

LEGEND		
ITEM	NEW	EXISTING
PROPERTY LINE	---	---
SPOT ELEVATIONS	+350'	
CONTOURS	---	---
BUILDING(S)	[Symbol]	[Symbol]
BITUMINOUS PAVING	[Symbol]	[Symbol]
CONCRETE PAVING & WALKS	[Symbol]	[Symbol]
BITUMINOUS CURB	[Symbol]	[Symbol]
SANITARY SEWER (MANHOLE)	[Symbol]	[Symbol]
STORM SEWER (STRUCTURE)	[Symbol]	[Symbol]
UNDERGROUND POWER LINE	---UP---	---UP---
UNDERGROUND TELEPHONE LINE	---UT---	---UT---
SITE LIGHT/FLOOD LIGHT	○	○
WATER MAIN	---W---	---W---
GAS MAIN	---G---	---G---
TREES/SHRUBS	[Symbol]	[Symbol]
FENCE	---X---	---X---
SOIL BORING	○	○
PROPERTY CORNER	---○---	---○---

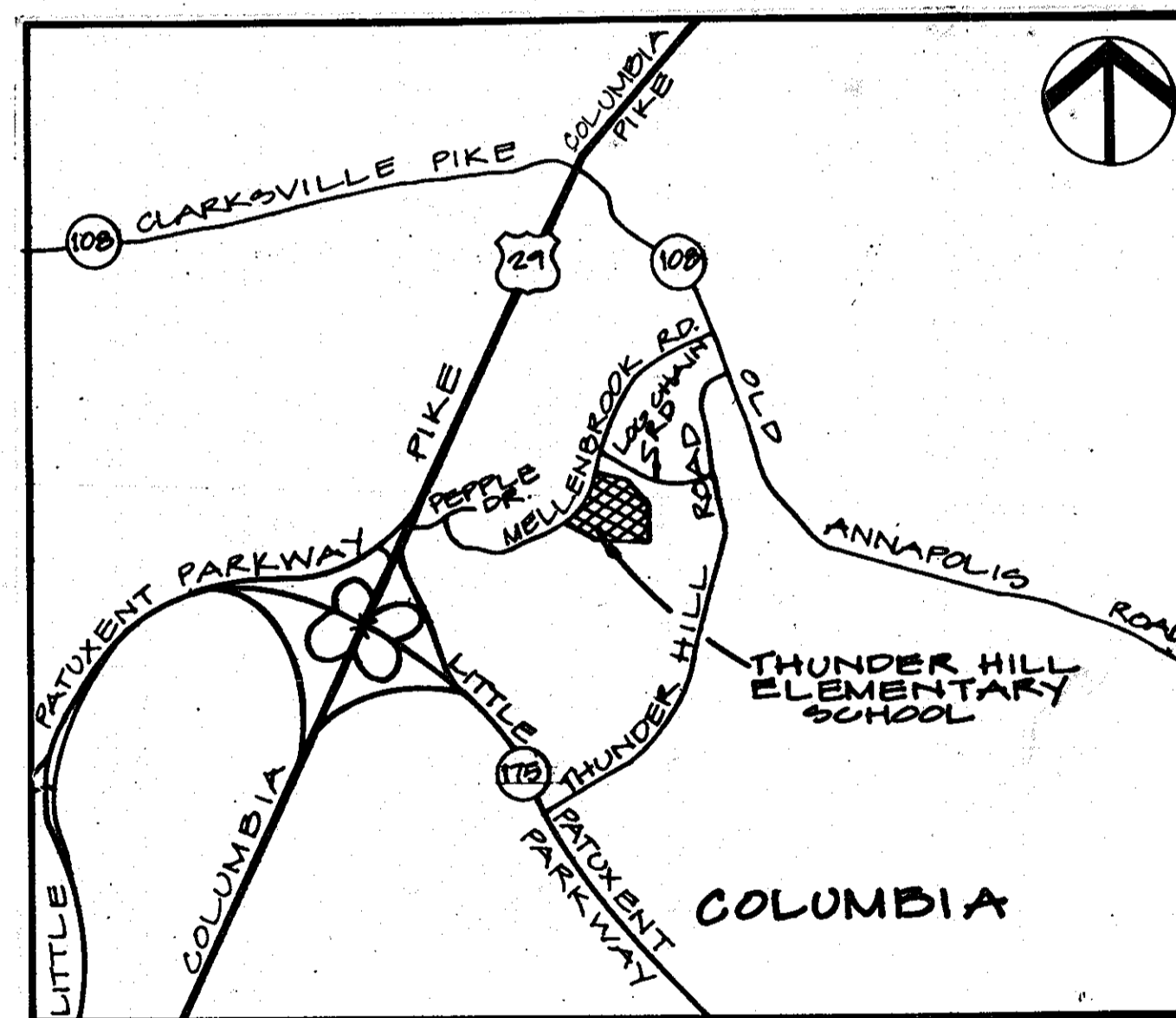
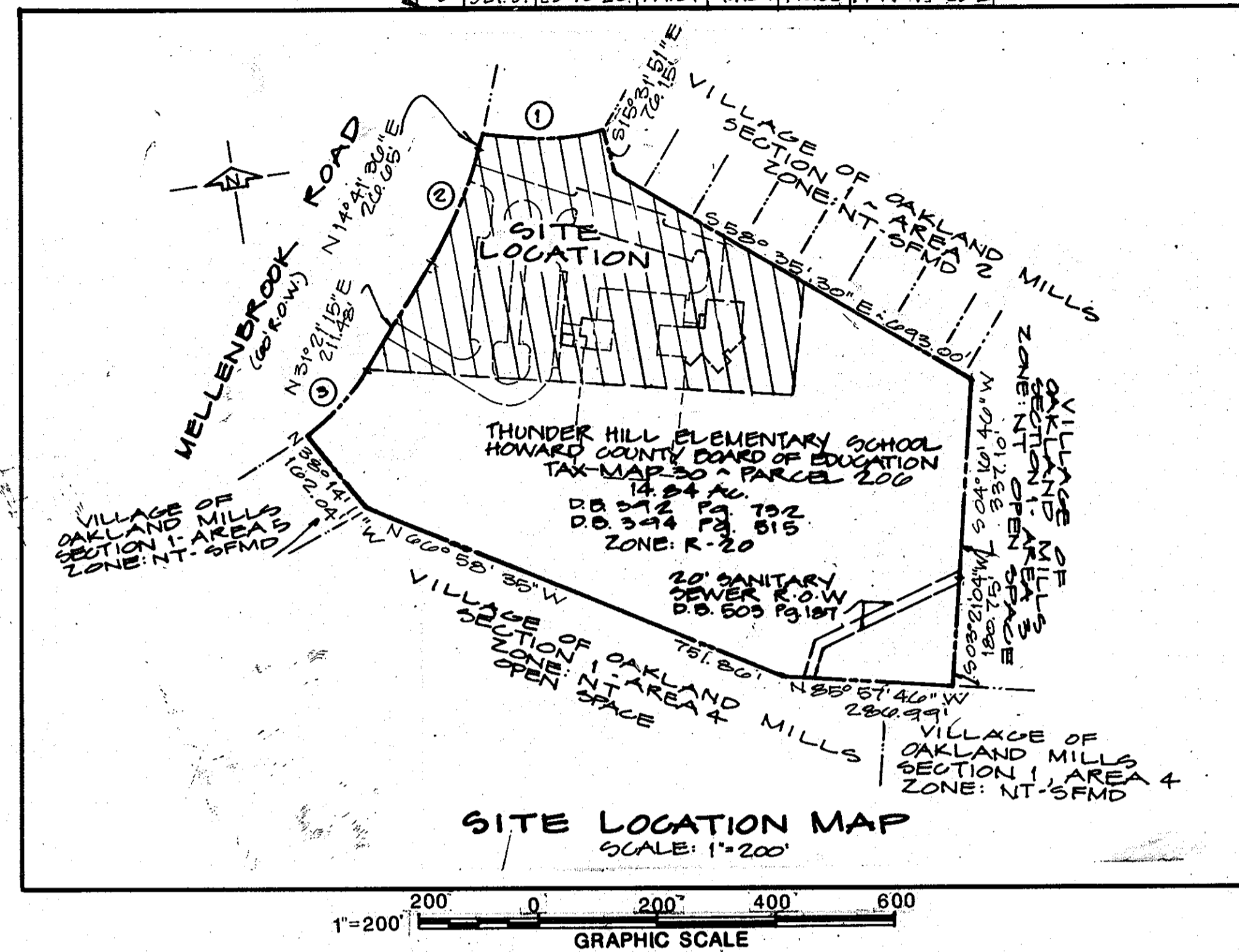
### ABBREVIATIONS

APPROX	APPROXIMATE	LAT	LATERAL
BIT	BITUMINOUS	MH	MANHOLE
CA	CONCRETE ANCHOR	N	NORTH
CISP	CAST IRON SOIL PIPE	NA	NOT APPLICABLE
CTB	CONCRETE THRUST BLOCK	NIC	NOT IN CONTACT
EP	EDGE OF PAVEMENT	PVMT	PAVEMENT
EX	EXISTING		
FF	FINISHED FLOOR	SAN	SANITARY SEWER
		STM	STORM
G	NATURAL GAS	TB	TEST BORING
HB	HORIZONTAL BEND	UP	UNDERGROUND POWER
HC	HANDICAP	UT	UNDERGROUND TELEPHONE
INV	INVERT	W	WATER
		W/	WITH

### DRAWING INDEX

- C-1 LEGEND, MAPS & NOTES
- C-2 SITE PLAN
- C-3 SITE PLAN
- C-4 EROSION CONTROL PLAN
- C-5 EROSION CONTROL PLAN
- C-6 EROSION CONTROL DETAILS AND SPECIFICATIONS
- C-7 PROFILES AND DETAILS
- C-8 SITE PLAN, EROSION CONTROL PLAN AND DETAILS

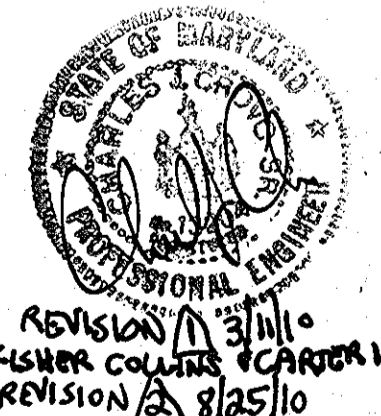
CURVE DATA						
NO.	RADIUS	DELTA	ARC	TAN	CHORD	CH BEARING
1	408.11	28° 21' 04"	208.87	103.87	200.81	N 84° 02' 24" E
2	702.10	10° 39' 40"	212.87	107.20	212.14	N 23° 01' 25" E
3	327.31	25° 40' 25"	147.24	74.87	140.00	N 44° 14' 28" E



#### GENERAL NOTES

- TOPOGRAPHIC AND BOUNDARY INFORMATION PROVIDED BY HOWARD COUNTY BOARD OF EDUCATION. NO TITLE REPORT FURNISHED.
- LOCATIONS OF ALL EXISTING UTILITIES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD LOCATION AND VERIFICATION OF ALL EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION IN THE VICINITY OF SAID UTILITIES.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE STANDARDS AND DETAILS CONTAINED WITHIN THE HOWARD COUNTY DESIGN MANUAL, VOLUMES I THROUGH IV.
- ALL UTILITIES AND DRAINAGE APPURTENANCES OUTSIDE OF THE PUBLIC RIGHT-OF-WAY WILL BE PRIVATELY OWNED AND MAINTAINED.
- FLOW DATA FOR THE EXISTING 12-INCH WATERMAIN IN MELLENBROOK ROAD FURNISHED BY HOWARD COUNTY BUREAU OF UTILITIES, AND ADJUSTED FOR MINIMUM HEAD CONDITIONS, IS AS FOLLOWS:

STATIC PRESSURE = 49.6 PSI  
RESIDUAL PRESSURE = 39.6 PSI  
FLOW RATE = 2100 GPM  
BASELINE ELEVATION = 400 FT.



ADDRESS CHART	
PARCEL NUMBER	STREET ADDRESS
P 200	9357 MELLENBROOK ROAD

#### SITE ANALYSIS

- PROPERTY OWNER: HOWARD COUNTY BOARD OF EDUCATION  
10910 ROUTE 102  
ELLICOTT CITY, MD. 21043 (301) 992-0500
- USE: THUNDER HILL ELEMENTARY SCHOOL
- TAX MAP: 30, PARCEL 206
- TOTAL SITE AREA: 646,214 S.F. OR 14.835 AC.
- PRESENT ZONING: R-20
- REQUIRED SETBACKS: FRONT YARD - 50 FEET MINIMUM  
SIDE YARD - 10 FEET MINIMUM  
REAR YARD - 30 FEET MINIMUM
- EXISTING S.D.P. NUMBERS: 70-02, 74-19, 75-08, 75-107
- ADDITION FLOOR AREA: 14,747 S.F. (GROSS)  
13,074 S.F. (NET USABLE)
- OCCUPANCY:
 

CURRENT TEACHERS	= 24	CURRENT STUDENTS	= 309
CURRENT TEACHERS AIDS	= 3		
CURRENT HEALTH AID	= 1		
CURRENT SECRETARIAL	= 2		
TOTAL CURRENT STAFF	= 30	CURRENT STUDENTS	= 309
FUTURE TEACHERS	= 3	FUTURE STUDENTS	= 89
TOTAL FUTURE STAFF	= 33	STUDENTS	= 398
- EXISTING PARKING: REGULAR = 91 SPACES  
HANDICAPPED = 4 SPACES  
TOTAL = 95 SPACES
- ADDITIONAL SPACES REQUIRED: 0  
(PER HOWARD CO. BOARD OF EDUCATION)
- SITE BUILDING COVERAGE - EXISTING: 50,060 S.F.  
PROPOSED: 14,150 S.F.  
TOTAL: 64,210 S.F. = 9.94%
- SITE OPEN SPACE (GREEN SPACE) TO REMAIN:  
495,953 S.F. OR 11.386 AC. = 76.74%

APPROVED  
DIVISION OF LAND DEVELOPMENT &  
ZONING ADMINISTRATION  
HOWARD COUNTY, MARYLAND  
DATE 12-22-86  
ms/dmm

REVISIONS		
2	REVISE SITE ANALYSIS	8/25/10
1	ADDED BUILDING ADDITIONS AND PARKING LOT	3/11/10

**THUNDER HILL  
ELEMENTARY SCHOOL  
KINDERGARTEN ADDITION**

HOWARD COUNTY BOARD OF EDUCATION  
COLUMBIA MARYLAND  
6th ELECTION DISTRICT

TAX MAP 30, PARCEL 206  
D.B. 392, PG. 732 AND D.B. 394, PG. 515  
ORIGINAL SDP NO. 70-02

**PECK PECK & ASSOCIATES, INC.**  
 architecture planning graphics interiors  
 1924 OPTIZ BOULEVARD WOODBRIDGE, VIRGINIA 22191 703-690-3421

