

GENERAL NOTES:

- Reference Board of Appeals Case No. BA 90-10E, Hearing dated Sept. 4, 1990. Special Exception to expand the Church and school facility was approved subject to Howard County Site Plan review and approval. (See Reference Below)
- Existing Septic System to remain in operation and additional Septic will serve the proposed Fellowship Hall. Construction equipment will circulate by using the northwest side of the church to avoid access over existing septic system. (See Note # Below)
- The proposed Septic System is designed to handle both the New Fellowship Hall facilities and the existing facilities. At such time when the existing septic system fails to function, a future connection shall be made between the existing waste lines and the proposed Septic Tank. (See future connections shown on the site plan)
- The proposed 2-1/2" Base Paving will be installed on existing ground less all topsoil. A 1-1/2" Surface Course will be applied to the proposed base paving and existing parking lot paving.
- Building and Retaining wall information will be provided by Architectural plans prepared by others.

PRIVATE WATER & SEWER SPECIFICATIONS

Well: The existing well is located in front of the existing church 35 feet plus/minus off the southwest corner.

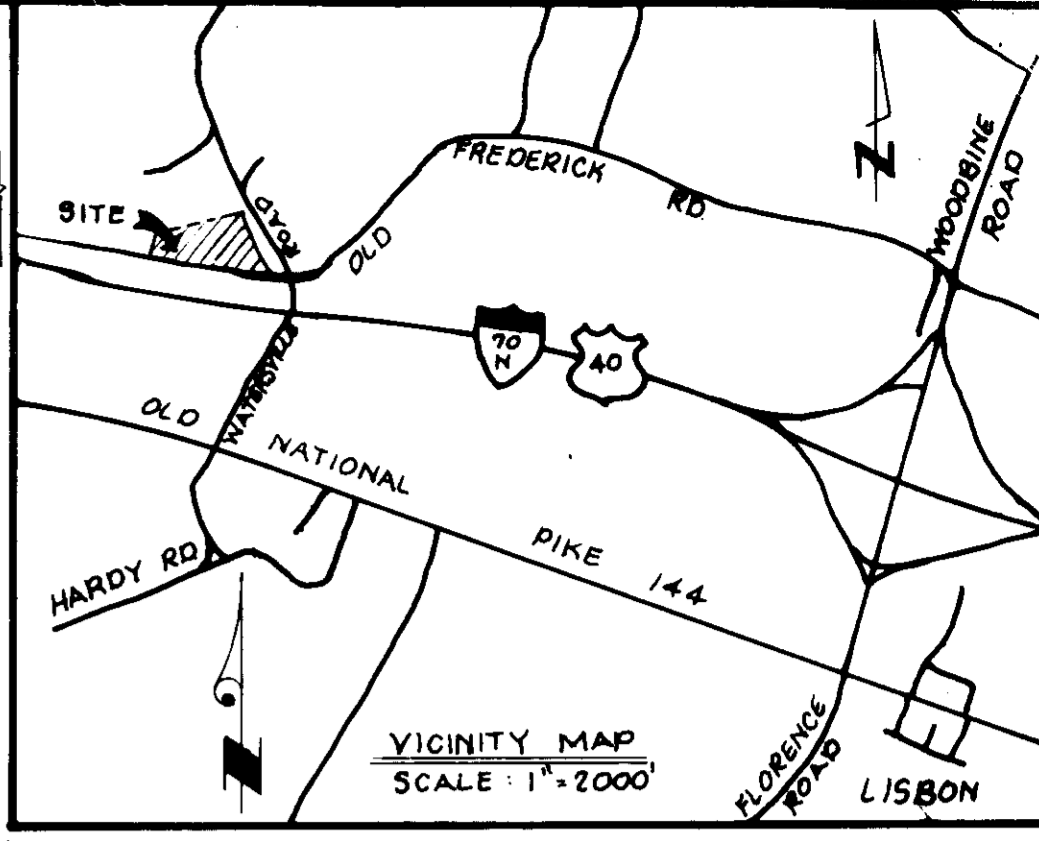
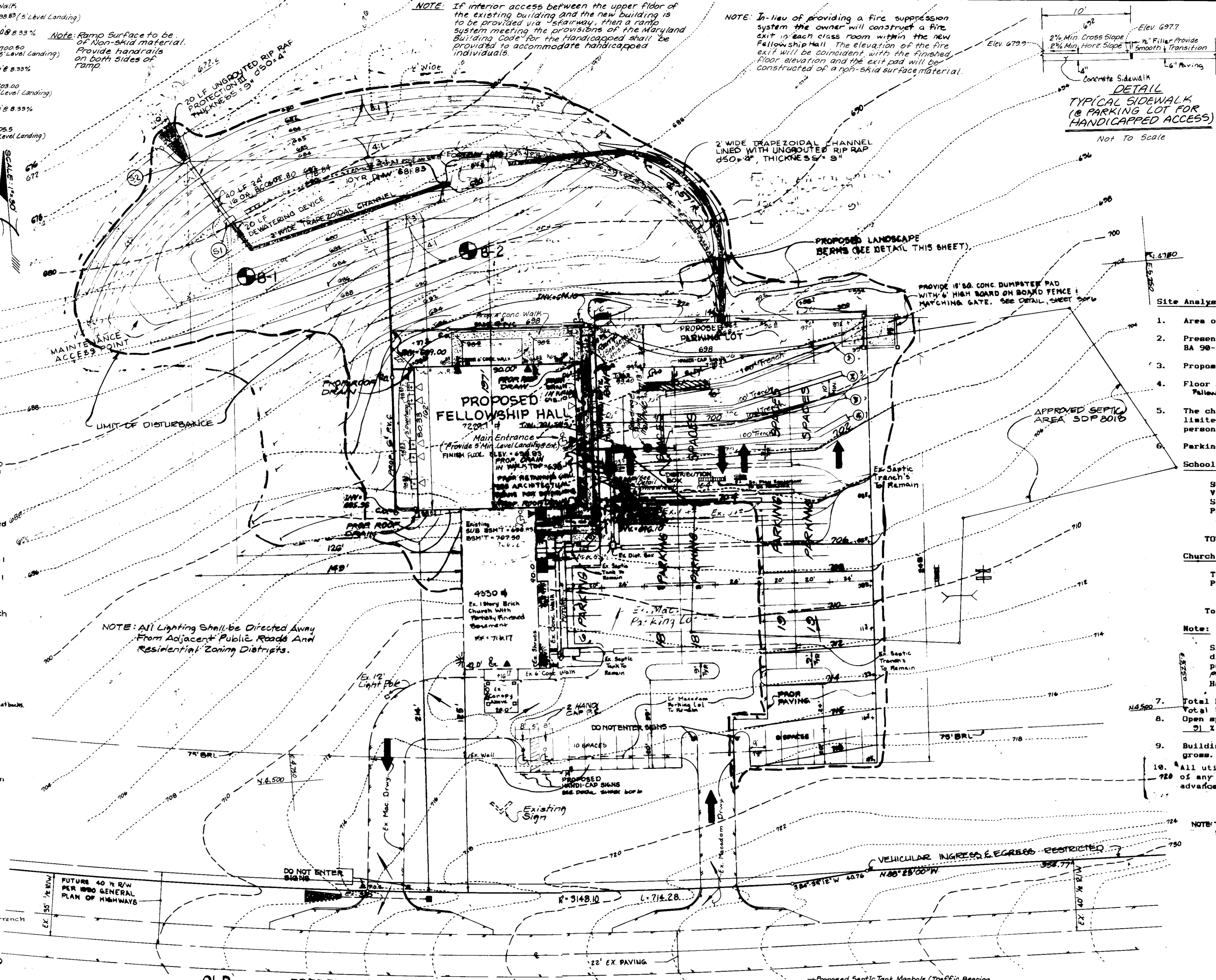
Septic System: The existing Church Septic System shall remain in place.

Proposed Fellowship Hall
 Slab Elevation = 696.83
 Sewer line Inv. Out. = 695.83 (at foundation wall)

Septic Tank
 Required septic tank capacity is 15 gallons per student and staff.
 75 Students X 15 gallons = 1125 gallons
 8 Staff X 15 gallons = 120 gallons
 Total required capacity = 1245 gallons
 Septic tank capacity provided will be 1500 gallons

Trench/Distribution Box
 Septic trenches shall be three feet wide by 5 feet deep.
 Required number of 100' long trenches at 300 sq. ft. per trench
 1245 gallons ÷ 300 = 4.15
 4 Trenches provided, 100' long.
 Existing ground elevation at distribution box = 702.40
 Proposed elevation at distribution box = 702.4. Inv. In = 698.90

Note: No food preparation will be done on site.
 No shower facilities will be provided on this site.



