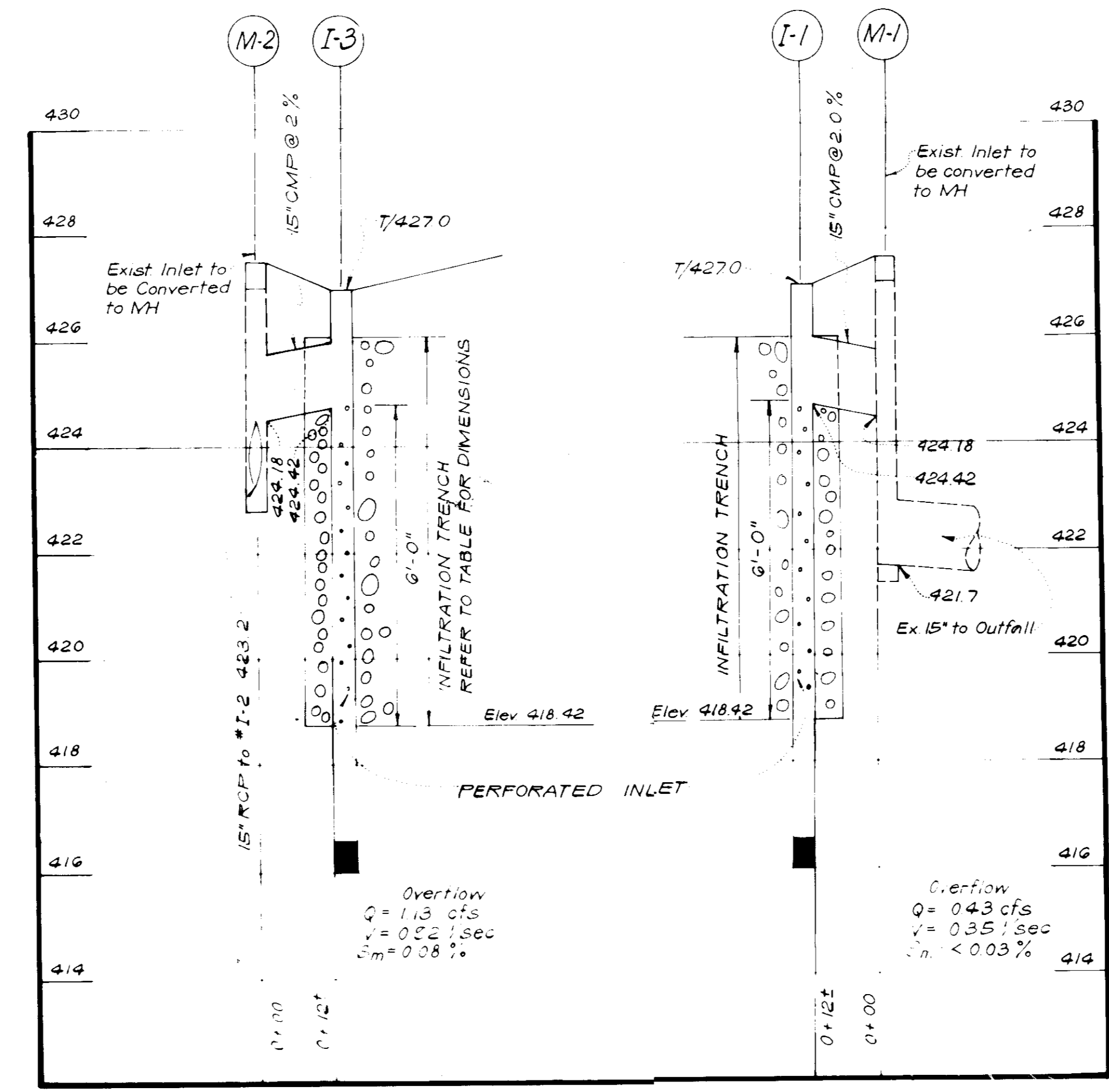
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS,
HOWARD COUNTY HEALTH DEPARTMENT
DATE 10-7-86
DIRECTOR [Signature]

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
DATE 10-8-86
DIRECTOR [Signature]

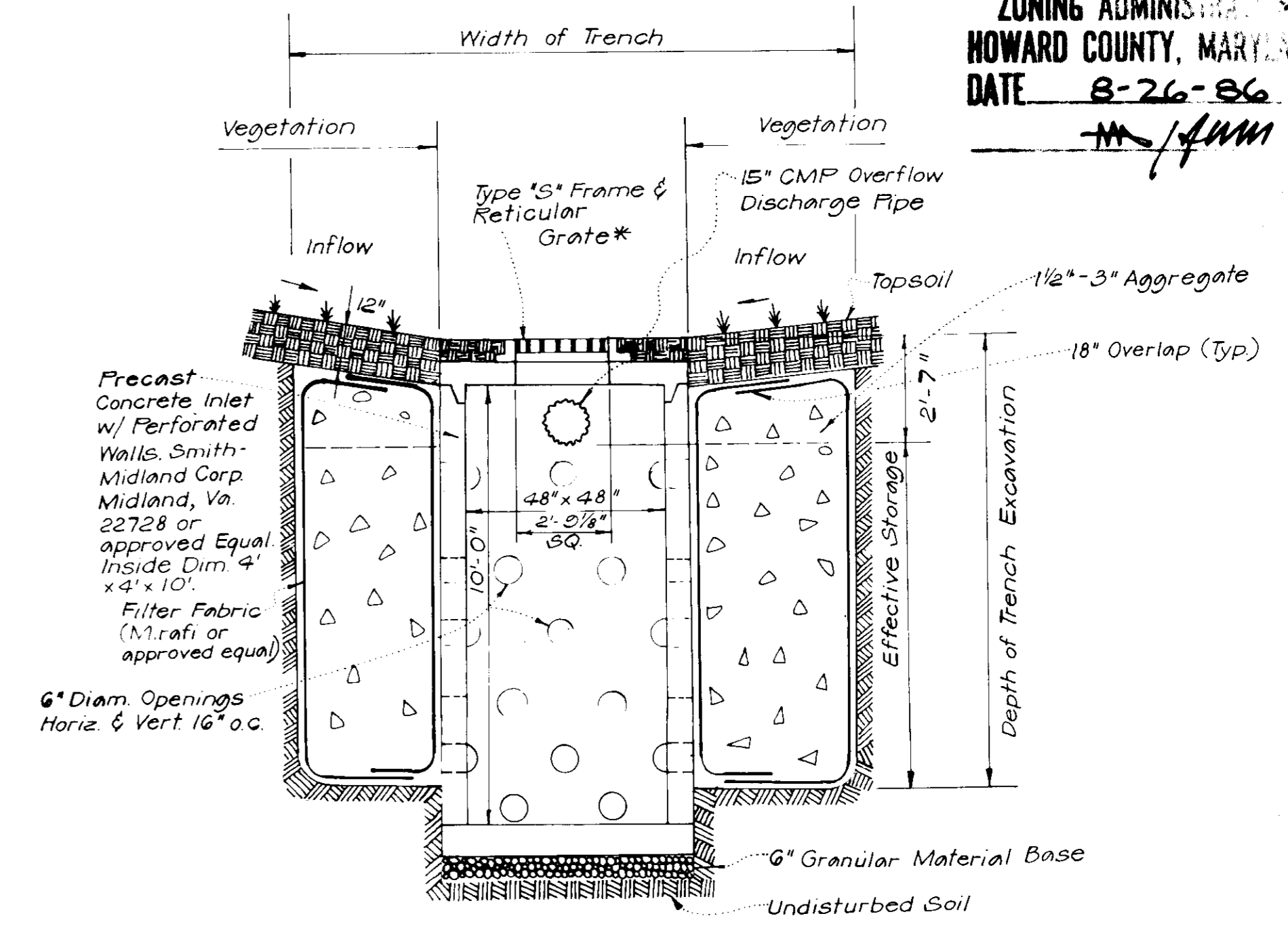
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DATE 10-7-86
DIRECTOR [Signature]

CHIEF OF BUREAU OF ENGINEERING [Signature] DATE 10-7-86

- GENERAL NOTES:**
- EXISTING CONDITIONS ARE BASED ON SURVEY DATED DECEMBER, 1985 AND PREPARED BY ASSOCIATED ENGINEERS, INC. BENCHMARK USED: ENTRANCE OF GROUND FLOOR OF CENTENNIAL LANE ELEMENTARY SCHOOL BUILDING, ELEVATION 430.00.
 - ALL DISTURBED UNPAVED AREA SHALL BE TOPSOILED, FERTILIZED, LIMED AND SEEDED, EXCEPT AREAS TO BE PLANTED AND AREAS TO BE SODDED. TOPSOIL DEPTH SHALL BE MINIMUM 4 INCHES COMPACTED.
 - ALL SEDIMENT AND EROSION CONTROL FEATURES SHALL BE INSTALLED IN ACCORDANCE WITH THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPED AREAS," 1983 EDITION.
 - ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS AND THE APPLICABLE PROVISIONS OF THE MARYLAND STATE HIGHWAYS ADMINISTRATION STANDARDS AND SPECIFICATIONS FOR MATERIALS, HIGHWAYS, BRIDGES AND INCIDENTAL STRUCTURES.
 - A PREFIX OF 4 MAY HAVE TO BE ADDED TO ALL GRADES.
 - ALL UNSUITABLE AND EXCESS FILL MATERIAL SHALL BE DISPOSED OF OFF SITE. LOCATION OF DISPOSAL AREA SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
 - CONTACT "MISS UTILITY" AT LEAST 48 HOURS PRIOR TO COMMENCING EXCAVATIONS.
 - EXISTING UTILITIES ARE BASED ON AVAILABLE RECORDS AND WERE FIELD-CHECKED WHERE POSSIBLE. CONTRACTOR MUST DIG TEST PITS BY HAND AT UTILITY CROSSINGS AND CONNECTION POINTS TO VERIFY EXACT LOCATION AND INVERTS WELL IN ADVANCE OF CONSTRUCTION. IF CONNECTIONS ARE NOT AS SHOWN OR IF CONFLICT IS ANTICIPATED, ENGINEER SHALL BE NOTIFIED BEFORE PROCEEDING WITH TRENCHING.
 - CONTRACTOR SHALL CLEAN UP THE WORK AREA AT THE COMPLETION OF THE PROJECT. ALL AREAS DISTURBED DURING THE CONSTRUCTION ACTIVITY SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
 - THE CONTRACTOR SHALL CONTACT THE CONSTRUCTION INSPECTION DIVISION 24 HOURS IN ADVANCE OF START OF WORK AT TELEPHONE 792-2430.
 - CONTRACTOR SHALL PROVIDE ALL SUITABLE FILL MATERIAL. LOCATION OF BORROW SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
 - REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR BUILDING DIMENSIONS AND TIE-IN POINTS AND DIMENSIONS OF NEW ADDITION TO EXISTING SCHOOL STRUCTURE.
 - REFER TO MECHANICAL DRAWINGS FOR CONTINUATION OF ROOF DRAINS AND FOR WATER AND SEWER EXTENSIONS TO NEW BUILDING ADDITION.
 - CONCRETE CURB SHALL BE STANDARD 7" COMBINATION CURB AND GUTTER, HOWARD COUNTY DPW STD. R-3.01. PITCH GUTTER AWAY FROM CURB TO CONFORM TO ADJACENT DRAINAGE PATTERN.
 - PAVING FOR PARKING SHALL BE TYPICAL SECTION P-2 OF THE HOWARD COUNTY DPW STD. R-2.01.



STORM DRAIN PROFILES
SCALE: HORIZ: 1"=20'
VERT: 1"=2'



**TYPICAL SECTION
INLET TO INFILTRATION TRENCH w/
OVERFLOW DISCHARGE PIPE**

Note: Refer to Infiltration Trench Table for Dimensions of Trench.
* Howard County DPW S.D. 4.93
NOT TO SCALE

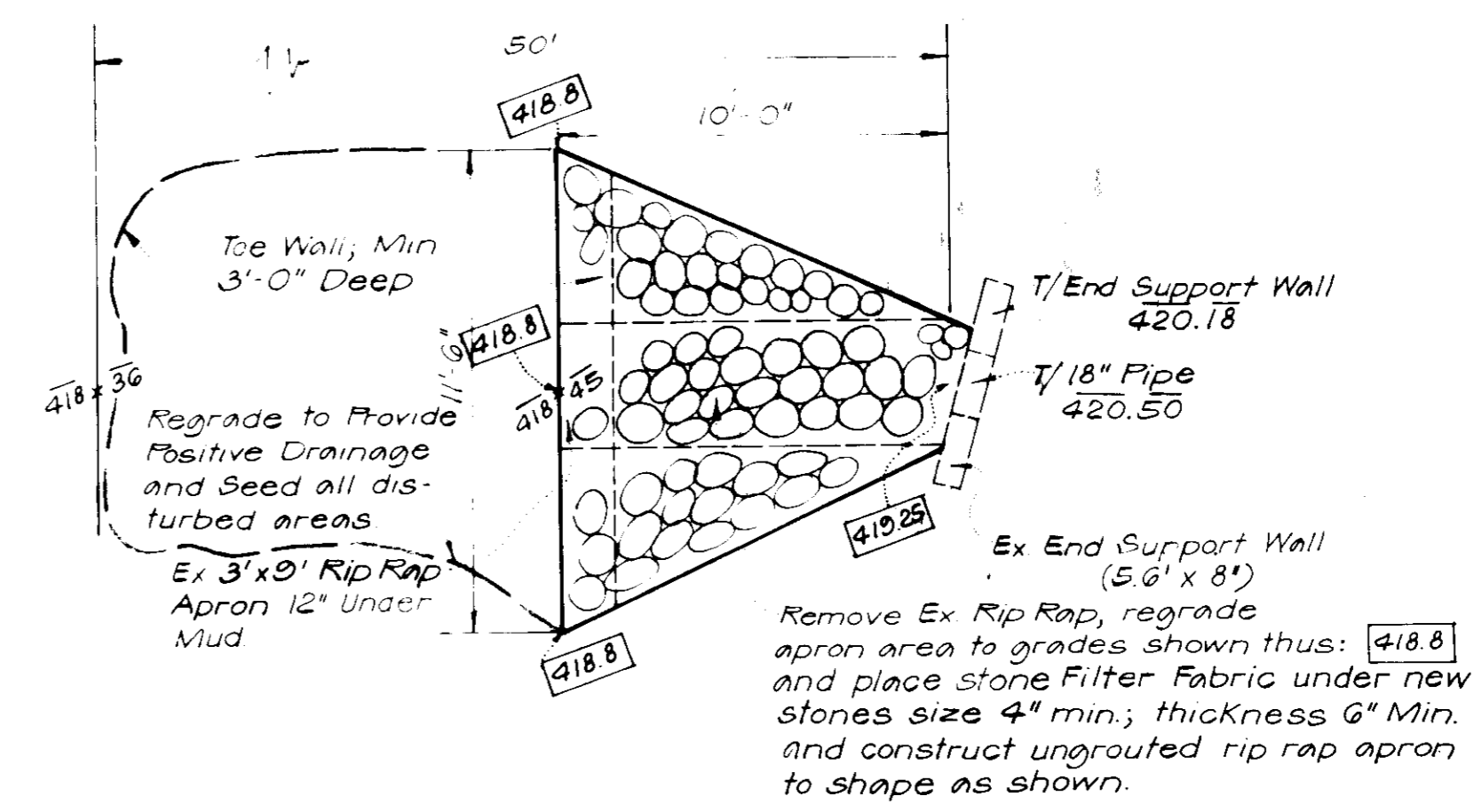
- CONSTRUCTION SEQUENCE FOR BUILDING CONSTRUCTION:**
- OBTAIN GRADING PERMIT.
 - INSTALL STABILIZED CONSTRUCTION ENTRANCE.
 - CARRY OUT INITIAL TRENCH EXCAVATION FOR TEMPORARY STORMWATER MANAGEMENT (REFER TO STORMWATER MANAGEMENT CONSTRUCTION SEQUENCE FOR TRENCH DIMENSIONS.)
 - INSTALL PERIMETER DIKE/SWALE TO DIRECT FLOW TO EXISTING INLETS TO BE CONVERTED LATER INTO MANHOLES M-1 AND M-2.
 - INSTALL INLET PROTECTION AT EXISTING INLET TO BE REMOVED LATER (NEAR I-2).
 - DEMOLISH EXISTING PAVING, STRIP TOPSOIL AND STOCKPILE.
 - RELOCATE STORM DRAIN AND CONSTRUCT INLET TRAP AT I-2. REMOVE INLET AND PLUG STORM DRAIN PIPES REPLACED BY NEW SYSTEM.
 - INSTALL SILT FENCES WHERE SHOWN.
 - BEGIN BUILDING CONSTRUCTION AND CONSTRUCT CONCRETE WALKS AND SLABS.
 - ROUGH GRADE, SPREAD TOPSOIL AND STABILIZE ALL DISTURBED, UNPAVED AREAS.
 - COMPLETE EXCAVATION FOR PERMANENT INFILTRATION TRENCH, BUILD INLETS I-1 AND I-3.
 - ADJUST TOPS OF EXISTING INLETS AND MODIFY TO FIT STANDARD MANHOLE AND FRAME AND COVER (MH-1 AND MH-2). (CONNECT I-1 TO M-1 AND I-3 TO MH-3 AND FILL TRENCHES WITH STONE.)
 - REMOVE PERIMETER DIKE/SWALE, FINE GRADE, SPREAD TOPSOIL AND STABILIZE.
 - REMOVE SEDIMENT TRAP AT I-2 AND ALL OTHER REMAINING SEDIMENT CONTROL FEATURES AND STABILIZE REMAINING DISTURBED AREAS.
 - CLEAN UP AREA AND BEGIN MAINTENANCE.

CONSTRUCTION SEQUENCE FOR TEMPORARY STORMWATER MANAGEMENT INFILTRATION TRENCH "C" SIMILAR TO ABOVE EXCEPT INITIAL TRENCH EXCAVATION FOR TRENCH "C" SHALL BE AS FOLLOWS:

TOP OF TRENCH 428.0
LENGTH 18'
WIDTH 12.3'
DEPTH 4.25'
BOTTOM OF TRENCH AT ELEVATION 423.75.

- CONSTRUCTION SEQUENCE FOR TEMPORARY STORMWATER MANAGEMENT INFILTRATION TRENCH "A" AND "B"**
- CARRY OUT INITIAL TRENCH EXCAVATION DURING ROUGH GRADING PHASE TO ALLOW TRENCH TO ACT AS A TEMPORARY STORMWATER MANAGEMENT FEATURE. REFER TO THIS SHEET FOR COORDINATION W/SEDIMENT CONTROL SEQUENCE.
 - THE INITIAL TRENCH EXCAVATION SHOULD BE TO THE FOLLOWING DIMENSIONS: TOP OF TRENCH 426.75
LENGTH 20.3 FT.
WIDTH 13.0 FT.
DEPTH 4.75 FT.
BOTTOM OF TRENCH AT ELEVATION 422.00
EXCAVATE TEMPORARY TRENCH ON CENTER AXIS OF PERMANENT INFILTRATION TRENCH.
 - AFTER INSTALLATION OF CONCRETE WALKS AND COMPLETION OF ADDITION AND STABILIZATION OF ALL DISTURBED AREAS REMOVE ALL ACCUMULATED SEDIMENT IN TRENCH.
 - EXCAVATE TRENCH TO FINAL DIMENSION AND ELEVATION CALLED FOR ON DWG G-1, CONSTRUCT INLETS I-1 AND I-3 AND FILL TRENCHES WITH STONE AND COVER WITH 12" OF TOPSOIL.
 - FINE GRADE AROUND TRENCH AND STABILIZE REMAINING DISTURBED AREAS.

- CONSTRUCTION SEQUENCE FOR PARKING CONSTRUCTION:**
- INSTALL INLET PROTECTION AT EXISTING INLET I-5, AND STRIP TOPSOIL.
 - REMOVE EXISTING INLET WEST OF I-5.
 - CARRY OUT INITIAL TRENCH EXCAVATION FOR TEMPORARY STORMWATER MANAGEMENT TRENCH "C." (REFER TO STORMWATER MANAGEMENT CONSTRUCTION SEQUENCE - TRENCH "C" FOR TRENCH DIMENSIONS.)
 - FINE GRADE FOR INSTALLATION OF CURB AND BASE COURSE.
 - CONSTRUCT CURB AND BASE COURSE.
 - FINE GRADE UNDISTURBED UNPAVED AREAS.
 - COMPLETE EXCAVATION FOR PERMANENT INFILTRATION TRENCH. BUILD INLET I-4 AND CONNECT TO I-5 AND FILL TRENCH WITH STONE.
 - SPREAD TOPSOIL AND STABILIZE.
 - STABILIZE REMAINING DISTURBED AREA AND REMOVE INLET PROTECTION.
 - CLEAN UP AREA AND BEGIN MAINTENANCE.



**RECONSTRUCTION OF EXISTING
OUTFALL APRON SOUTH OF
SCHOOL BUILDING AT D/102**
Scale: 1"=4'

9/18/86 - REVISED TO MEET COUNTY COMMENTS DATED AUG.26.1986

OWNER:
BOARD OF EDUCATION
10910 ROUTE 108
ELLCOTT CITY, MD. 21043
TEL. (301)922-0500

ASSOCIATED ENGINEERS, INC.
8555 SIXTEENTH STREET
SILVER SPRING, MARYLAND 20910
TEL. 301-589-7311

SUBDIVISION NAME	SECT./AREA	LOT/PARCEL #
		1029
PLAT # OR LOT #	ZONE	TAX/USE MAP
548/233/14	R-20	24
WATER CODE	SEWER CODE	GENAS TR.
F12		2 6023.01

Parking and Building Addition to SDP 72-115

Abresh Eddy and Eckhardt Architects
PO Box 477 Great Falls Virginia 22066 (703)759-6500

Centennial Lane
Elementary School

Howard County Public Schools
2nd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SDP-86-267

NOTES AND DETAILS

G-4 SHEET

Date AUG. 14, 1986 Rev.

4 OF 6

SDP-86-267

[Signature]
Evan M. [Signature]

PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT

DATE 10-7-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
DATE 10-7-86

DIRECTOR: John W. Muechler
DATE 10-8-86

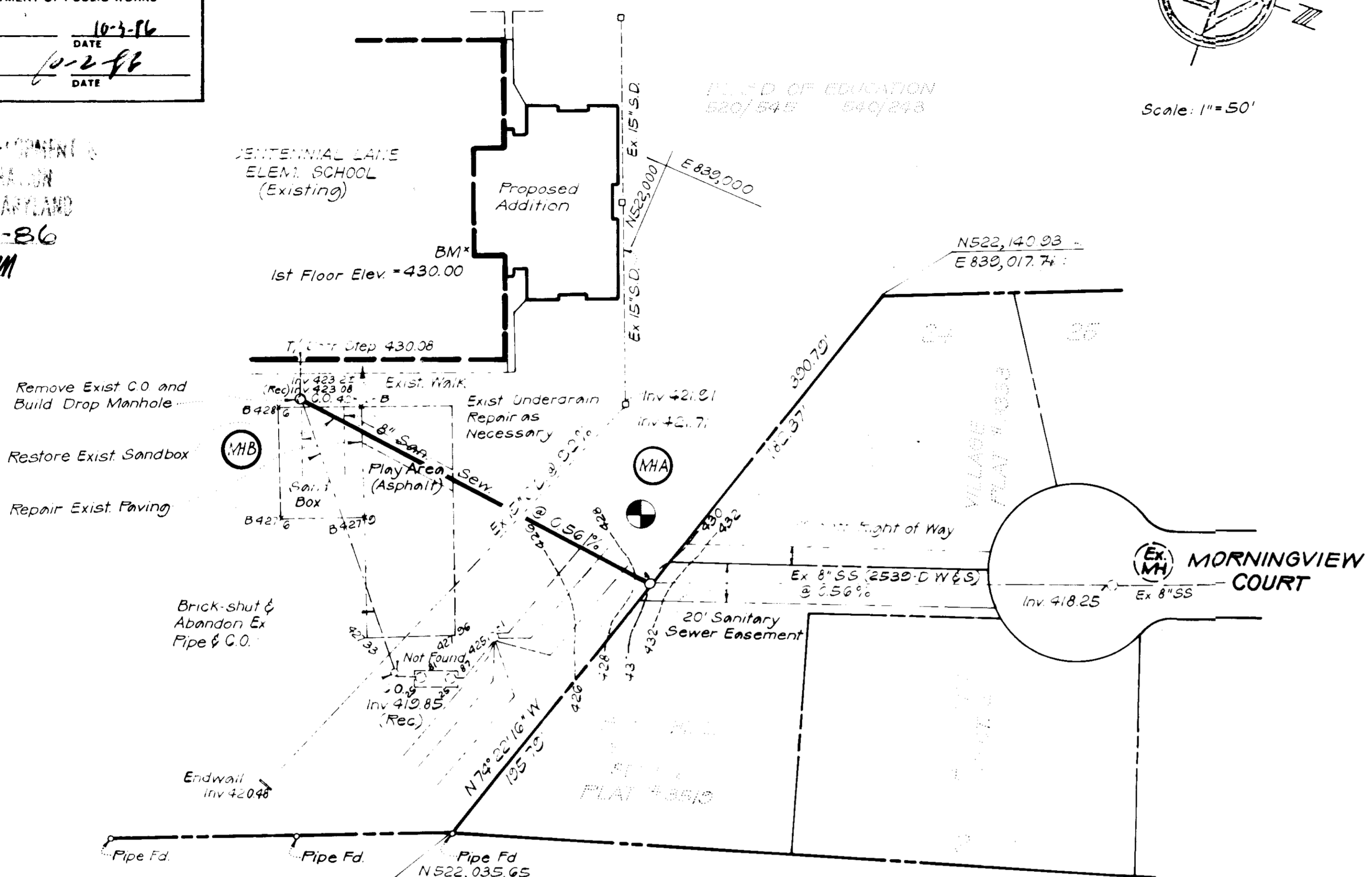
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

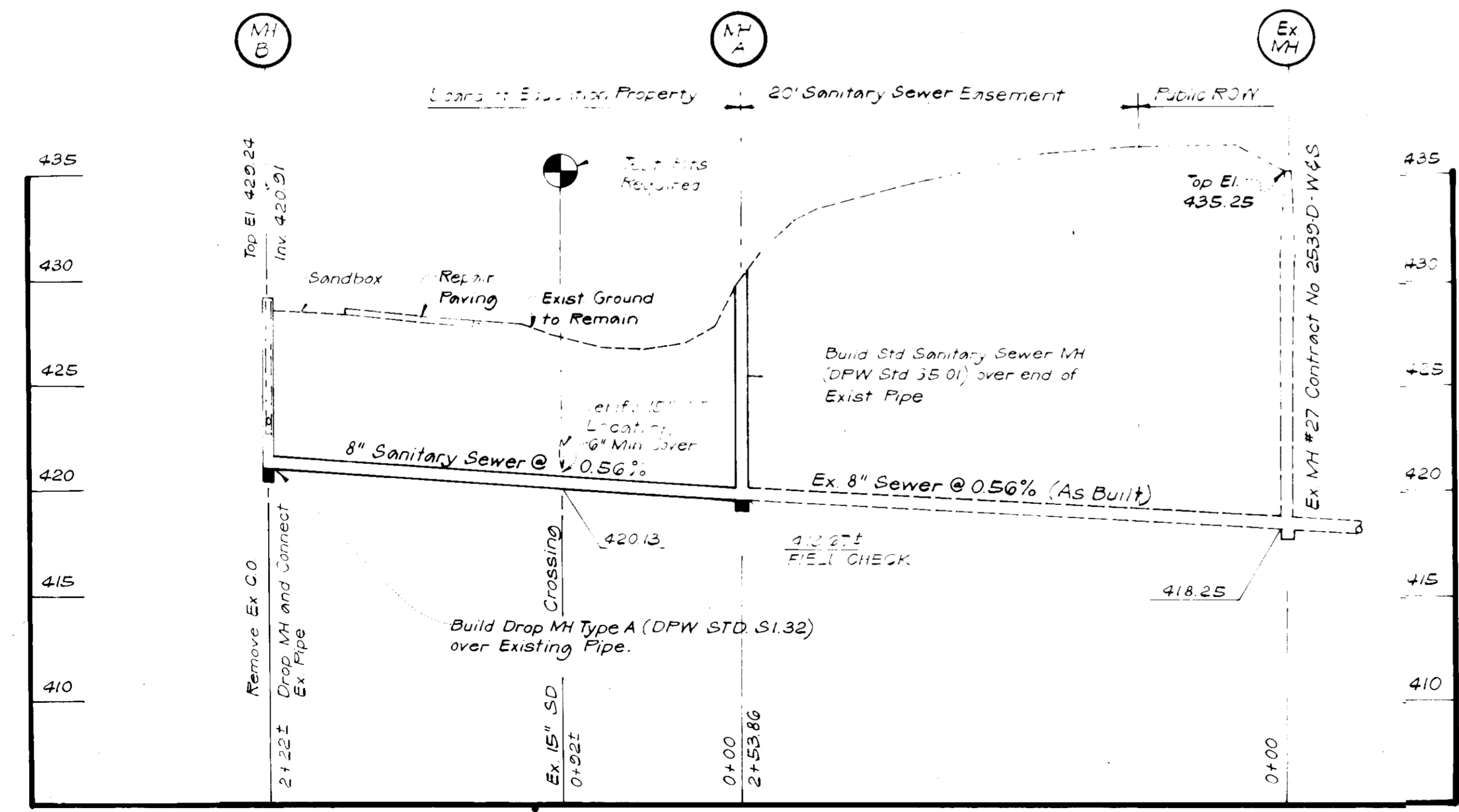
DIRECTOR: [Signature]
DATE 10-3-86

CHIEF BUREAU OF ENGINEERING
DATE 10-2-86

APPROVED
DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 8-26-86



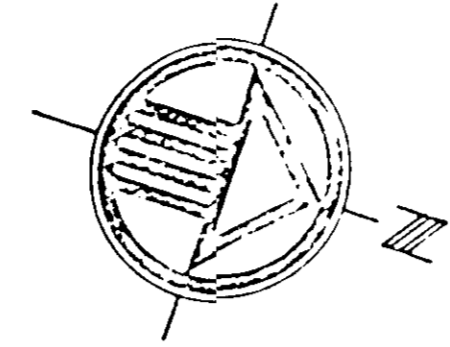
NOTE: Existing Sept. Tank & Distribution Box shall be pumped dry & filled with Gravel. Leaching trenches shall be abandoned. Work in accordance with Howard County Health Dept Regulations.