**THUNDER HILL ELEMENTARY SCHOOL  
ADDITION & ALTERATIONS**  
 9357 MELLENBROOK RD. COLUMBIA, MARYLAND  
 THE HOWARD COUNTY PUBLIC SCHOOL SYSTEM

SHEET TITLE  
& NOTES

ISSUED  
23 FEBRUARY 1987

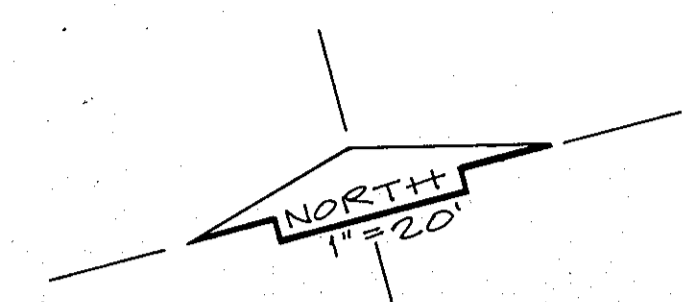
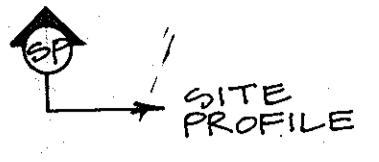
REVISED

JOB NUMBER  
044.0090 / 8609

DRAWING NO.  
**C-1**

SDP 1 OF 8  
SHEET 2 OF 26

NO.	CURVE		DATA			
	RADIUS	DELTA	ARC	TAN	CHORD	CH BEARING
1	402.11'	28°27'04"	262.24'	103.57'	200.81'	N 89°02'37"E
2	732.10'	10°37'40"	212.29'	107.20'	212.14'	N 23°01'25"E



VILLAGE OF OAKLAND MILLS  
SECTION 1 - AREA 2  
ZONE: NT - SFMD

VILLAGE OF OAKLAND MILLS  
SECTION 1 - AREA 2  
ZONE: NT - SFMD

**SITE PLAN NOTES**

1. ALL CONSTRUCTION SHALL CONFORM TO REQUIREMENTS OF HOWARD COUNTY DESIGN MANUAL, VOLUMES I THRU IV.
2. FIRE HYDRANT SHALL BE IN ACCORDANCE WITH HOWARD COUNTY STANDARD DETAIL W-1.11, LOCATION TYPE 'A', & W-1.12.
3. CONCRETE THRUST BLOCKS (INDICATED CTB) OR BUTTRESSES SHALL BE IN ACCORDANCE WITH STANDARD DETAILS W-2.21, W-2.23 & W-2.24.
4. FIRE HYDRANT & VALVE SHALL BE STRAPPED IN ACCORDANCE WITH STANDARD DETAILS W-2.11 THRU W-2.15.
5. NEW CONCRETE SIDEWALK SHALL BE IN ACCORDANCE WITH STANDARD DETAIL R-3.05.
6. NEW CURBING SHALL BE CONSTRUCTED TO MATCH EXISTING ADJACENT CURBING & SHALL BE IN ACCORDANCE WITH STANDARD DETAIL R-3.03.

NOTE: THIS PLAN IS SUBJECT TO WAIVER PETITION WP-10-25. THE PLANNING DIRECTOR ON APRIL 15, 2010 APPROVED TO WAIVE SECTION 16.12.02.(b)(1)(iii) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:

1. NO SPECIMEN TREE(S) MAY BE REMOVED AND NO IMPACTS TO THE PERENNIAL STREAM OR ITS BUFFERS MAY OCCUR.
2. A FEE-IN-LIEU PAYMENT OF \$9,801.00 SHALL BE PAID TO THE FOREST CONSERVATION FUND, SECTION 16.12.11, ACCOUNT # 019-005-4206.

Revisions		
1	Added 2 Handicap Spaces, 8" Water Line, Fire Hydrant & 20' Water Line Easement	3/11/10
2	Added Waiver Approval Note And Revised Handicapped Parking Area	8/25/10

APPROVED  
DIVISION OF LAND DEVELOPMENT &  
ZONING ADMINISTRATION  
HOWARD COUNTY, MARYLAND  
DATE 12-22-86  
*[Signature]*

OWNER:  
HOWARD COUNTY BOARD OF EDUCATION  
10910 ROUTE 108  
ELICOTT CITY, MD 21045

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.  
HOWARD COUNTY HEALTH DEPARTMENT  
*[Signature]* 7-7-87  
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING  
*[Signature]* 7-10-87  
DIRECTOR DATE

APPROVED: DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION  
*[Signature]* 7-10-87  
DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 7/2/87  
DIRECTOR DATE

CHIEF BUREAU OF ENGINEERING  
*[Signature]* 7/2/87  
DATE

**THUNDER HILL  
ELEMENTARY SCHOOL  
KINDERGARTEN ADDITION**

HOWARD COUNTY BOARD OF EDUCATION  
COLUMBIA MARYLAND  
6th ELECTION DISTRICT

TAX MAP 30, PARCEL 206  
D.B. 392, PG. 732 AND D.B. 394, PG. 515  
ORIGINAL SDP NO. 70-02

REVISION 3/11/10  
FISHER COLLINS & CARTER INC  
REVISION 8/25/10

SDP-87-92 DPW NO. 44-1647-D

1"=20'  
GRAPHIC SCALE

PECK PECK & ASSOCIATES, INC.  
architecture planning graphics interiors  
1824 OPTIZ BOULEVARD WOODBRIDGE, VIRGINIA 22191 703-680-3121

CAD-CON  
INCORPORATED  
3025 Hamaker Court  
Suite 201  
Fairfax, Virginia  
703-260-2585

THUNDER HILL ELEMENTARY SCHOOL  
ADDITION & ALTERATIONS  
9357 MELLENBROOK RD. COLUMBIA, MARYLAND  
THE HOWARD COUNTY PUBLIC SCHOOL SYSTEM

SHEET TITLE  
SITE PLAN

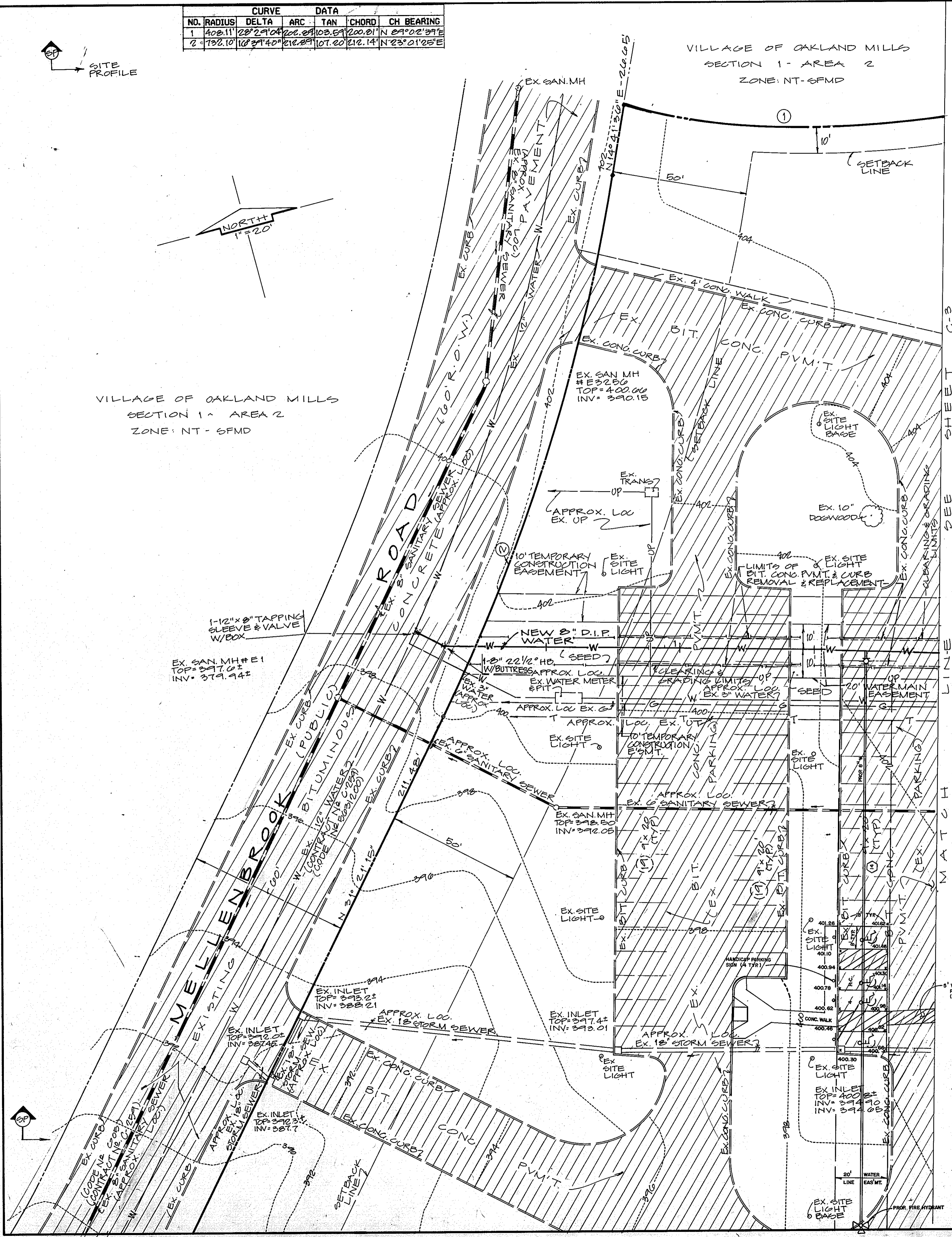
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23 FEBRUARY 1987