Site Analysis

- Area of Parcel: 14.029 Ac., 611,103.24 sq. ft.
- Present Zoning: R, Board of Appeals Case No. BA 79-19 and BA 90-18E. Previous approved site plan - SDP 8018.
- Proposed use of structures: Fellowship Hall expansion to existing Church and school facility.
- Floor Space: Ex. Church = 4330 sq. ft. (Both Floors)
 Fellowship Hall School = 7229.78 sq. ft. (Single Story)
- The church consists of 150 members. School capacity is limited to 75 students. The school presently has 8 staff personnel.
- Parking Requirements:

School Facilities:

| | |
|------------------------------|-----------|
| Staff parking | 4 spaces |
| Visitor parking | 10 spaces |
| Student parking | 2 spaces |
| Parking for all-purpose room | 78 spaces |

TOTAL REQUIRED PARKING 94 SPACES

Church:

| | |
|------------------------|-----------------------------|
| Total seating: | 140 |
| Parking required | 1 space per 3 seats |
| Total Required Parking | $\frac{140}{3} = 47$ spaces |

Note: Since the Church and school functions operate at different hours, the School and Church can share the parking provided. Use the larger parking requirement PLUS handicap requirement. Handicap parking required = 4 spaces

- Total Parking Spaces Required = 94 spaces + 4 handicap = 98 Total Parking Spaces Provided = 94 spaces + 4 handicap = 98
- Open space (green area) to remain on site: 12.76% and 21% of net area.
- Building coverage of site 0.26% area and 1.76% of gross.
- All utility companies must be notified 24 hours in advance of any construction. Call "Miss Utility" 48 hours in advance of construction 1-800-257-7777.

APPROVED: DEPARTMENT OF PUBLIC WORKS FOR STORM DRAINAGE SYSTEMS AND ROADS.

James J. Linn 4/29/92
 DIRECTOR, PUBLIC WORKS DATE

William R. Brown 3-18-91
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

James R. Brown 6/3/92
 PLANNING DIRECTOR DATE

Emma H. Harkness 4/19/92
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

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

Barbara L. ...

Special Exception, BA 90-18E requested to expand a church and school facility in an R-zone. September 4, 1990 the request was approved by Howard County Planning Board.

Special Exception, BA Case No. 79-19 requested the approval to construct a religious facility in an R-zone. June 4, 1979 the request was approved by the Howard County Planning Board.

CONCLUSIONS OF THE LAW

- The Board concludes that the lot coverage and height specifications are in compliance with the provisions of Section 123F(2) and 123F(3).
- The Board concludes that there will be no adverse impact on adjacent properties.

Based on the foregoing, and subject to compliance with all Howard County Building Code provisions and approval of Howard County Board of Education for the establishment of a private school, the Petition of the Church of the Open Bible for a Special Exception to construct a religious and educational facility is hereby GRANTED on this 4th day of June, 1992. Further the request of the Petitioner for a refund of the hearing fee is also GRANTED.

OLD FREDERICK ROAD (PUBLIC) (MAJOR COLLECTOR HIGHWAY)

SEPTIC SYSTEM PROFILE
 SCALE: HORIZ. 1" = 30' VERT. 1" = 5'

Proposed Building
 Proposed Retaining Wall
 Proposed Septic Tank Manhole (Traffic Bearing Capacity)
 Proposed Sewerage Pump Manhole (Traffic Bearing Capacity)
 Proposed Parking Lot
 4" Reinforced Pipe
 Invert 8" Below Original Ground
 Bottom of Trench 8" Below Original Ground
 Proposed Distribution Box Inv. 698.90
 Proposed Septic Tank (1500 Gallon)
 4" Ductile Iron Pipe
 604.00
 605.75

ADDRESS CHART

| PARCEL | STREET ADDRESS |
|--------|--------------------------|
| 172 | 16700 OLD FREDERICK ROAD |

TRENCH DATA

| Trench No. | Original Ground | Invert | Bottom Trench |
|------------|-----------------|--------|---------------|
| 1 | 701.90 | 698.90 | 698.90 |
| 2 | 700.00 | 697.00 | 698.90 |
| 3 | 699.30 | 696.30 | 698.90 |
| 4 | 698.50 | 695.50 | 698.90 |