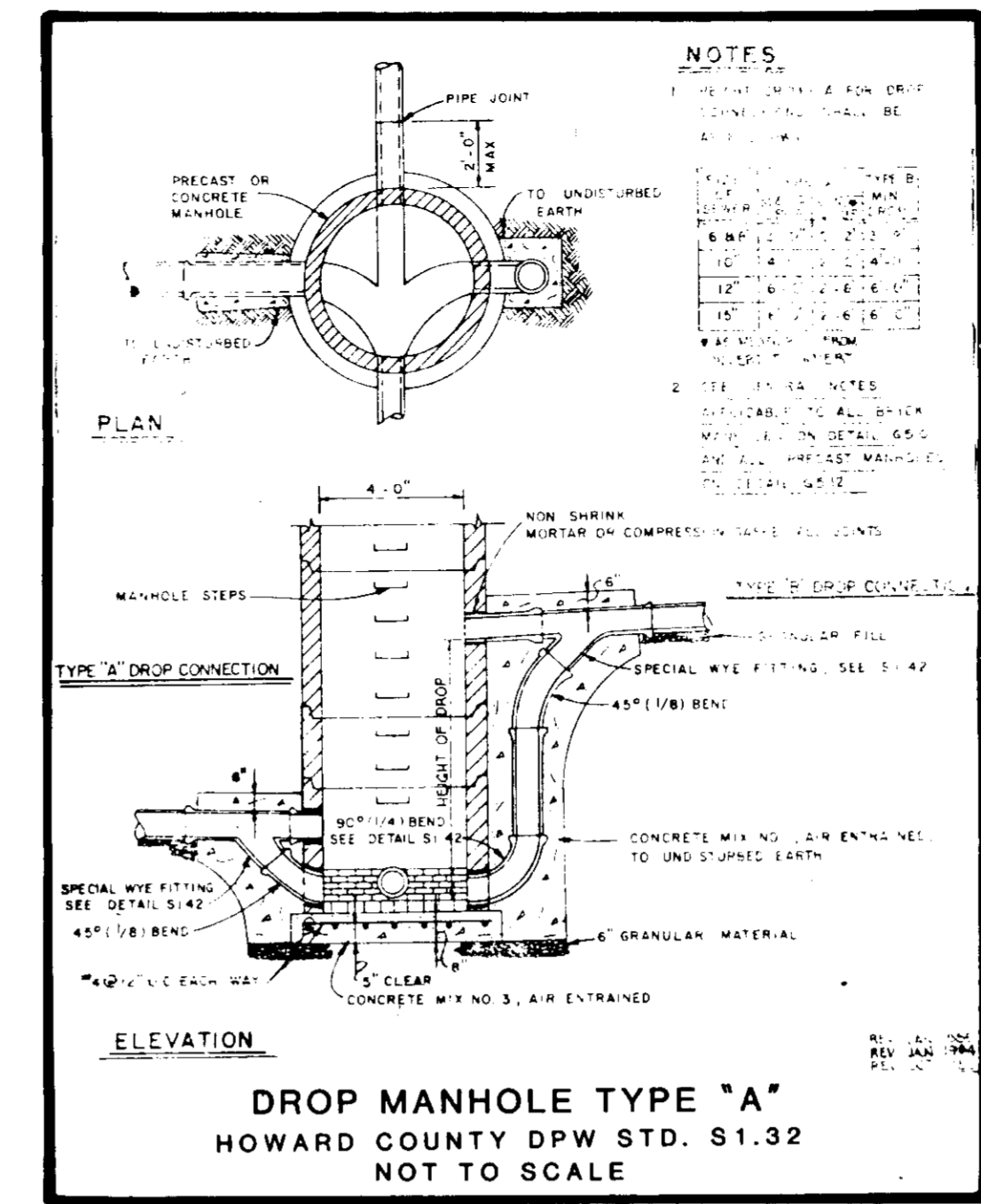
SANITARY SEWER PROFILE

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

OWNER: BOARD OF EDUCATION
10910 ROUTE 108
ELLCOTT CITY, MD 21043
TEL. (301) 922-8500



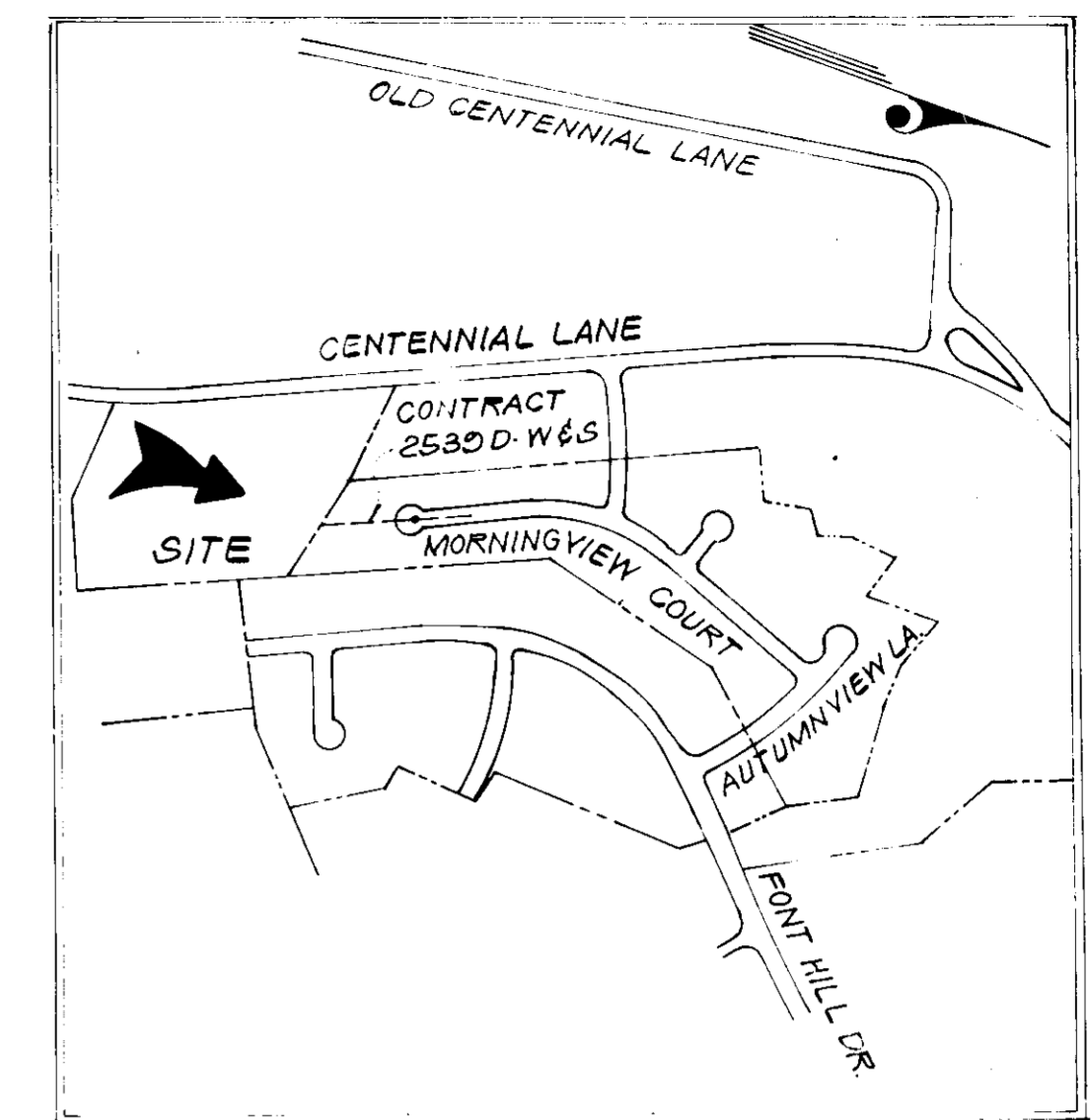
Scale: 1"=50'



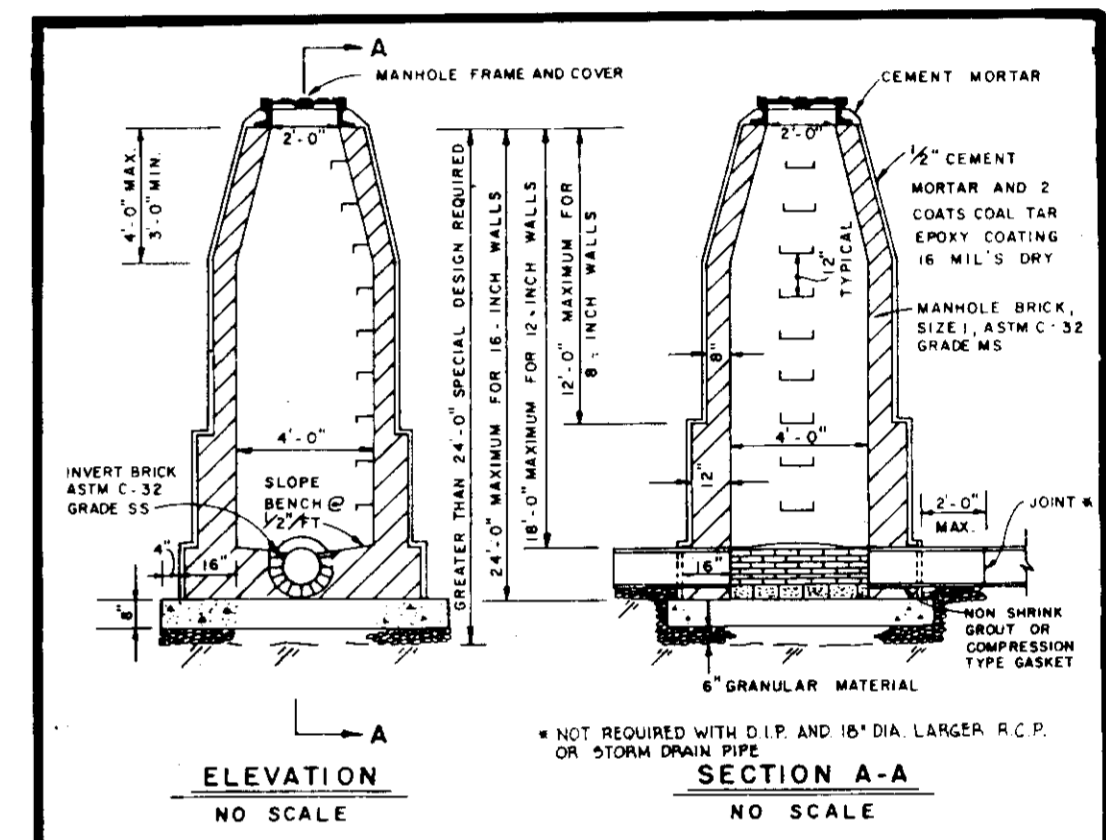
DROP MANHOLE TYPE "A"
HOWARD COUNTY DPW STD. S1.32
NOT TO SCALE

NOTES

- ALL ON-SITE SANITARY SEWER CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF DEPARTMENT OF PUBLIC WORKS, HOWARD COUNTY, MARYLAND.
- ALL PIPE ELEVATIONS ARE PIPE INVERTS.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER.
- CONTRACTOR SHALL PROVIDE A PIPE JOINT IN SEWER MAIN WITHIN 2'-0" OF THE EXTERIOR OF MANHOLE WALLS.
- TREES ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT.
- CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION AS DIRECTED BY THE ENGINEER.
- EXISTING CONDITIONS ARE BASED ON A TOPOGRAPHIC SURVEY MADE DURING APRIL 1986, BY ASSOCIATED ENGINEERS, INC. BM USED: FLOOR ELEVATION OF EXISTING SCHOOL BUILDING, EL. 430.00. GRID SYSTEM IS BASED ON MARYLAND STATE COORDINATE SYSTEM.
- CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF HOWARD COUNTY PUBLIC WORKS FACILITIES AND SCHOOL BOARD FACILITIES BEFORE BEGINNING CONSTRUCTION.
- ALL EXCAVATIONS SHALL BE MADE BY OPEN CUT. BANKS OF TRENCHES SHALL BE KEPT AS NEARLY VERTICAL AS PRACTICABLE AND WHERE REQUIRED SHALL BE PROPERLY SHEETED AND BRACED. WHERE DAMAGE IS LIKELY TO RESULT FROM WITHDRAWING SHEET, THE SHEETING SHALL BE LEFT IN PLACE AT NO ADDITIONAL COST TO OWNER. ALL SHORING, SHEETING AND FENCING REQUIRED TO PERFORM AND PROTECT THE EXCAVATION AND TO SAFEGUARD EMPLOYEES AND PUBLIC SHALL BE PERFORMED AND SHALL MEET THE REQUIREMENTS OF M.O.S.H.A.
- CONTRACTOR SHALL OBTAIN ALL PERMITS INCLUDING THE EXPEDITING OF ALL NECESSARY SIGNATURES AND PAPERWORK. THE OWNER SHALL PAY FOR PERMITS AND FEES REQUIRED. CONTRACTOR SHALL HAVE ALL INSPECTIONS MADE AND PERFORM ALL TESTS REQUIRED.
- ON-SITE SEWER PIPE TO BE A.C.P. 2400 OR P.V.C.
- PIPE JOINTS SHALL BE RUBBER COMPRESSION TYPE OR SOLVENT WELD AS PER SOLVENT MANUFACTURER'S RECOMMENDATIONS.
- ALL ON-SITE SANITARY PIPE TO HAVE A MINIMUM OF 4'-0" COVER BELOW FINISHED GRADE.
- SEPTIC SYSTEM SHALL REMAIN IN SERVICE UNTIL NEW WORK IS COMPLETE AND READY FOR OPERATION.
- EXISTING SEPTIC SYSTEM TO HAVE SEWAGE AND EFFLUENT REMOVED AND DISPOSED OF BY A LICENSED OPERATOR. EMPTIED SEPTIC TANK TO BE FILLED IN WITH BANK-RUN GRAVEL.
- RETURN DISTURBED EARTH TO ORIGINAL CONDITION: TOPSOIL, FERTILIZER, LIME AND SEED ALL DISTURBED AREAS IN ACCORDANCE WITH THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPED AREAS," 1983 EDITION.
- TEST: A VISUAL LAMP INSPECTION SHALL BE MADE BETWEEN MANHOLES AND LINE OF FLOW SHALL BE CLEAR AND STRAIGHT. PIPING BETWEEN MANHOLES SHALL BE SUBJECT TO A 5 P.S.I. AIR TEST FOR 5 MIN. AND PROVED TIGHT.
- INSPECTION OF THE ON-SITE SEWER SYSTEM SHALL BE DONE BY A REGISTERED PROFESSIONAL ENGINEER OR HIS DULY AUTHORIZED REPRESENTATIVE AND SAID ENGINEER SHALL CERTIFY THAT ALL CONSTRUCTION HAS BEEN DONE IN ACCORDANCE WITH THE PLUMBING REGULATIONS, COUNTY'S GENERAL SPECIFICATIONS AND CONDITIONS.



VICINITY MAP
SCALE: 1"=600'



STANDARD SANITARY SEWER MANHOLE
HOWARD COUNTY DPW STD. G 5.01
NOT TO SCALE

GENERAL NOTES APPLICABLE TO ALL BRICK MANHOLES

- MANHOLE BASE SHALL BE 8-INCH CAST IN PLACE CONCRETE SLAB WITH NO. 3 ANCHORS. ALL OTHER SLABS SHALL BE MIX NO. 3 AIR ENTRAINED.
- MANHOLE BASE SHALL BE BUILT ON 6-INCH GRANULAR MATERIAL ON FIRM SUBGRADE.
- EXCAVATION BELOW PIPES SHALL BE BACKFILLED WITH GRANULAR MATERIAL 1/3 OF WAY TO TOP OF PIPE.
- CONNECTION BETWEEN MANHOLE WALL AND SEWER SHALL BE NON-SHRINK GROUT OR RUBBER GASKET COMPRESSION TYPE JOINT.
- MANHOLE STEPS SHALL BE AS SPECIFIED ON DETAIL S2.2.
- MANHOLE COVER SHALL BE AS SHOWN ON DETAIL S2.3.
- PIPE JOINTS SHALL BE PROVIDED WITH 2" MAX. FROM OUTSIDE OF MANHOLE WALL.

STANDARD SANITARY SEWER MANHOLE
HOWARD COUNTY DPW STD. G 5.01
NOT TO SCALE

SUBDIVISION NAME	SECT./AREA	LOT/PARCEL #
		1029
PLAT # OR L.O.P. #	ZONE	FRONT SETBACK
640/234	R-20	24
540/243		2
WATER CODE	SEWER CODE	
F12		

Parking and Building Addition to SDP 72-115
Abraham Eddy and Eckhardt Architects
PO Box 477, Great Falls, Virginia 22066 (703) 753-5500

Centennial Lane
Elementary School
Howard County Public Schools
2nd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND



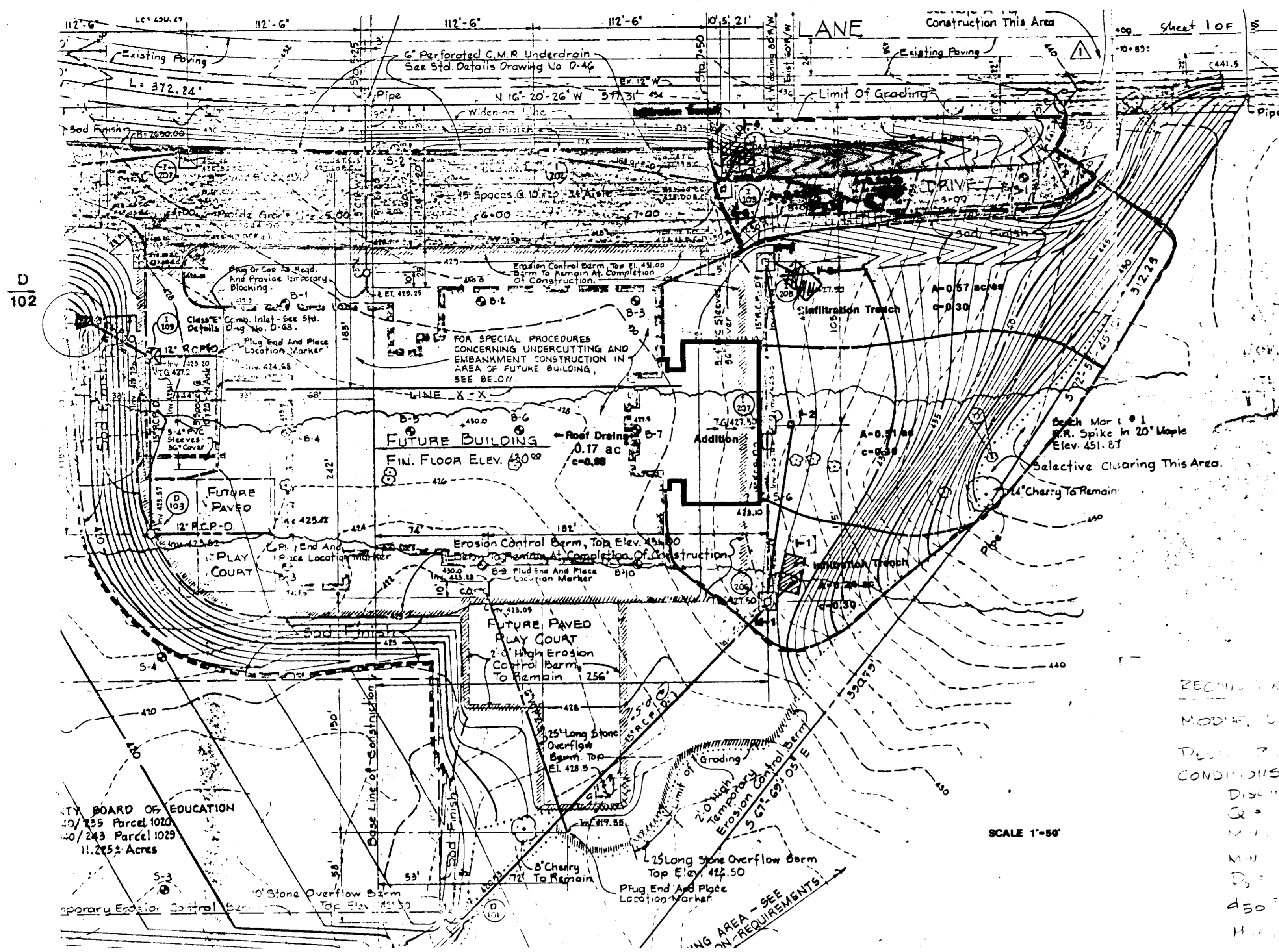
E. M. Plesha

ASSOCIATED ENGINEERS, INC.
CIVIL ENGINEERS & LAND SURVEYORS
833 SIXTEENTH STREET
SILVER SPRING, MARYLAND 20910
TEL. 301-589-7311

9/18/86 - REVISED TO MEET COUNTY COMMENTS DATED AUG. 26, 1986

SDP-86-267	SEWER HOUSE CONNECTION	G-5, SHEET
Date: AUG. 14, 1986	Rev.	5 OF 6

SDP-86-267



10 YEAR STORM FREQUENCY DEPARTMENT OF PUBLIC WORKS STORM DRAIN FLOW TABULATION FORM

LOCATION: CENTENNIAL LANE ELEM. SCHOOL
 DEVELOPMENT: BUILDING ADDITION TO SDP 72-115
 MADE IN CONNECTION WITH J.O. No. _____
 STORM FREQUENCY _____

MODIFICATIONS TO and RELOCATIONS OF SD SYSTEM
 SDP 72-115
 Date 6-9-86
 Sheet 4 Total in Comp. 5
 Computed by EP
 Checked by _____

LOCATION	AREA	ACRES		COEFF	CA	ICA	TIME CONC. MIN			INTEN	Q + CIA	PIPE n = 0.014				REMARKS	
		Sub	Total				Inlet	Drain	Total			"I"	C.F.S.	Size	Slope		Vel.
I-3 M-3	0.57	-	0.57	0.30	0.17	0.17	10	-	10	6.6	1.13	15"	2.0	0.21	12	0.08	
M-3 E-2	0.57	-	0.57	-	-	0.17	-	-	10	6.6	1.13	15"	1.0	0.21	103	0.03	
I-2 M-1	0.51	-	0.51	1.08	0.30	0.15	0.32	10	2	12	6.1	1.95	15"	1.0	1.59	112	0.11
I-1 M-1	0.24	-	0.24	0.30	0.07	0.07	10	-	10	6.6	0.43	15"	2.0	0.35	12	0.03	
M-1 Ex Endwall	0.101	-	0.101	1.32	-	0.39	-	-	13	5.6	2.18	24"	0.42	1.77	195	0.13	

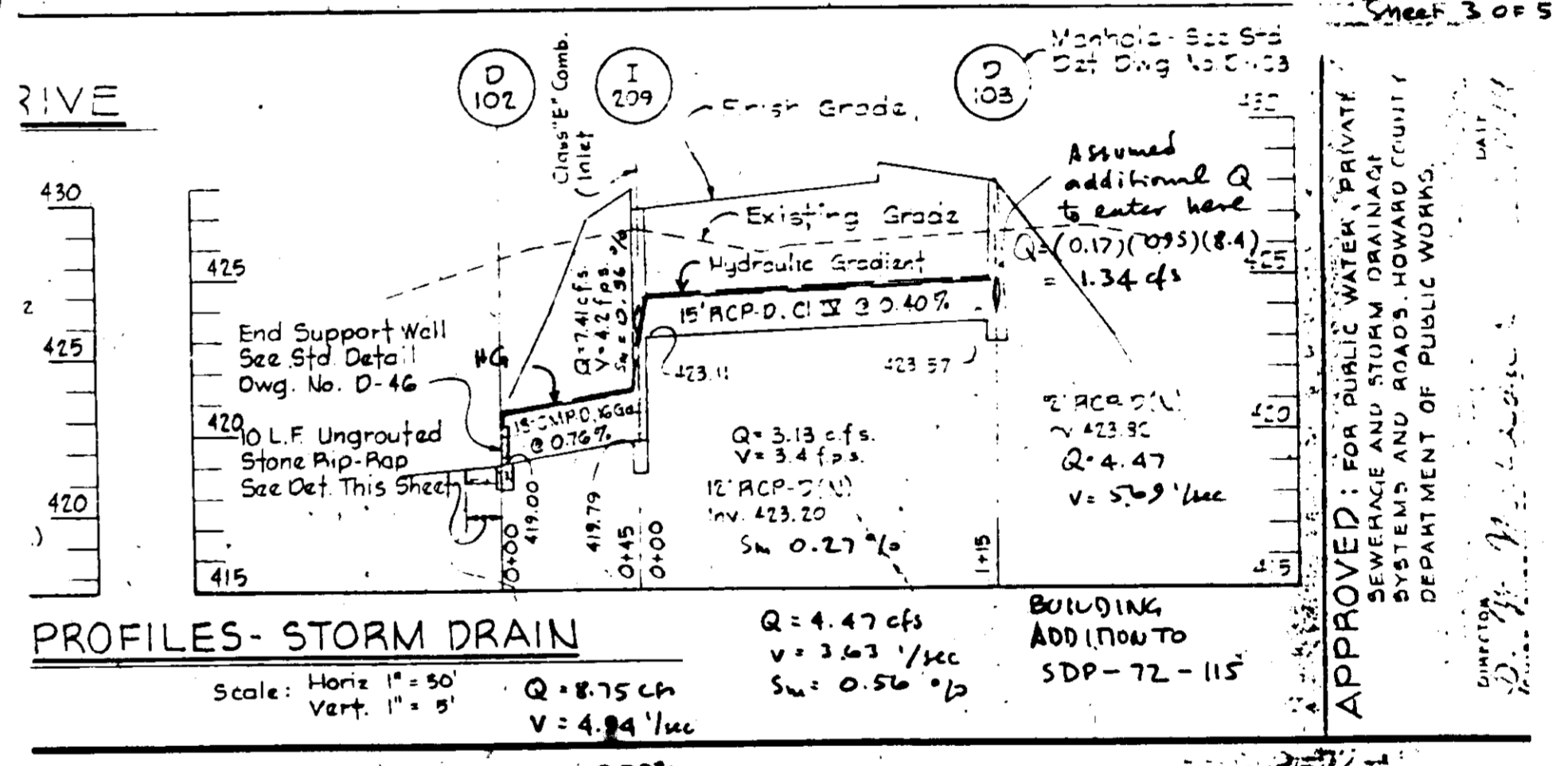
Remarks: Road Drains from Existing Building Addition are picked up internally and piped to Man. 12" OUTFALL PIPES ON SOUTH SIDE OF BUILDING (SDP 72-115)

LOCATION	AREA	ACRES	COEFF	CA	ICA	TIME CONC. MIN	INTEN	Q + CIA	PIPE n = 0.014	REMARKS						
S-1 I-4	0.28	-	0.28	0.75	0.21	0.21	5	-	5	8.4	1.76	15"	8.8	1.43	16	0.22
I-4 I-5	0.28	-	0.28	0.75	0.21	0.21	5	-	5	8.4	1.76	15"	0.6	1.64	125	0.25
I-5 I-1	0.03	-	0.03	0.95	0.03	0.24	5	-	5	8.4	2.02	15"	-	-	-	-

Ex 202
 Ex 203
 Ex 204

STANDARD STORM DRAINAGE DESIGN
 FLOW TABULATION FORM
 SDD-5

REQUIRED MIN. OF OUTPUT PROTECTION AT D/102
 MODIFIED AS PER SDP 72-115 (SEE DWG G-4)
 DESIGN TABLE 7.3.1 FOR M.N. TAILWALL CONDITIONS:
 DISCHARGE TO UNDEVELOPED SECTION
 $Q = 8.75 \text{ cfs}$
 MIN. LENGTH OF APPROX. $L_a = 10 \text{ FT}$
 MIN. WIDTH OF APPROX. $W = D_a + L_a$
 $D_a = 8 \text{ FT}$ (from $Q = 8.75 \text{ cfs}$)
 $L_a = 10 \text{ FT}$
 $W = 18 \text{ FT}$
 450' x 2' 6" MIN. USE 4" MIN. STONE SIZE
 MIN. SLOPE TO BE MAINTAINED 0.15% x 3' 6"



DEPARTMENT OF PUBLIC WORKS STORM DRAIN FLOW TABULATION FORM

LOCATION: CENTENNIAL LANE ELEM. SCHOOL
 DEVELOPMENT: BUILDING ADDITION TO SDP 72-115
 MADE IN CONNECTION WITH J.O. No. _____
 STORM FREQUENCY _____

Date 6-9-86
 Sheet 4 Total in Comp. 5
 Computed by EP
 Checked by _____

LOCATION	AREA	ACRES		COEFF	CA	ICA	TIME CONC. MIN			INTEN	Q + CIA	PIPE n = 0.014				REMARKS
		Sub	Total				Inlet	Drain	Total			"I"	C.F.S.	Size	Slope	
ED EXM	0.17	Added	95	0.16	-	-	5	5	8.4	3.13	Ex 15"	0.40	3.63	115	0.56	
D	D	-	-	-	-	-	-	-	-	7.41	Ex 18"	0.76	4.34	45	0.73	
D	D	-	-	-	-	-	-	-	-	1.34	Ex 18"	0.76	4.34	45	0.73	
D	D	-	-	-	-	-	-	-	-	8.75	-	-	-	-	-	

SYSTEM IS ADEQUATE AND CAN ABSORB ADDITION OF FLOW OF $Q = 1.34 \text{ cfs}$ from Building Addition 0.17 ac. Impervious area (100%)

STANDARD STORM DRAINAGE DESIGN
 FLOW TABULATION FORM
 SDD-5

DEPARTMENT OF PUBLIC WORKS STORM DRAIN FLOW TABULATION FORM

LOCATION: CENTENNIAL LANE ELEM. SCHOOL
 DEVELOPMENT: CHECK ON ADEQUACY OF EXISTING SYSTEM
 MADE IN CONNECTION WITH J.O. No. _____
 STORM FREQUENCY _____

Date 6-9-86
 SHEET 5 TOTAL IN COMP. 5
 COMPUTED BY _____
 CHECKED BY _____

NO.	TYPE	V FPS	V' FPS	Q CFS	Q' CFS	Q/Q'	LOSS				TOTAL	REMARKS
							A	B	C	D		
EXM		5.49	3.63	4.47	4.47	-	0.08	-0.31	0.06	-0.17	Actual Drop in Ex Structure 0.25 (Crown match)	
EX I/209		3.63	4.94	4.47	3.75	-	0.15	0.2	0.06	0.41	Actual Drop in Ex Structure 3.22	

STANDARD STORM DRAINAGE DESIGN
 STRUCTURE LOSSES
 SDD-3

APPROVED FOR PUBLIC WATER AND PUBLIC BEVERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT
 DATE 10-20-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 DATE 10-9-86