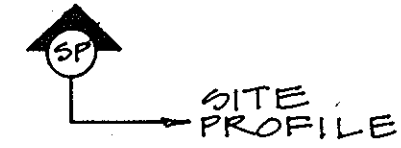
REVISED  
6-17-87 PER HCDPW

JOB NUMBER  
044.0090 / 8809

DRAWING NO.  
C-2

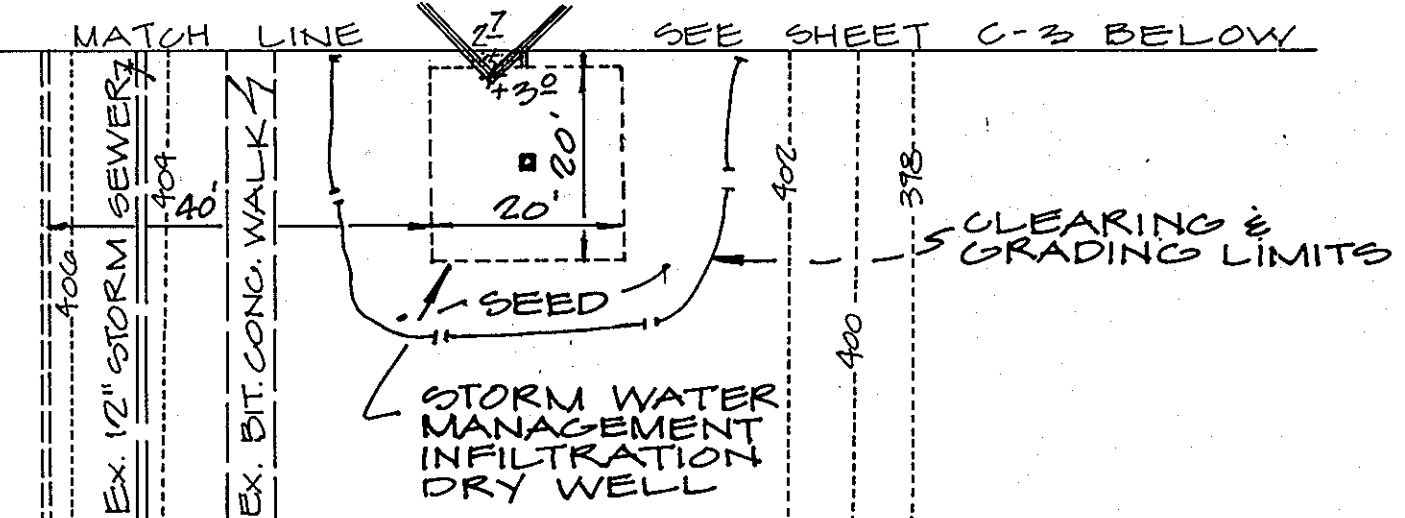
SDP 2 OF 8  
SHEET 3 OF 25



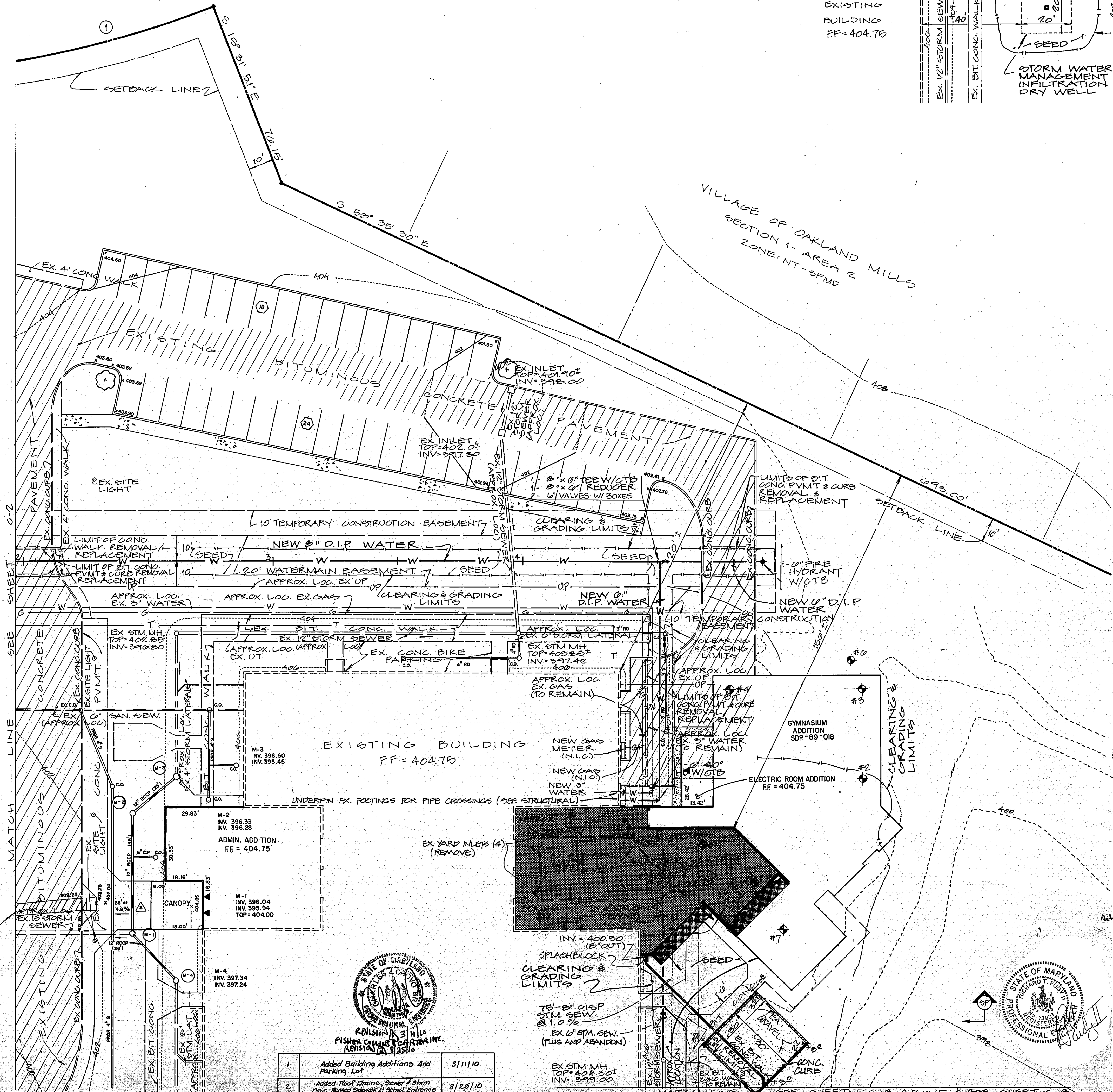


CURVE DATA						
NO.	RADIUS	DELTA	ARC	TAN	CHORD	CH BEARING
1	408.11	28° 29' 04"	202.89	103.59	200.81	N 84° 02' 31" E
2	732.10	10° 39' 30"	212.87	107.20	212.14	N 23° 21' 23" E

EXISTING BUILDING  
FF = 404.75



VILLAGE OF OAKLAND MILLS  
SECTION 1- AREA 2  
ZONE: NT-3FMD



APPROVED  
DIVISION OF LAND DEVELOPMENT &  
ZONING ADMINISTRATION  
HOWARD COUNTY, MARYLAND  
DATE 12-22-86  
*M. H. H.*

OWNER:  
HOWARD COUNTY BOARD OF EDUCATION  
10910 ROUTE 108  
ELLICOTT CITY, MD 21043  
SDP-87-92 DPW NO. 44-1647-D  
1"=20' GRAPHIC SCALE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS  
HOWARD COUNTY HEALTH DEPARTMENT  
*Joseph P. ...* 7-6-87  
COUNTY HEALTH OFFICER DATE  
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING  
*...* 7-10-87  
DIRECTOR DATE  
APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE,  
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*...* 2/2/87  
DIRECTOR DATE  
*...* 7-2-87  
CHIEF BUREAU OF ENGINEERING DATE

**THUNDER HILL  
ELEMENTARY SCHOOL  
KINDERGARTEN ADDITION**  
HOWARD COUNTY BOARD OF EDUCATION  
COLUMBIA MARYLAND  
6th ELECTION DISTRICT  
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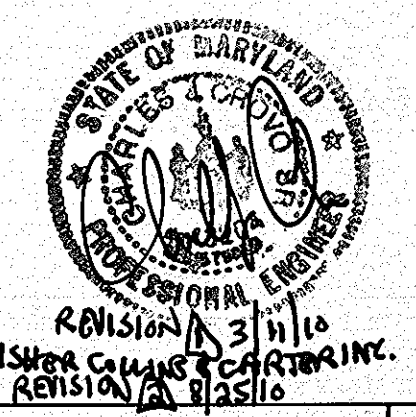
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CAD-CON  
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3025 Mountain Court  
Suite 201  
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703-260-2585

**THUNDER HILL ELEMENTARY SCHOOL  
ADDITION & ALTERATIONS**  
9357 MELLENBROOK RD. COLUMBIA, MARYLAND  
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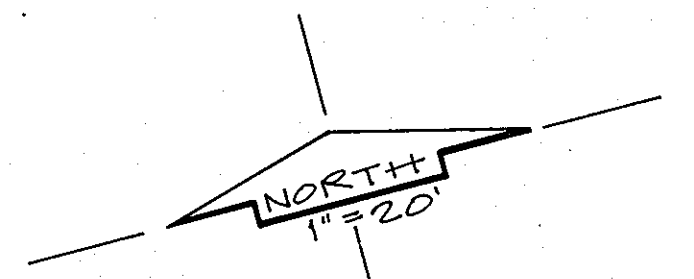
SHEET TITLE  
SITE PLAN  
ISSUED  
23 FEBRUARY 1987  
REVISED  
6-17-87 PER HCDPW  
JOB NUMBER  
044.009.0 / 8609  
DRAWING NO.  
**C-3**  
SDP 30FB  
SHEET 4 OF 25

1	Added Building Additions And Parking Lot	3/11/10
2	Added Roof Drains, Downspout & Storm Drain, Repaired Sidewalk at School Entrance	8/25/10



CURVE DATA		DATA				
NO.	RADIUS	DELTA	ARC	TAN	CHORD	CH BEARING
1	408.11	28°24'04"	102.89'	103.89'	200.81'	N 29°02'39"E
2	792.10	16°27'40"	116.24'	107.20'	212.87'	N 23°01'22"E

VILLAGE OF OAKLAND MILLS  
SECTION 1 - AREA 2  
ZONE: NT-SFMD



VILLAGE OF OAKLAND MILLS  
SECTION 1 - AREA 2  
ZONE: NT-SFMD

1-12" x 8" TAPPING  
SLEEVE & VALVE  
W/BOX

EX SAN. MH # E1  
TOP: 397.01  
INV: 379.44

EX SAN. MH # E2  
TOP: 392.50  
INV: 390.15

EX SAN. MH # E3  
TOP: 391.50  
INV: 390.00

EX SAN. MH # E4  
TOP: 391.50  
INV: 390.00

EX SAN. MH # E5  
TOP: 391.50  
INV: 390.00

EX SAN. MH # E6  
TOP: 391.50  
INV: 390.00

EX SAN. MH # E7  
TOP: 391.50  
INV: 390.00

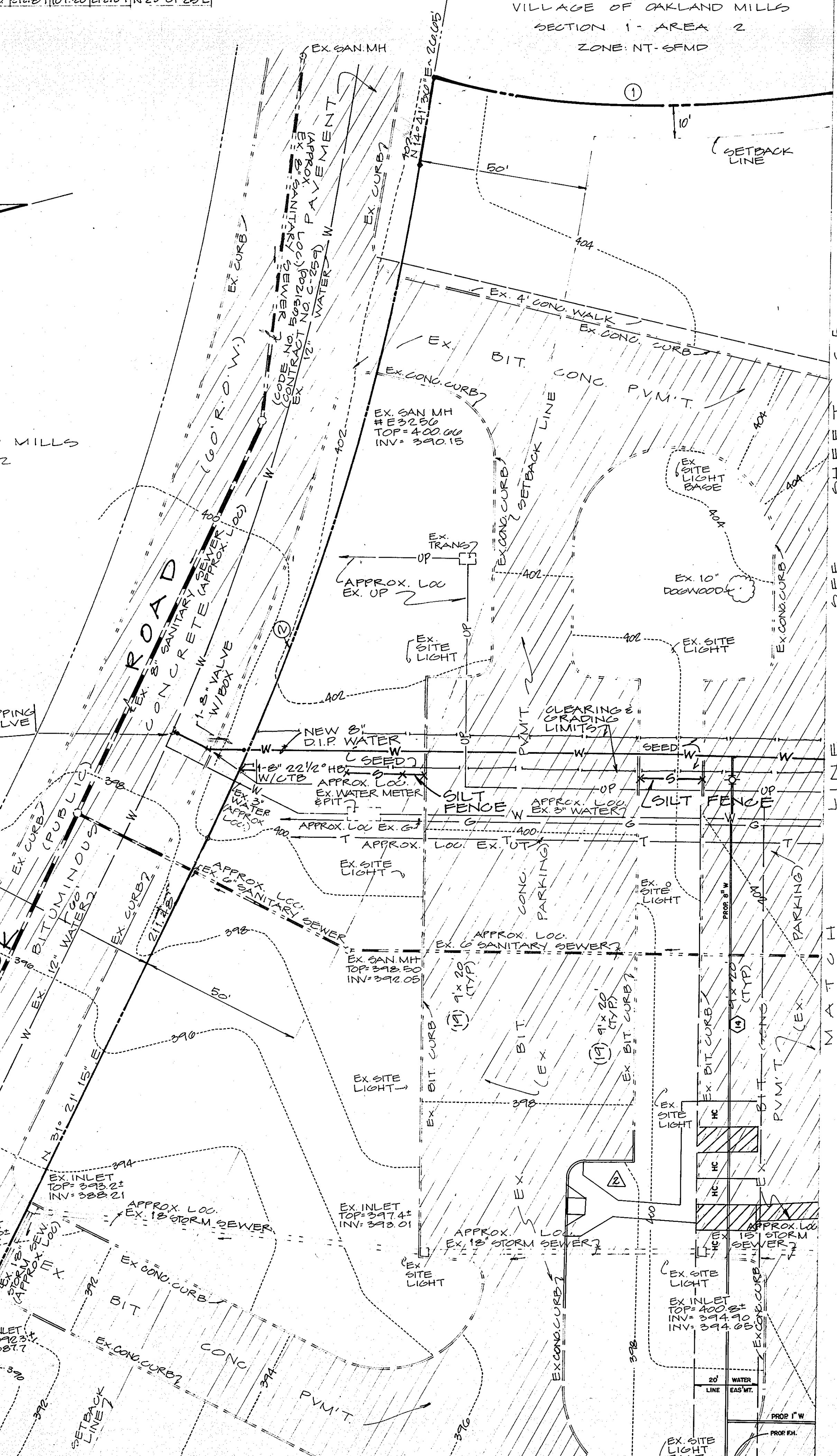
EX SAN. MH # E8  
TOP: 391.50  
INV: 390.00

EX SAN. MH # E9  
TOP: 391.50  
INV: 390.00

EX SAN. MH # E10  
TOP: 391.50  
INV: 390.00

EX SAN. MH # E11  
TOP: 391.50  
INV: 390.00

EX SAN. MH # E12  
TOP: 391.50  
INV: 390.00



"I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project."  
Signature of Developer: Sydney L. Cousin  
Date: June 23, 1987  
Sydney L. Cousin  
Howard County Public Schools  
16910 Route 108  
Ellicott City, Maryland 21043  
(301) 992-0800

I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.  
Signature of Engineer: [Signature]  
Date: 6-23-87

SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT. (1 DAY)
- NOTIFY "MISS UTILITY" AT LEAST 48 HOURS BEFORE BEGINNING ANY WORK AT 1-800-257-7777. NOTIFY THE HOWARD COUNTY OFFICE OF CONSTRUCTION/INSPECTION AT 410-313-1330 24 HOURS BEFORE STARTING WORK.
- INSTALL SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS. (1 WEEK)
- GRADE TO SUBGRADE CLASSROOM ADDITION AREAS AND PARKING LOT.
- CONSTRUCT STORM DRAIN SYSTEM, INSTALL INLET PROTECTION AND INSTALL CONCRETE CURB AND GUTTER. (2 WEEKS)
- CONSTRUCT CLASSROOM ADDITION. (9 MONTHS)
- INSTALL PAVING AS SHOWN ON PLANS. INSPECT STORM DRAIN SYSTEM AND FLUSH/CLEAN AS NECESSARY TO ENSURE NO REMAINING SEDIMENT IS WITHIN THE STORM DRAIN STRUCTURES AND THE STORM DRAIN SYSTEMS. (2 WEEKS)
- INSTALL SIDEWALKS AND FINE GRADE ALL AREAS AND INSTALL PERMANENT SEEDING. (1 WEEK)
- FOLLOWING SUCCESSFUL STABILIZATION (i.e. ESTABLISHED VEGETATION OR PAVING OF ALL DISTURBED AREAS, OBTAIN PERMISSION FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR TO REMOVE ALL REMAINING SEDIMENT AND EROSION CONTROL DEVICES THEN STABILIZE THOSE AREAS DISTURBED BY THIS PROCESS WITH PERMANENT SEEDING. (1 WEEK)
- SEQUENCE NOTE: THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON ALL SEDIMENT AND EROSION CONTROL STRUCTURES SHOWN HEREON AFTER EACH RAINFALL EVENT AND ON A DAILY BASIS. REMOVE SEDIMENT FROM THE SILT FENCE IN ACCORDANCE WITH THE CONSTRUCTION SPECIFICATIONS.

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. (992-2437)
- 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 redistribution, 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 in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51) and (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52.) Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- 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.
- Site Analysis:  
Total Area of Site 14.835 Acres  
Area Disturbed 0.452 Acres  
Area to be roofed or paved 0.158 Acres  
Area to be vegetatively stabilized 0.294 Acres  
Total Cut 165 Cu. yds  
Total Fill 412 Cu. yds  
Offsite waste/borrow area location ADVISE INSPECTOR
- 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.
- 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 building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
- Infiltration dry well shall not be constructed or placed into service until all of contributing drainage areas have been stabilized and approved by the responsible inspector. Section of roof storm lateral draining to dry well will be temporarily plugged and roof water will spill out over surcharge splash block until dry well is placed in service.
- See Erosion Control Details and Specifications, Sheet C-6, for further information.