BA20-18E

LAND DESIGN ENGINEERING, INC.
 10820 Guilford Road, Suite 210, Jessup, Maryland 20794 • (301) 804-8264 • (301) 880-8334

SITE DEVELOPMENT PLAN
BUILDING ADDITION TO CHURCH OF THE OPEN BIBLE
 LIBER 951 FOLIO 300
 TAX MAP NO. 7 PARCEL 172
 4TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 PREVIOUS FILE NO. SDP 8018, 8019, 8020

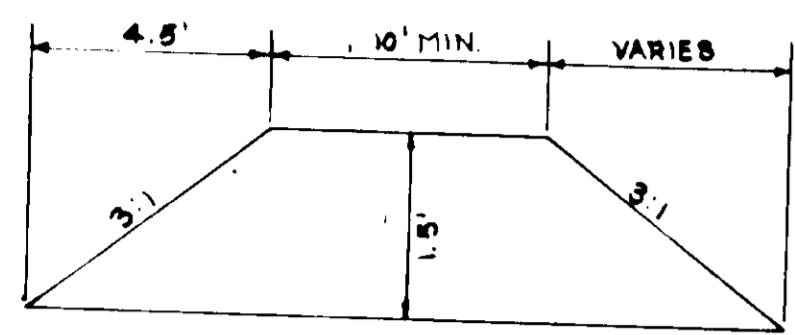
SCALE 1" = 30'
DRAWING 1 OF 6
JOB NO. 90-0002
P.L.S. NO.