APPROVED FOR PUBLIC WATER AND PUBLIC BEVERAGE STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DATE 10-23-86

9/18/86 - REVISED TO MEET COUNTY COMMENTS DATED AUG. 28, 1986



SDP - 86 - 267
 Planning and Building Addition to SDP 72-115
 PROJECT NAME: CENTENNIAL LANE ELEMENTARY SCHOOL
 HOWARD COUNTY, MD. 2ND ELECTION DISTRICT
 DRAWING TITLE: DRAINAGE DESIGN AND STORM DRAIN COMPUTATIONS

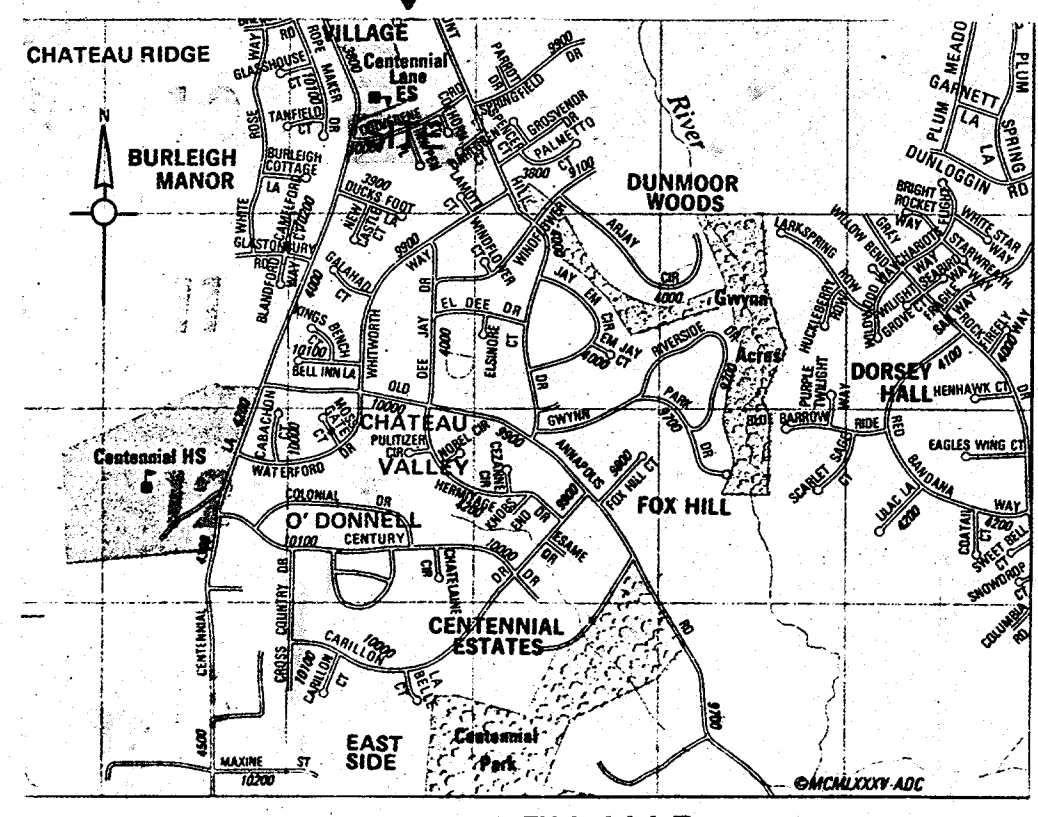
SUBDIVISION NAME	SECT./AREA	LOT/PARCEL #
448/235	78, 131, 132	24
OWNER CODE	F12	SEWER CODE

ASSOCIATED ENGINEERS, INC.
 8800 SIXTEENTH STREET
 SILVER SPRING, MARYLAND 20910
 TEL. 301-586-7311

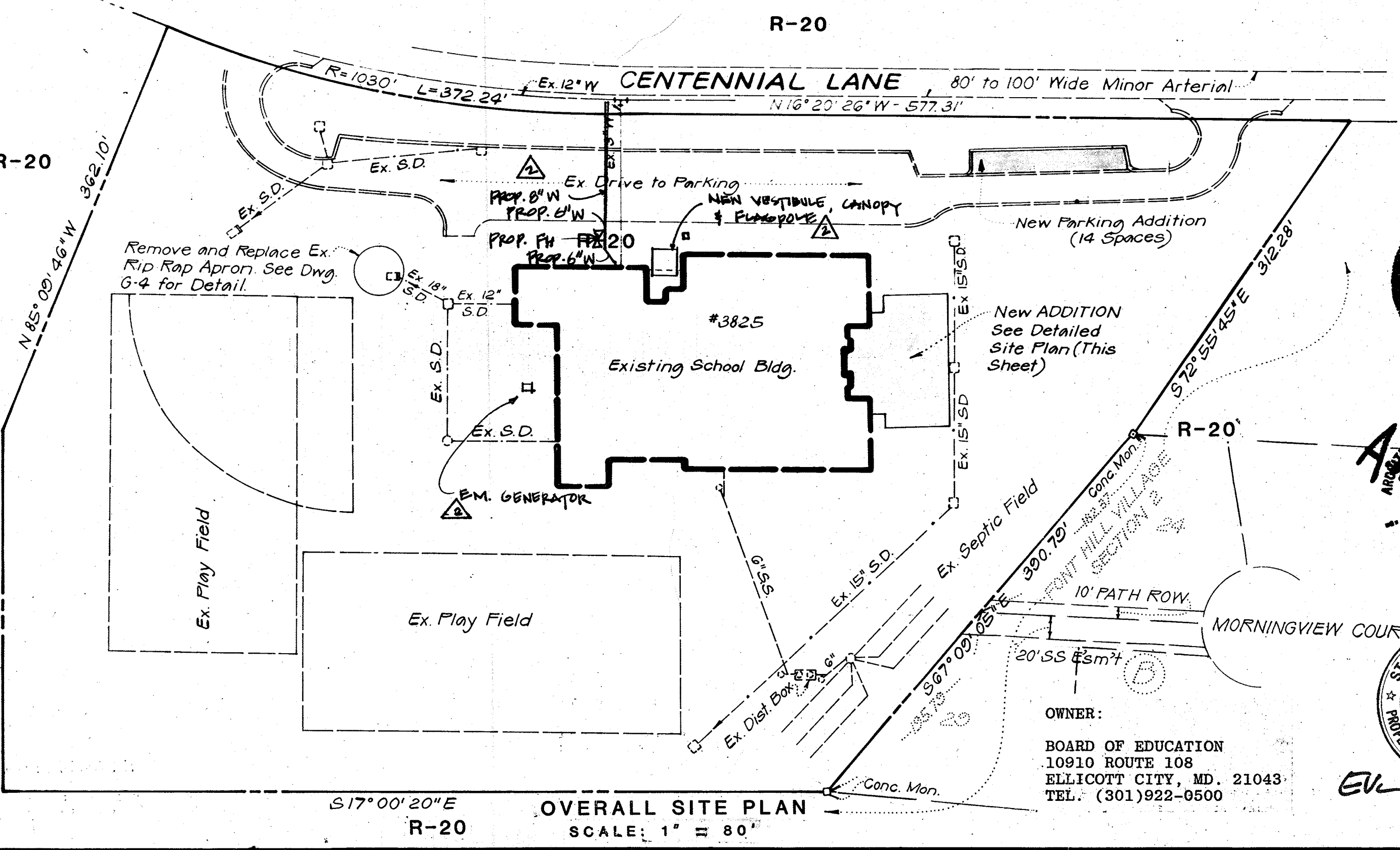
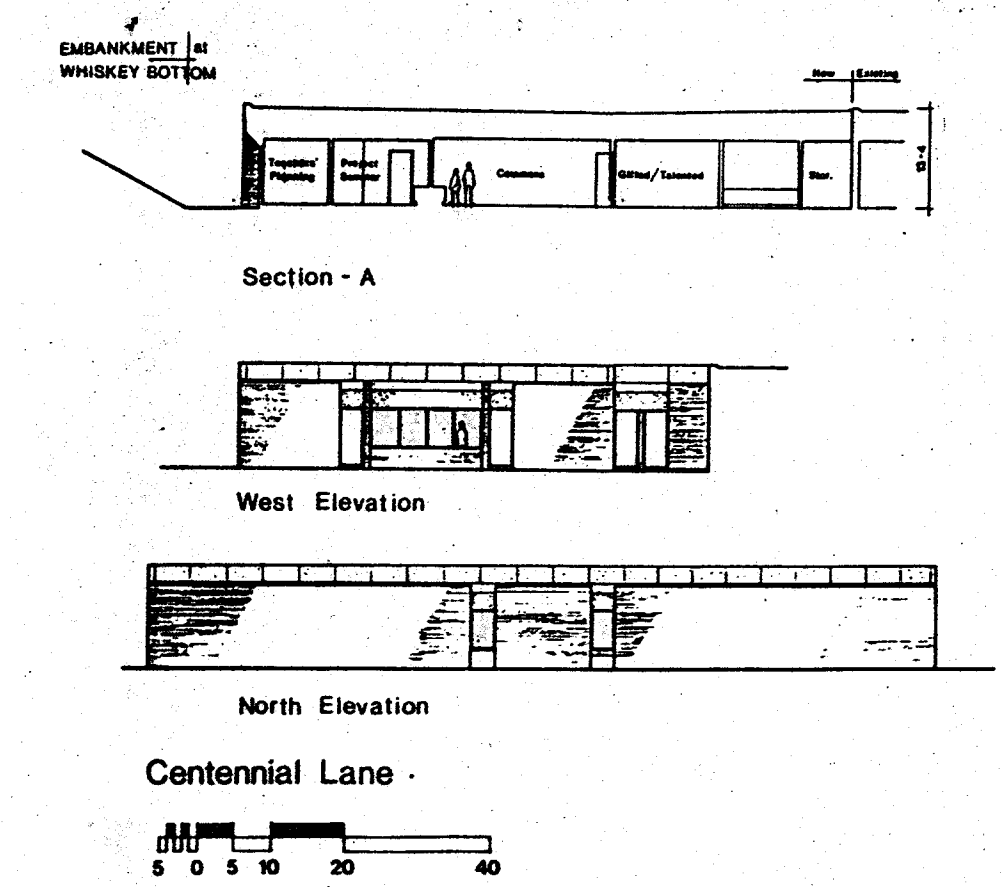
DATE: 8-26-86
 M. HANN

JOB NO. 2897
 SHEET NO. 004
 6 OF 6

SDP-86-267



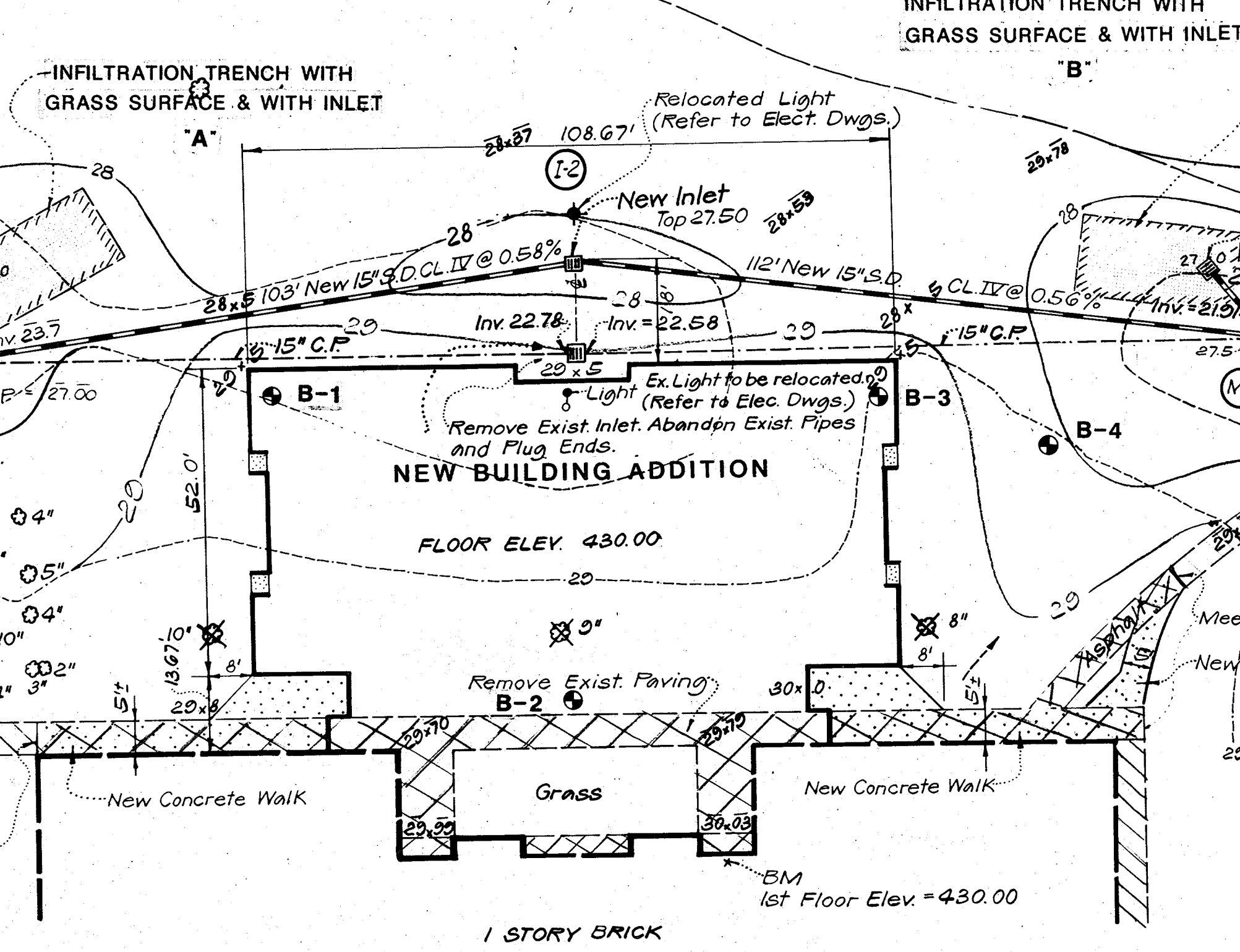
VICINITY MAP
SCALE 1" = 2000'
TOTAL AREA OF PROPERTY = 11.22 AC



OVERALL SITE PLAN
SCALE: 1" = 80'

PERMANENT INFILTRATION TRENCH						
TRENCH	REQUIRED VOLUME OF STONE	LENGTH	TRENCH DIMENSIONS WIDTH EFFECTIVE DEPTH	DEPTH OF STONE	BOTTOM ELEV. OF TRENCH	INVERT OUT OF OVERFLOW PIPE
A	2007 C.F.	22.3	15.0 6.0	7.58	418.42	424.42
B	2007 C.F.	22.3	15.0 6.0	7.58	418.42	424.42
C	1715 C.F.	20.0	14.29 6.0	7.58	419.22	425.22

CENTENNIAL LANE

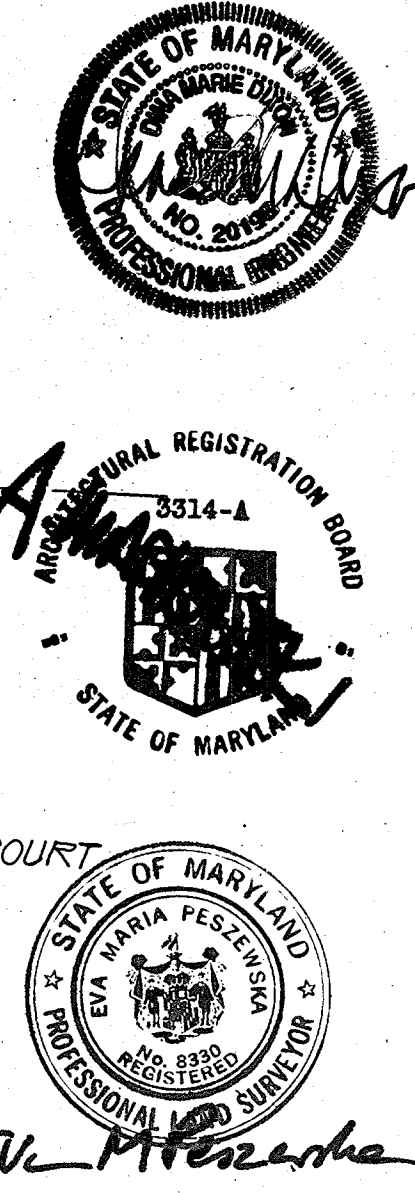


SITE PLAN
SCALE: 1" = 20'

SITE INFORMATION:
OWNER: BOARD OF EDUCATION
ADDRESS: 10910 ROUTE 108
ELLICOTT CITY, MD 21043
TELEPHONE (301) 922-0500
SITE LOCATION: 3825 CENTENNIAL LANE
ELLICOTT CITY, MD 21043
ELECTION DISTRICT: #2
TAX MAP: 24, TAX PARCEL 1029
AREA OF PROPERTY: 11.22 AC
ZONING: R-20
PROPERTY RECORDED IN LIBER 540, FOLIO 235 AND LIBER 540, FOLIO 243
PARKING REQUIRED: 66
PARKING SPACES EXISTING: 52
NEW PARKING PROVIDED: 14
TOTAL PARKING PROVIDED: 66

LEGEND:

EXISTING CONTOURS	---	428
DESIGN CONTOURS	---	428
EXISTING SPOT GRADES	---	29x78
DESIGN SPOT GRADES	---	29x75
EXISTING STORM DRAIN PIPES AND STRUCTURES	---	
NEW STORM DRAIN PIPES AND STRUCTURES	---	
INFILTRATION TRENCH	---	
EXISTING PAVING TO BE REMOVED	---	
EXISTING PAVING	---	
NEW CONCRETE WALK	---	
NEW BITUMINOUS CONCRETE WALK	---	
NEW SOIL BORINGS TAKEN	---	
NEW COMBINATION CURB & GUTTER	---	
NEW BITUMINOUS CONCRETE PAVING	---	



ASSOCIATED ENGINEERS, INC.
8333 SIXTEENTH STREET
SILVER SPRING, MARYLAND 20910
TEL: 301-589-7111

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT
DATE 10-7-86
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
DATE 10-9-86
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DATE 10-3-86

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 8-26-86

FOR GENERAL NOTES REFER TO DWG. G-4.
FOR SEDIMENT CONTROL PLAN REFER TO DWG. G-2
NEW ENTRANCE CANOPY & FLAGPOLE BY SM
NEW GENERATOR BY GIPE ASSOC.
NDCM REVISED FIRE PROTECTION & DOMESTIC WATER SERVICE



ADDRESS CHART

LOT NUMBER	STREET ADDRESS				
1029	3825 Centennial Lane ELLICOTT CITY, MD 21043				
SUBDIVISION NAME	SECT./AREA LOT/PARCEL #				
	1020				
PLAT # OR LOT #	BLOCK #	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR.
540-235	78/13	R-20	24	2	6023.01
540-243					
WATER CODE	SEWER CODE				
F12					

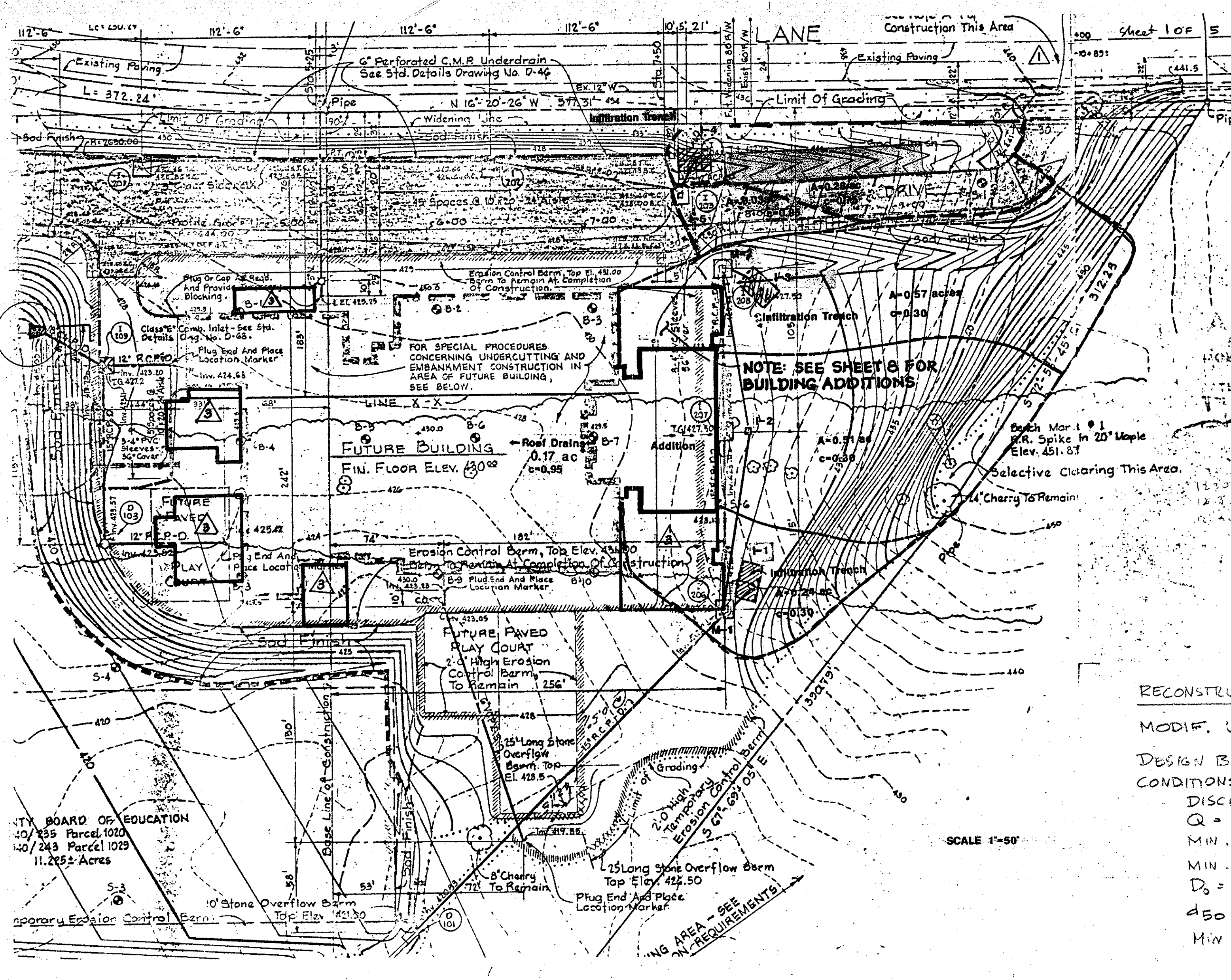
Parking and Building Addition to SDP 72-115

Abrash, Eddy and Eckhardt Architects
P.O. Box 477 Great Falls, Virginia, 22066 (703) 759-5500

Centennial Lane
Elementary School
Howard County Public Schools
2nd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SDP-86-267

SITE PLAN		G-1
Date AUG. 27, 1986		SHEET
Rev.		1 OF 6



10 YEAR STORM FREQUENCY DEPARTMENT OF PUBLIC WORKS STORM DRAIN FLOW TABULATION FORM

LOCATION: CENTENNIAL LANE ELEM. SCHOOL
 DEVELOPMENT: BUILDING ADDITION TO SDP 72-115
 MADE IN CONNECTION WITH J.O. No. _____
 STORM FREQUENCY _____

MODIFICATIONS TO and RELOCATIONS OF SD SYSTEM
 SDP 72-115
 Date 6-9-86
 Sheet 4 Total in Comp. 5
 Computed by EP
 Checked by _____

LOCATION	AREA	ACRES	COEFF	CA	CA	CA	TIME CONC-MIN	INTEN	Q + CIA	PIPE n = 0.014	REMARKS
From To	Sub. Total		"C"				Inlet Drain Total	"I"	C.F.S.	Size Slope Vel. Lgth.	MIN. SLOPE
I-3 M-3	0.57	0.57	0.30	0.17	0.17		10 - 10	6.6	1.13	15" 2.0 12	0.08
M-3 I-2	0.57	0.57	-	0.17	0.17		10 - 10	6.6	1.13	15" 1.0 103	0.03
I-2 M-1	0.51	0.57	1.08	0.30	0.15		10 2 12	6.1	1.95	15" 1.0 112	0.11
I-1 M-1	0.24	0.24	0.30	0.07	0.07		10 - 10	6.6	0.43	15" 2.0 035	< 0.03
M-1 Ex Encl. No. 1	1.32	-	-	0.39	-		1 13	5.6	2.18	Ex 15" 0.42 1.77 295	0.13

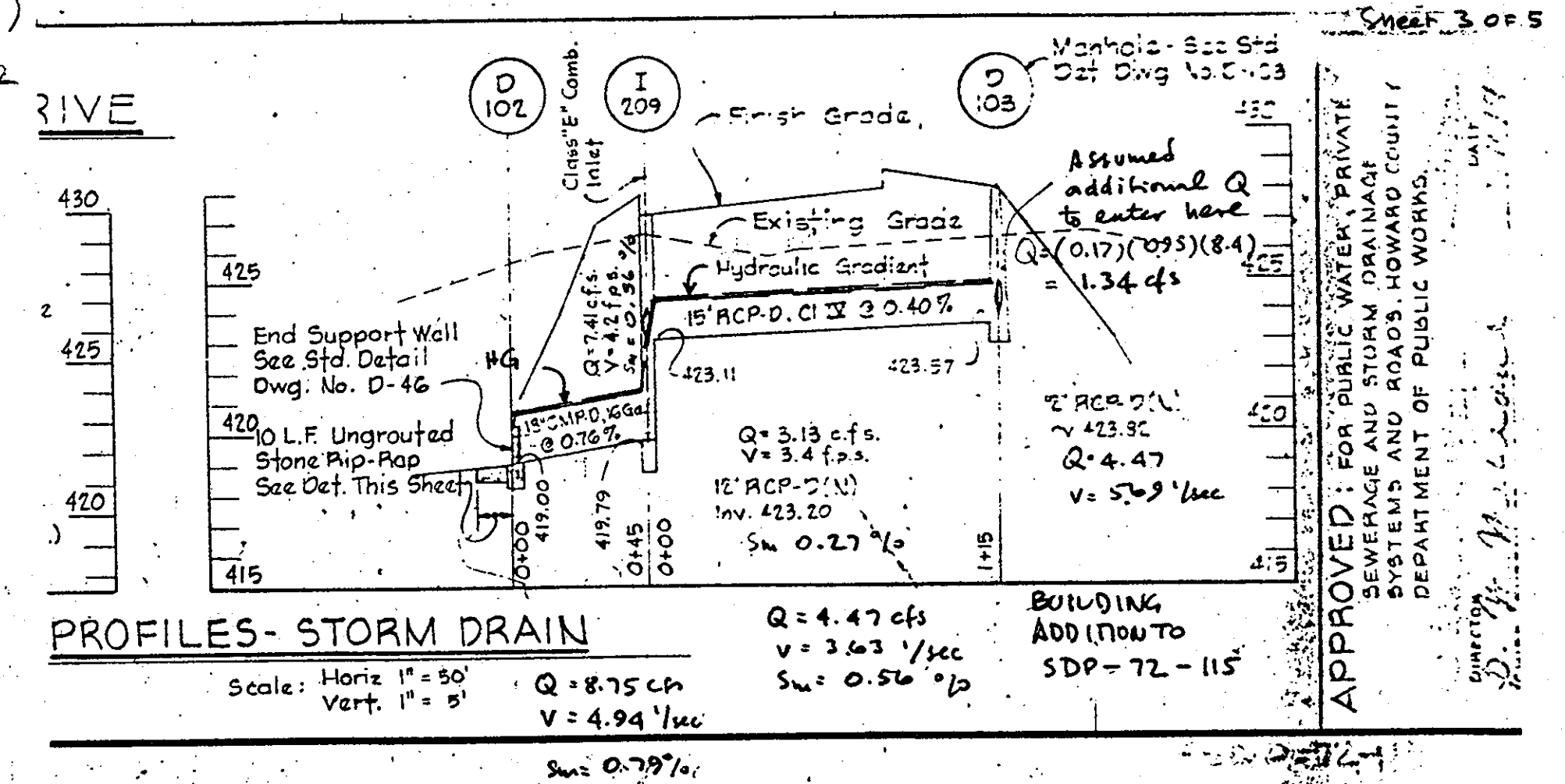
Remarks: Roof Drains from existing Building Addition are picked up internally and piped to manhole, 12" OUFALL PIPES ON SOUTH SIDE OF BUILDING (SDP 72-115)

LOCATION	AREA	ACRES	COEFF	CA	CA	CA	TIME CONC-MIN	INTEN	Q + CIA	PIPE n = 0.014	REMARKS
From To	Sub. Total		"C"				Inlet Drain Total	"I"	C.F.S.	Size Slope Vel. Lgth.	MIN. SLOPE
S-1 I-4	0.28	0.28	0.15	0.21	0.21		5 - 5	8.4	1.76	Curve Opening	
I-4 I-5	0.28	0.28	0.75	0.21	0.21		5 - 5	8.4	1.76	15" 8.8 143 16	0.22
I-5 I-1	0.03	0.28	0.31	0.95	0.03		5 - 5	8.4	2.02	15" 0.6 1.64 125	0.25

EX 202
 EX 1203

STANDARD STORM DRAINAGE DESIGN
 FLOW TABULATION FORM
 SDD-5

RECONSTRUCTION OF OUTLET PROTECTION AT D 102
 MODIF. USDA SCS DETAIL ROP-1, (SEE DWG G-4)
 DESIGN BASED ON TABLE 38.11 FOR MIN. TAILWATER CONDITIONS:
 DISCHARGE TO UNCONFINED SECTION
 $Q = 8.75 \text{ cfs}$
 MIN. LENGTH OF APRON $L_a = 10'-0"$
 MIN. WIDTH OF APRON $W = D_o + L_a$
 $D_o = 18"$ therefore $W = 1.5' + 10' = 11.5'$
 $d_{50} = 2.5 \text{ inches}$, use 4" MIN STONE SIZE
 MIN STONE THICKNESS $d_{50} \times 1.5 = 6"$



DEPARTMENT OF PUBLIC WORKS STORM DRAIN FLOW TABULATION FORM

LOCATION: CENTENNIAL LANE ELEM. SCHOOL
 DEVELOPMENT: BUILDING ADDITION TO SDP-72-115
 MADE IN CONNECTION WITH J.O. No. _____
 STORM FREQUENCY _____