1	ADDED 2 HANDICAP SPACES, 8" WATER LINE, FIRE HYDRANT AND 20' WATERLINE EASEMENT	3-11-10
2	Revised Handicapped Parking Area	8-25-10

APPROVED  
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION  
HOWARD COUNTY, MARYLAND  
DATE 12-22-86  
[Signature]

Reviewed for HOWARD S.C.D.  
Name  
and Meets Technical Requirements  
[Signature] 6-25-87  
U.S. Soil Conservation Service Date  
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT  
[Signature] 6-25-87  
Howard S.C.D. Date

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT  
[Signature] 7-6-87  
COUNTY HEALTH OFFICER DATE  
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING  
[Signature] 7-10-87  
DIRECTOR DATE  
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  
[Signature] 7-2-87  
DIRECTOR DATE  
CHIEF BUREAU OF ENGINEERING

THUNDER HILL ELEMENTARY SCHOOL KINDERGARTEN ADDITION  
HOWARD COUNTY BOARD OF EDUCATION COLUMBIA MARYLAND  
6th ELECTION DISTRICT  
TAX MAP 30, PARCEL 206  
D.B. 392, PG. 732 AND D.B. 394, PG. 515  
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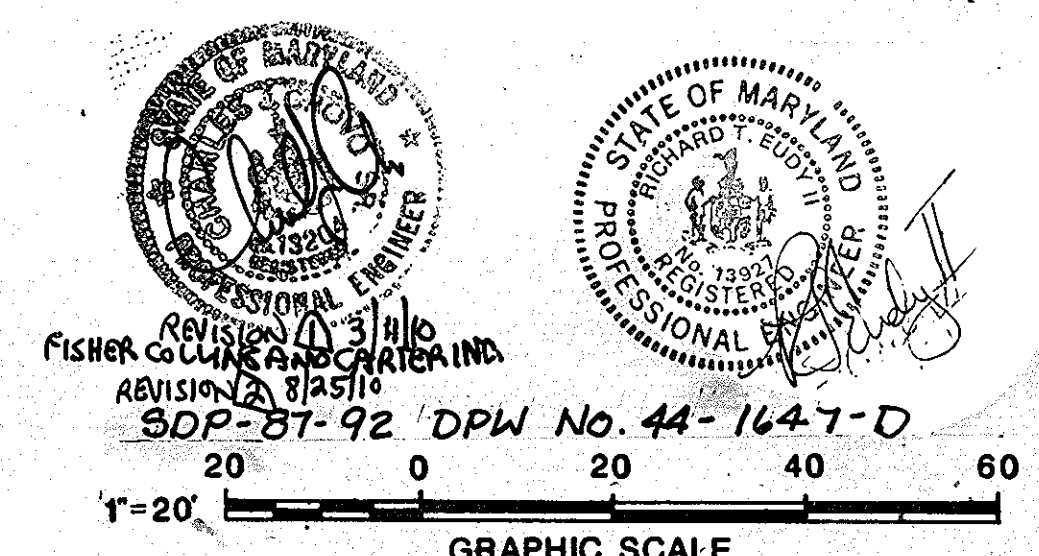
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1924 OPITZ BOULEVARD WOODBRIDGE, VIRGINIA 22191 703-660-3121

CAD-CON INCORPORATED  
3025 Henric Court  
Suite 201  
Fairfax, Virginia  
703-280-2589

THUNDER HILL ELEMENTARY SCHOOL ADDITION & ALTERATIONS  
9357 MELLENBROOK RD. COLUMBIA, MARYLAND  
THE HOWARD COUNTY PUBLIC SCHOOL SYSTEM

SHEET TITLE  
EROSION CONTROL PLAN  
ISSUED  
23 FEBRUARY 1987.  
REVISED  
JOB NUMBER  
044.0090 / 8609  
DRAWING NO.  
C-4  
SDP 40F8  
SHEET 6 OF 25

NOTE:  
THIS PLAN IS FOR EROSION CONTROL ONLY. NOT TO BE USED FOR CONSTRUCTION OF PERMANENT FACILITIES.



CURVE		DATA				
NO.	RADIUS	DELTA	ARC	TAN	CHORD	CH BEARING
1	408.11	28°29'04"	208.81	103.59	200.81	N 84°02'51" E
2	732.10	10°51'40"	212.84	107.20	212.14	N 23°01'25" E

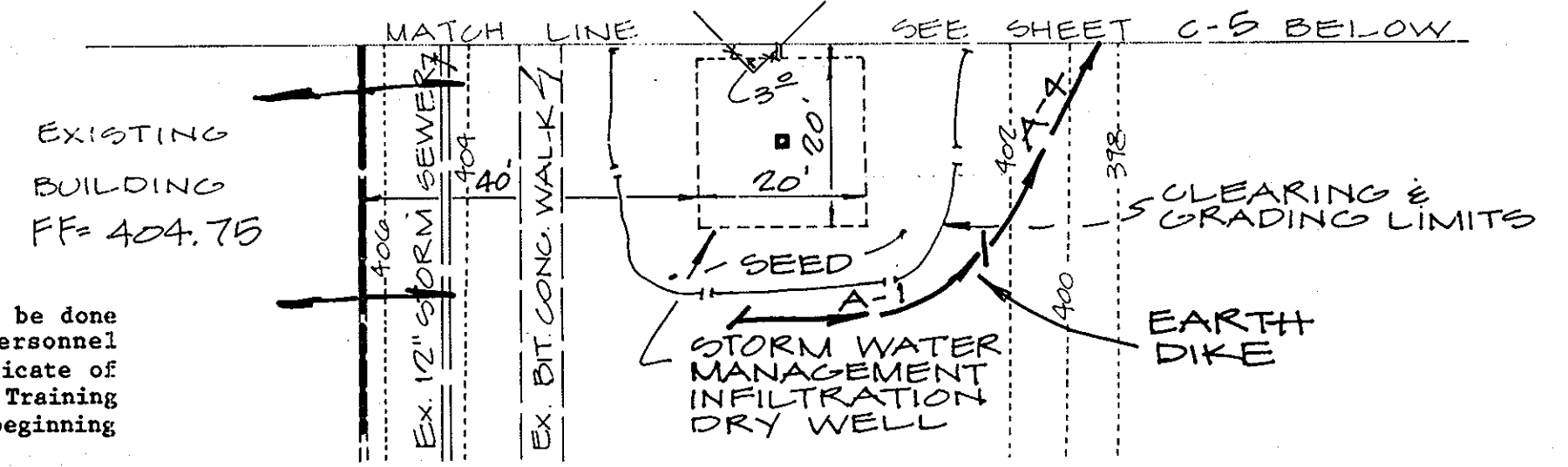
I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

*Signature of Engineer*  
Date: 6-23-87

"I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project."

*Signature of Developer*  
Date: June 23, 1987

SYDNEY L. COUSIN  
Howard County Public Schools  
10910 Route 108  
Ellicott City, Maryland 21043  
(301) 942-0500



**Construction Schedule**

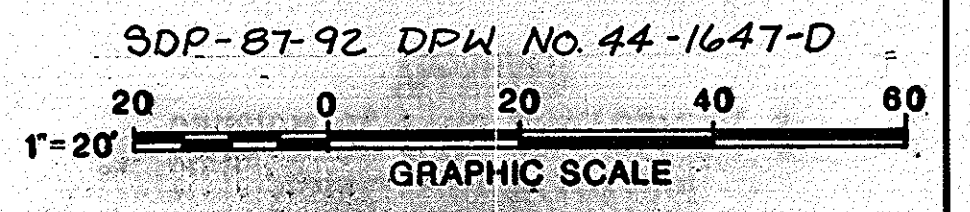
1. Install temporary sediment control devices -	2 days*
2. Clearing, demolition and rough grading -	5 days
3. Utility installation -	20 days
4. Building Construction -	180 days
5. Permanent site stabilization -	20 days
6. Infiltration dry well construction -	2 days
7. Remove temporary sediment control devices, repair and permanently stabilize remainder of site -	15 days

\*Commencing upon receipt of required permits

**Stone Outlet Sediment Trap:**

Drainage Area	= 0.452 Ac
Storage Required	= 814 CF
Trap Size	= 25' x 7' x 3' Depth
Storage Provided	= 867 CF
Outlet Length	= 2 Ft
Embankment Height	= 2 Ft
Weir Crest	= 399.00
Pool Bottom	= 396.00
Embankment Top	= 400.00

APPROVED  
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION  
HOWARD COUNTY, MARYLAND  
DATE: 12-23-86



Reviewed for **Howard S.C.D.**  
Name  
and meets Technical Requirements  
*Signature* 6-25-87  
U.S. Soil Conservation Service Date  
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT  
*Signature*  
Howard S.C.D. Date

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.  
HOWARD COUNTY HEALTH DEPARTMENT  
COUNTY HEALTH OFFICER *Signature* DATE 7-6-87  
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING  
DIRECTOR *Signature* DATE 7-10-87  
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION  
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS AND PUBLIC ROADS  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
DIRECTOR *Signature* DATE 7-2-87  
CHIEF BUREAU OF ENGINEERING *Signature* DATE 7-2-87

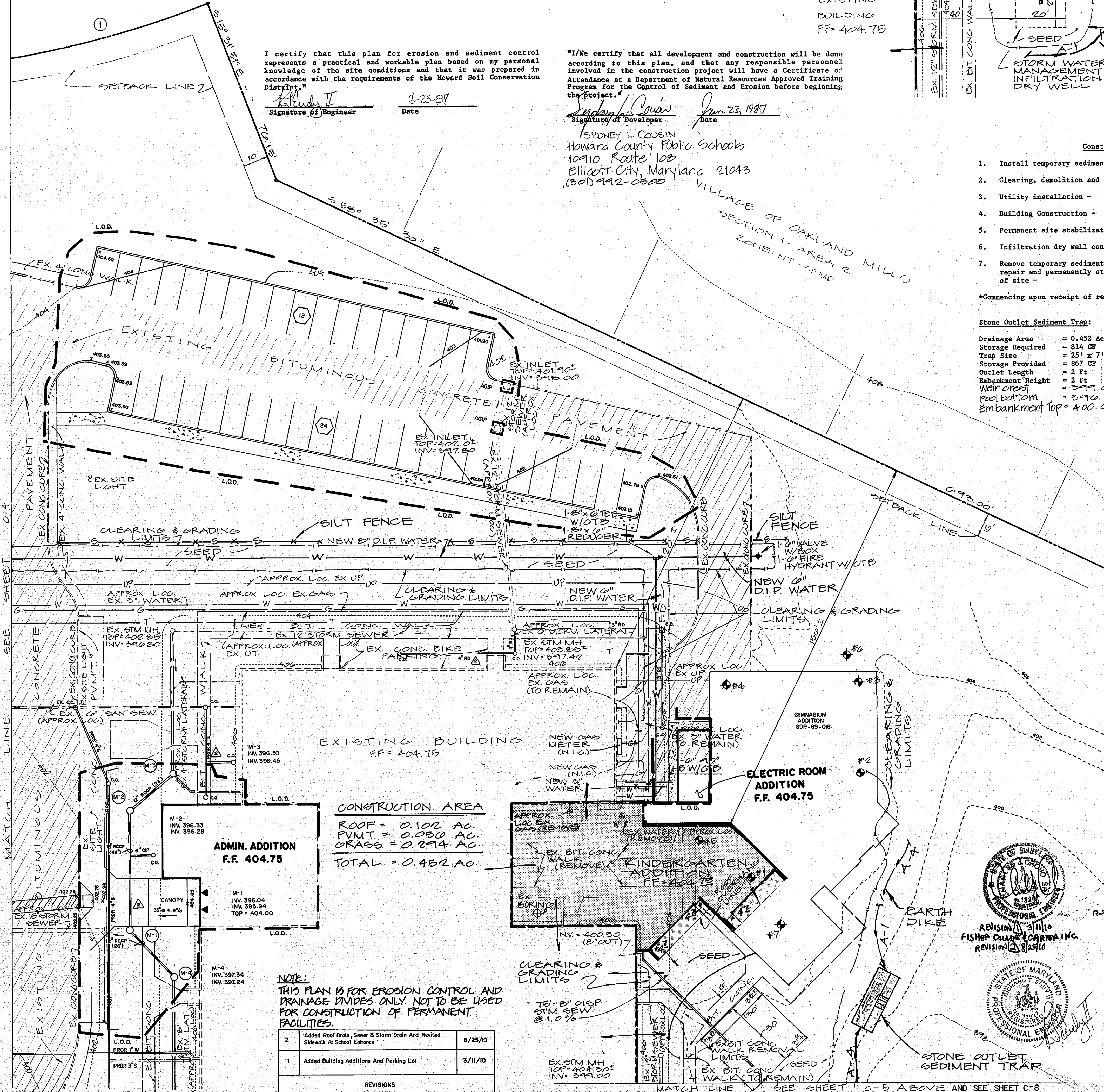
**THUNDER HILL ELEMENTARY SCHOOL KINDERGARTEN ADDITION**  
HOWARD COUNTY BOARD OF EDUCATION  
COLUMBIA MARYLAND  
6th ELECTION DISTRICT  
TAX MAP 30, PARCEL 206  
D.B. 392, PG. 732 AND D.B. 394, PG. 515  
ORIGINAL SDP NO. 70-02

PECK PECK & ASSOCIATES, INC.  
architecture planning graphics interiors  
1924 OPTIC BOULEVARD WOODBRIDGE, VIRGINIA 22191 703-690-3121

CAD-CON INCORPORATED  
3025 Hanover Court Suite 201  
Fairfax, Virginia 703-260-2585

THUNDER HILL ELEMENTARY SCHOOL  
ADDITION & ALTERATIONS  
9357 MELLENBROOK RD. COLUMBIA, MARYLAND  
THE HOWARD COUNTY PUBLIC SCHOOL SYSTEM

SHEET TITLE  
EROSION CONTROL PLAN  
ISSUED  
23 FEBRUARY 1987  
REVISED  
JOB NUMBER  
044.0090 / 8609  
DRAWING NO.  
C-5  
SDP 50F B  
SHEET 6 OF 25

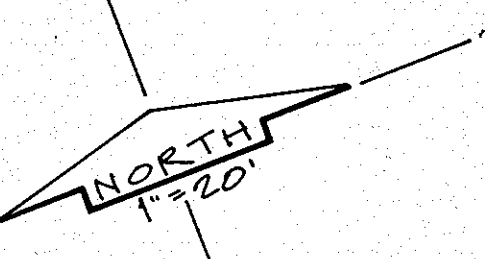
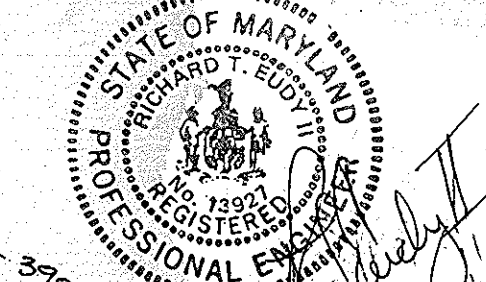
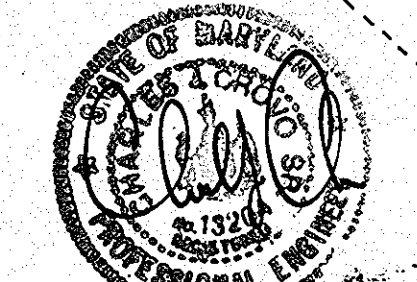