DESIGNED L.M.M. & DWJ
DRAWN W. J.
CHECKED R.M.
DATE Nov. 1990

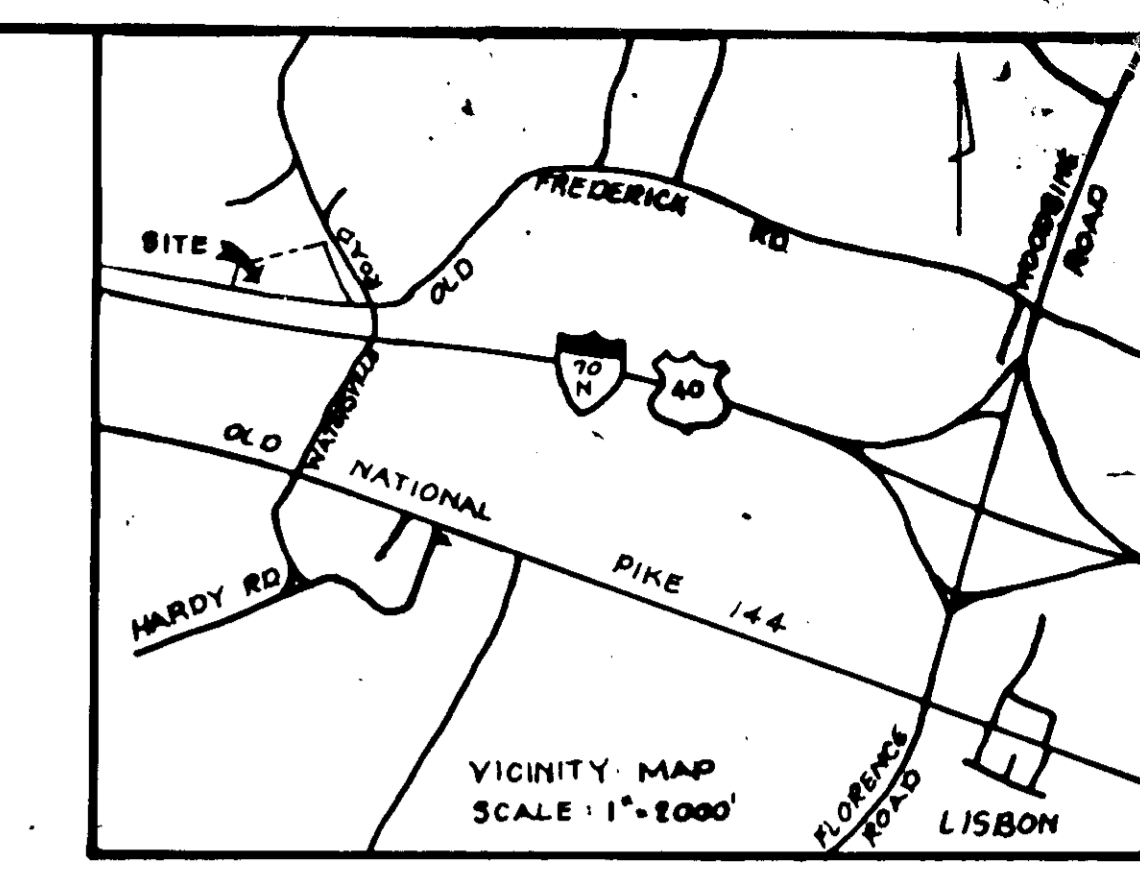
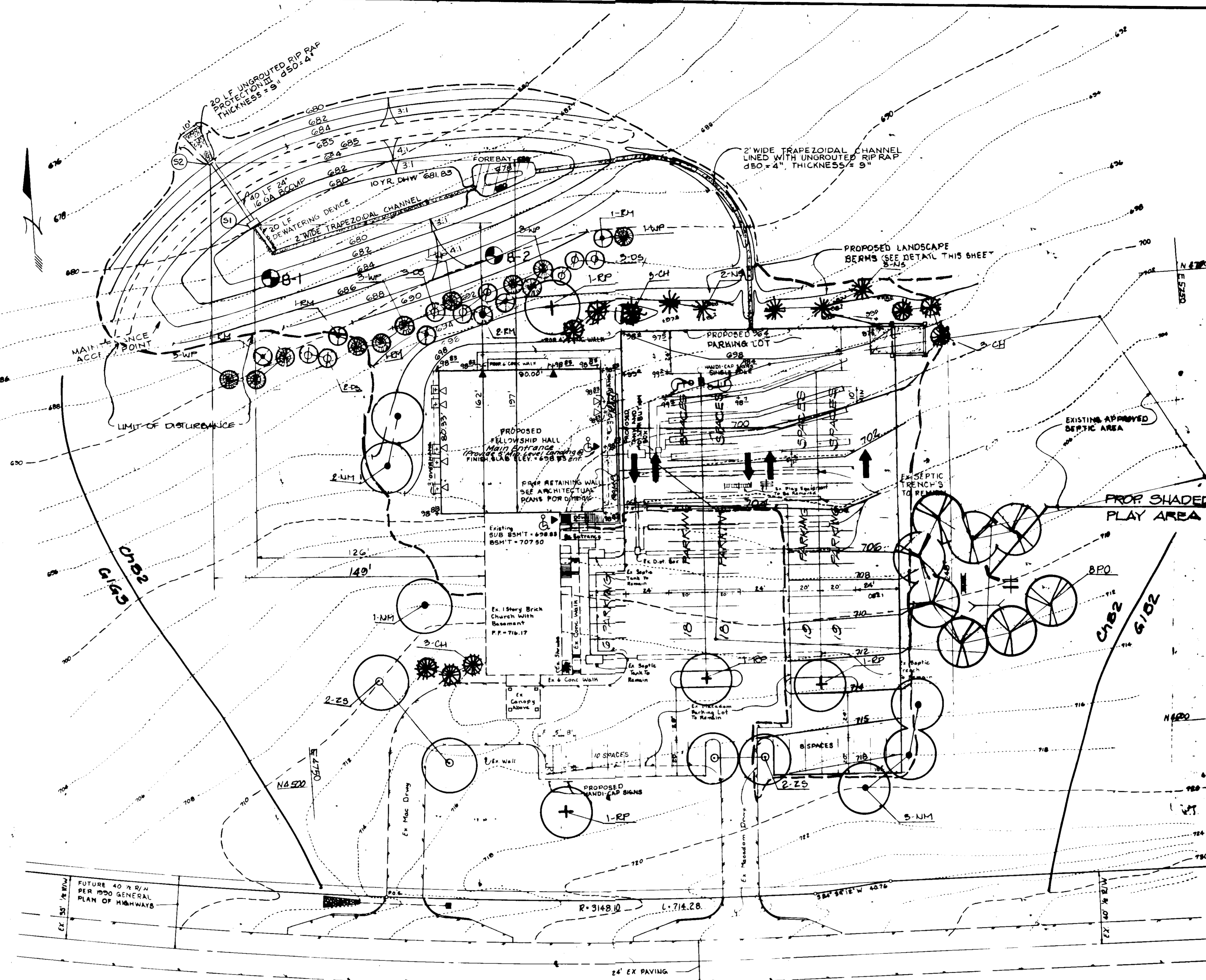
OWNER: LISBON CHURCH
 16700 OLD FREDERICK ROAD
 LISBON, MARYLAND 21771