Date 6-9-86
 Sheet 4 Total in Comp. 5
 Computed by EP
 Checked by _____

LOCATION	AREA	ACRES	COEFF	CA	CA	CA	TIME CONC-MIN	INTEN	Q + CIA	PIPE n = 0.014	REMARKS
From To	Sub. Total		"C"				Inlet Drain Total	"I"	C.F.S.	Size Slope Vel. Lgth.	MIN. SLOPE
RD EX MH	0.17	Added	.95	0.16			5 5	8.4	3.13 Ex		
D 103									4.47 Ex 15"	0.40 3.63 115	0.56
D 103									7.11 Ex		
D 103							0.5 5.5		1.34 Ex 18"	0.76 4.34 45	0.72
									8.75 cfs		

SYSTEM IS ADEQUATE AND CAN ABSORB ADDITION OF FLOW OF $Q = 1.34 \text{ cfs}$ from Building Addition 0.17 AC impervious area (100%)

STANDARD STORM DRAINAGE DESIGN
 FLOW TABULATION FORM
 SDD-5

LOCATION: CENTENNIAL LANE ELEM. SCHOOL
 DEVELOPMENT: CHECK ON ADEQUACY OF EXISTING SYSTEM
 MADE IN CONNECTION WITH J.O. No. _____
 STORM FREQUENCY _____

Date 6-9-86
 SHEET 5 TOTAL IN COMP. 5
 COMPUTED BY _____
 CHECKED BY _____

NO.	TYPE	V	V	Q	Q	Q/Q	LOSS				TOTAL	REMARKS
							A	B	C	D		
EX MH		5.69	3.43	4.47	4.47	-	0.08	-0.31	0.06	-0.17	Actual Drop in Ex Structure 0.25 (Crown match)	
EX L/209		3.63	4.94	4.47	8.15	-	0.15	0.2	0.06	0.41	Actual Drop in Ex Structure 3.32	

STANDARD STORM DRAINAGE DESIGN
 STRUCTURE LOSSES
 SDD-3

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT
 DATE 8-26-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 DATE 10-9-86
 DATE 10-8-86

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DATE 8-26-86

9/18/88 - REVISED TO MEET COUNTY COMMENTS DATED AUG. 28, 1988



SDP - 86 - 267
 Planning and Building Addition to SDP 72-115
CENTENNIAL LANE ELEMENTARY SCHOOL
 HOWARD COUNTY, MD. 2ND ELECTION DISTRICT
 DRAINAGE DIVISION AND STORM DRAIN COMPUTATIONS

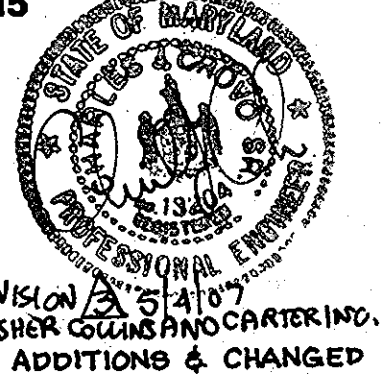
SUBDIVISION NAME	SECT./AREA	LOT/Parcel No.
PLAN # OF L.P. BLOCK	ZONE	DATE
WATER CODE	SEWER CODE	

ASSOCIATED ENGINEERS, INC.
 6555 SIXTEENTH STREET
 SILVER SPRING, MARYLAND 20910
 TEL. 301-580-7311

DATE: AUG. 6, 1986

REVISION: 5407 ADD BUILDING ADDITIONS & CHANGED SHEET NUMBERS

APPROVED
 DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
 HOWARD COUNTY, MARYLAND
 DATE 8-26-86



CHECK OF EXISTING STORM SYSTEM
 ADDED 0.17 ac. Roof Drains
 CENTENNIAL LANE ELEMENTARY SCHOOL
 BUILDING ADDITION TO SDP 72-115

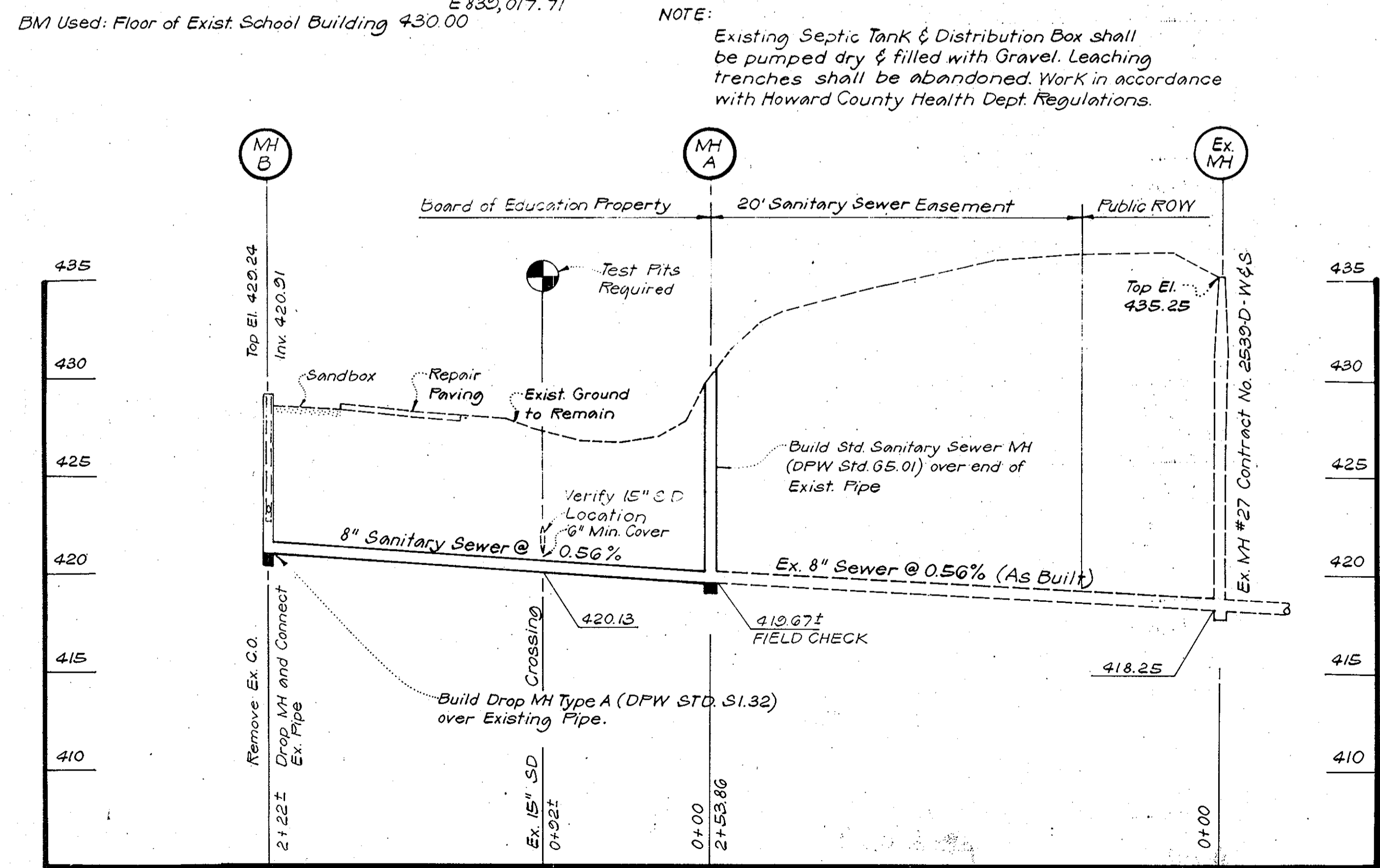
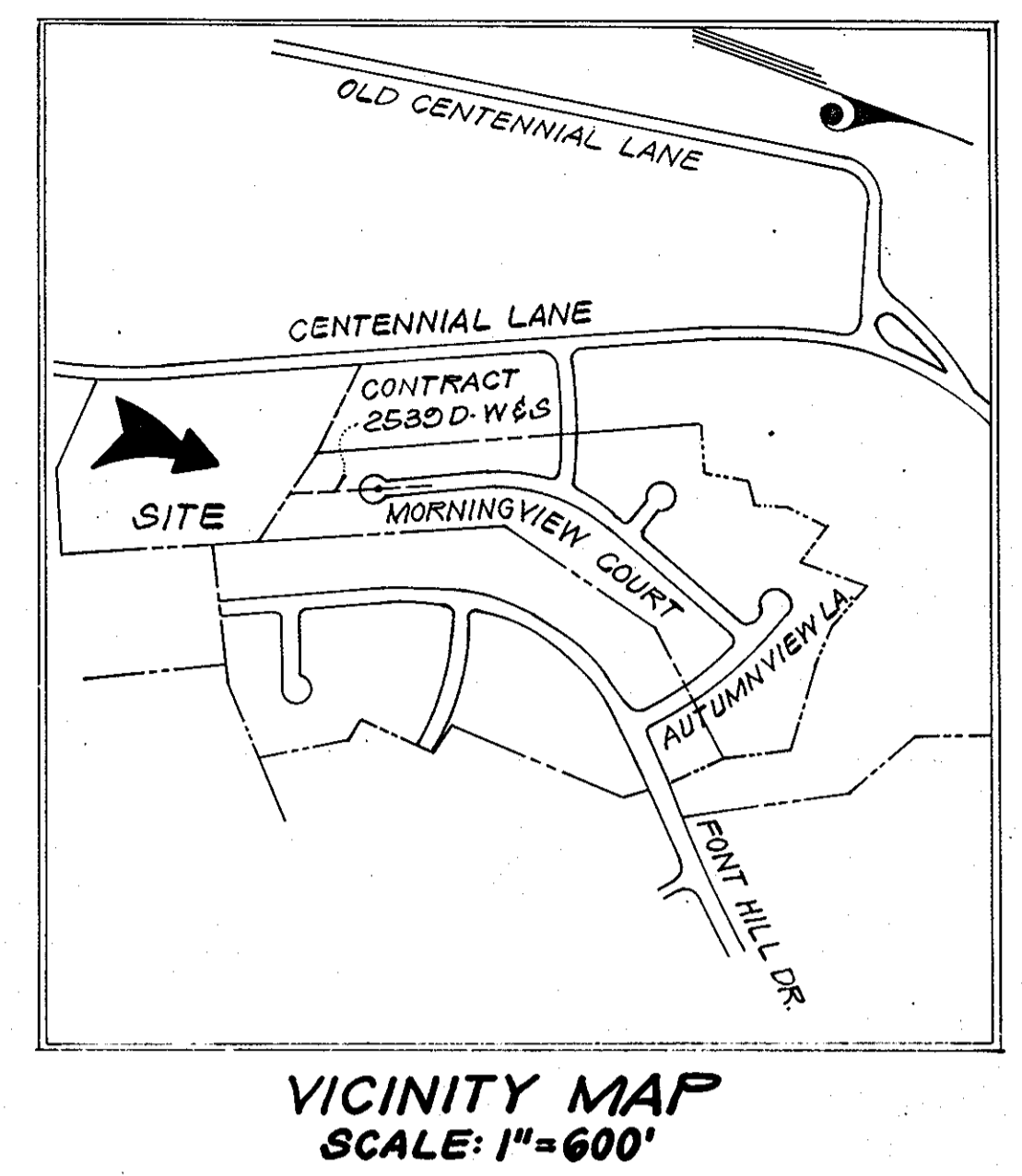
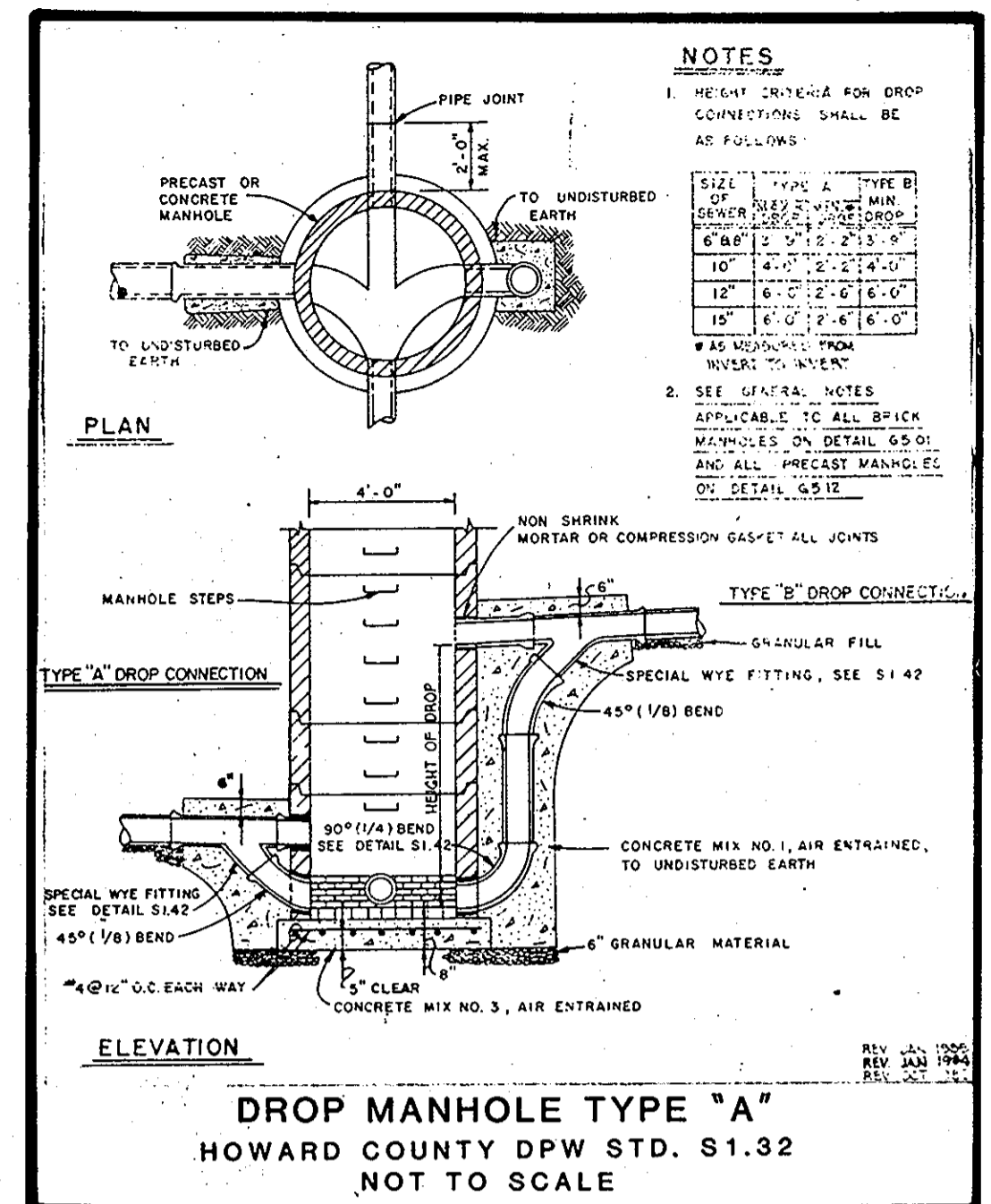
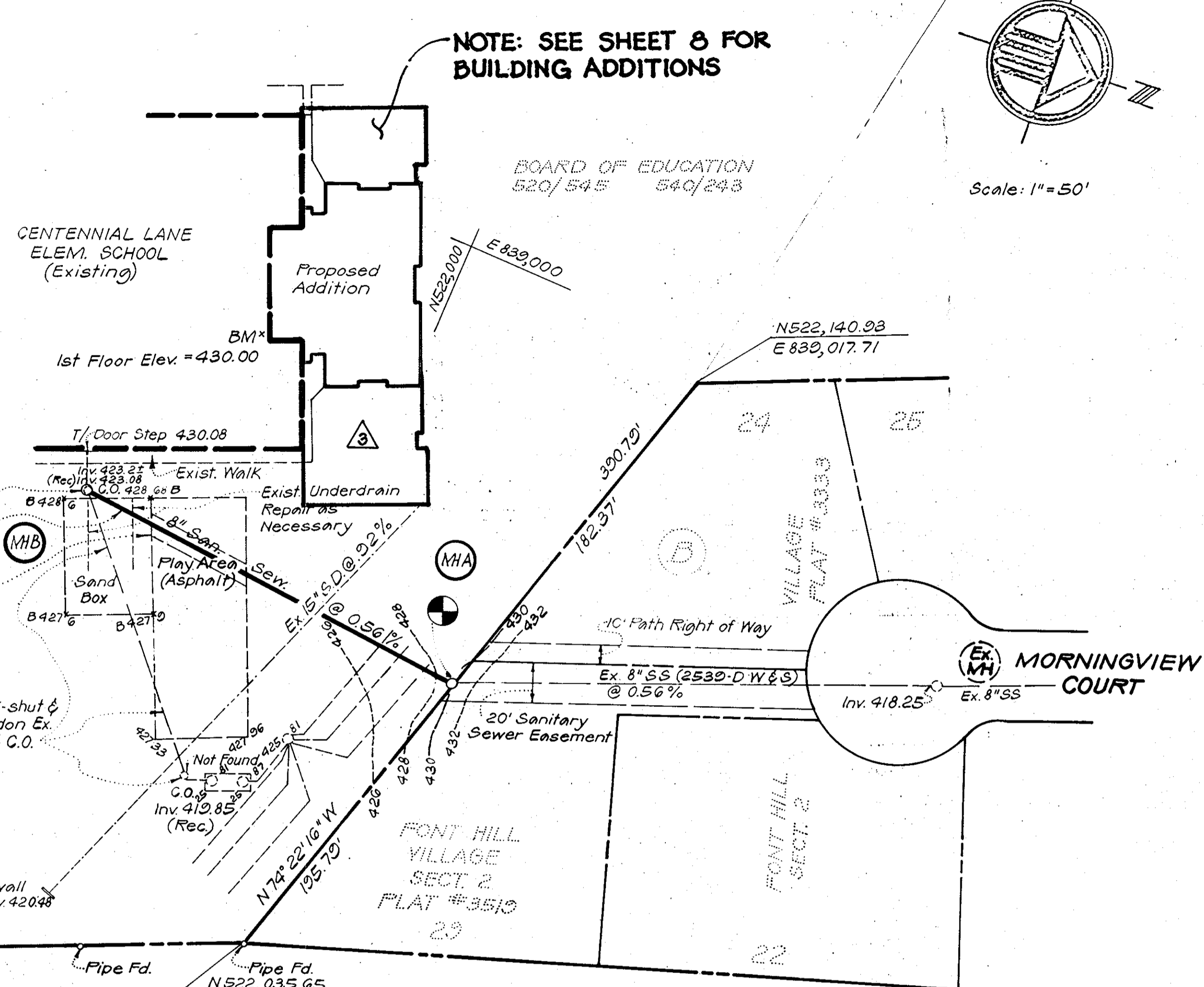
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS,
HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER: *[Signature]* DATE: 10-7-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
DIRECTOR: *[Signature]* DATE: 10-9-86

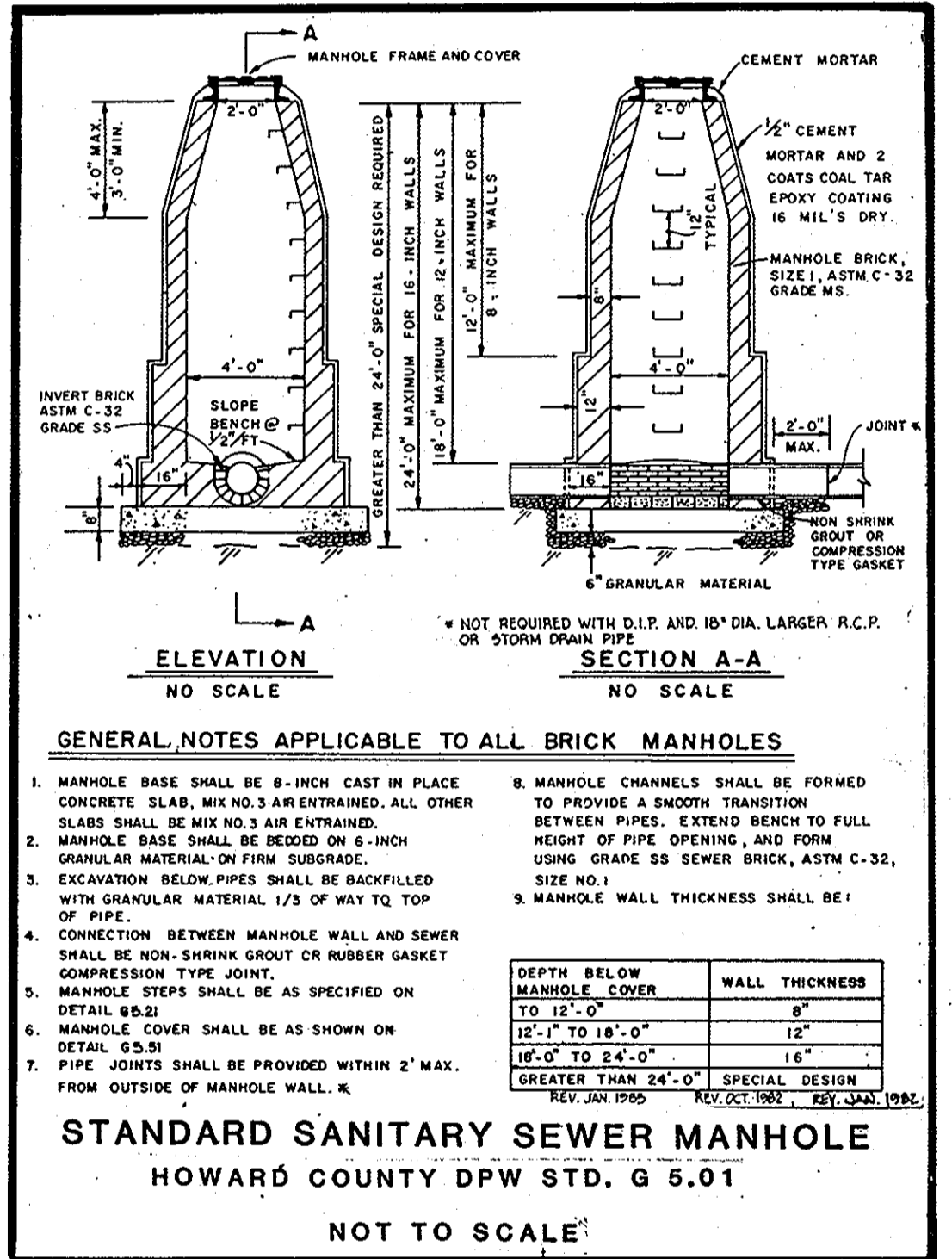
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR: *[Signature]* DATE: 10-3-86

CHIEF BUREAU OF ENGINEERING: *[Signature]* DATE: 10-2-86

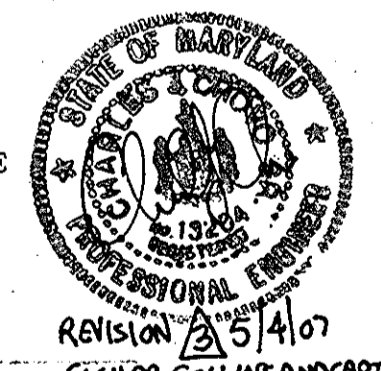
APPROVED
DIVISION OF LAND DEVELOPMENT &
ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE: 8-26-86
[Signature]



- NOTES:
- ALL ON-SITE SANITARY SEWER CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF DEPARTMENT OF PUBLIC WORKS, HOWARD COUNTY, MARYLAND.
 - ALL PIPE ELEVATIONS ARE PIPE INVERTS.
 - ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER.
 - CONTRACTOR SHALL PROVIDE A PIPE JOINT IN SEWER MAIN WITHIN 2'-0" OF THE EXTERIOR OF MANHOLE WALLS.
 - THREES ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT.
 - CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION AS DIRECTED BY THE ENGINEER.
 - EXISTING CONDITIONS ARE BASED ON A TOPOGRAPHIC SURVEY MADE DURING APRIL 1986, BY ASSOCIATED ENGINEERS, INC. BM USED: FLOOR ELEVATION OF EXISTING SCHOOL BUILDING, EL. 430.00. GRID SYSTEM IS BASED ON MARYLAND STATE COORDINATE SYSTEM.
 - CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF HOWARD COUNTY PUBLIC WORKS FACILITIES AND SCHOOL BOARD FACILITIES BEFORE BEGINNING CONSTRUCTION.
 - ALL EXCAVATIONS SHALL BE MADE BY OPEN CUT. BANKS OF TRENCHES SHALL BE KEPT AS NEARLY VERTICAL AS PRACTICABLE AND WHERE REQUIRED SHALL BE PROPERLY SHEETED AND BRACED. WHERE DAMAGE IS LIABLE TO RESULT FROM WITHDRAWING SHEET, THE SHEETING SHALL BE LEFT IN PLACE AT NO ADDITIONAL COST TO OWNER. ALL SHORING, SHEETING AND FENCING REQUIRED TO PERFORM AND PROTECT THE EXCAVATION AND TO SAFEGUARD EMPLOYEES AND PUBLIC SHALL BE PERFORMED AND SHALL MEET THE REQUIREMENTS OF M.O.S.H.A.
 - CONTRACTOR SHALL OBTAIN ALL PERMITS INCLUDING THE EXPEDITING OF ALL NECESSARY SIGNATURES AND PAPERWORK. THE OWNER SHALL PAY FOR PERMITS AND FEES REQUIRED. CONTRACTOR SHALL HAVE ALL INSPECTIONS MADE AND PERFORM ALL TESTS REQUIRED.
 - ON-SITE SEWER PIPE TO BE A.C.P. 2400 OR P.V.C.
 - PIPE JOINTS SHALL BE RUBBER COMPRESSION TYPE OR SOLVENT WELD AS PER SOLVENT MANUFACTURER'S RECOMMENDATIONS.
 - ALL ON-SITE SANITARY PIPE TO HAVE A MINIMUM OF 4'-0" COVER BELOW FINISHED GRADE.
 - SEPTIC SYSTEM SHALL REMAIN IN SERVICE UNTIL NEW WORK IS COMPLETE AND READY FOR OPERATION.
 - EXISTING SEPTIC SYSTEM TO HAVE SEWAGE AND EFFLUENT REMOVED AND DISPOSED OF BY A LICENSED OPERATOR. EMPTIED SEPTIC TANK TO BE FILLED IN WITH BANK-RUN GRAVEL.
 - RETURN DISTURBED EARTH TO ORIGINAL CONDITION: TOPSOIL, FERTILIZE, LIME AND SEED ALL DISTURBED AREAS IN ACCORDANCE WITH THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPED AREAS," 1983 EDITION.
 - TEST: A VISUAL LAMP INSPECTION SHALL BE MADE BETWEEN MANHOLES AND LINE OF FLOW SHALL BE CLEAR AND STRAIGHT. PIPING BETWEEN MANHOLES SHALL BE SUBJECT TO A 5 P.S.I. AIR TEST FOR 5 MIN. AND PROVED TIGHT.
 - INSPECTION OF THE ON-SITE SEWER SYSTEM SHALL BE DONE BY A REGISTERED PROFESSIONAL ENGINEER OR HIS DULY AUTHORIZED REPRESENTATIVE AND SAID ENGINEER SHALL CERTIFY THAT ALL CONSTRUCTION HAS BEEN DONE IN ACCORDANCE WITH THE PLUMBING REGULATIONS, COUNTY'S GENERAL SPECIFICATIONS AND CONDITIONS.