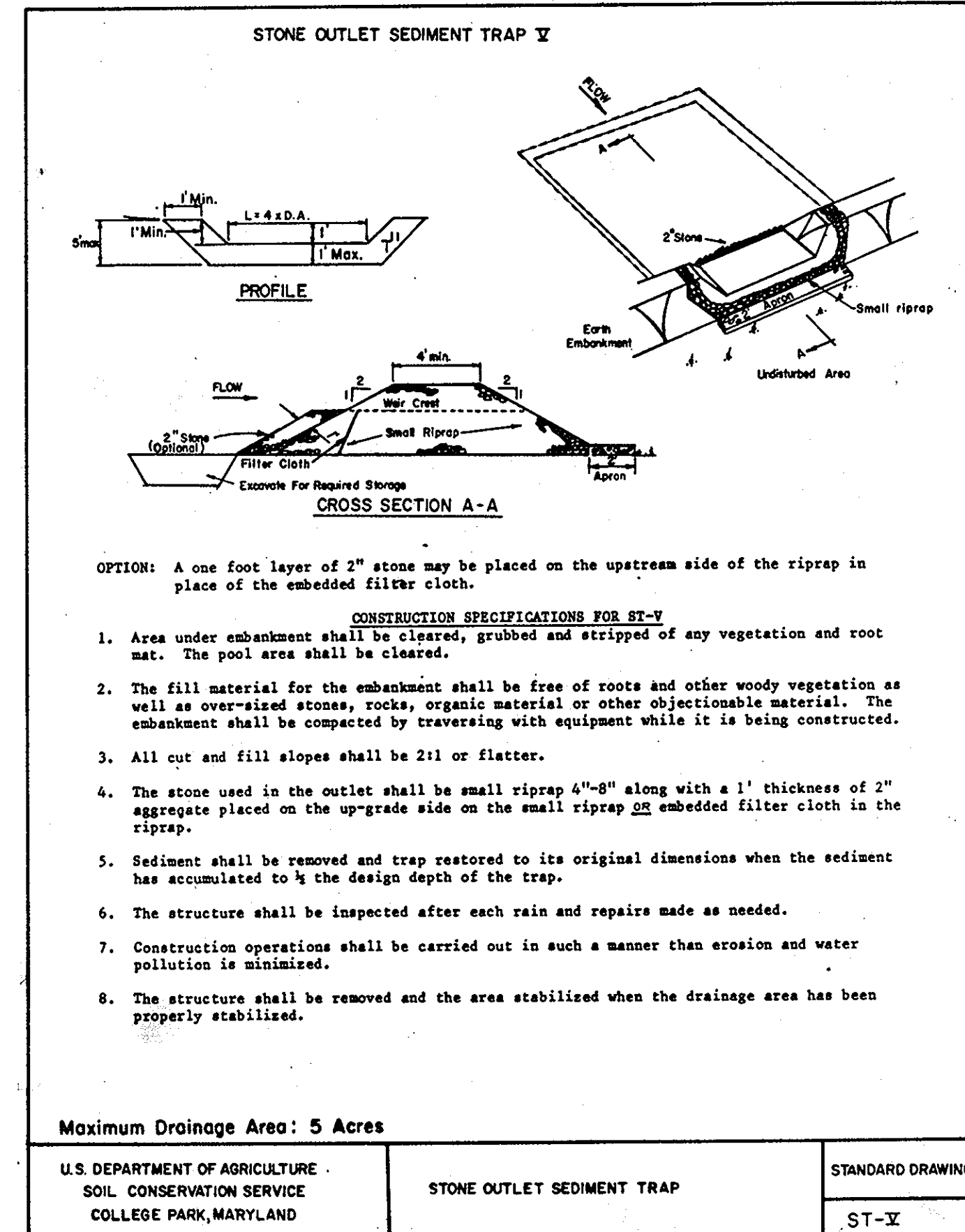
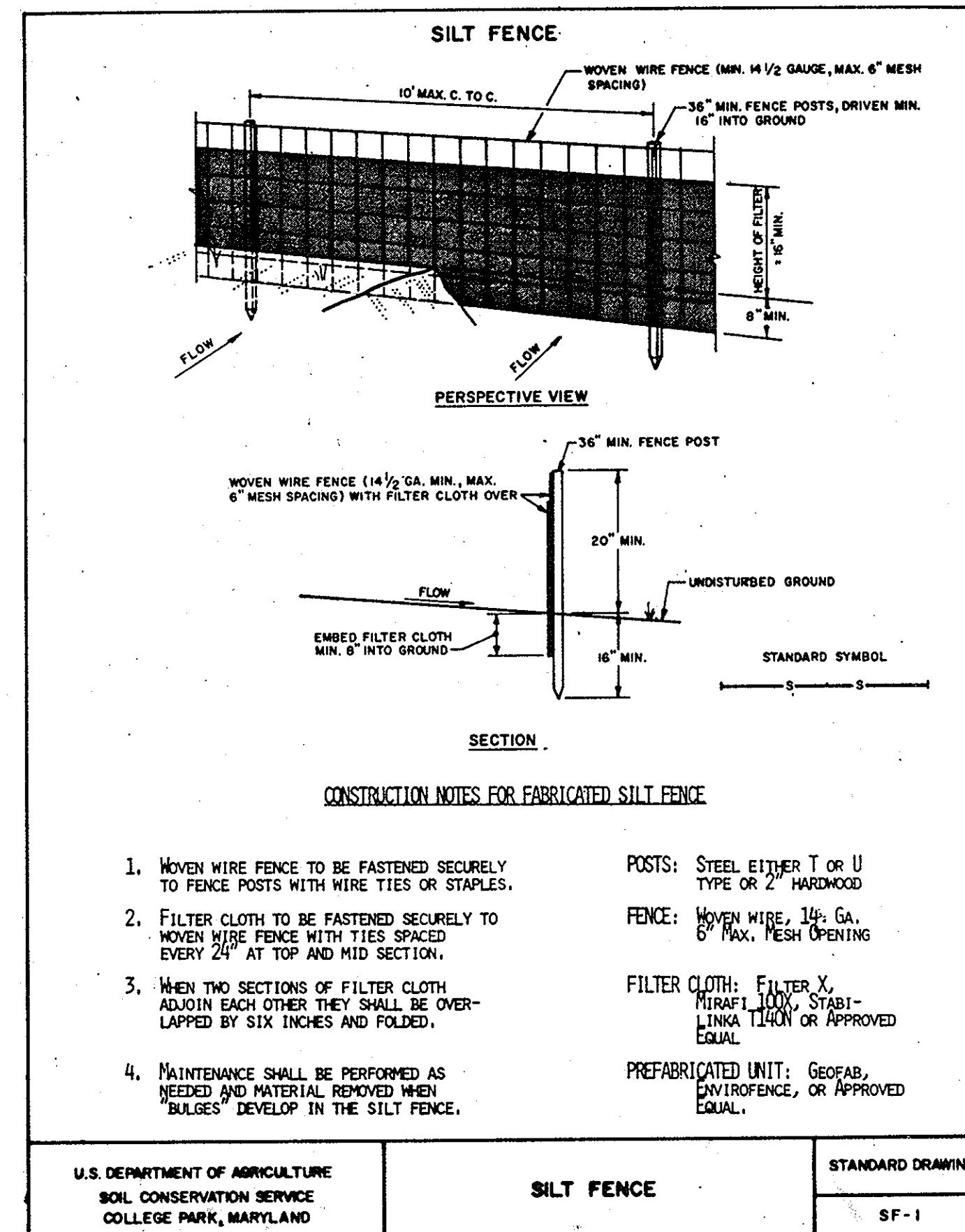
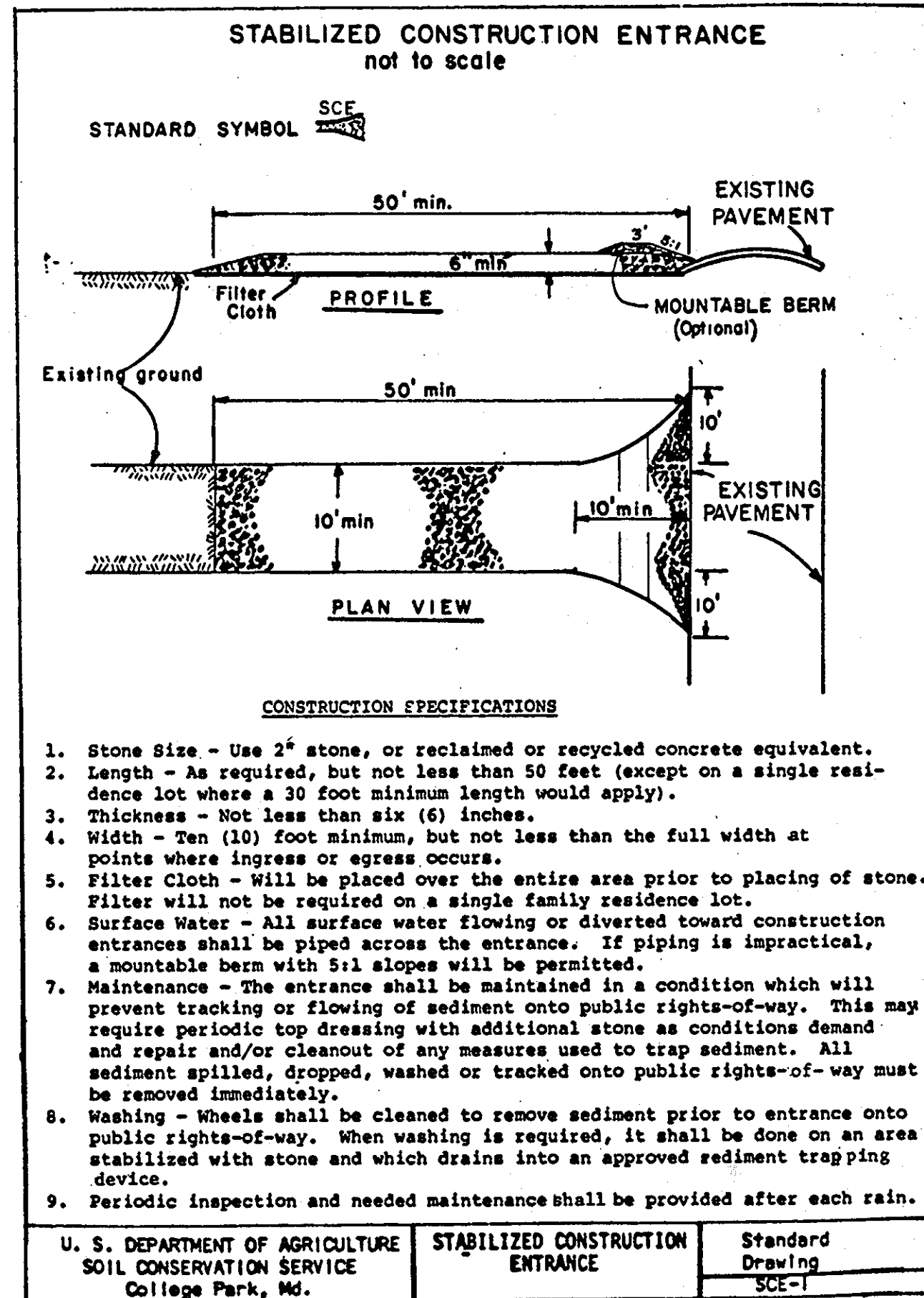
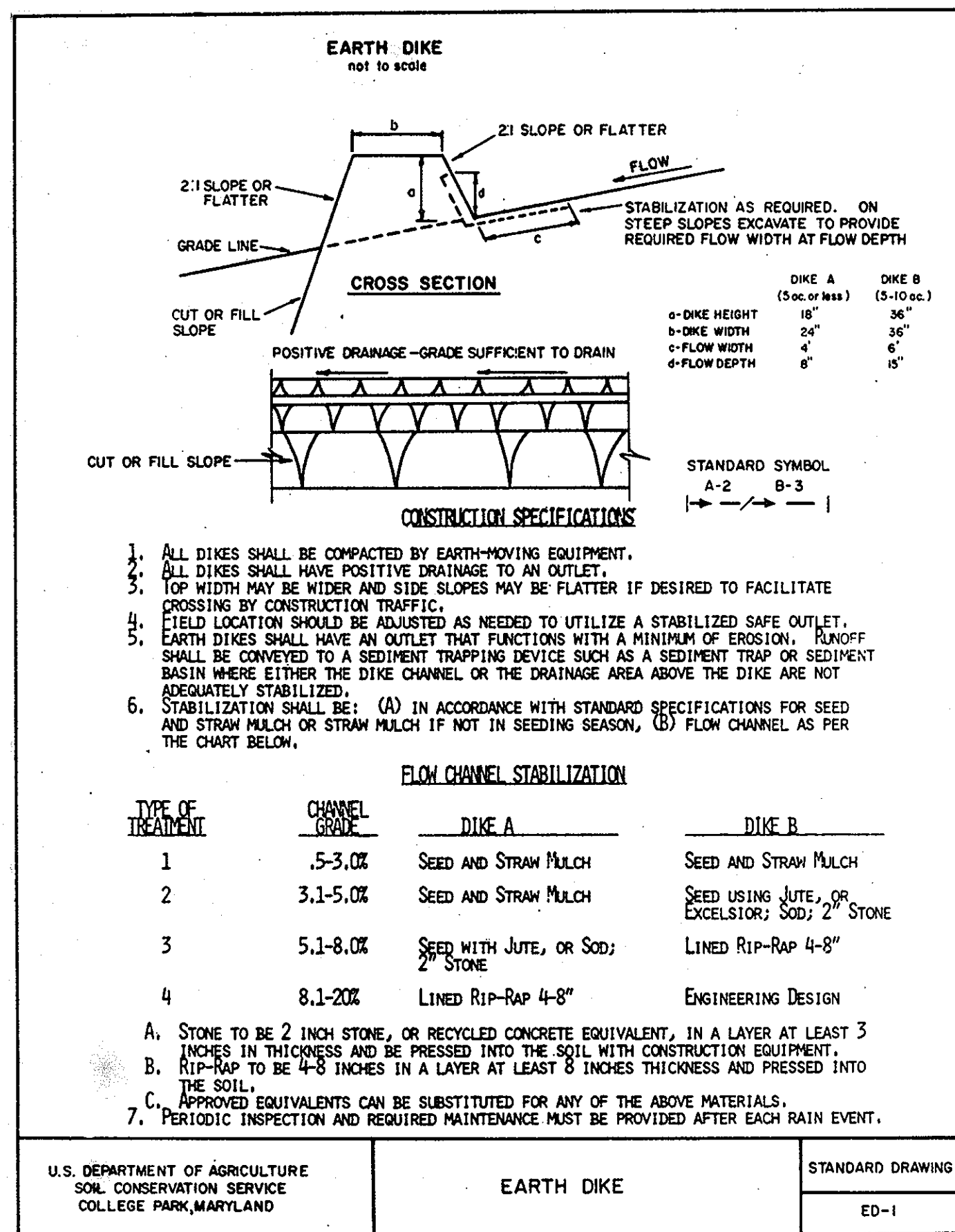
**CONSTRUCTION AREA**  
ROOF = 0.102 AC.  
PVMT. = 0.050 AC.  
GRASS = 0.274 AC.  
TOTAL = 0.452 AC.

**NOTE:**  
THIS PLAN IS FOR EROSION CONTROL AND DRAINAGE DIVIDES ONLY. NOT TO BE USED FOR CONSTRUCTION OF PERMANENT FACILITIES.

**REVISIONS**

2	Added Roof Drain, Sewer & Storm Drain and Revised Sidewalk At School Entrance	8/25/10
1	Added Building Additions and Parking Lot	3/11/10





**PERMANENT SEEDING NOTES**

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

**Seedbed Preparation:** Loosen upper three inches of soil by raking, discing or other acceptable means before seeding.

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

- Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 square ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq ft).
- Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil.

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

**Mulching -** Apply 1 1/2 ton to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchoring.

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

**TEMPORARY SEEDING NOTES**

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

**Seedbed Preparation:** Loosen upper three inches of soil by raking, discing or other acceptable means before seeding.

**Soil Amendments:** Apply 60 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft).

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

**Mulching:** Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. anchor mulch immediately after application using mulch anchoring tool or 218 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 ft or higher, use 348 gal per acre (8 gal/1000 sq ft) for anchoring.

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

APPROVED  
DIVISION OF LAND DEVELOPMENT &  
ZONING ADMINISTRATION  
HOWARD COUNTY, MARYLAND  
DATE 12-22-86  
*M. J. Allen*

OWNER:  
HOWARD COUNTY BOARD OF EDUCATION  
10910 ROUTE 108  
ELLICOTT CITY, MD. 21043

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.  
HOWARD COUNTY HEALTH DEPARTMENT  
*James E. G... 7-6-87*  
COUNTY HEALTH OFFICER DATE

APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING  
*[Signature]*  
DATE 7-10-87

DIRECTOR DATE  
*John W. H... 7-10-87*  
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE.  
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*[Signature]*  
DATE 7-2-87

DIRECTOR DATE  
*[Signature]*  
CHIEF BUREAU OF ENGINEERING DATE

THUNDER HILL  
ELEMENTARY SCHOOL  
KINDERGARTEN ADDITION  
HOWARD COUNTY BOARD OF EDUCATION  
COLUMBIA MARYLAND  
6th ELECTION DISTRICT  
TAX MAP 30, PARCEL 206  
D.B. 392, PG. 732 AND D.B. 394, PG. 515  
ORIGINAL SDP NO. 70-02

PECK PECK & ASSOCIATES, INC.  
architecture planning graphics interiors  
1924 CRITZ BOULEVARD WOODBRIDGE, VIRGINIA 22191 703-690-3121

CAD-CON INCORPORATED  
3025 Hamaker Court Suite 201 Fairfax, Virginia 703-260-2685

THUNDER HILL ELEMENTARY SCHOOL  
ADDITION & ALTERATIONS  
9357 MELLENBROOK RD. COLUMBIA, MARYLAND  
THE HOWARD COUNTY PUBLIC SCHOOL SYSTEM