ASSOCIATED ENGINEERS, INC.
CIVIL ENGINEERS & LAND SURVEYORS
855 SIXTEENTH STREET
SILVER SPRING, MARYLAND 20910
TEL 301-589-7311



5-4-07 ADD BUILDING ADDITIONS & CHANGED SHEET NUMBERS

SUBDIVISION NAME: PLG 1 CR L/F 5/11/86 ZONE: R-20 TAX/ZONE MAP: 24 FILED, DIST: 2023.01 WATER CODE: F12 SEWER CODE: ---

Abraham Eddy and Eckhardt Architects
PO Box 477, Great Falls, Virginia 22066 (703) 756-6500

Centennial Lane
Elementary School

Howard County Public Schools
2nd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SDP-86-267

SEWER HOUSE CONNECTION

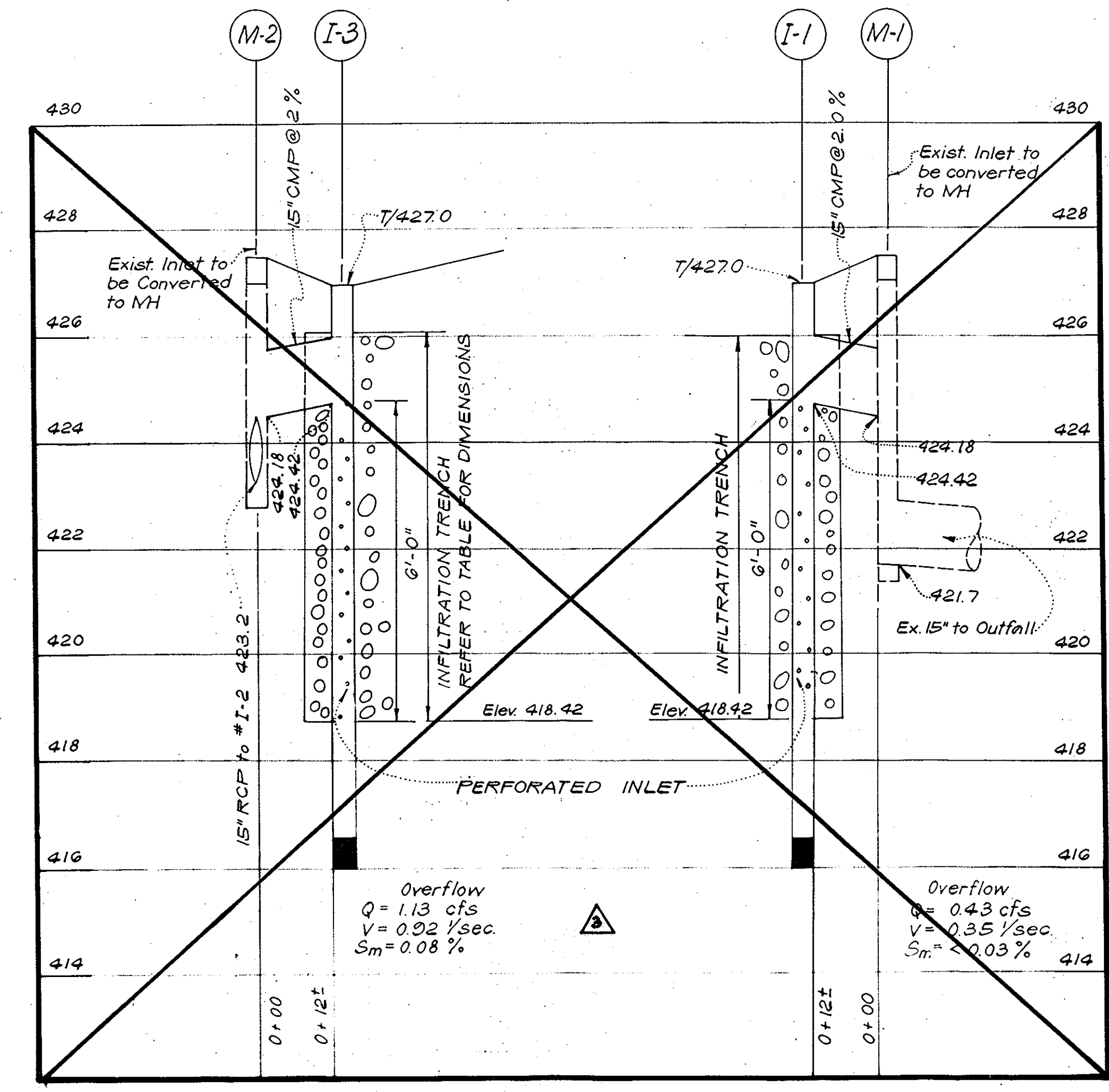
DATE: AUG 14, 1986

Rev. 5 OF 15

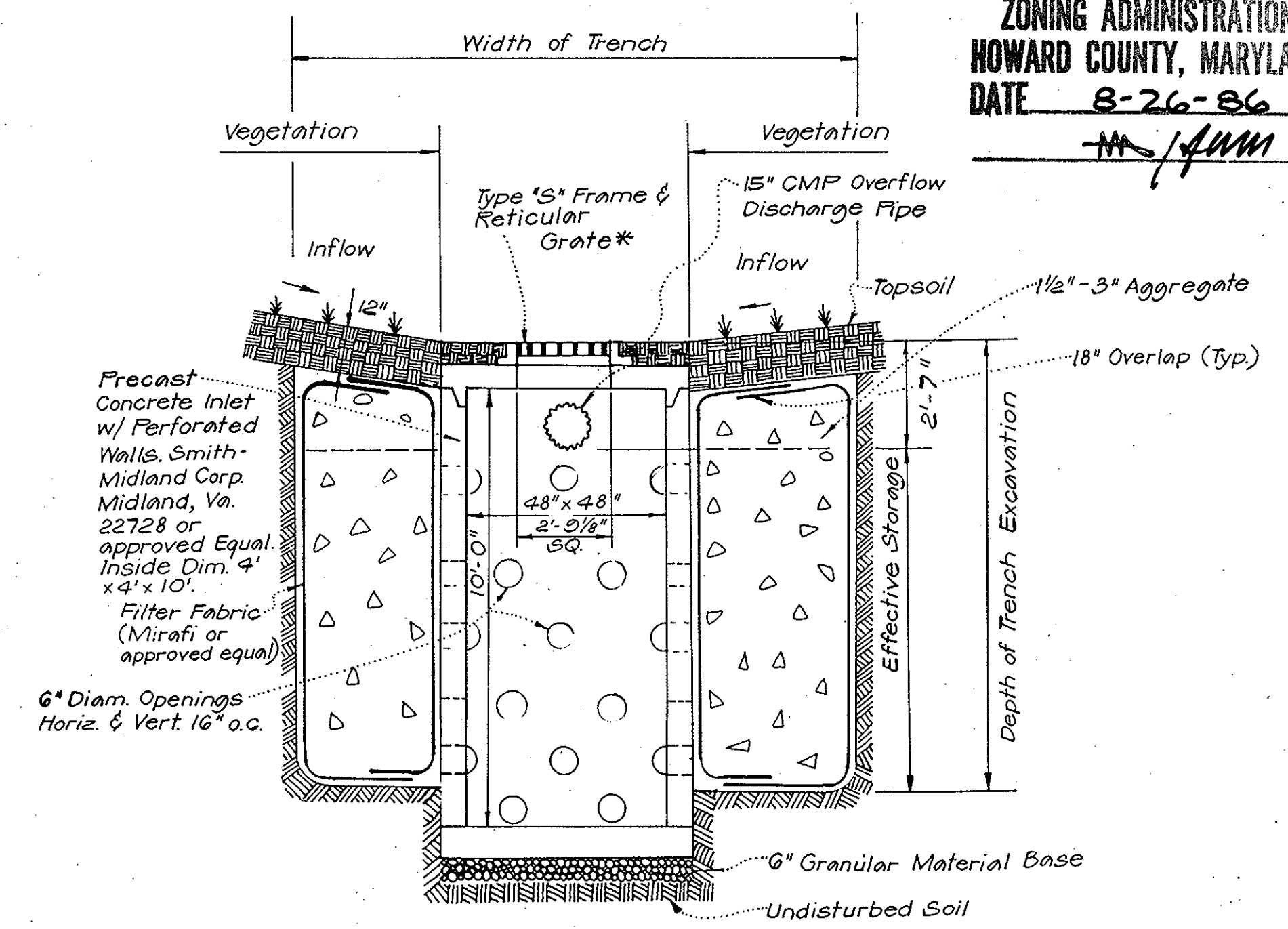
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
 HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: *Joseph B. Boyd* DATE: 10-7-86
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 COUNTY HEALTH OFFICER: *Thomas J. Korman* DATE: 10-9-86
 DIRECTOR: *Richard M. Brachman* DATE: 10-8-86
 CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION
 APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: *Don W. Nunn* DATE: 10-3-86
 CHIEF BUREAU OF ENGINEERING: *Blair J. F.* DATE: 10-2-86

APPROVED
 DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
 HOWARD COUNTY, MARYLAND
 DATE: 8-26-86
H. J. M.

- GENERAL NOTES:
- EXISTING CONDITIONS ARE BASED ON SURVEY DATED DECEMBER, 1985 AND PREPARED BY ASSOCIATED ENGINEERS, INC. BENCHMARK USED: ENTRANCE OF GROUND FLOOR OF CENTENNIAL LANE ELEMENTARY SCHOOL BUILDING, ELEVATION 430.00.
 - ALL DISTURBED UNPAVED AREA SHALL BE TOPSOILED, FERTILIZED, LIMED AND SEED, EXCEPT AREAS TO BE PLANTED AND AREAS TO BE SODED. TOPSOIL DEPTH SHALL BE MINIMUM 4 INCHES COMPACTED.
 - ALL SEDIMENT AND EROSION CONTROL FEATURES SHALL BE INSTALLED IN ACCORDANCE WITH THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPED AREAS," 1983 EDITION.
 - ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS AND THE APPLICABLE PROVISIONS OF THE MARYLAND STATE HIGHWAYS ADMINISTRATION STANDARDS AND SPECIFICATIONS FOR MATERIALS, HIGHWAYS, BRIDGES AND INCIDENTAL STRUCTURES.
 - A PREFIX OF 4 MAY HAVE TO BE ADDED TO ALL GRADES.
 - ALL UNSUITABLE AND EXCESS FILL MATERIAL SHALL BE DISPOSED OF OFF SITE. LOCATION OF DISPOSAL AREA SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
 - CONTACT "MISS UTILITY" AT LEAST 48 HOURS PRIOR TO COMMENCING EXCAVATIONS.
 - EXISTING UTILITIES ARE BASED ON AVAILABLE RECORDS AND WERE FIELD-CHECKED WHERE POSSIBLE. CONTRACTOR MUST DIG TEST PITS BY HAND AT UTILITY CROSSINGS AND CONNECTION POINTS TO VERIFY EXACT LOCATION AND INVERTS WELL IN ADVANCE OF CONSTRUCTION. IF CONNECTIONS ARE NOT AS SHOWN OR IF CONFLICT IS ANTICIPATED, ENGINEER SHALL BE NOTIFIED BEFORE PROCEEDING WITH TRENCHING.
 - CONTRACTOR SHALL CLEAN UP THE WORK AREA AT THE COMPLETION OF THE PROJECT. ALL AREAS DISTURBED DURING THE CONSTRUCTION ACTIVITY SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
 - THE CONTRACTOR SHALL CONTACT THE CONSTRUCTION INSPECTION DIVISION 24 HOURS IN ADVANCE OF START OF WORK AT TELEPHONE 792-2630.
 - CONTRACTOR SHALL PROVIDE ALL SUITABLE FILL MATERIAL. LOCATION OF BORROW SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
 - REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR BUILDING DIMENSIONS AND TIE-IN POINTS AND DIMENSIONS OF NEW ADDITION TO EXISTING SCHOOL STRUCTURE.
 - REFER TO MECHANICAL DRAWINGS FOR CONTINUATION OF ROOF DRAINS AND FOR WATER AND SEWER EXTENSIONS TO NEW BUILDING ADDITION.
 - CONCRETE CURB SHALL BE STANDARD 7" COMBINATION CURB AND GUTTER, HOWARD COUNTY DPW STD. R-3.01. PITCH GUTTER AWAY FROM CURB TO CONFORM TO ADJACENT DRAINAGE PATTERN.
 - PAVING FOR PARKING SHALL BE TYPICAL SECTION P-2 OF THE HOWARD COUNTY DPW STD. R-2.01.



STORM DRAIN PROFILES
 SCALE: HORIZ: 1" = 20'
 VERT: 1" = 2'



TYPICAL SECTION
INLET TO INFILTRATION TRENCH w/ OVERFLOW DISCHARGE PIPE

Note: Refer to Infiltration Trench Table for Dimensions of Trench.
 *Howard County DPW S.D. 4.93 NOT TO SCALE

CONSTRUCTION SEQUENCE FOR BUILDING CONSTRUCTION:

- OBTAIN GRADING PERMIT.
- INSTALL STABILIZED CONSTRUCTION ENTRANCE.
- CARRY OUT INITIAL TRENCH EXCAVATION FOR TEMPORARY STORMWATER MANAGEMENT (REFER TO STORMWATER MANAGEMENT CONSTRUCTION SEQUENCE FOR TRENCH DIMENSIONS.)
- INSTALL PERIMETER DIKE/SWALE TO DIRECT FLOW TO EXISTING INLETS TO BE CONVERTED LATER INTO MANHOLES M-1 AND M-2.
- INSTALL INLET PROTECTION AT EXISTING INLET TO BE REMOVED LATER (NEAR I-2).
- DEMOLISH EXISTING PAVING, STRIP TOPSOIL AND STOCKPILE.
- RELOCATE STORM DRAIN AND CONSTRUCT INLET TRAP AT I-2. REMOVE INLET AND PLUG STORM DRAIN PIPES REPLACED BY NEW SYSTEM.
- INSTALL SILT FENCES WHERE SHOWN.
- BEGIN BUILDING CONSTRUCTION AND CONSTRUCT CONCRETE WALKS AND SLABS.
- ROUGH GRADE, SPREAD TOPSOIL AND STABILIZE ALL DISTURBED, UNPAVED AREAS.
- COMPLETE EXCAVATION FOR PERMANENT INFILTRATION TRENCH, BUILD INLETS I-1 AND I-3.
- ADJUST TOPS OF EXISTING INLETS AND MODIFY TO FIT STANDARD MANHOLE AND FRAME AND COVER (MH-1 AND MH-2). CONNECT I-1 TO M-1 AND I-3 TO MH-3 AND FILL TRENCHES WITH STONE.
- REMOVE PERIMETER DIKE/SWALE, FINE GRADE, SPREAD TOPSOIL AND STABILIZE.
- REMOVE SEDIMENT TRAP AT I-2 AND ALL OTHER REMAINING SEDIMENT CONTROL FEATURES AND STABILIZE REMAINING DISTURBED AREAS.
- CLEAN UP AREA AND BEGIN MAINTENANCE.

CONSTRUCTION SEQUENCE FOR TEMPORARY STORMWATER MANAGEMENT INFILTRATION TRENCH "C" SIMILAR TO ABOVE EXCEPT INITIAL TRENCH EXCAVATION FOR TRENCH "C" SHALL BE AS FOLLOWS:

TOP OF TRENCH 428.0
 LENGTH 18'
 WIDTH 12.3'
 DEPTH 4.25'

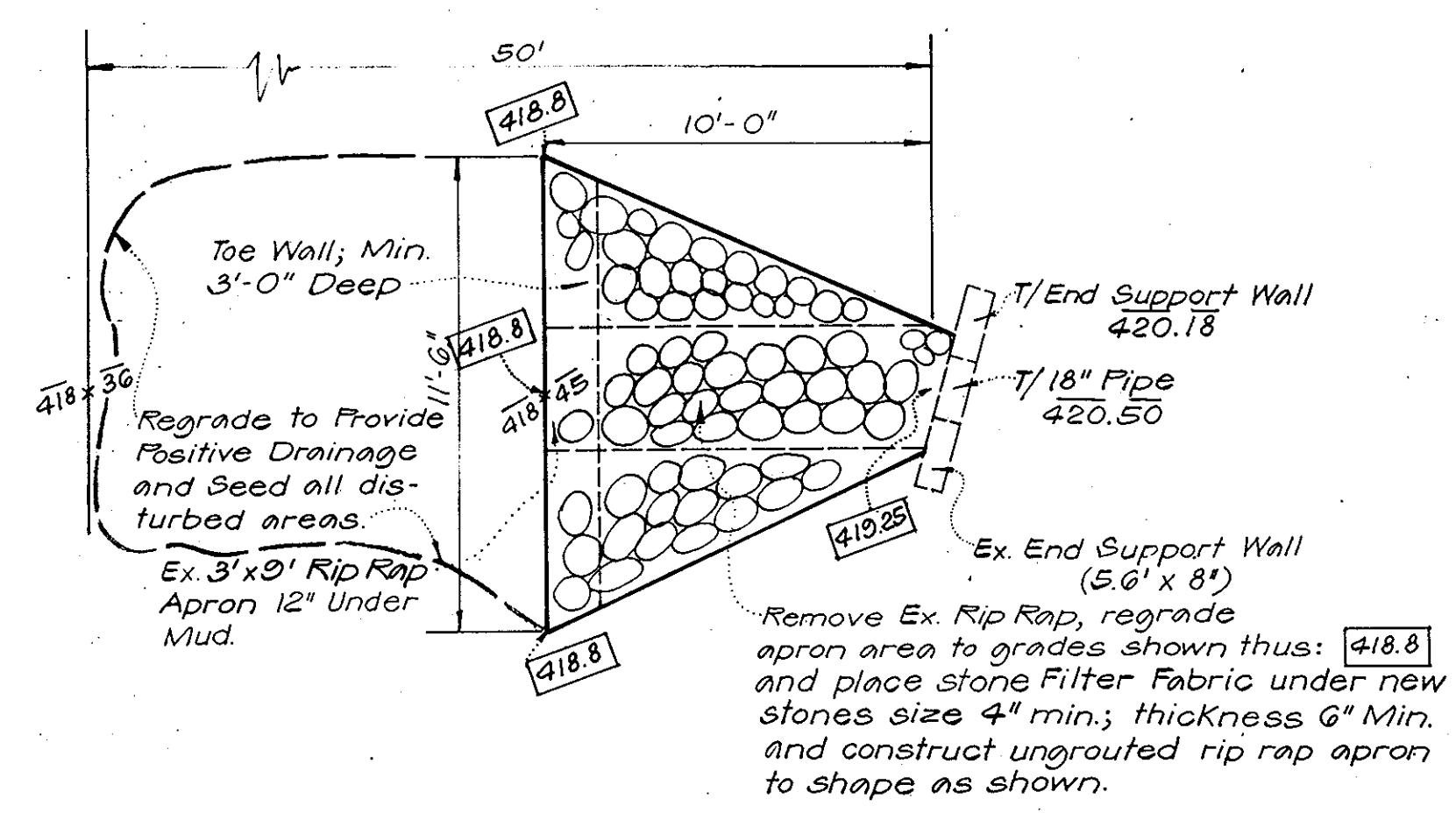
BOTTOM OF TRENCH AT ELEVATION 423.75.

CONSTRUCTION SEQUENCE FOR TEMPORARY STORMWATER MANAGEMENT INFILTRATION TRENCH "A" AND "B":

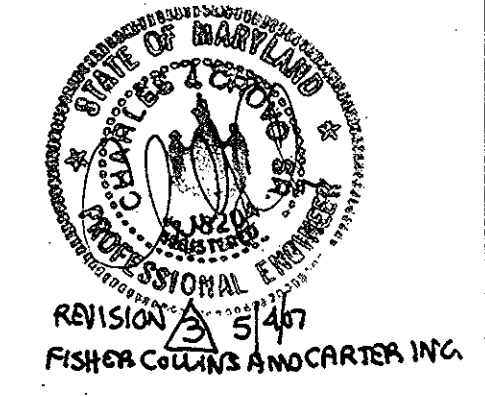
- CARRY OUT INITIAL TRENCH EXCAVATION DURING ROUGH GRADING PHASE TO ALLOW TRENCH TO ACT AS A TEMPORARY STORMWATER MANAGEMENT FEATURE. REFER TO THIS SHEET FOR COORDINATION w/SEDIMENT CONTROL SEQUENCE.
- THE INITIAL TRENCH EXCAVATION SHOULD BE TO THE FOLLOWING DIMENSIONS: TOP OF TRENCH 426.75
 LENGTH 20.3 FT.
 WIDTH 13.0 FT.
 DEPTH 4.75 FT. *
 BOTTOM OF TRENCH AT ELEVATION 422.00
 EXCAVATE TEMPORARY TRENCH ON CENTER AXIS OF PERMANENT INFILTRATION TRENCH.
- AFTER INSTALLATION OF CONCRETE WALKS AND COMPLETION OF ADDITION AND STABILIZATION OF ALL DISTURBED AREAS REMOVE ALL ACCUMULATED SEDIMENT IN TRENCH.
- EXCAVATE TRENCH TO FINAL DIMENSION AND ELEVATION CALLED FOR ON DWG G-1, CONSTRUCT INLETS I-1 AND I-3 AND FILL TRENCHES WITH STONE AND COVER WITH 12" OF TOPSOIL.
- FINE GRADE AROUND TRENCH AND STABILIZE REMAINING DISTURBED AREAS.

CONSTRUCTION SEQUENCE FOR PARKING CONSTRUCTION:

- INSTALL INLET PROTECTION AT EXISTING INLET I-5, AND STRIP TOPSOIL.
- REMOVE EXISTING INLET WEST OF I-5.
- CARRY OUT INITIAL TRENCH EXCAVATION FOR TEMPORARY STORMWATER MANAGEMENT TRENCH "C." (REFER TO STORMWATER MANAGEMENT CONSTRUCTION SEQUENCE - TRENCH "C" FOR TRENCH DIMENSIONS.)
- FINE GRADE FOR INSTALLATION OF CURB AND BASE COURSE.
- CONSTRUCT CURB AND BASE COURSE.
- FINE GRADE UNDISTURBED UNPAVED AREAS.
- COMPLETE EXCAVATION FOR PERMANENT INFILTRATION TRENCH. BUILD INLET I-4 AND CONNECT TO I-5 AND FILL TRENCH WITH STONE.
- SPREAD TOPSOIL AND STABILIZE.
- STABILIZE REMAINING DISTURBED AREA AND REMOVE INLET PROTECTION.
- CLEAN UP AREA AND BEGIN MAINTENANCE.



RECONSTRUCTION OF EXISTING OUTFALL APRON SOUTH OF SCHOOL BUILDING AT
 Scale: 1" = 4'



5-4-07 CHANGED SHEET NUMBERS & DELETE STORM DRAIN PROFILE

SUBDIVISION NAME	SECT./AREA	LOT/PARCEL #
---	---	1029
PLAT # OR L.P. BLOCK #	ZONE	TAX/USE MAP
540/235/1, 8, 13	R-20	24
540/235/4		2
WATER CODE	SEWER CODE	
F12	---	6023.01

Parking and Building Addition to SDP 72-115

Abrash Eddy and Eckhardt Architects
 P.O. Box 477, Great Falls, Virginia 22066 (703) 769-5500

Centennial Lane
 Elementary School
 Howard County Public Schools
 2nd ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SDP-86-267

NOTES AND DETAILS	G-4 SHEET
Date AUG. 14, 1986	Rev.
	4 OF 15



9/18/86 - REVISED TO MEET COUNTY COMMENTS DATED AUG. 26, 1986

OWNER:
 BOARD OF EDUCATION
 10910 ROUTE 108
 ELLICOTT CITY, MD. 21043
 TEL. (301) 922-0500

ASSOCIATED ENGINEERS, INC.
 8555 SIXTEENTH STREET
 SILVER SPRING, MARYLAND 20910
 TEL. 301-589-7311

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

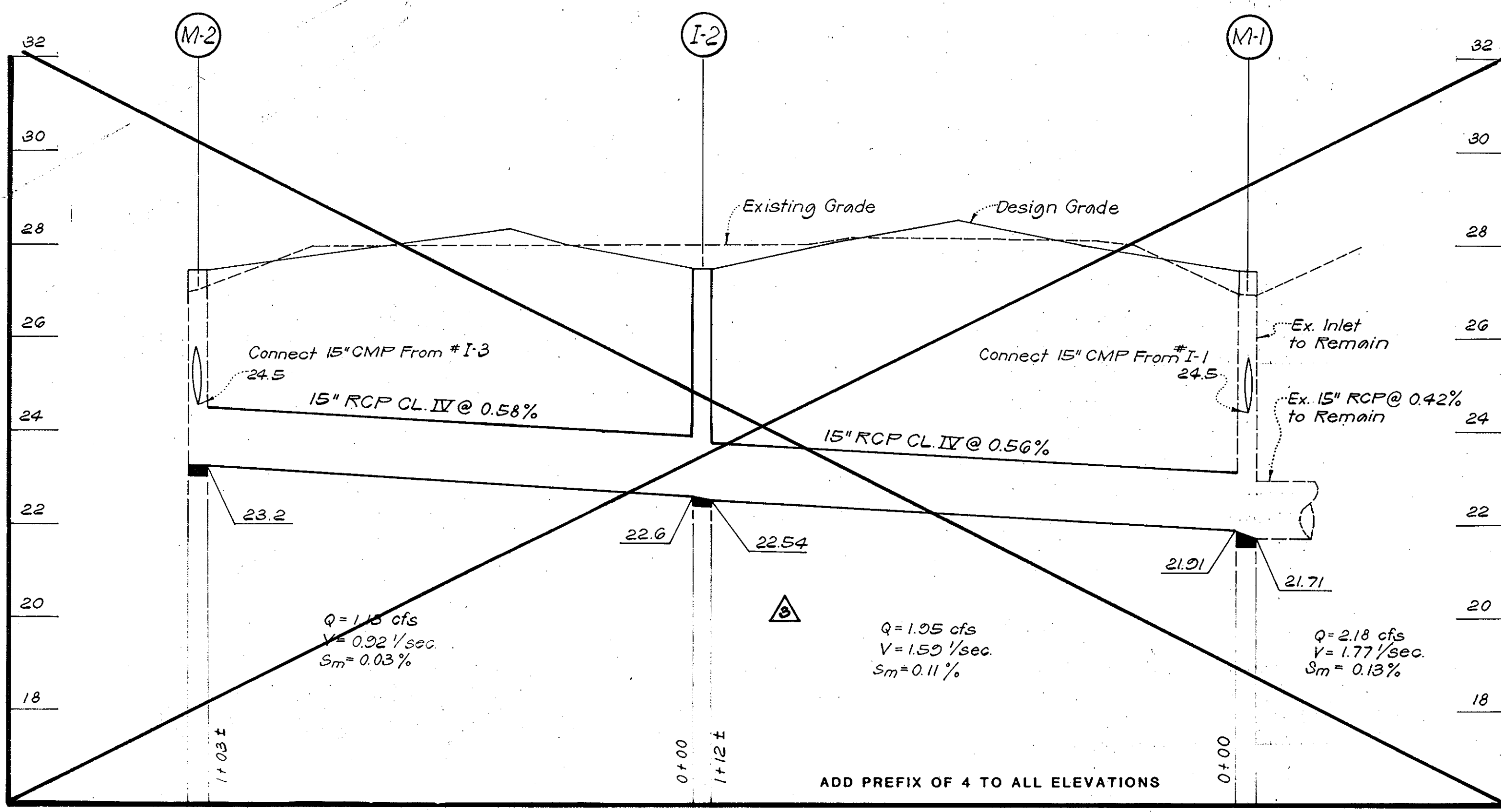
10-2-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
10-7-86

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

10-2-86

10-2-86



STORM DRAIN PROFILE
SCALE: HORIZ.: 1" = 50'
VERT.: 1" = 2'

SEDIMENT SILT TRAP SCHEDULE

TRAP AT STRUCTURE	TRIBUTARY AREA (AC)	REQUIRED STORAGE (1800 CF/AC)	DIMENSION OF TRAP L x W x D (FT)	ACTUAL STORAGE CF/AC	TRAP TYPE
I-2	0.45	810	7' 7" x 3.5'	858	ST-III

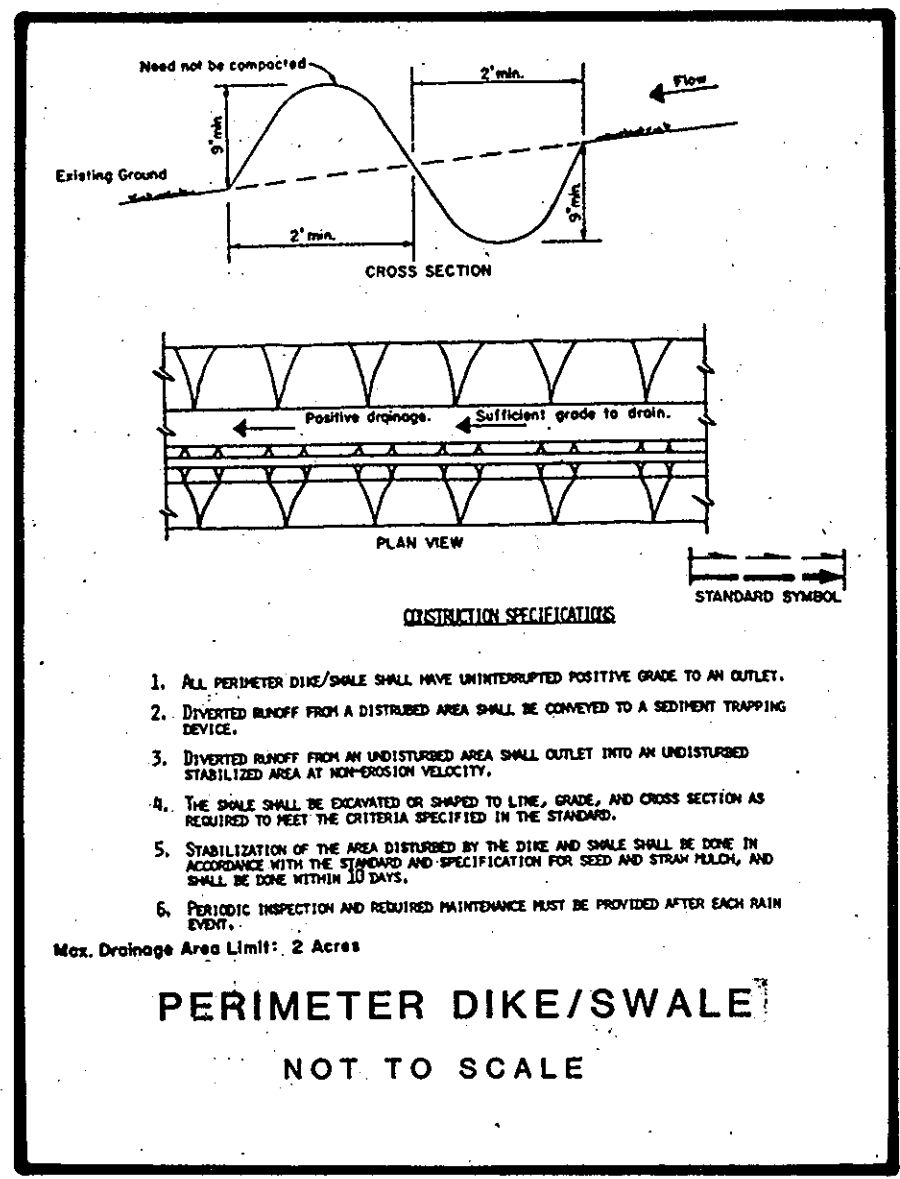
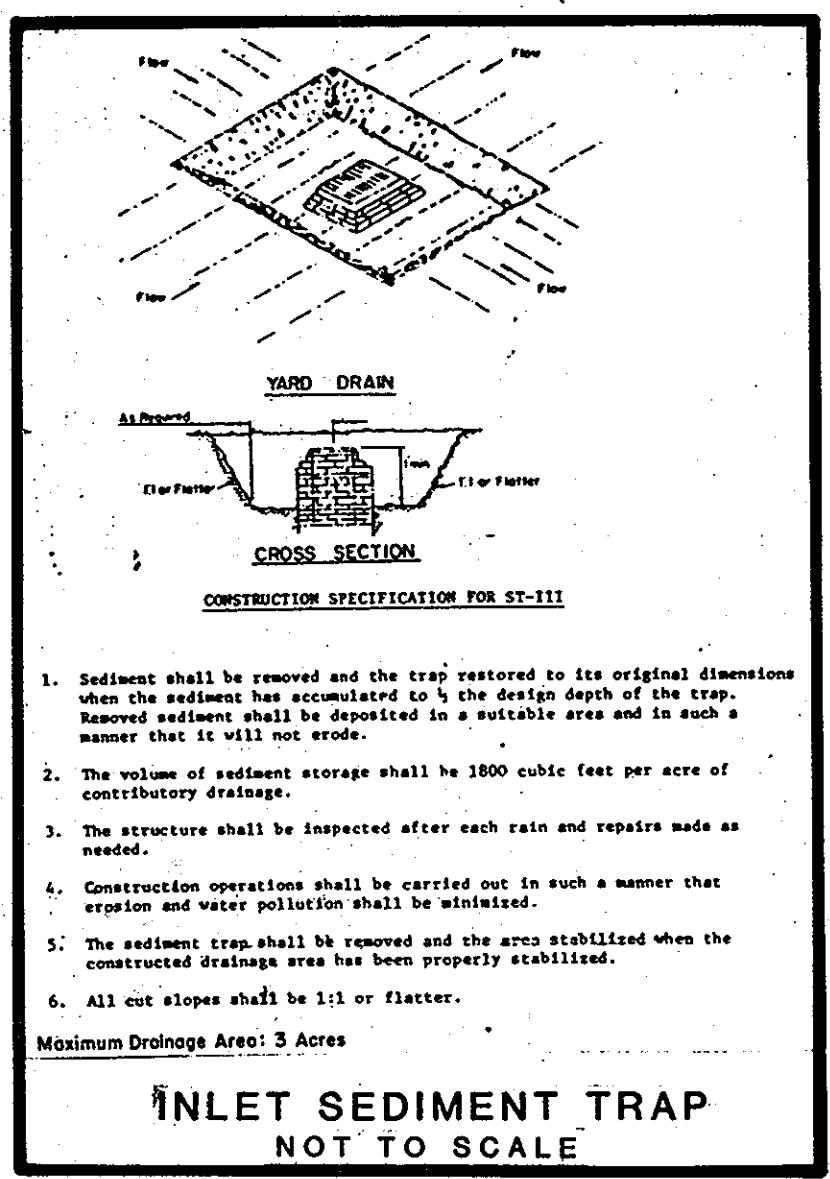
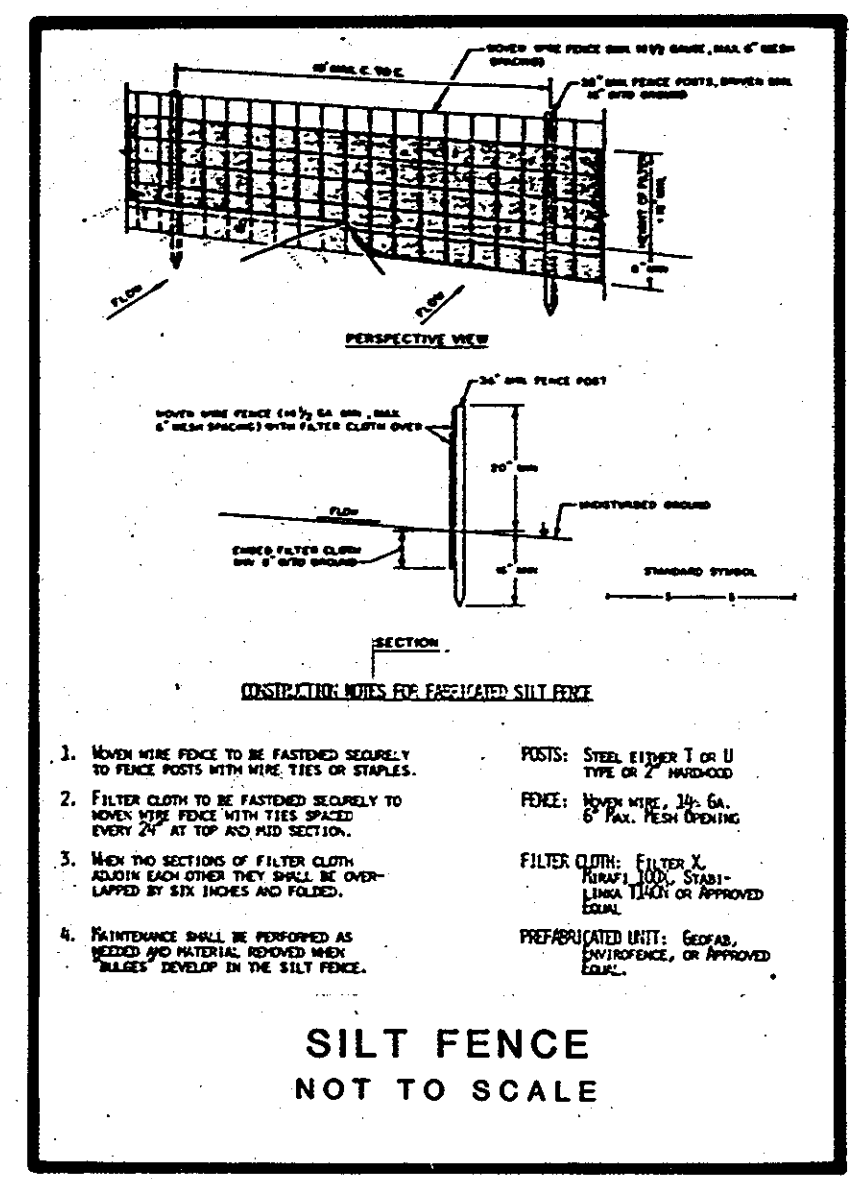
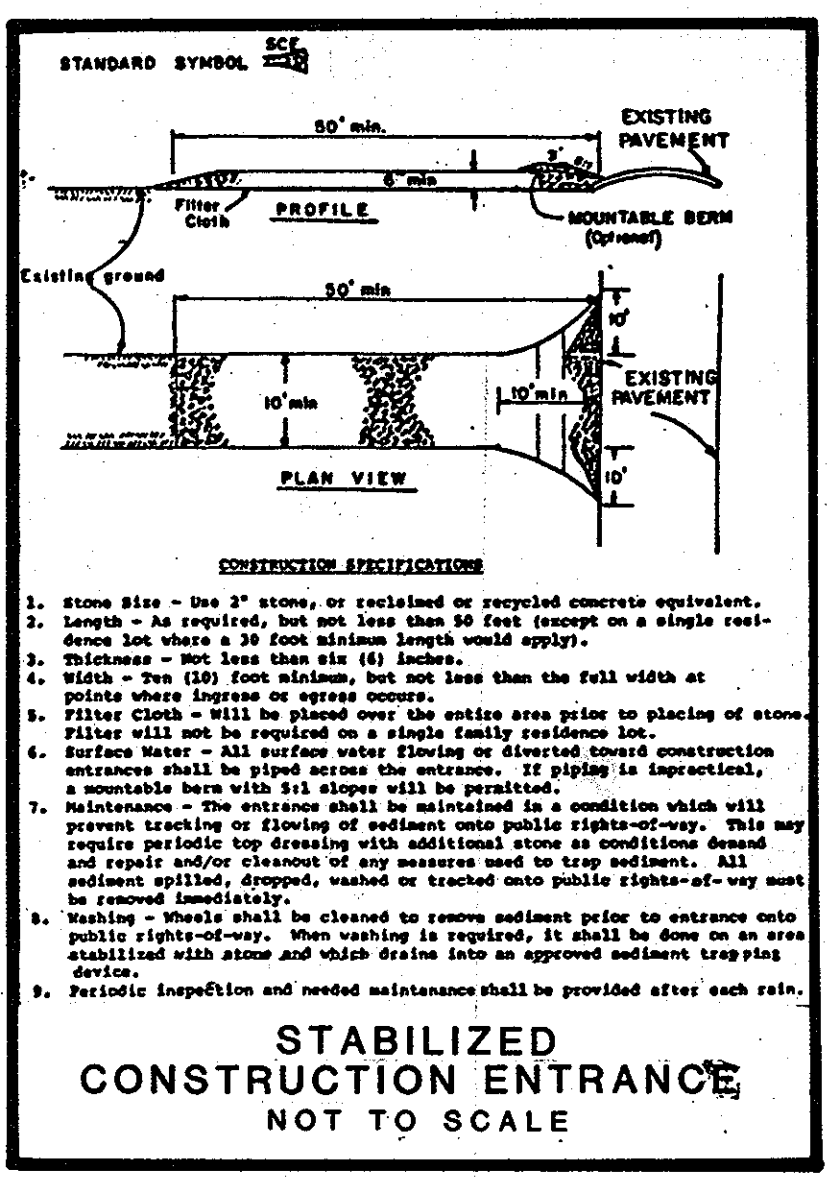
NOTE: OFFSET TRAP IF NECESSARY TO ALLOW CLEARANCE OF 1 FOOT (MIN.) OVER EXISTING PIPE.

- SEDIMENT CONTROL NOTES:**
- A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION (922-2437).
 - ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1983 "MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL."
 - FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
 - ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12 OF THE HOWARD COUNTY DESIGN MANUAL, "STORM DRAINAGE."
 - ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1983 "MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" FOR PERMANENT SEEDINGS (SEC. 51) SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52), AND AS SPECIFIED HEREIN.
 - TOPSOIL SHALL MEET ALL APPLICABLE REQUIREMENTS OF THE SPECIFICATIONS FOR MATERIALS, HIGHWAYS, BRIDGES AND INCIDENTAL STRUCTURES OF THE MARYLAND STATE HIGHWAY ADMINISTRATION. TOPSOIL SHALL BE 4 INCHES THICK (COMPACTED).
 - LIME SHALL BE SPREAD AT A RATE OF ONE (1) TON PER ACRE.
 - FERTILIZER 5-10-10 OR EQUIVALENT SHALL BE APPLIED AT A RATE OF 1700 LBS. PER ACRE. BOTH LIME AND FERTILIZER SHALL BE UNIFORMLY APPLIED TO THE LOOSENEED TOPSOIL AND SHALL BE RAKED SMOOTH PRIOR TO SEEDING.
 - SEED SHALL BE "KENTUCKY 31" TALL FESCUE APPLIED AT A RATE OF 2 LBS. PER 1,000 SQ. FT. STRAW MULCH SHALL BE UNIFORMLY APPLIED AT THE RATE OF 70 TO 90 LBS. PER 1,000 FT.
 - SOD SHALL BE A CLASS OF TURF GRASS SOD AND SHALL BE MARYLAND STATE CERTIFIED.
 - SITE ANALYSIS:

TOTAL AREA OF SITE: 11.22 AC
AREA DISTURBED: 1.34 AC
AREA TO BE PAVED AND/OR ROOF AREA ADDED = 0.68 AC

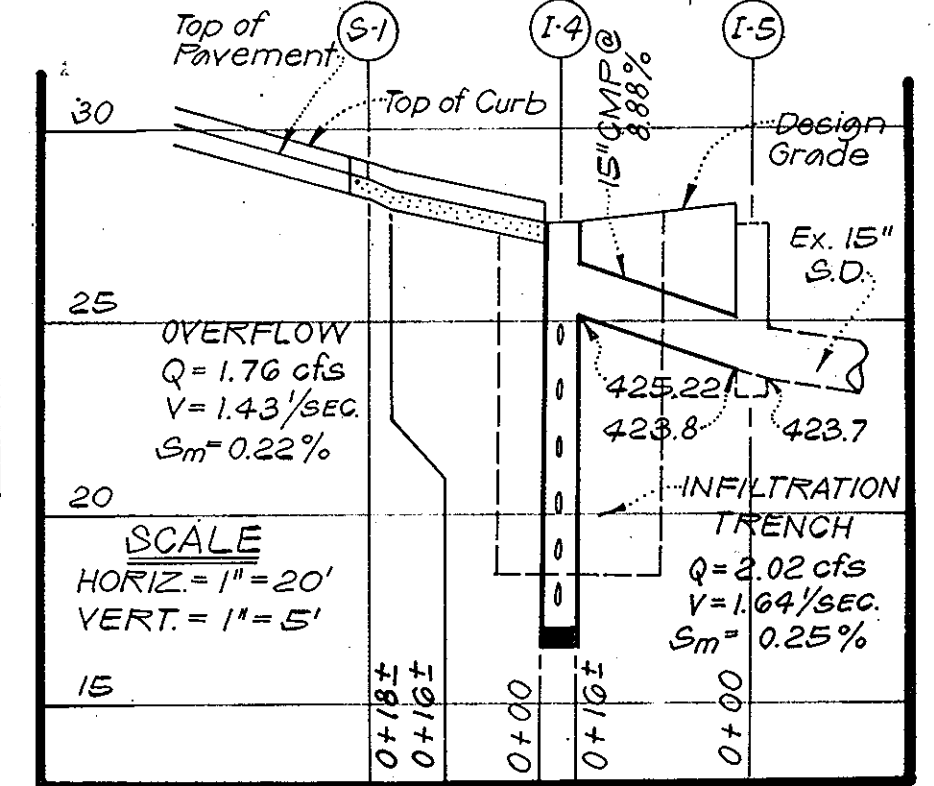
AREA TO BE VEGETATIVELY STABILIZED: 0.66 AC

OFF-SITE WASTE AREA LOCATION: TO BE SUBMITTED
OFF-SITE BORROW AREA LOCATION: TO BE SUBMITTED
CONTRACTOR WILL BE REQUIRED TO PROVIDE THE ABOVE INFORMATION PRIOR TO ISSUANCE OF THE PERMIT AND SUBMIT A SEDIMENT CONTROL PLAN ACCEPTABLE TO THE SOIL CONSERVATION DISTRICT.
 - ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
 - ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY DPW SEDIMENT CONTROL INSPECTOR.



STRUCTURE TABLE

NO.	TYPE	TOP ELEV.	INV. IN	INV. OUT	REMARKS
M-1	EXISTING INLET	427.50	424.18	421.71	REBUILD TOP OF STRUCTURE AND PROVIDE WITH CONCRETE HANDRAILS, FRAME AND COVER. CONNECT NEW PIPE AND REPAIR STRUCTURES AS NECESSARY.
M-2	EXISTING INLET	427.50	424.18	423.3	AS DETAILED
I-1	INLET TO INFILTRATION TRENCH	427.00	-	424.42	AS DETAILED
I-2	TYPE 'B' INLET	427.50	423.00	422.51	DPW STD. SD-42.2 WITH PERFORATED GRATE
I-3	INLET TO INFILTRATION TRENCH	427.00	-	424.42	AS DETAILED
I-4	INLET TO INFILTRATION TRENCH	427.8	-	425.22	AS DETAILED
I-5	EXISTING INLET	-	423.8	423.70	CONNECT NEW PIPE AND REPAIR STRUCTURE AS NECESSARY
B-1	CURB OPENING	-	-	-	MODIFIED MESA STD. MD.-64001



SUBDIVISION NAME SECT./AREA LOT/PARCEL #

1020

PLAT # OR L.P. BLOCK # ZONE TAX/ZONE MAP ELEC. DIST. CENSUS TR.

542-238 R-20 24 2 6023.01

WATER CODE F12 **SEWER CODE**

Parking and Building Addition to SDP 72-115

Abrash Eddy and Eckhardt Architects
PO Box 477, Great Falls, Virginia, 22066 (703) 759-5500

Centennial Lane
Elementary School

Howard County Public Schools
2nd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

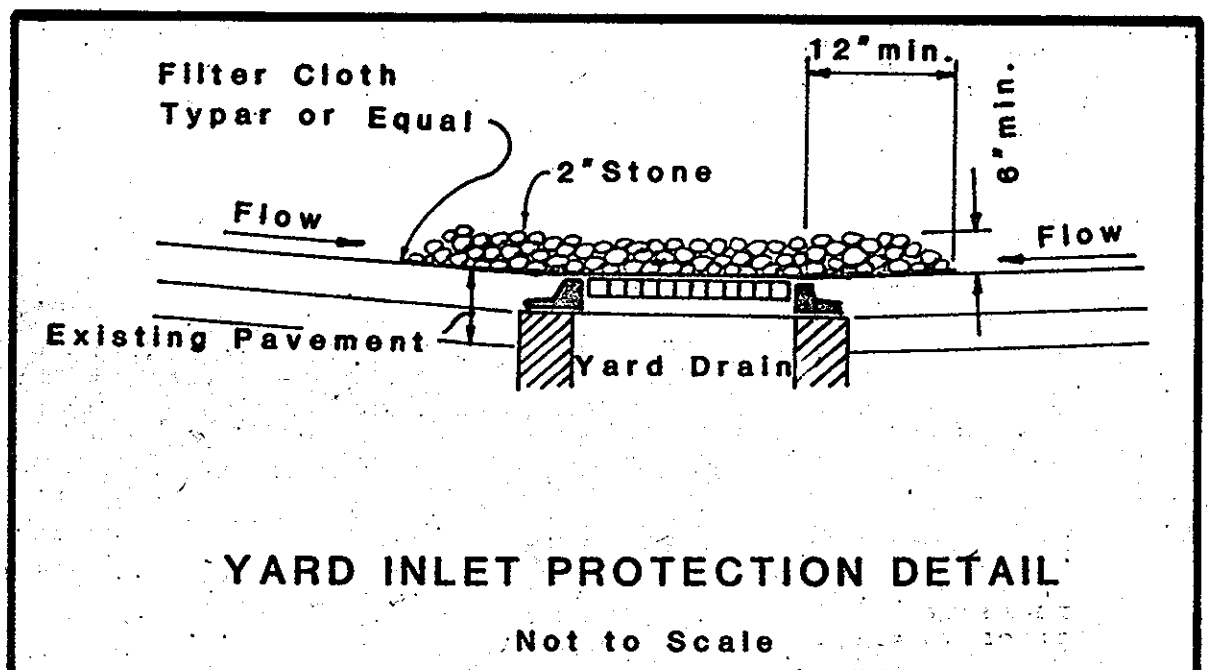
SDP-86-267

PROFILES & DETAILS

DATE: AUG. 14, 1986

3 OF 15

OWNER:
BOARD OF EDUCATION
10910 ROUTE 108
ELLCOTT CITY, MD. 21043
TEL. (301)922-0500



Reviewed for _____ S.C.D.
Name _____
and meets Technical Requirements

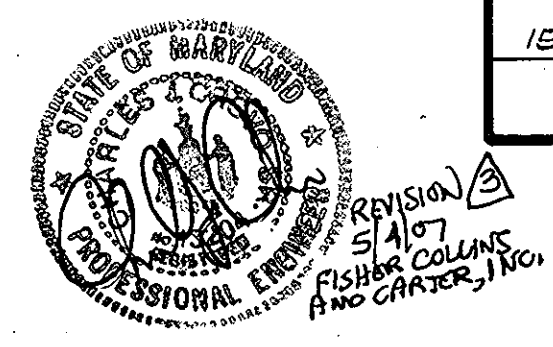
Signature _____ Date 9-29-86

U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

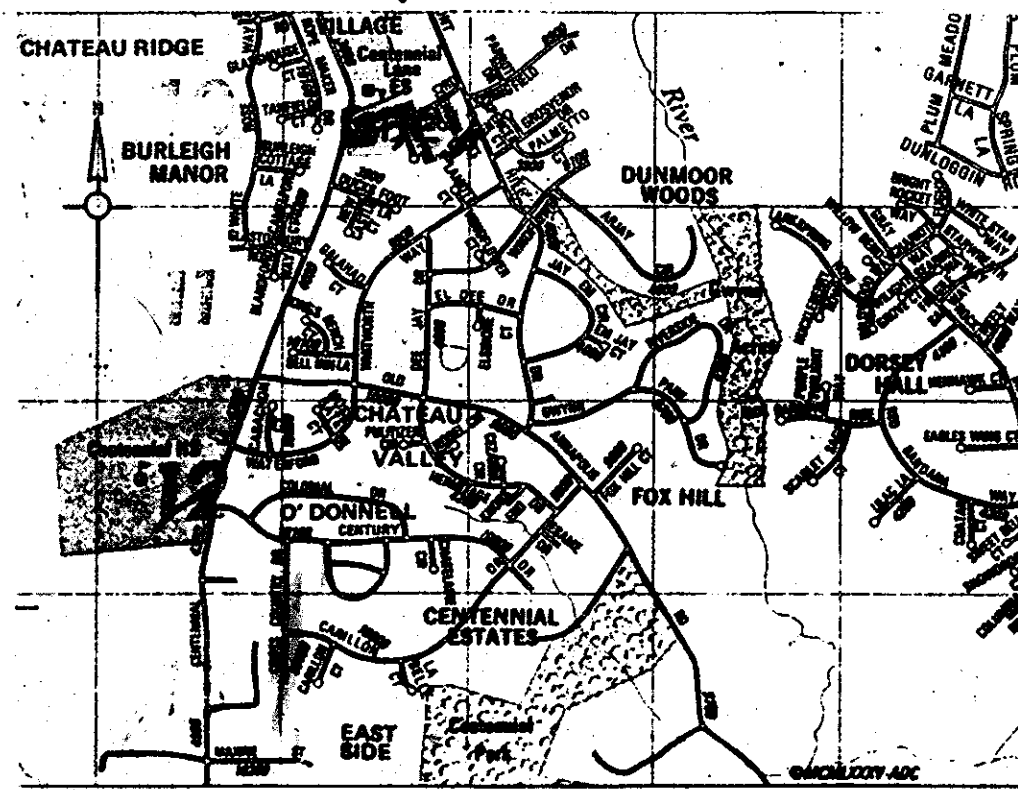
Approved _____ 9/29/86
Howard S.C.D.

ASSOCIATED ENGINEERS, INC.
8355 SIXTEENTH STREET
SILVER SPRING, MARYLAND 20910
TEL. 301-589-7311



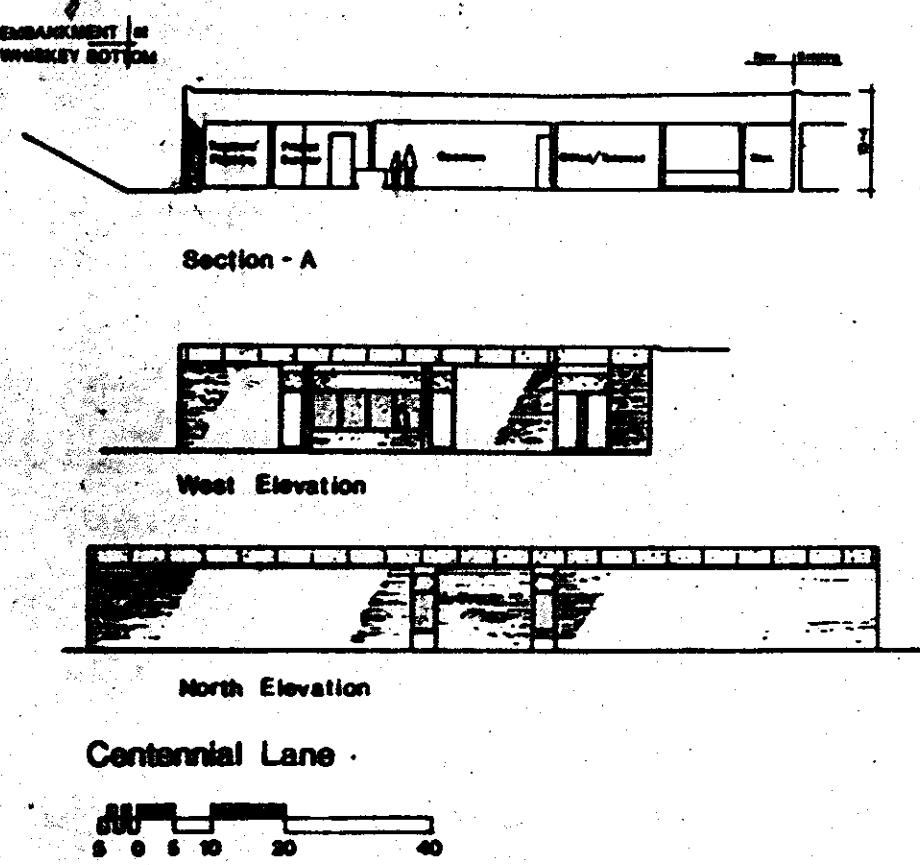
5-4-07 CHANGE SHEET NUMBERS, DELETE STORM DRAIN PROFILE & REVISE SITE ANALYSIS CHART

9/18/86 - REVISED TO MEET COUNTY COMMENTS DATED AUG. 26, 1986



VICINITY MAP
SCALE 1" = 2000'

TOTAL AREA OF PROPERTY = 11.22 AC



DEVELOPER'S CERTIFICATION
I certify that all development and/or construction will be done according to this plan of development and plan for Erosion and Sediment Control and I also authorize periodic on-site inspection by the Howard County Soil Conservation District or their authorized agents, as are deemed necessary. Deviation from this plan will not be made unless authorized by the Howard County Soil Conservation District.
Henry Hanning
Signature: _____ Date: 9/24/86

DESIGN CERTIFICATION
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITION AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
Eva M. Peruzka
SIGNATURE: _____ DATE: 9/18/86

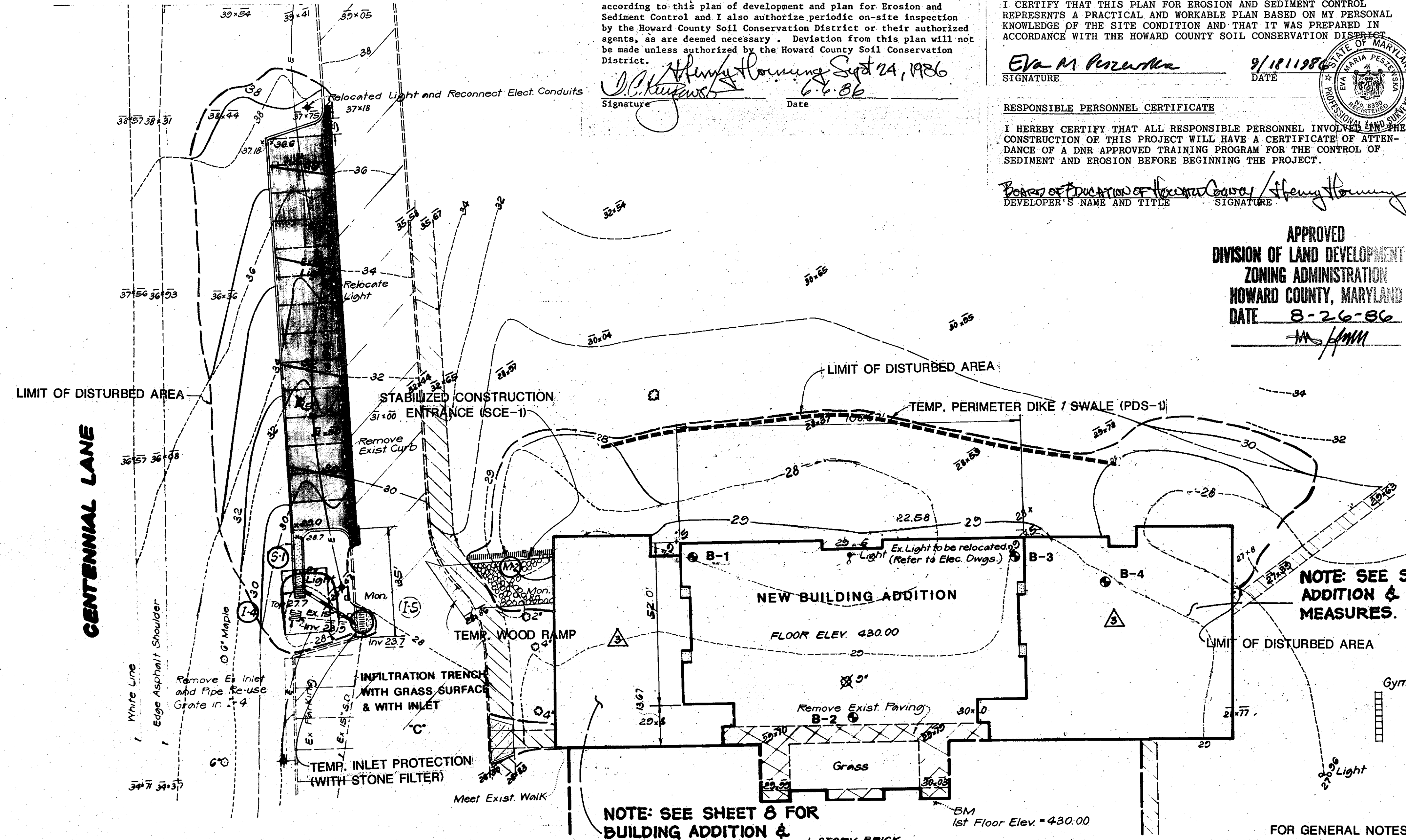
RESPONSIBLE PERSONNEL CERTIFICATE
I HEREBY CERTIFY THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION OF THIS PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE OF A DNR APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.
Henry Hanning
DEVELOPER'S NAME AND TITLE: _____ SIGNATURE: _____

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
John W. Munn
COUNTY HEALTH OFFICER DATE: 10-7-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
John W. Munn
DIRECTOR DATE: 10-9-86

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
John F. Neugebauer
DIRECTOR DATE: 10-2-86

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE: 8-26-86



NOTE: SEE SHEET 8 FOR BUILDING ADDITION & SEDIMENT CONTROL MEASURES.
NOTE: THIS DRAWING SHALL BE USED FOR SEDIMENT CONTROL ONLY. REFER TO DWG. G-4 FOR CONSTRUCTION SEQUENCE AND SEQUENCE OF CONSTRUCTION OF STORMWATER MANAGEMENT INFILTRATION TRENCHES.