SHEET TITLE  
EROSION CONTROL  
DETAILS AND  
SPECIFICATIONS

ISSUED  
23 FEBRUARY 1987

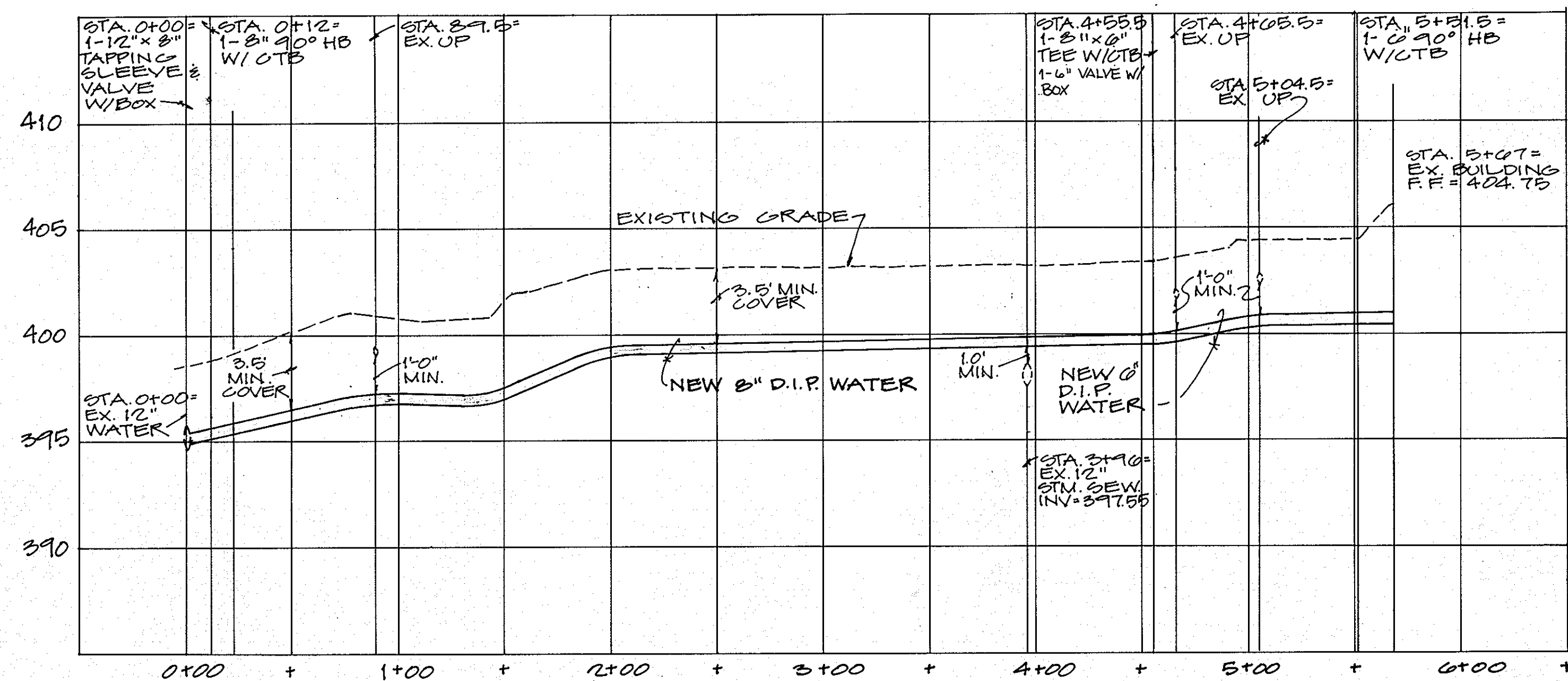
REVISED

JOB NUMBER  
044.0090 / 8609

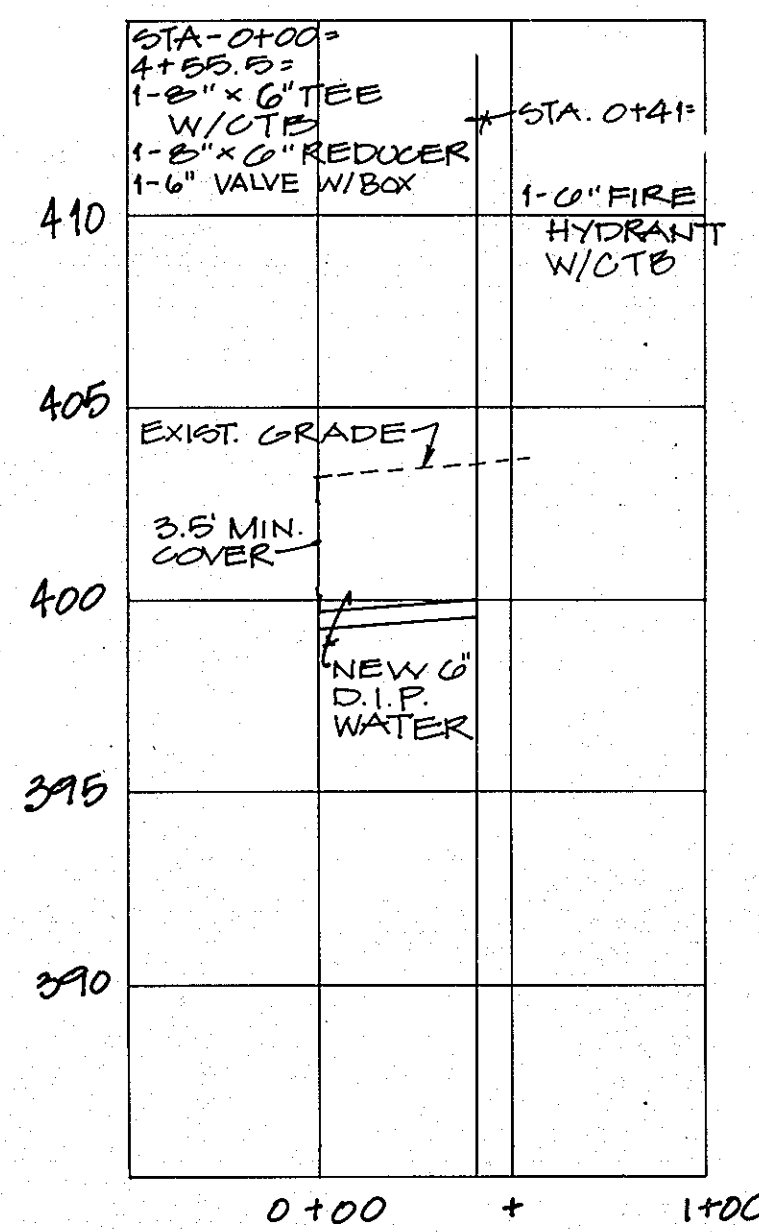
DRAWING NO.  
C-6

SDP 60FB  
SHEET 7 OF 25

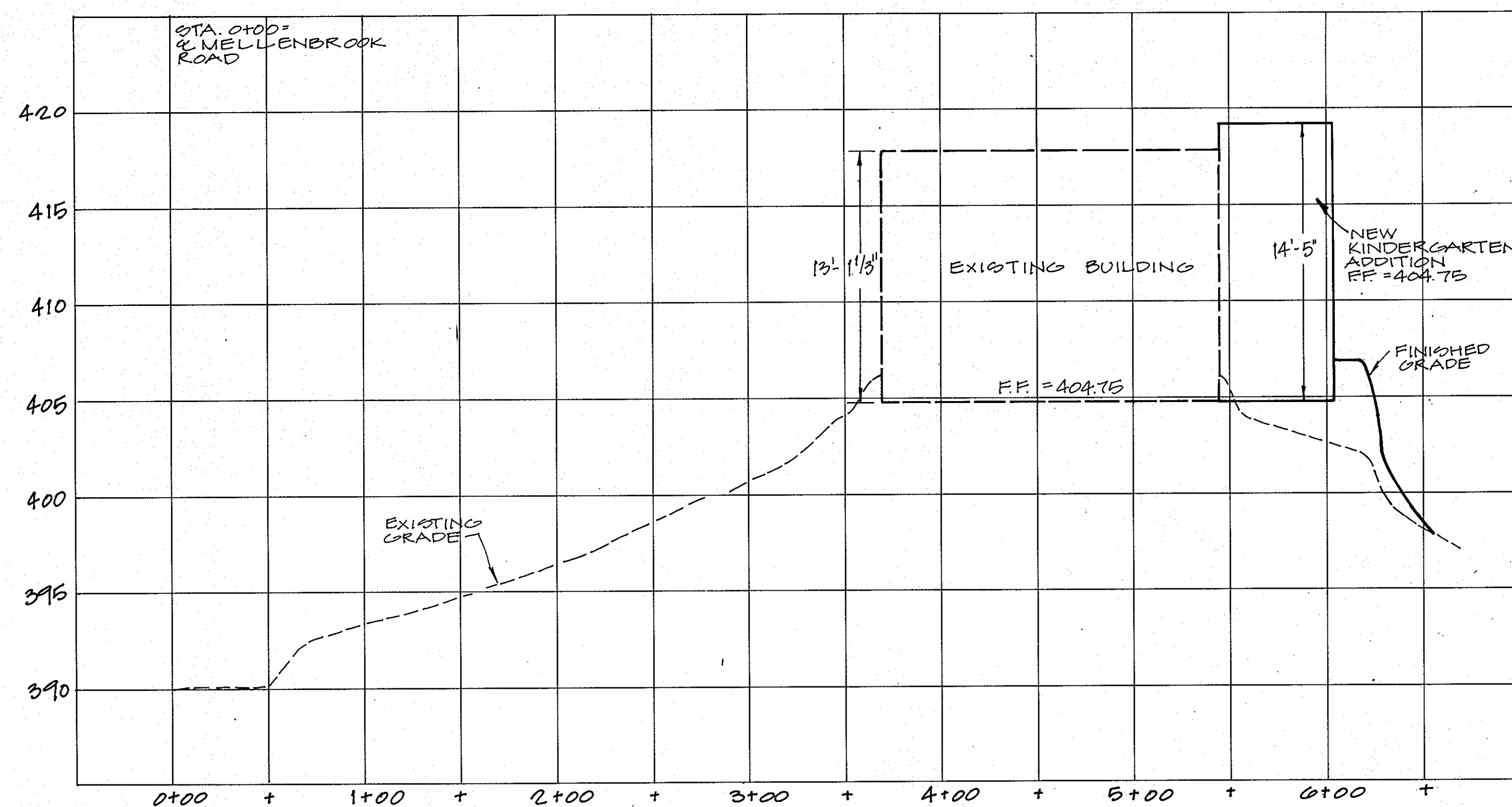
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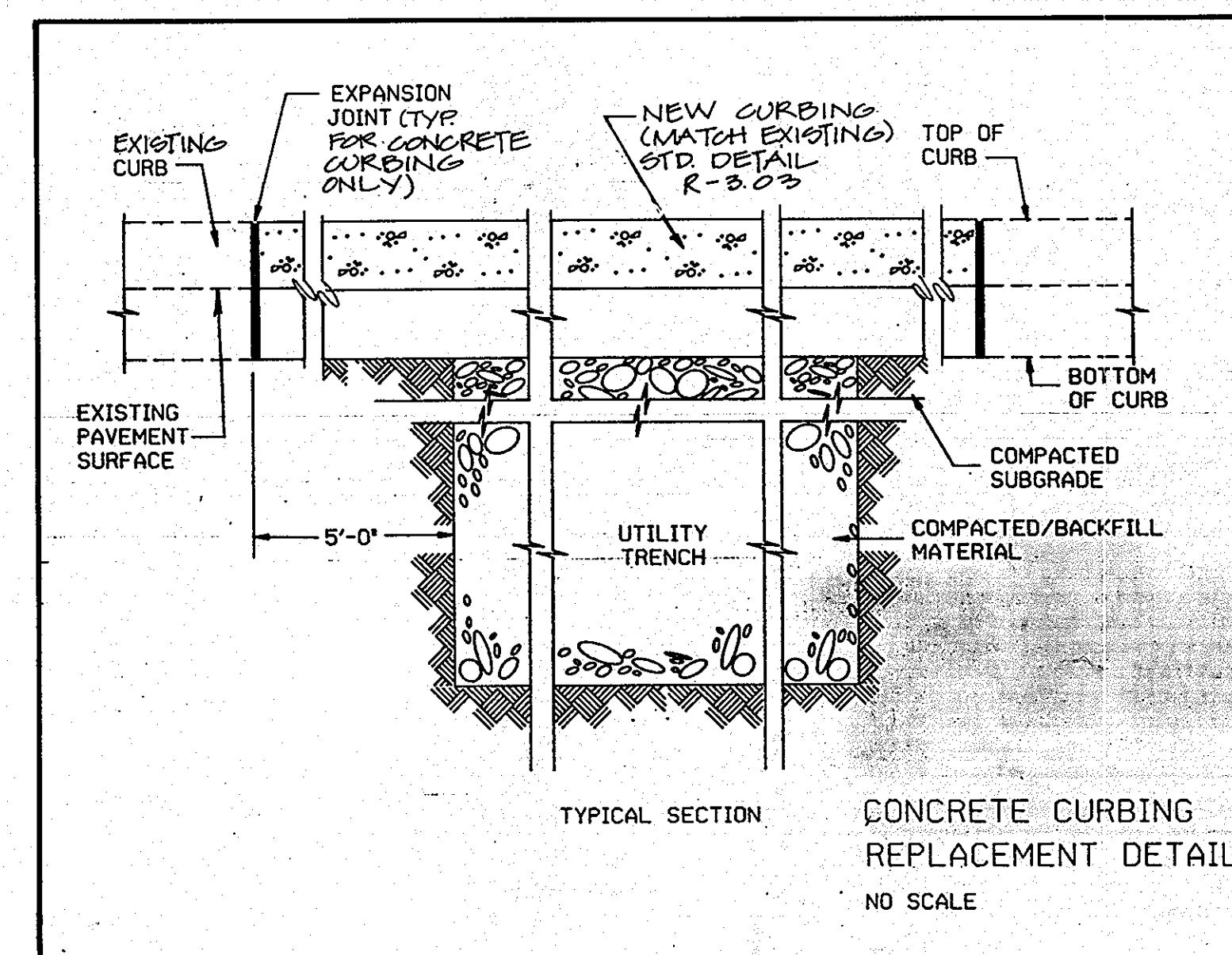
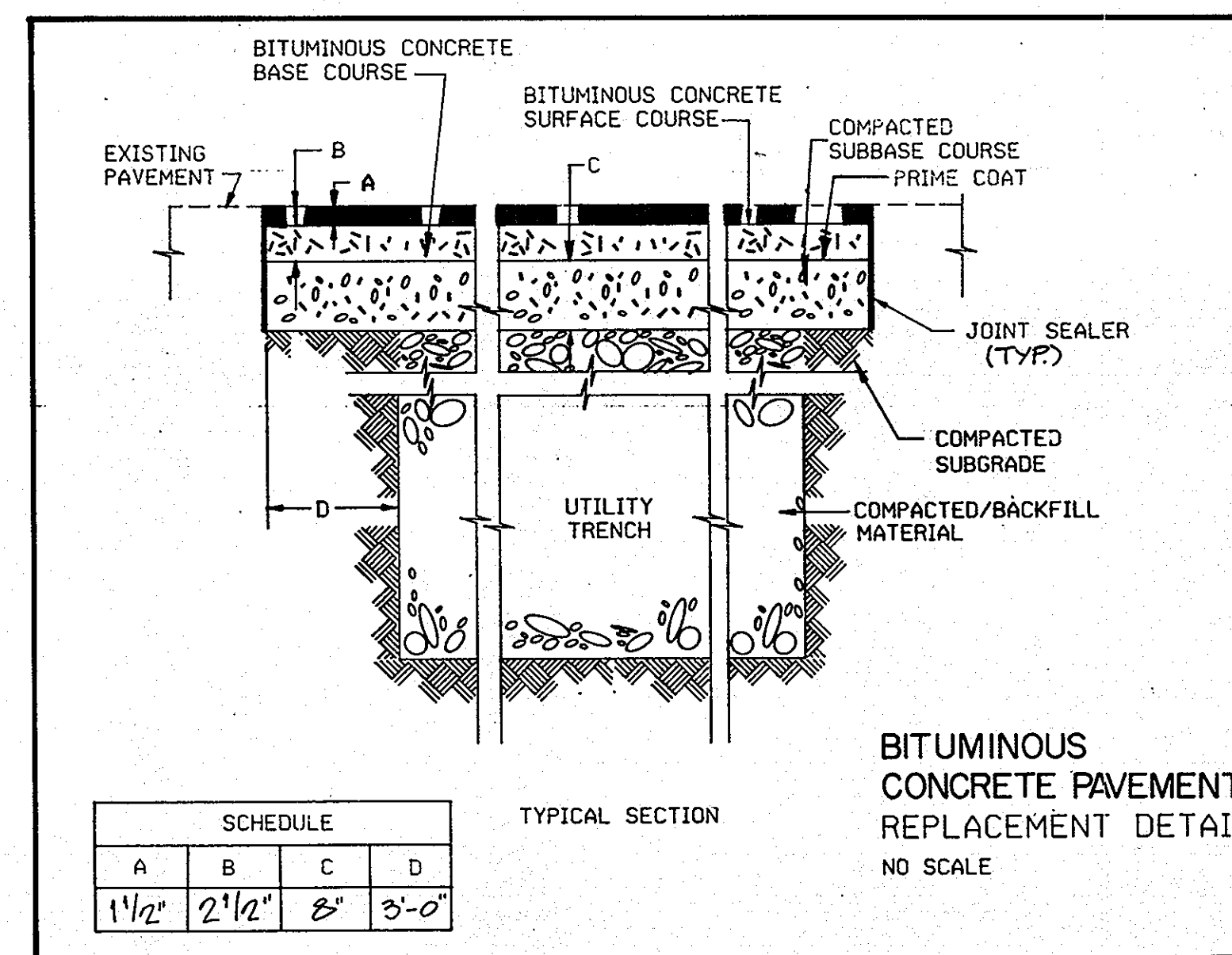
**WATERMAIN PROFILE**  
SCALE: HORIZ. = 1" = 50'  
VERT. = 1" = 5'



**WATERMAIN PROFILE**  
SCALE: HORIZ. = 1" = 50'  
VERT. = 1" = 5'



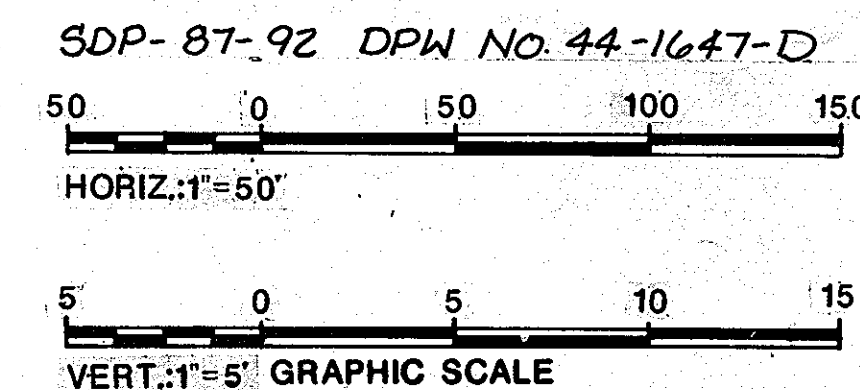
**SITE PROFILE**  
SCALE: HORIZ. = 1" = 50'  
VERT. = 1" = 5'



OWNER:  
HOWARD COUNTY BOARD OF EDUCATION  
10910 ROUTE 108  
ELLCOTT CITY, MD. 21043

APPROVED  
DIVISION OF LAND DEVELOPMENT &  
ZONING ADMINISTRATION  
HOWARD COUNTY, MARYLAND  
DATE 12-22-86

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS,  
HOWARD COUNTY HEALTH DEPARTMENT  
COUNTY HEALTH OFFICER: *[Signature]* DATE 7-6-87  
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING  
DIRECTOR: *[Signature]* DATE 7-10-87  
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 7/2/87  
CHIEF BUREAU OF ENGINEERING: *[Signature]* DATE 7-2-87