NOTE: SEE SHEET 8 FOR BUILDING ADDITION & SEDIMENT CONTROL MEASURES.
1 STORY BRICK

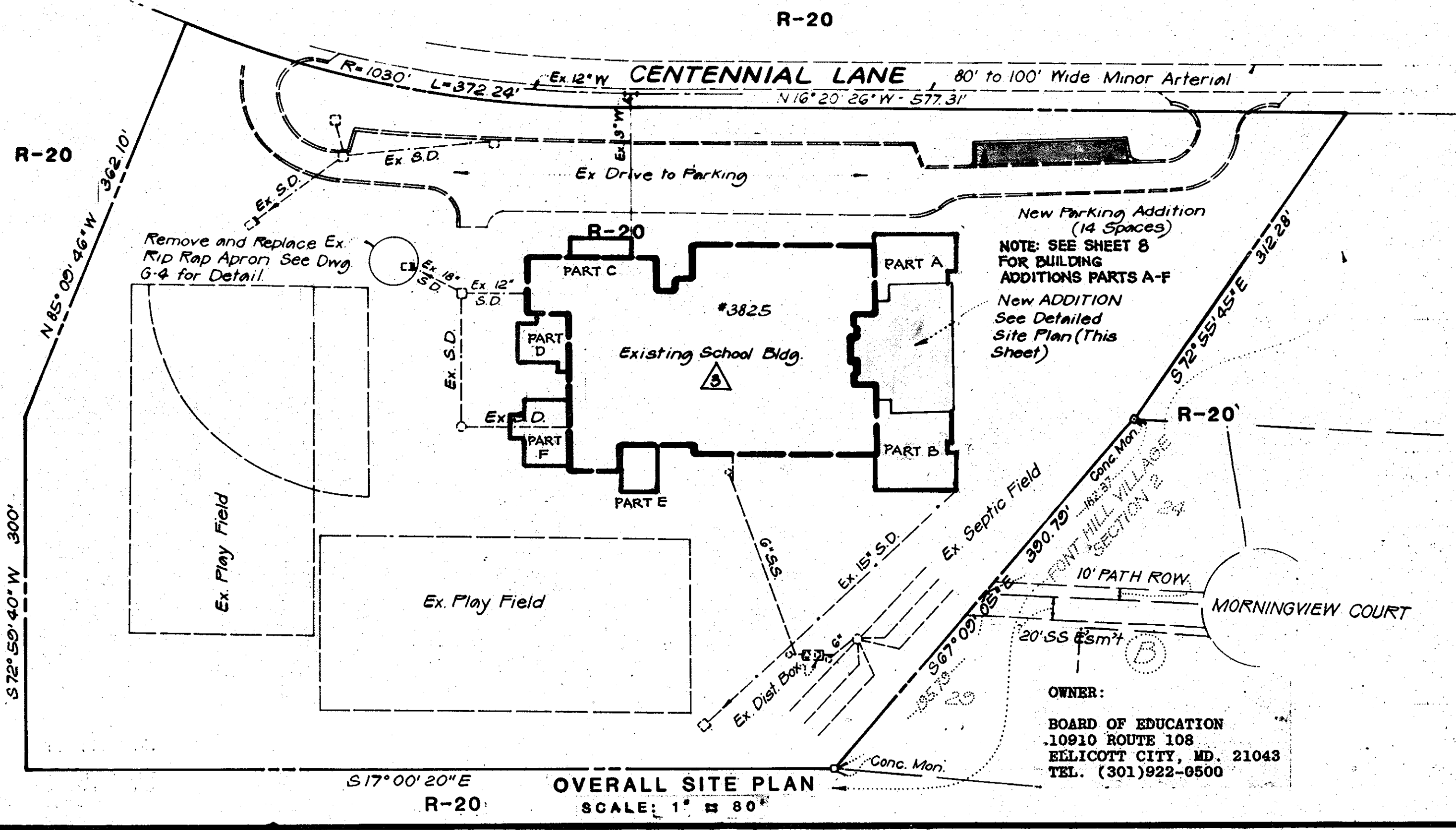
SEDIMENT CONTROL LEGEND

- TEMPORARY CONSTRUCTION ENTRANCE SCE-1
- TEMPORARY SILT FENCE SF-I
- TEMPORARY INLET TRAP ST-III
- TEMPORARY INLET PROTECTION (STONE FILTER)
- PERIMETER DIKE/SWALE PDS-1
- TEMPORARY FENCE (48" HIGH)

- LEGEND:**
- EXISTING CONTOURS
 - DESIGN CONTOURS
 - EXISTING SPOT GRADES
 - DESIGN SPOT GRADES
 - EXISTING STORM DRAIN PIPES AND STRUCTURES
 - NEW STORM DRAIN PIPES AND STRUCTURES
 - INFILTRATION TRENCH
 - EXISTING PAVING TO BE REMOVED
 - EXISTING PAVING
 - NEW CONCRETE WALK
 - NEW BITUMINOUS CONCRETE WALK
 - NEW SOIL BORINGS TAKEN
 - NEW CONCRETE CURB & GUTTER
 - NEW BITUMINOUS CONCRETE PAVING

SITE INFORMATION:
OWNER: BOARD OF EDUCATION
ADDRESS: 10910 ROUTE 108, ELLICOTT CITY, MD 21043
TELEPHONE: (301) 922-0500
SITE LOCATION: 3825 CENTENNIAL LANE, ELLICOTT CITY, MD 21043
ELECTION DISTRICT: #2
TAX MAP: 24, TAX PARCEL 1029
AREA OF PROPERTY: 11.22 AC
ZONING: R-20
PROPERTY RECORDED IN LIBER 540, FOLIO 235 AND LIBER 540, FOLIO 243
PARKING REQUIRED: 66
PARKING SPACES EXISTING: 52
NEW PARKING PROVIDED: 14
TOTAL PARKING PROVIDED: 66

ASSOCIATED ENGINEERS, INC.
6355 SIXTEENTH STREET
SILVER SPRING, MARYLAND 20910
TEL: (301) 586-7311



ADDRESS CHART

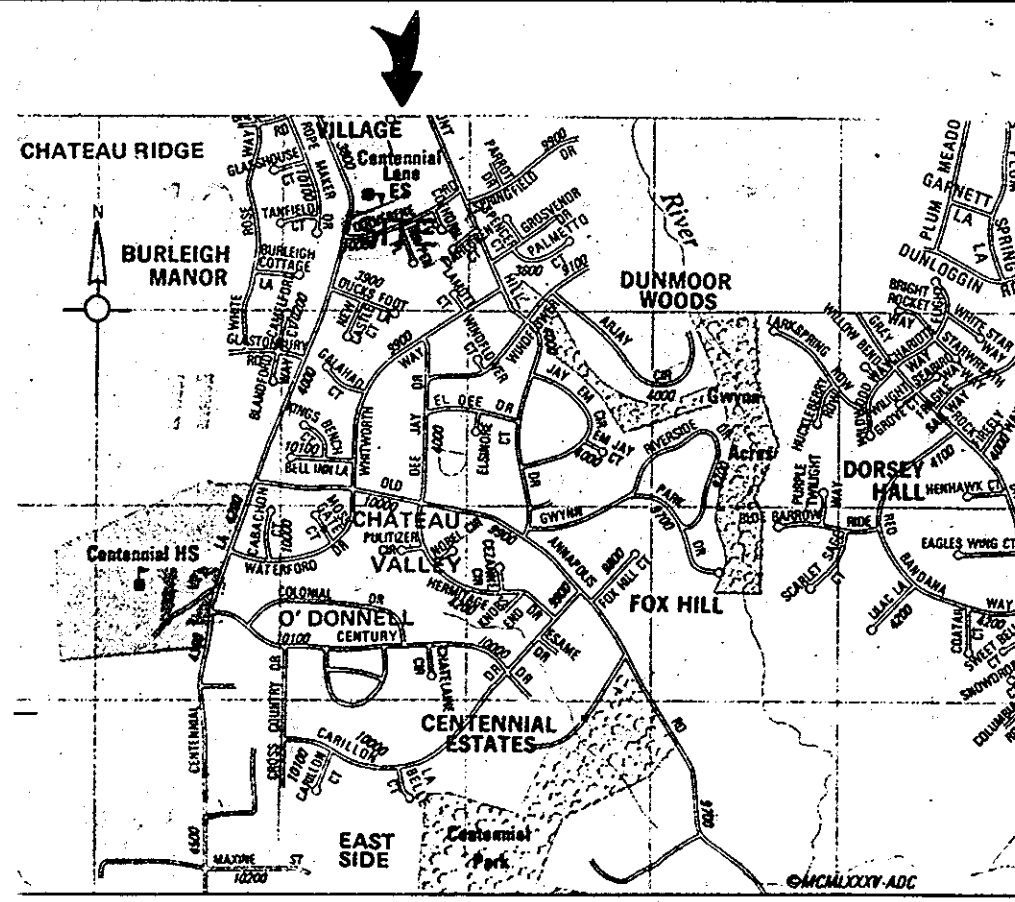
LOT NUMBER	STREET ADDRESS
1020	3825 Centennial Lane

Parking and Building Addition to SDP 72-115
Abrash Eddy and Eckhardt Architects
P.O. Box 477 Great Falls, Virginia 22066 (703) 759-5500

Centennial Lane Elementary School
Howard County Public Schools
2nd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SDP-86-267

SEDIMENT CONTROL PLAN
G-2 SHEET
2 OF 15



VICINITY MAP
SCALE 1" = 2000'
TOTAL AREA OF PROPERTY = 11.22 AC

PERMANENT INFILTRATION TRENCH							
TRENCH	REQUIRED VOLUME OF STONE	LENGTH	TRENCH DIMENSIONS	EFFECTIVE DEPTH	DEPTH OF STONE	BOTTOM ELEV. OF TRENCH	INVERT OUT OF OVERFLOW PIPE
A	2007 C.F.	22.3	16.0	6.0	7.58	418.48	424.48
B	2007 C.F.	22.3	16.0	6.0	7.58	418.42	424.42
C	1715 C.F.	20.0	14.29	6.0	7.58	419.22	425.22

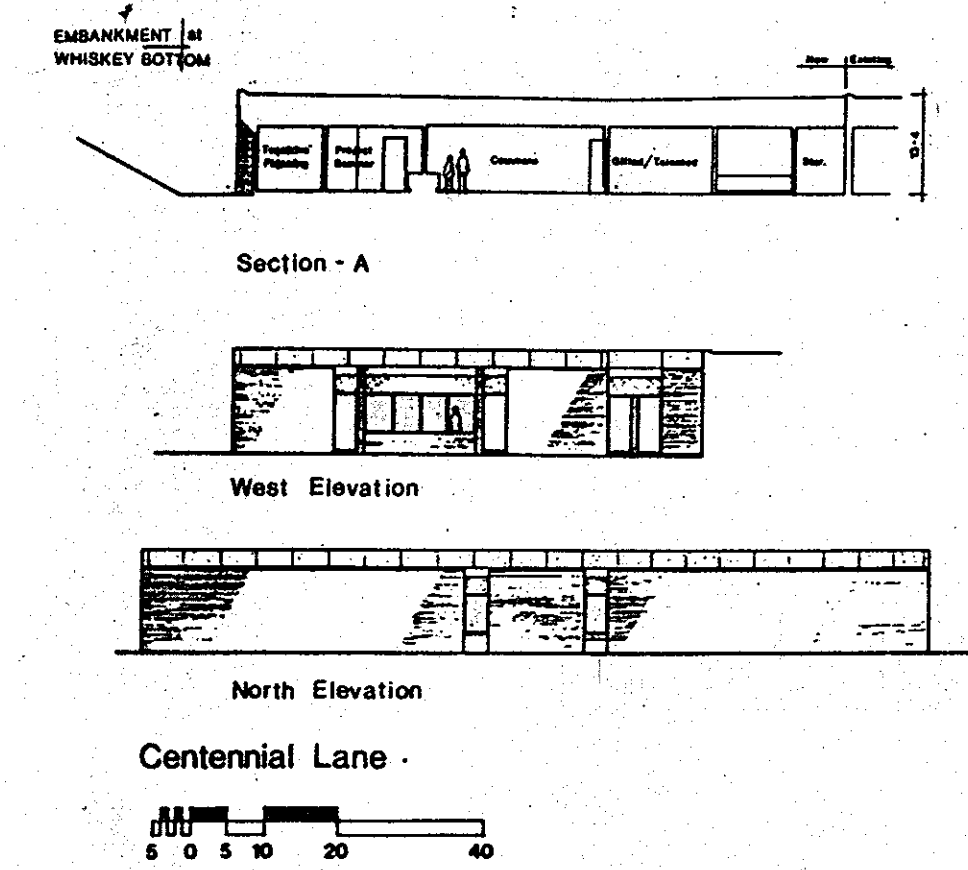
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS,
HOWARD COUNTY HEALTH DEPARTMENT
DATE 10-7-86
COUNTY HEALTH OFFICER: [Signature]

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
DATE 10-9-86
DIRECTOR: [Signature]

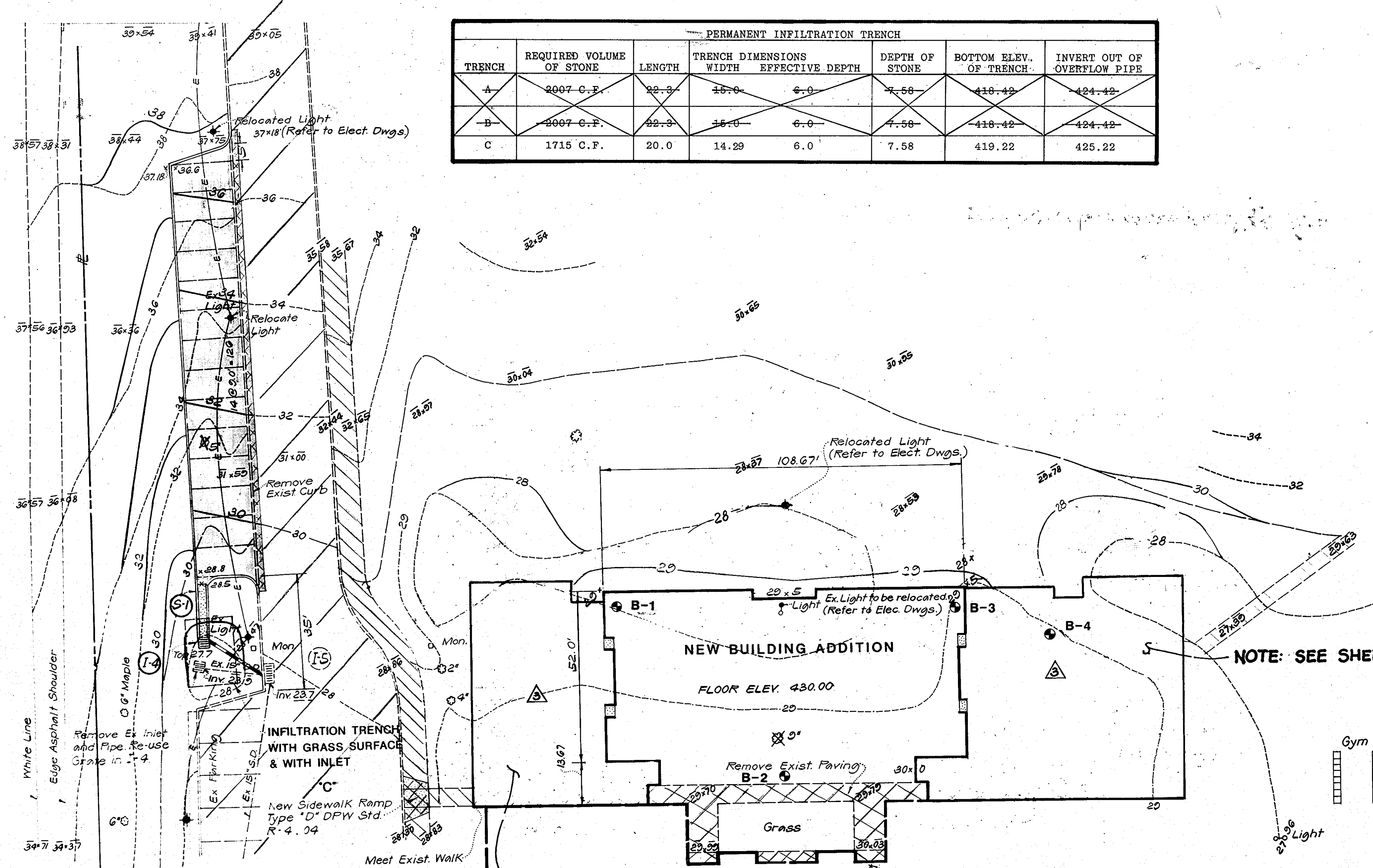
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DATE 10-8-86
DIRECTOR: [Signature]

APPROVED: [Signature]
DATE 10-8-86
CHIEF BUREAU OF ENGINEERING

APPROVED
DIVISION OF LAND DEVELOPMENT &
ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 8-26-86
[Signature]



CENTENNIAL LANE



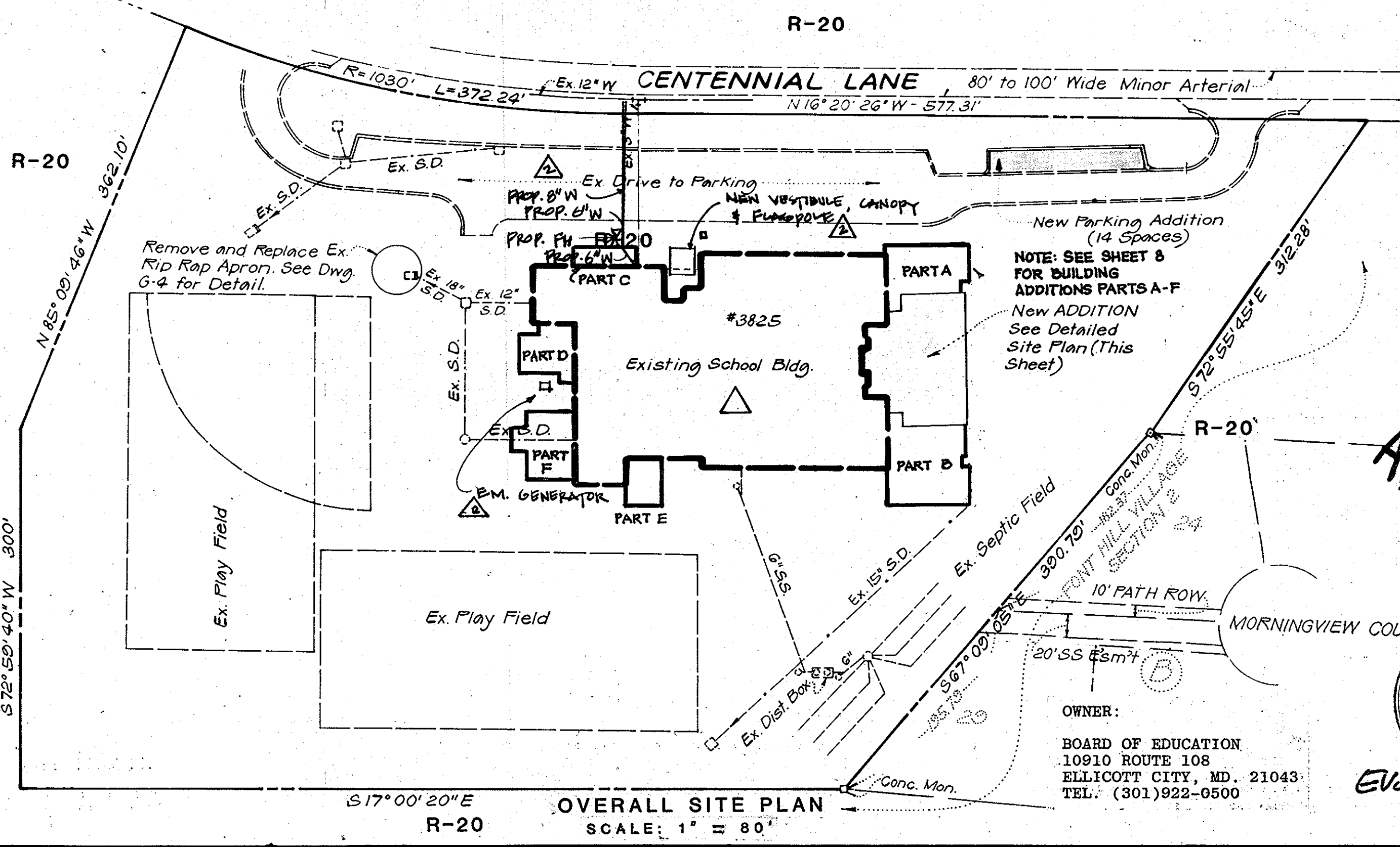
NOTE: SEE SHEET 8 FOR BUILDING ADDITIONS.
1 STORY BRICK

NOTE: SEE SHEET 8 FOR BUILDING ADDITIONS.

- SHEET INDEX
- 1 SITE PLAN
 - 2 SEDIMENT CONTROL PLAN
 - 3 PROFILES & DETAILS
 - 4 NOTES & DETAILS
 - 5 SEWER HOUSE CONNECTION
 - 6 DEMOLITION PLAN
 - 7 DRAINAGE DIVIDES & STORM DRAIN COMPUTATIONS
 - 8 SITE DEVELOPMENT PLAN & SEDIMENT CONTROL PLAN
 - 9 SITE DEVELOPMENT PLAN & SEDIMENT CONTROL PLAN
 - 10 SITE DEVELOPMENT PLAN
 - 11 DETAIL SHEET # BUILDING ELEVATIONS
 - 12 WATER, SEWER & STORM DRAIN PROFILES
 - 13 PROFILES & STRUCTURE SCHEDULE
 - 14 LEVEL SPREADER DETAILS
 - 15 LEVEL SPREADER NOTES & DETAILS

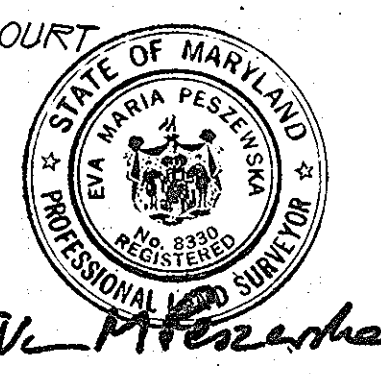
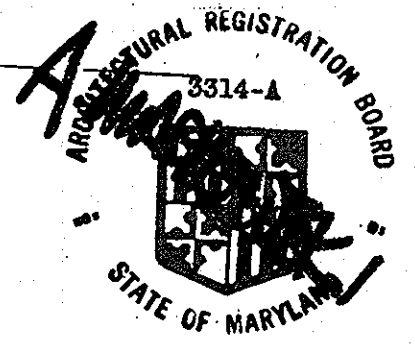
5-4-07 ADDED BUILDING ADDITIONS, A-F, AND CHANGED ALL SHEET NUMBERS

FOR GENERAL NOTES REFER TO DWG. G-4
FOR SEDIMENT CONTROL PLAN REFER TO DWG. G-2
2/14/06 NEW ENTRANCE CANOPY & FLAGPOLE BY SM
NEW GENERATOR BY GIPE ASSOC.
WDCM REVISED PIPE PROTECTION & DOMESTIC WATER SERVICE



OVERALL SITE PLAN
SCALE: 1" = 80'

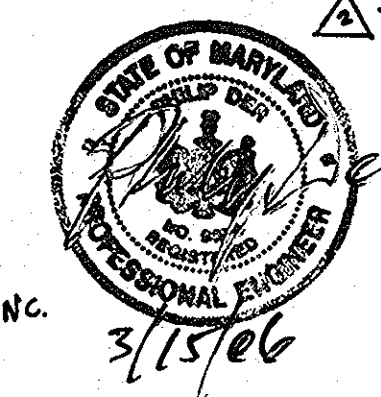
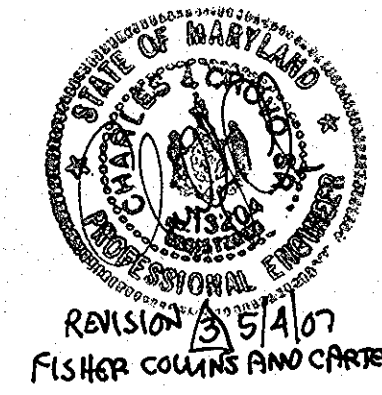
SITE INFORMATION:
OWNER: BOARD OF EDUCATION
ADDRESS: 10910 ROUTE 108
ELLICOTT CITY, MD 21043
TELEPHONE (301) 922-0500
SITE LOCATION: 3825 CENTENNIAL LANE
ELLICOTT CITY, MD 21043
ELECTION DISTRICT: #2
TAX MAP: 24, TAX PARCEL 1029
AREA OF PROPERTY: 11.22 AC
ZONING: R-20
PROPERTY RECORDED IN LIBER 540, FOLIO 235 AND
LIBER 540, FOLIO 243
PARKING REQUIRED: 66
PARKING SPACES EXISTING: 52
NEW PARKING PROVIDED: 14
TOTAL PARKING PROVIDED: 66



ASSOCIATED ENGINEERS, INC.
8335 SIXTEENTH STREET
SILVER SPRING, MARYLAND 20910
TEL: 301-589-7311

SITE PLAN
SCALE: 1" = 20'

- LEGEND:
- EXISTING CONTOURS: --- 428 ---
 - DESIGN CONTOURS: --- 428 ---
 - EXISTING SPOT GRADES: 29x78
 - DESIGN SPOT GRADES: 29x75
 - EXISTING STORM DRAIN PIPES AND STRUCTURES: [Symbol]
 - NEW STORM DRAIN PIPES AND STRUCTURES: [Symbol]
 - INFILTRATION TRENCH: [Symbol]
 - EXISTING PAVING TO BE REMOVED: [Symbol]
 - EXISTING PAVING: [Symbol]
 - NEW CONCRETE WALK: [Symbol]
 - NEW BITUMINOUS CONCRETE WALK: [Symbol]
 - NEW SOIL BORINGS TAKEN: [Symbol]
 - NEW COMBINATION CURB & GUTTER: [Symbol]
 - NEW BITUMINOUS CONCRETE PAVING: [Symbol]

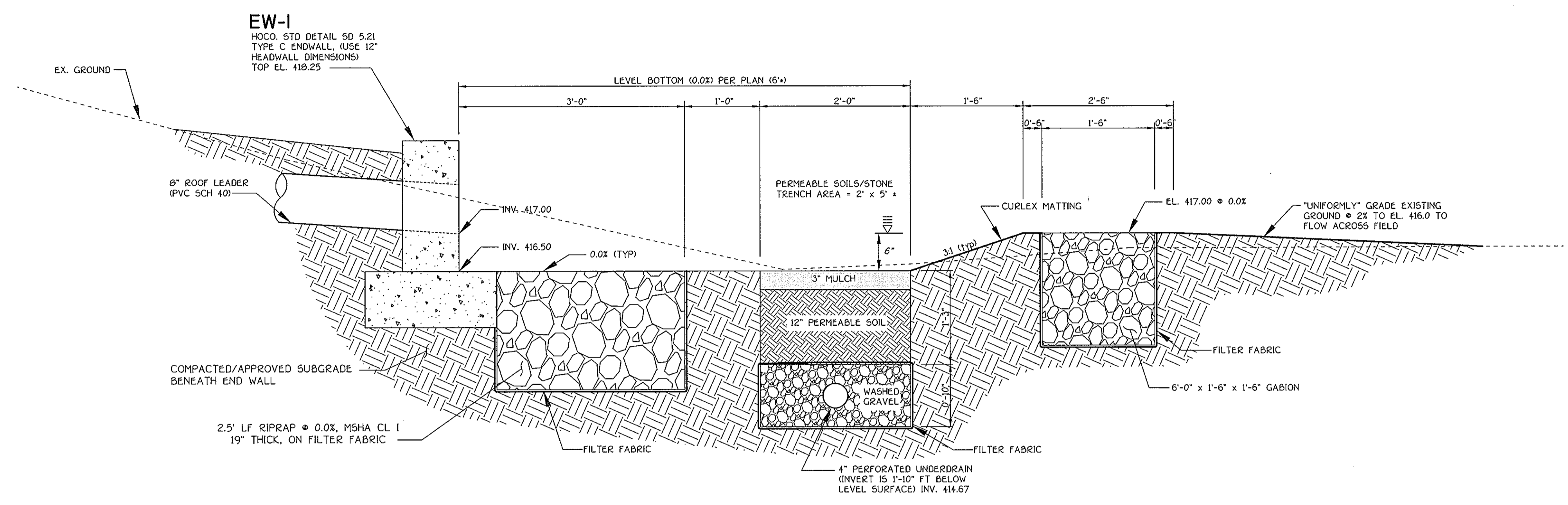


ADDRESS CHART	
LOT NUMBER	STREET ADDRESS
1029	3825 Centennial Lane ELLICOTT CITY, MD 21043
SUBDIVISION NAME	
540-235	24
540-243	2
WATER CODE	F12
SEWER CODE	-

Parking and Building Addition to SDP 72-115
Abrash Eddy and Eckhardt Architects
P.O. Box 477 Great Falls, Virginia 22066 (703) 759-5500

Centennial Lane
Elementary School
Howard County Public Schools
2nd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SDP-86-267
SITE PLAN
G-1 SHEET
1 OF 15



LEVEL SPREADER - TYPICAL PROFILE
SCALE: 1" = 1'

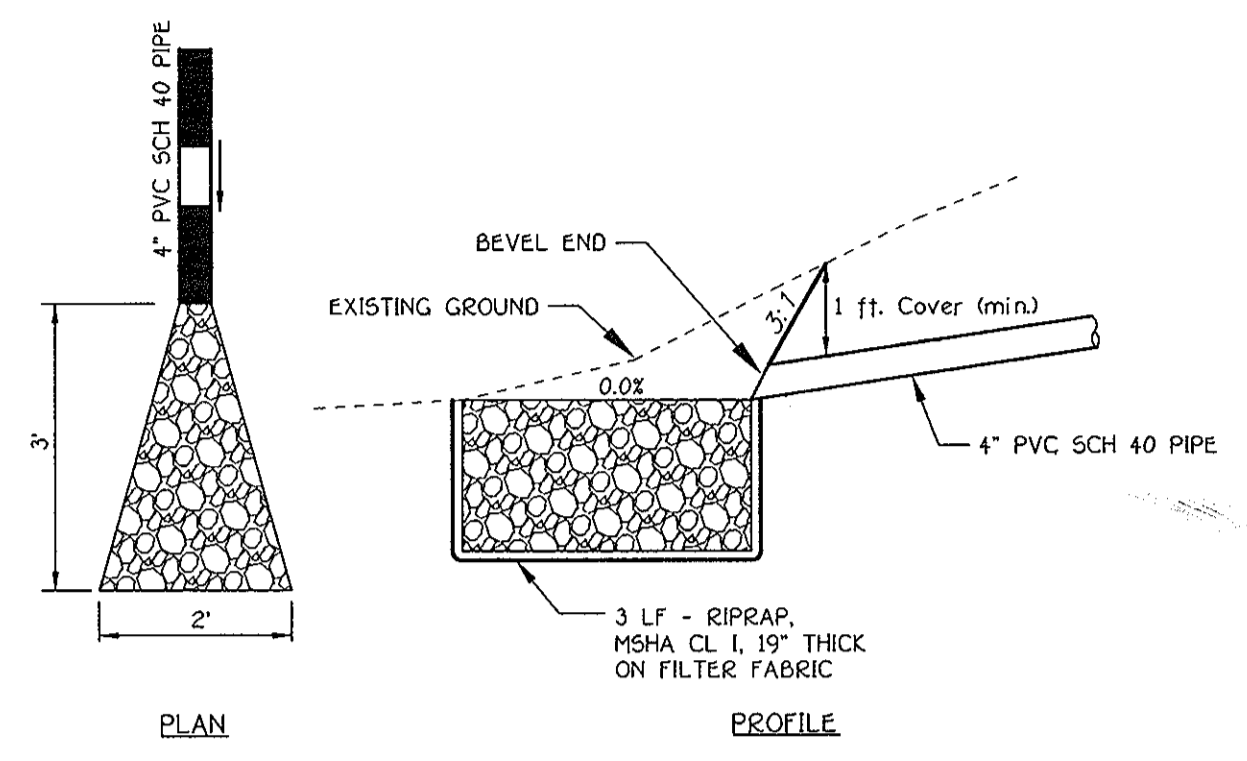
LEVEL SPREADER NOTES

- Place 4" perforated (slotted) underdrain pipe at 0.0% beneath the level spreader "depressed" area as shown on the plan. Use solid pipe outside of stone area and then slope outfall at 1.0% minimum and discharge into the wooded area per the site plan on with outfall as per detail this sheet. The shall be PVC or HDPE. Cap upstream end.
- Based on field conditions, the contractor shall provide positive drainage downstream of the level area (i.e., grade land at 2% to "daylight". The grading shall be performed such that water flows in a "sheet flow" fashion (i.e. evenly spreads out as it flows downhill). All disturbed area shall be stabilized prior to allowing roof water to enter the level spreader.
- The level spreader and permeable soil/stone bedding and underdrain shall be installed after ALL upstream areas have been stabilized (i.e., paved or have established vegetation).
- Use 3:1 maximum side slopes around the inside of the depressed area except at end wall where where 2:1 is acceptable to tie-in ground at end wall.