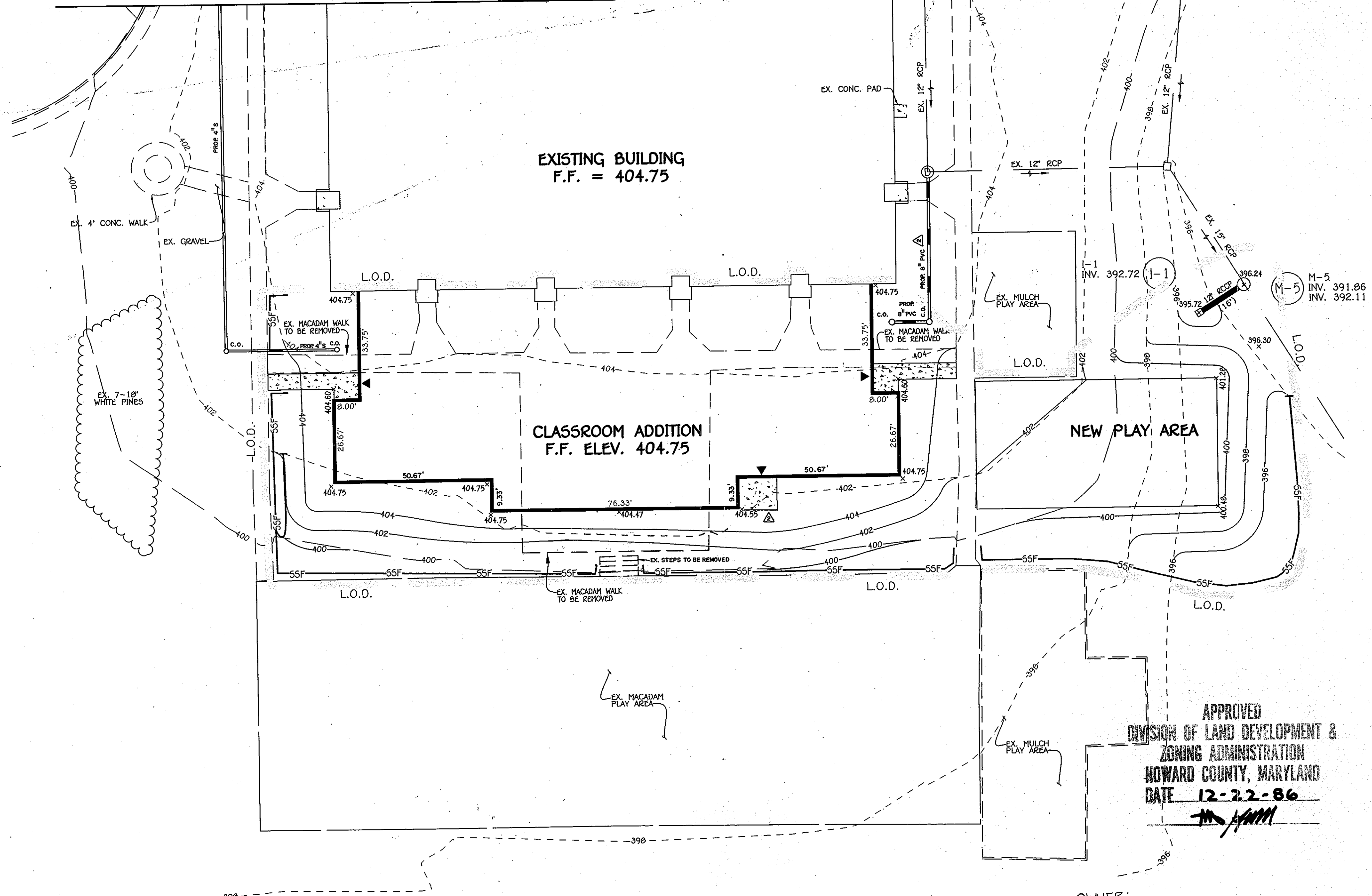
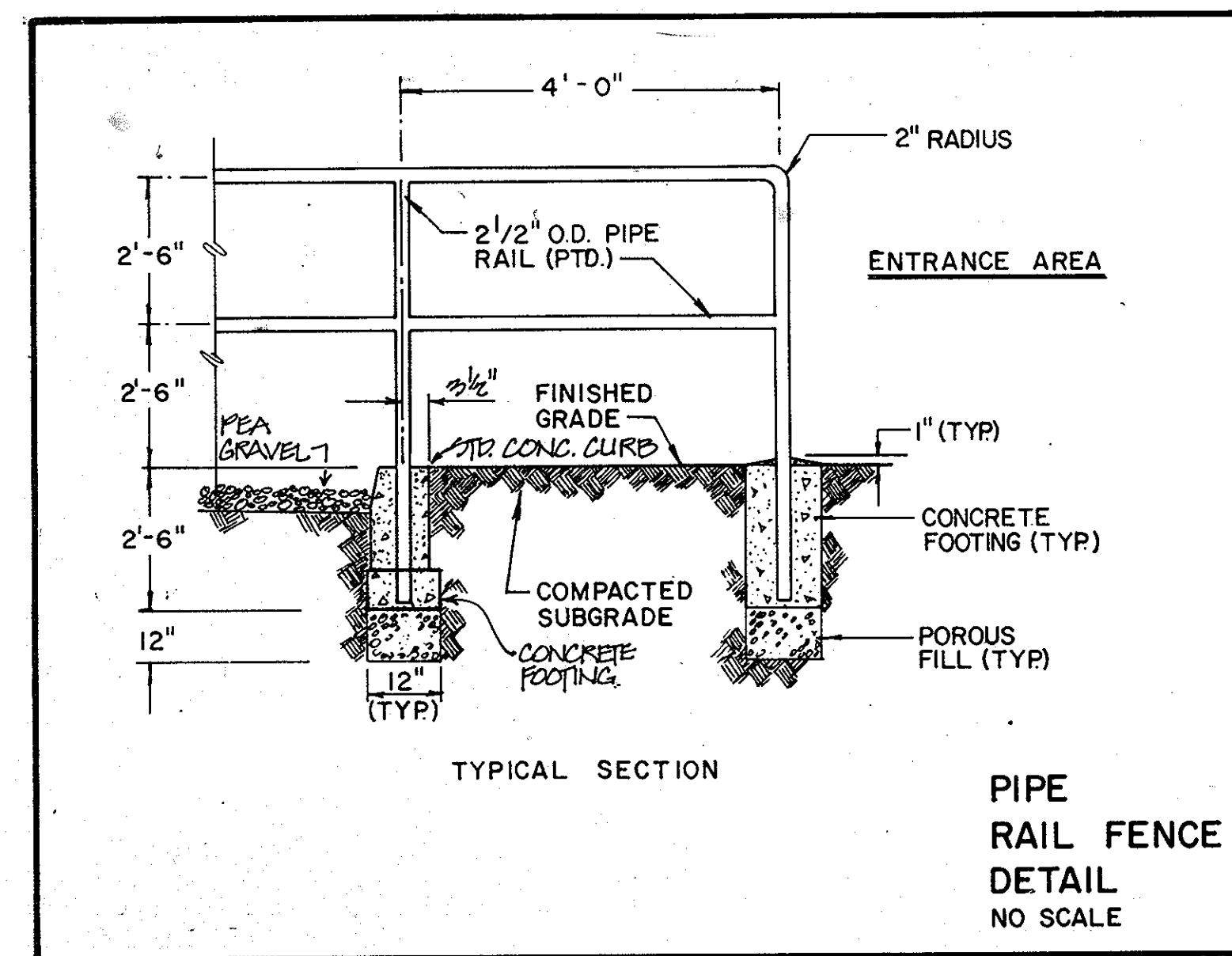
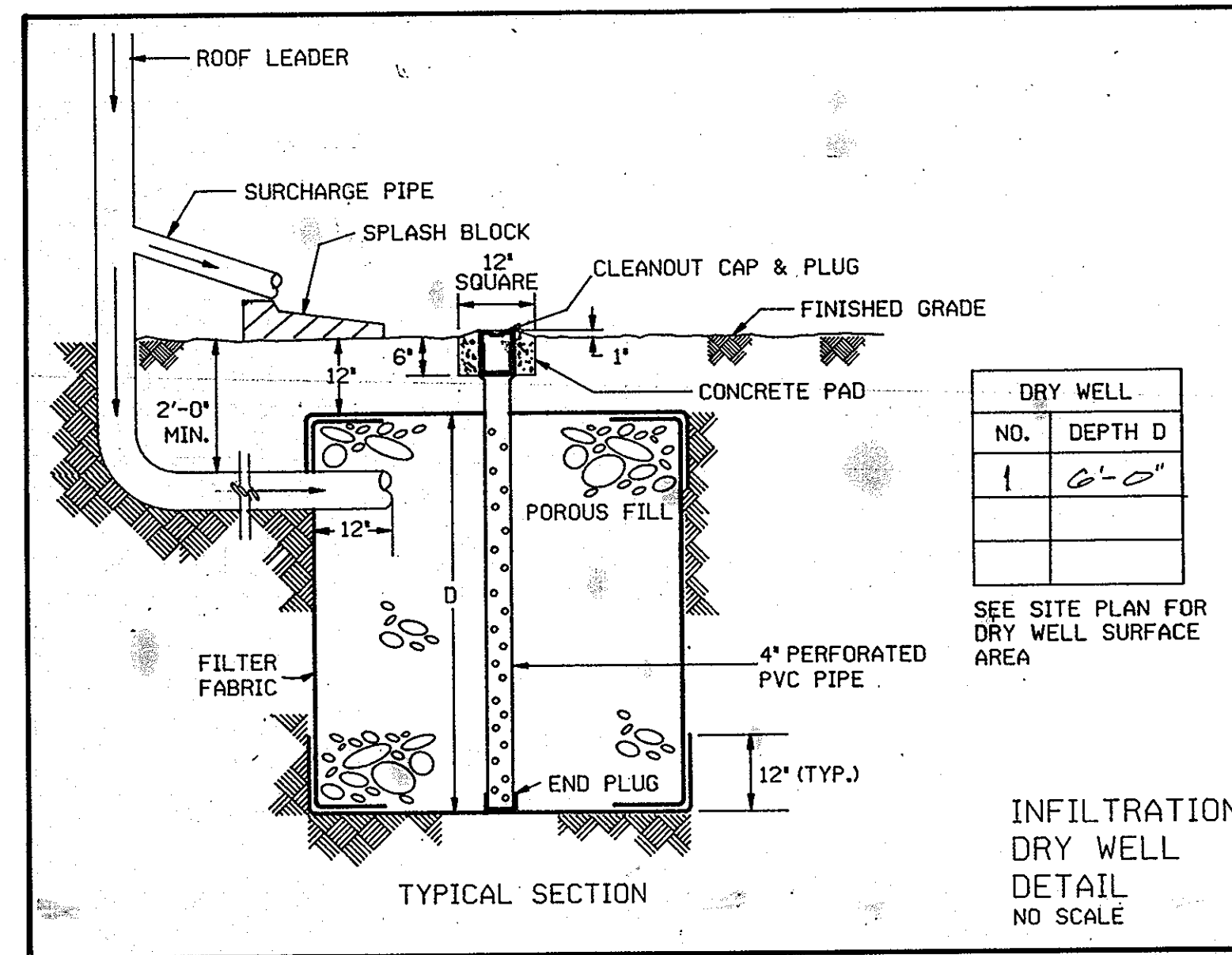
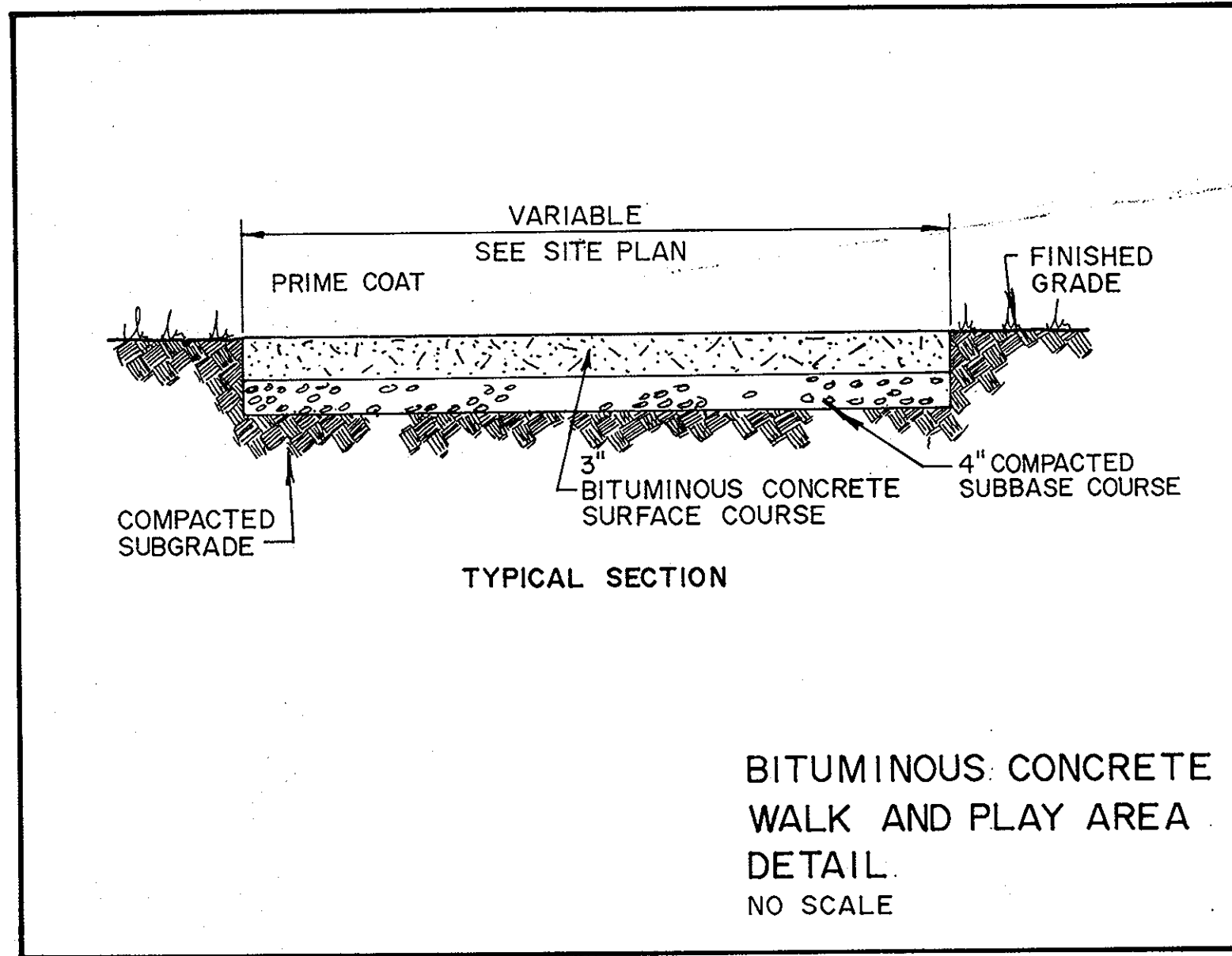


**THUNDER HILL ELEMENTARY SCHOOL KINDERGARTEN ADDITION**

HOWARD COUNTY BOARD OF EDUCATION  
COLUMBIA MARYLAND  
6th ELECTION DISTRICT  
TAX MAP 30, PARCEL 206  
D.B. 392, PG. 732 AND D.B. 394, PG. 515  
ORIGINAL SDP NO. 70-02

PECK PECK & ASSOCIATES, INC.  
 architecture planning graphics interiors  
 1924 ORTIZ BOULEVARD WOODBRIDGE, VIRGINIA 22191 703-690-3121  
 CAD-CON INCORPORATED  
 3025 Hammer Court Suite 201 Fairfax, Virginia 703-260-2565  
**THUNDER HILL ELEMENTARY SCHOOL ADDITION & ALTERATIONS**  
 9357 MELLENBROOK RD., COLUMBIA, MARYLAND  
 THE HOWARD COUNTY PUBLIC SCHOOL SYSTEM  
 SHEET TITLE: PROFILES & DETAILS  
 ISSUED: 23 FEBRUARY 1987  
 REVISED: 6-17-87 PER HCDPW  
 JOB NUMBER: 044.0090 / -8609  
 DRAWING NO.: **C-7**  
 SDP 7 OF 8  
 SHEET 8 OF 25  
**SDP-87-92**

SEE SHEET C-3 FOR CONTINUATION



APPROVED  
DIVISION OF LAND DEVELOPMENT &  
ZONING ADMINISTRATION  
HOWARD COUNTY, MARYLAND  
DATE 12-22-86  
*[Signature]*

OWNER:  
HOWARD COUNTY BOARD OF EDUCATION  
10910 ROUTE 108  
ELLCOTT CITY, MD. 21043

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS,  
HOWARD COUNTY HEALTH DEPARTMENT  
*[Signature]* DATE 7-6-87  
COUNTY HEALTH OFFICER

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING  
*[Signature]* DATE 7-10-87  
DIRECTOR

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,  
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*[Signature]* DATE 7-2-87  
DIRECTOR

**THUNDER HILL  
ELEMENTARY SCHOOL  
KINDERGARTEN ADDITION**

HOWARD COUNTY BOARD OF EDUCATION  
COLUMBIA MARYLAND  
6th ELECTION DISTRICT

TAX MAP 30, PARCEL 206  
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ORIGINAL SDP NO. 70-02

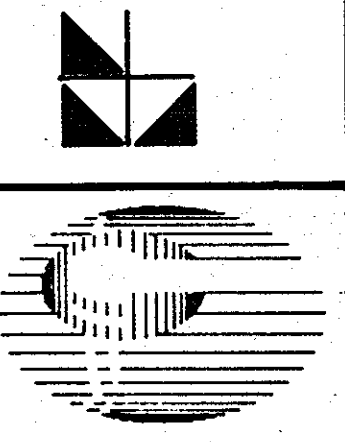
REVISIONS		
1	ADDED BUILDING ADDITION AND PLAY AREA	3-11-10
2	Revised Sidewalk And Steps. Added Prop. Cover of Storm Drain.	8-25-10

REVISION 1 3/11/10  
FISHER COLLINS & CARTER, INC.  
REVISION 2 8/25/10

STATE OF MARYLAND  
REGISTERED PROFESSIONAL ENGINEER  
*[Signature]*

SDP-87-92 DPW NO. 44-1647-D

PECK PECK & ASSOCIATES, INC.  
architecture planning graphics interiors  
1924 OPITZ BOULEVARD WOODBRIDGE, VIRGINIA 22191 703-690-3121



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INCORPORATED  
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703-280-2585

**THUNDER HILL ELEMENTARY SCHOOL  
ADDITION & ALTERATIONS**  
9357 MELLENBROOK RD. COLUMBIA, MARYLAND  
THE HOWARD COUNTY PUBLIC SCHOOL SYSTEM

SHEET TITLE  
SITE PLAN,  
EROSION  
CONTROL PLAN  
AND DETAILS

ISSUED  
23 FEBRUARY 1987

REVISED

JOB NUMBER  
044.009.0 / 8609

DRAWING NO.  
**C-8**

SDP 8 OF 8

SHEET 3 OF 25

SDP-87-92