MATERIAL SPECIFICATIONS

- The permeable soil shall consist of well mixed 35% sand, and 65% topsoil. The soil shall be free of stones, stumps, roots, or other similar material greater than 2". No other material shall be mixed or dumped within the permeable soil that may hinder plant growth. The planting soil shall be free of Bermuda grass, Quackgrass, Johnson grass, or other noxious weeds as specified under COMAR 15.08.01.05. The permeable soil shall loosely compacted in 8" lifts and be flocced after placement. Any settlement shall be refilled to the design elevation, and as outlined below. Sand shall meet AASHTO M-6 or ASTM C-33, Size: 0.02" to 0.04". The sand must be clean, free of fines, roots, etc. See the bioretention soil standards as set for in the Maryland Department of the Environment's 2000 SWM Design Manual for all other applicable soil specifications.
- Mulch shall be double-shredded hardwood aged 6 to 12 months. No woods chips or pine mulch.
- The "washed gravel" shall be washed pea gravel (ASTM D449) or uniformly sized stone meeting AASHTO M-43 (0.375" to 0.75") surrounded by geotextile Mirafi 180N or approved equal (alternative geotextiles are outlined in MDE's 2000 SWM Manual in Appendix B, Class "C" criteria). Stone shall be carefully placed to prevent damage to geotextile. The geotextile shall be installed per the manufacturer's specifications with a 6" overlap. Stone aggregate must be free of fines and clean.
- The curlex matting shall be stapled and installed per the manufacturer's specifications.
- The gabion shall be pvc-coated and have an "open" bottom (i.e., use a 1/2 standard 1.5'x3'x6' gabion basket). Gabion to be filled with 4"-8" stone. Gabion top surface to be level (0.0% with 0.5" tolerance) in all directions.
- Earthen fill adjacent to the gabion level spreader shall be well compacted (90%) and vegetatively stabilized prior to use.

LEVEL SPREADER DETAIL
NO SCALE



LEVEL SPREADER OUTFALL DETAIL
SCALE: 1" = 2'

NOTE: This detail shows the level spreader underdrain outfall to the wooded area adjacent to the south side of the athletic fields.

STORMWATER MANAGEMENT GENERAL NOTES

- All construction shall meet the latest edition of the Howard County Standards and Specifications and/or the Maryland Department of the Environment's 2000 Stormwater Design Manual or as shown on these plans. The contractor shall consult the engineer should there be any discrepancies.
- The utility locations are approximate. Contractor shall test pit all known existing utilities to verify, size, shape, location, and type prior to performing construction. Utility relocations, whether shown or not, are the responsibility of the owner. Any utility damaged due to construction must be repaired immediately.
- Should the contractor discover discrepancies between the plans and field conditions, the engineer is to be notified immediately to resolve the situation. If the contractor makes field corrections or adjustments without notifying the engineer, then the contractor assumes all responsibility for those changes.
- Contractor shall notify Miss Utility 1-800-257-7777 and Howard County Construction Inspection Division five (5) working days prior to beginning construction.
- Fisher Collins & Carter is not responsible for the contractor's utilization of men, materials, equipment, or safety measures in the performance of any work for this project. The contractor assumes all responsibility for performing the work correctly and in conformance with code/specification requirements.
- The level spreader can be graded and constructed/stabilized but can not receive roofwater until all upstream areas have been stabilized. (i.e., good grass cover or paved).
- The Stormwater Management Facility (i.e., Level Spreader) shown on this sheet shall be privately owned and maintained by the Howard County Public School System.

5/4/07	ADDED THIS SHEET FOR LEVEL SPREADER NOTES AND DETAILS
DATE	DESCRIPTION
REVISION BLOCK	
APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>Paul R. ...</i>	4/18/07
Director - Department of Planning and Zoning	DATE
<i>Chris ...</i>	4/18/07
Chief, Division of Land Development	DATE
<i>...</i>	4/18/07
Chief, Development Engineering Division	DATE



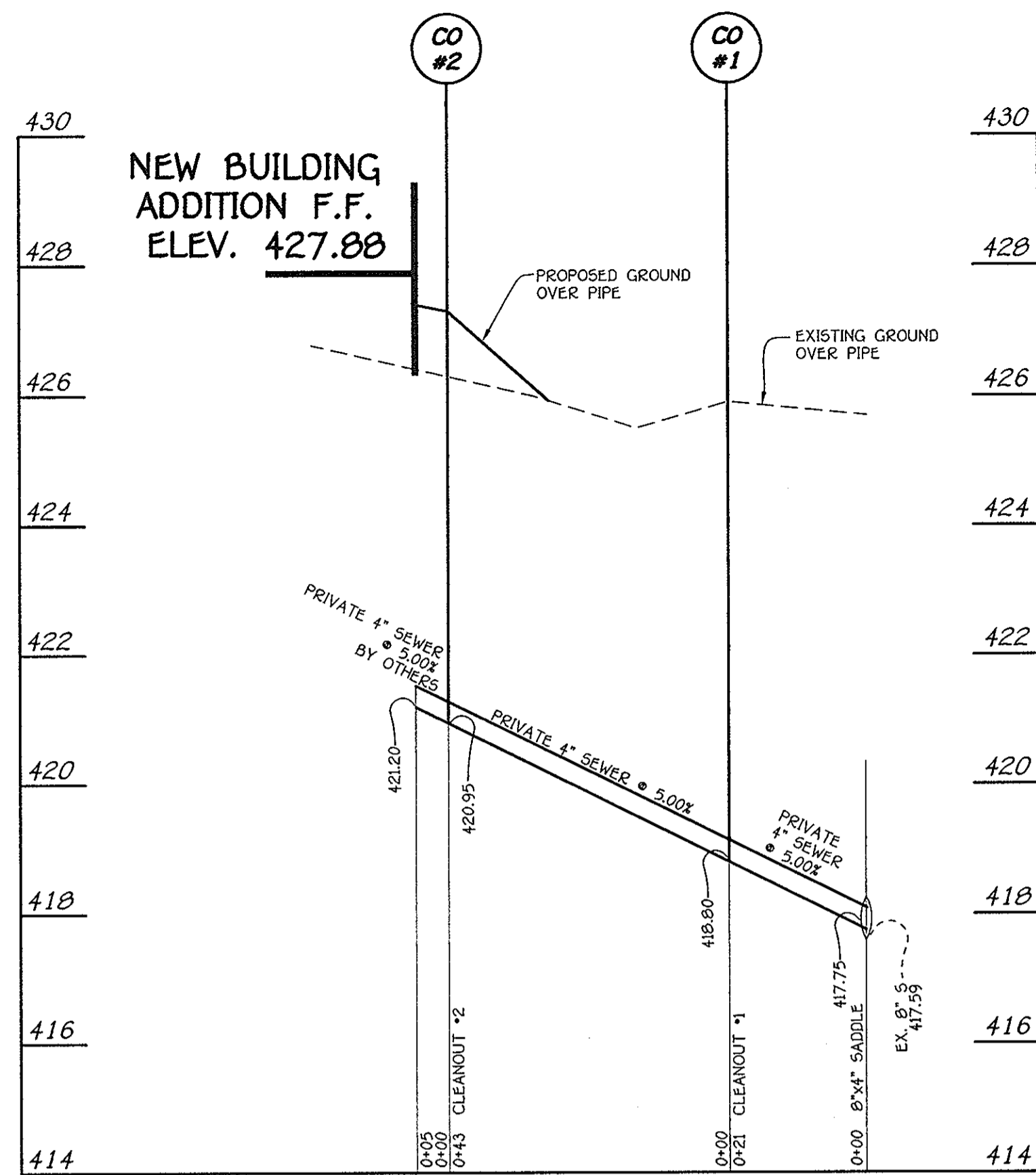
PREPARED FOR
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 Maryland Route 108
Ellicott City, Maryland 21042
Attention Catherine Young
410-313-6805

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 8072 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
410 461 - 2955

Address Chart					
Parcel Number	Street Address				
P. 1029	3825 CENTENNIAL LANE				
ELLICOTT CITY, MD. 21042					
PROJECT	CENTENNIAL ELEMENTARY SCHOOL	SECTION/AREA	N/A	PARCEL	1029
DEED REF.	BLOCK NO.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
520/545	14	R-20	24	SECOND	6023.04
WATER CODE	F 12	SEWER CODE	5841600		

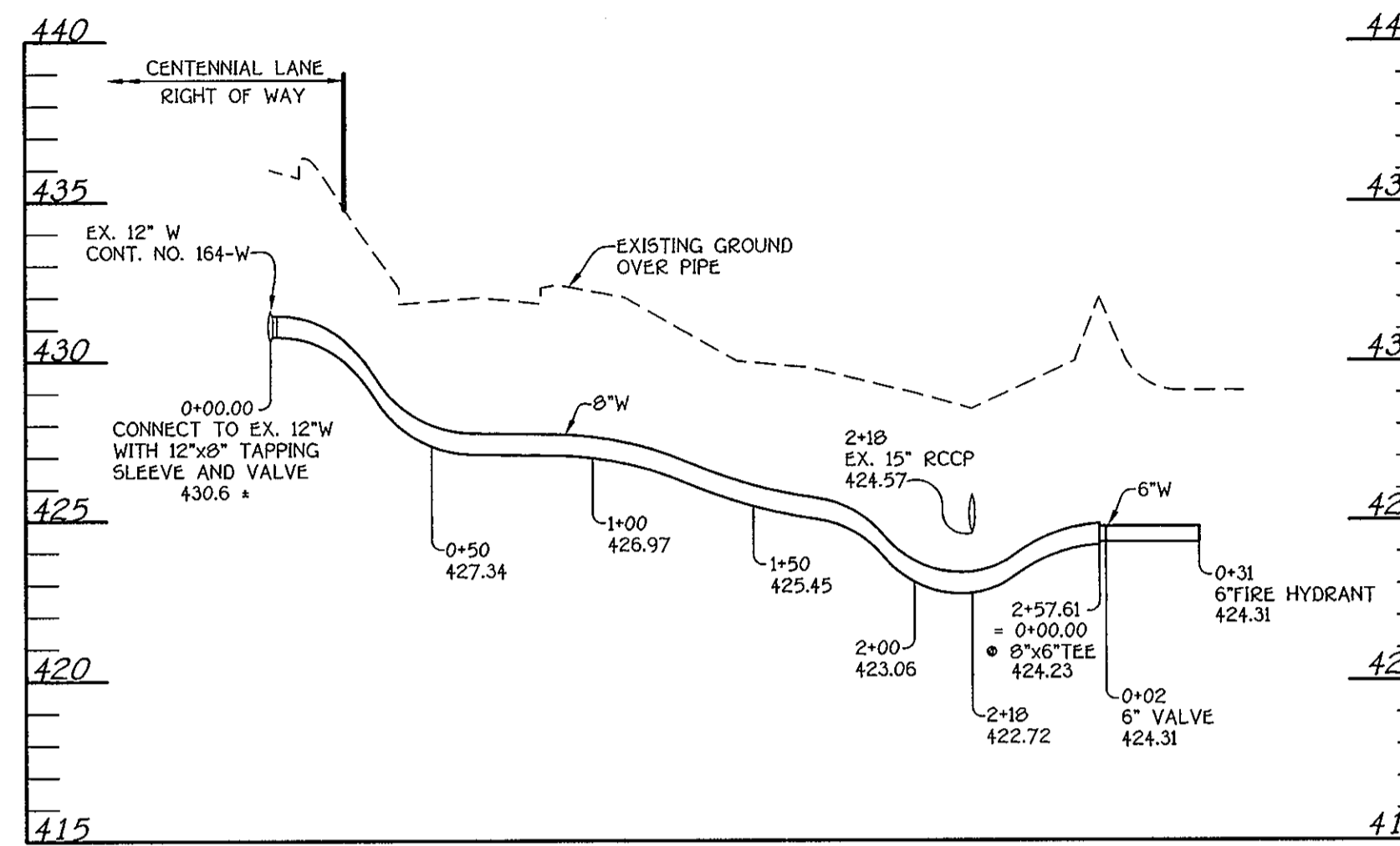
LEVEL SPREADER NOTES AND DETAILS					
"REVISED SITE DEVELOPMENT PLAN"					
CENTENNIAL ELEMENTARY SCHOOL					
BUILDING ADDITIONS					
TAX MAP No.:	24	GRID No.:	7, 8, 13, 14	PARCEL No.:	1029
SECOND ELECTION DISTRICT	HOWARD COUNTY, MARYLAND			SCALE:	1" = 20'
DATE: MAY 30, 2007			SHEET 15 OF 15		
SDP-86-267					

1:2007/07/01/010/07100 SWM 2405.dwg, SWM-4, 5/31/2007 11:44:38 AM, 1:1



SEWER PROFILE

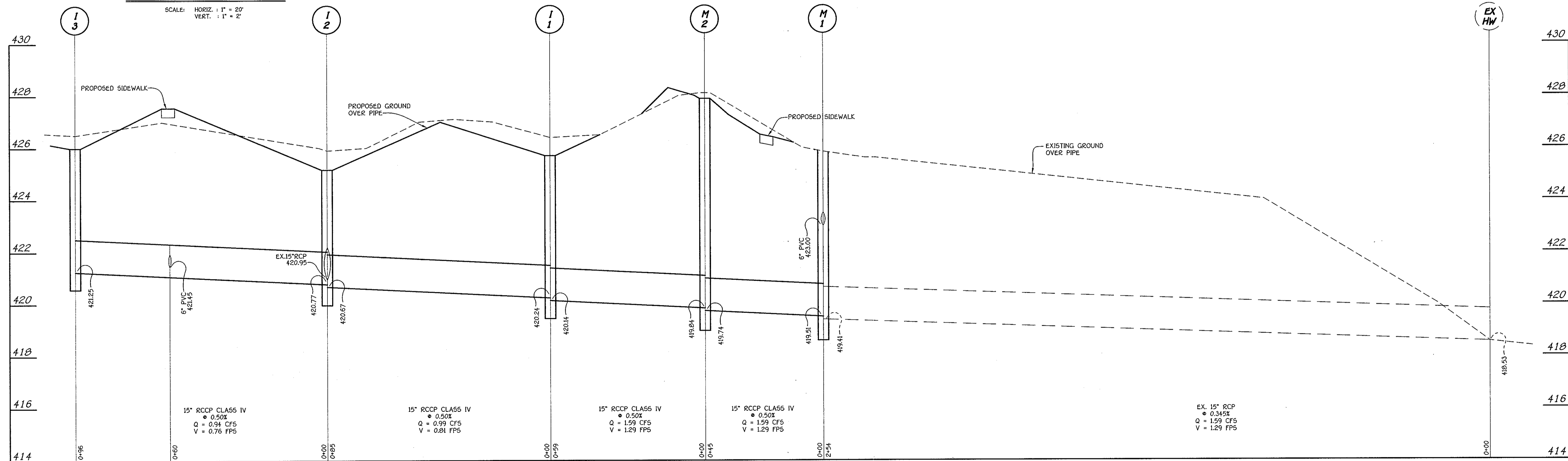
SCALE: HORIZ. : 1" = 20'
VERT. : 1" = 2'



WATER PROFILE

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

WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN			
0+00.00	12" x 8" TAPPING SLEEVE & VALVE	582,713.65	1,351,212.11
2+57.61	8" x 6" TEE	582,828.45	1,351,442.72
2+59.11	8" PLUG & BUTTRESS	582,829.12	1,351,444.07
6" WATER MAIN			
0+02.00	6" VALVE	582,827.10	1,351,443.39
0+31.00	6" FIRE HYDRANT	582,801.06	1,351,456.36



STORM DRAIN PROFILE

SCALE: HORIZ. : 1" = 20'
VERT. : 1" = 2'



5/4/07	ADDED THIS SHEET FOR PROPOSED WATER, SEWER AND STORM DRAIN PROFILES.
DATE	DESCRIPTION
	REVISION BLOCK
APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>Mark A. Leavelle</i>	6/16/07
Director - Department of Planning and Zoning	Date
<i>Chris H. Harts</i>	6/15/07
Chief, Division of Land Development	Date
Chief, Development Engineering Division	6/15/07
	Date

PREPARED FOR
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 Maryland Route 108
Ellicott City, Maryland 21042
Attention Cathleen Young
410-313-6805

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 18772 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
1808 181 - 2855

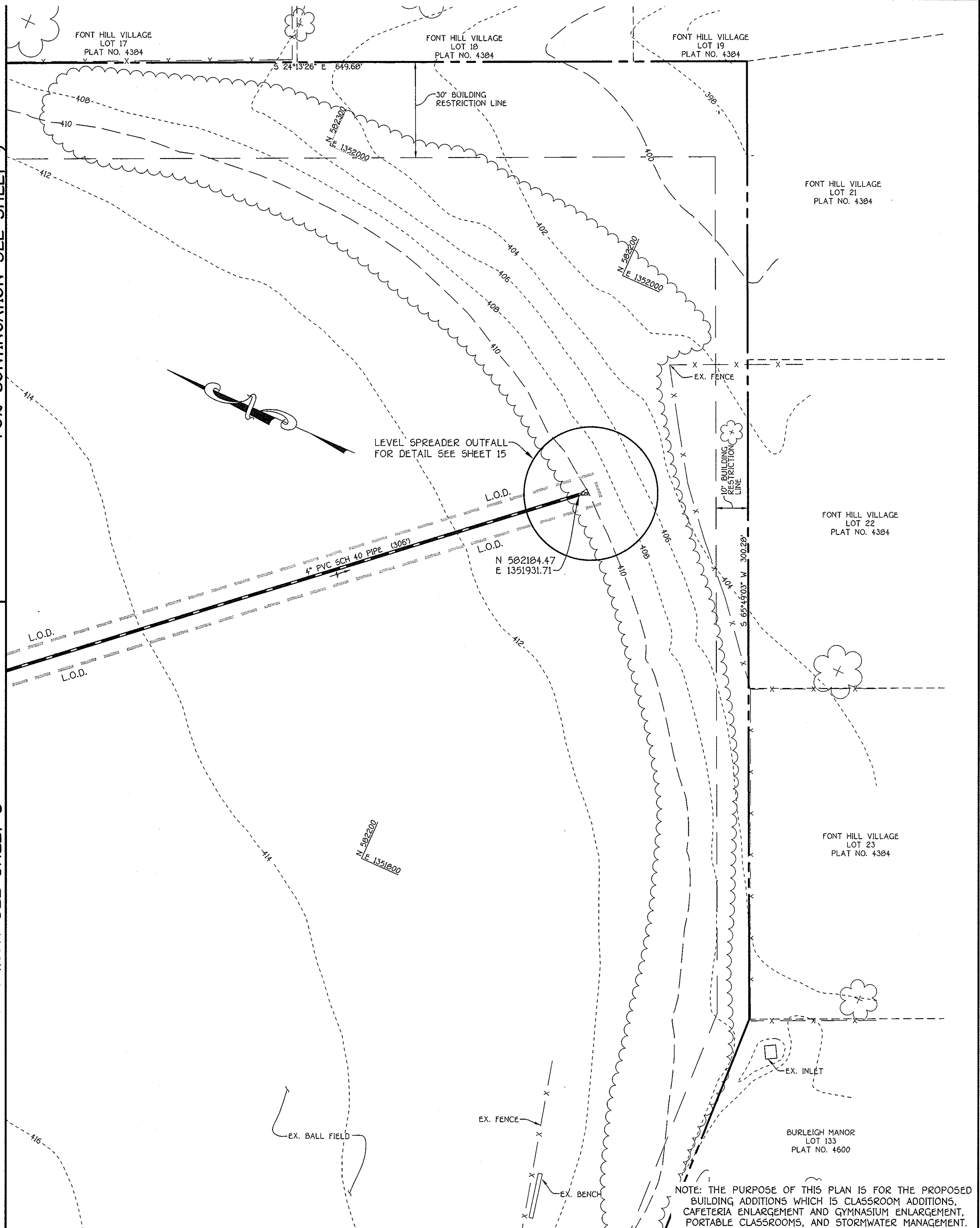
Address Chart			
Parcel Number	Street Address		
P. 1029	3825 CENTENNIAL LANE		
	ELLICOTT CITY, MD. 21042		
PROJECT	SECTION/AREA	PARCEL	
CENTENNIAL ELEMENTARY SCHOOL	N/A	1029	
DEED REF.	BLOCK NO.	ZONE	TAX MAP
520/545	14	R-20	24
WATER CODE	SEWER CODE		PARCEL
F 12	5841600		6023.04

WATER, SEWER AND STORM DRAIN PROFILES
"REVISED SITE DEVELOPMENT PLAN"
CENTENNIAL ELEMENTARY SCHOOL
BUILDING ADDITIONS

TAX MAP No.: 24 GRID No.: 7, 8, 13, 14 PARCEL No.: 1029
SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1" = 20' DATE: MAY 30, 2007

FOR CONTINUATION SEE SHEET 9

FOR CONTINUATION SEE SHEET 8



NOTE: THE PURPOSE OF THIS PLAN IS FOR THE PROPOSED BUILDING ADDITIONS WHICH IS CLASSROOM ADDITIONS, CAFETERIA ENLARGEMENT AND GYMNASIUM ENLARGEMENT, PORTABLE CLASSROOMS, AND STORMWATER MANAGEMENT.



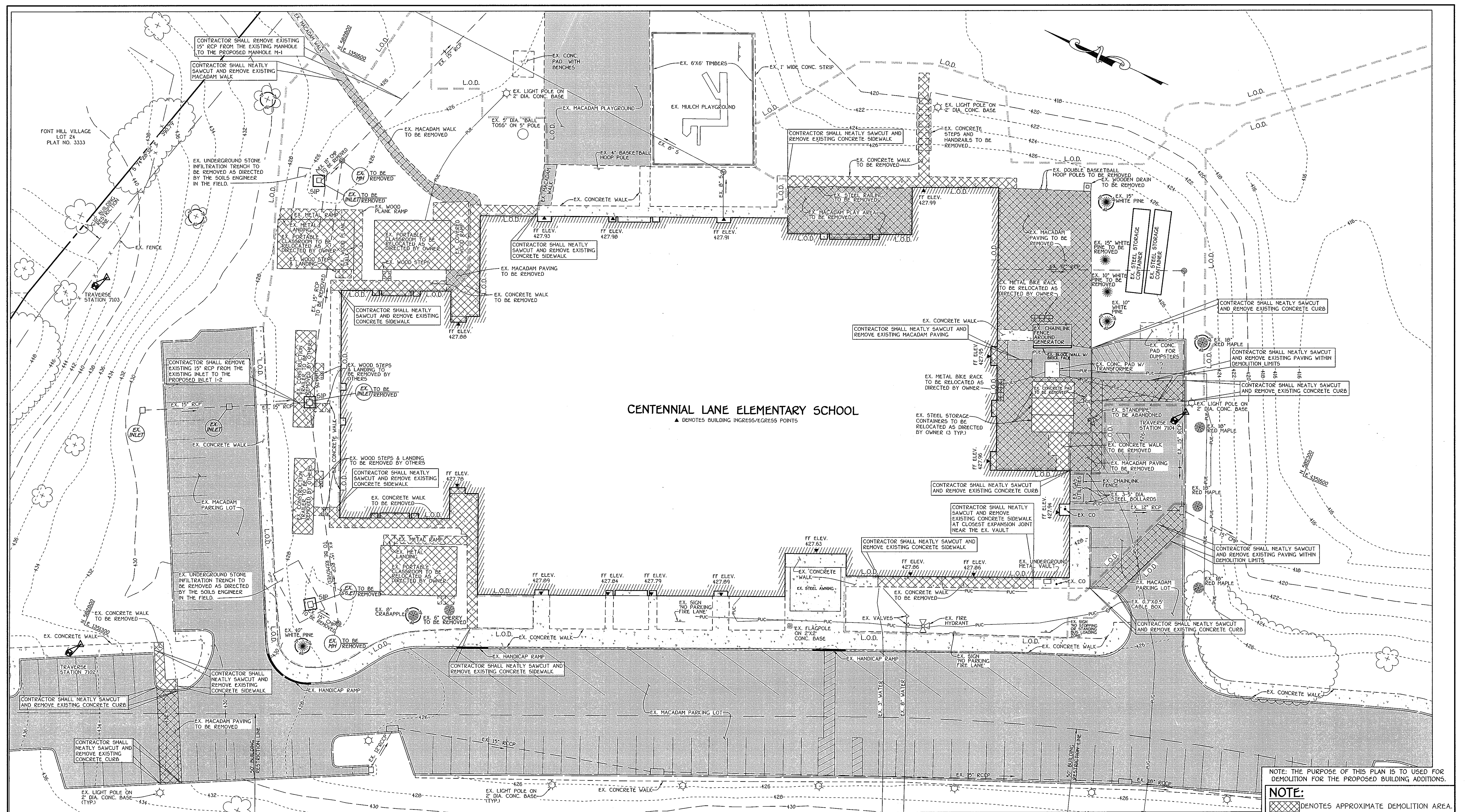
5/14/07	ADDED THIS SHEET FOR PROPOSED BUILDING ADDITIONS.
DATE	DESCRIPTION
REVISION BLOCK	
APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>Mark L. ...</i>	6/14/07
Director - Department of Planning and Zoning	Date
<i>Carol ...</i>	9/18/10
Chief, Division of Land Development	Date
<i>[Signature]</i>	6/14/07
Chief, Development Engineering Division	Date

PREPARED FOR
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 Maryland Route 108
 Ellicott City, Maryland 21042
 Attention Cathleen Young
 410-313-6805

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 (410) 461-2855

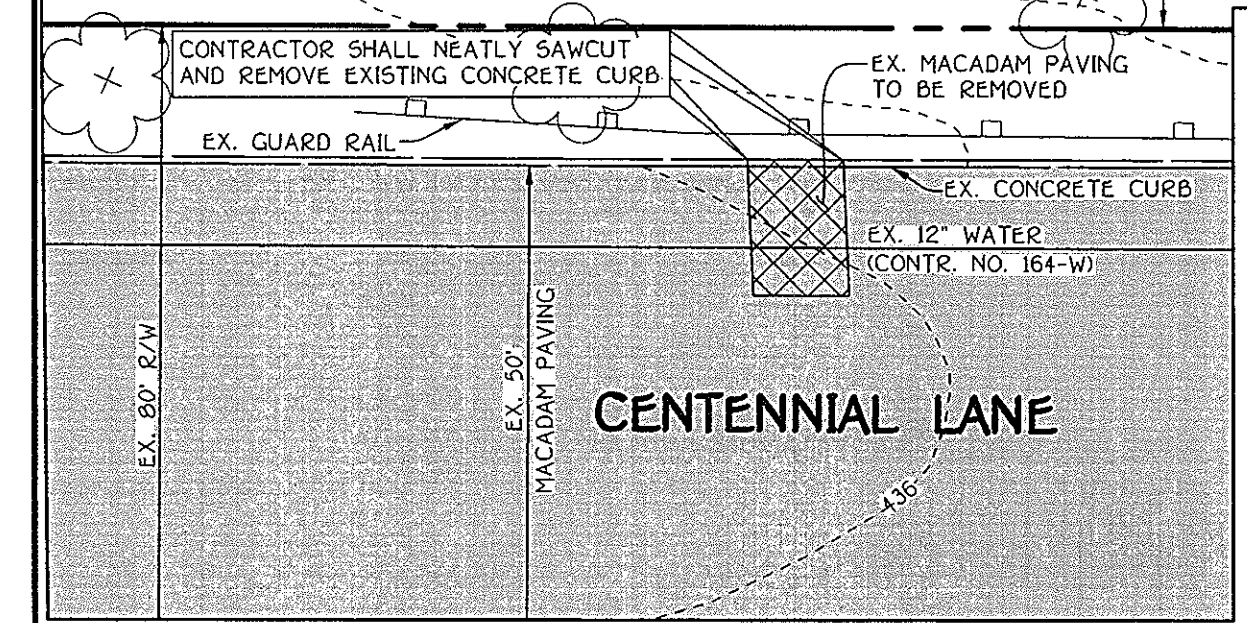
Address Chart					
Parcel Number	Street Address				
P. 1029	3825 CENTENNIAL LANE				
ELLICOTT CITY, MD. 21042					
PROJECT	SECTION/AREA	PARCEL			
CENTENNIAL ELEMENTARY SCHOOL	N/A	1029			
DEED REF.	BLOCK NO.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
520/545	14	R-20	24	SECOND	6023.04
WATER CODE	F 12	SEWER CODE	5841600		

SITE DEVELOPMENT PLAN	
"REVISED SITE DEVELOPMENT PLAN"	
CENTENNIAL ELEMENTARY SCHOOL	
BUILDING ADDITIONS	
TAX MAP No.: 24	GRID No.: 7, 8, 13, 14
SECOND ELECTION DISTRICT	HOWARD COUNTY, MARYLAND
SCALE: 1" = 20'	DATE: MAY 30, 2007
SHEET 10 OF 15	
SDP-06-267	



CENTENNIAL LANE ELEMENTARY SCHOOL
 ▲ DENOTES BUILDING INGRESS/EGRESS POINTS

NOTE: THE PURPOSE OF THIS PLAN IS TO BE USED FOR DEMOLITION FOR THE PROPOSED BUILDING ADDITIONS.
 NOTE: DENOTES APPROXIMATE DEMOLITION AREA.



5/11/07	ADDED THIS SHEET FOR PROPOSED BUILDING ADDITIONS.
DATE	DESCRIPTION
APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>Mark H. Gable</i>	4/18/07
Director - Department of Planning and Zoning	Date
<i>Andy Hanna</i>	6/18/07
Chief, Division of Land Development	Date
<i>Chief, Development Engineering Division</i>	6/14/07
	Date

PREPARED FOR
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 Maryland Route 108
 Ellicott City, Maryland 21042
 Attention Cathleen Young
 410-313-6805

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING, CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 19272 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 410-461-2855

Address Chart					
Parcel Number	Street Address				
P. 1029	3825 CENTENNIAL LANE				
ELICOTT CITY, MD. 21042					
PROJECT	SECTION/AREA	PARCEL			
CENTENNIAL ELEMENTARY SCHOOL	N/A	1029			
DEED REF.	BLOCK NO.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
520/545	14	R-20	24	SECOND	6023.04
WATER CODE	F 12	SEWER CODE	5841600		

DEMOLITION PLAN

"REVISED SITE DEVELOPMENT PLAN"
CENTENNIAL ELEMENTARY SCHOOL
 BUILDING ADDITIONS

TAX MAP No.: 24 GRID No.: 7, 8, 13, 14 PARCEL No.: 1029
 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: 1" = 20' DATE: MAY 30, 2007

SHEET 7 OF 15
 SDP-86-267