LEGEND

| | |
|----------------------|--------|
| Existing Contour | 400 |
| Proposed Contour | 400 |
| Existing Spot Elev. | 401.5 |
| Proposed Spot Elev. | 01.5 |
| Contour Interval | 2 FEET |
| Limit of Disturbance | |
| Drainage Direction | |



LANDSCAPE BERM DETAIL
NOT TO SCALE



NOTE: TREES WITHIN THE APPROVED SEPTIC AREA ARE SUBJECT TO REMOVAL IF THE SEPTIC TRENCHES NEED TO BE EXTENDED.

OLD FREDERICK ROAD

PLANT LIST:

| SYMBOL | QUANTITY | COMMON NAME | BOTANICAL NAME | SIZE | REMARKS |
|--------|----------|-------------------|--------------------------------------|------------------|----------|
| ⊕ RP | 4 | REDSPIRE PEAR | PIRUS CALLERYANA BRADFORD 'REDSPIRE' | 1 1/2" TO 2" CAL | B&B |
| ⊕ ZS | 4 | ZELKOVA SERRATA | JAPANESE ZELKOVA | 1 1/2" TO 2" CAL | B&B |
| ⊕ NM | 6 | NORWAY MAPLE | ACER PLATANOIDES (SUMMER SHADE) | 1 1/2" TO 2" CAL | B&B |
| ⊕ CH | 5 | CANADIAN HEMLOCKS | TSUGA CANADENSIS | 5' TO 6' H. | B&B |
| ⊕ NS | 5 | NORWAY SPRUCE | PICEA ADIES | 5' TO 6' H. | B&B |
| ⊕ WP | 8 | DOWNY SHADDOLO | AMELANCHIER | 1" CAL. | CLUMP |
| ⊕ EM | 11 | WHITE PINE | PIRUS STROBUS | 5' TO 4' H. | CLUMP |
| ⊕ RM | 6 | RED MAPLES | ACER RUDELMUM | 1" CAL. | CARCROOT |
| ⊕ PO | 8 | PIN OAK | QUERCUS PALUSTRIS | 5' TO 6' H. | B&B |

ENVIRONMENTAL IMPACT:
1. NO EXISTING STEEP SLOPES.
2. NO WETLANDS OR FLOODPLAINS.
3. EXISTING VEGETATION - LAWN, NO TREES.
4. SOILS ARE AS SHOWN.

APPROVED: DEPARTMENT OF PUBLIC WORKS, FOR STORM DRAINAGE SYSTEMS AND ROADS.
James G. Linn 4/26/92
DIRECTOR, PUBLIC WORKS
William J. Kelly 4/29/92
CHIEF, BUREAU OF ENGINEERING

APPROVED: DEPARTMENT OF PLANNING AND ZONING
James G. Linn 6/3/92
PLANNING DIRECTOR
Elaine Halstead 6/1/92
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY HEALTH DEPARTMENT FOR PRIVATE WATER AND SEWERAGE SYSTEMS.
John Boyle 5-21-92
HEALTH OFFICER

LAND DESIGN ENGINEERING, INC.
16700 Old Frederick Road, Suite 210, Lusboil, Maryland 21771

| | | |
|-------------------|--|---------------------|
| DESIGNED DWJ | LANDSCAPE PLAN AND ENVIRONMENTAL IMPACT BUILDING ADDITION TO CHURCH OF THE OPEN BIBLE LIBER 951 FOLIO 300 TAX MAP NO. 7 - PARCEL 172 4 TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND PREVIOUS FILE NO. SDP 8018 | SCALE 1" = 30' |
| DRAWN W. J. | | DRAWING 2 OF 6 |
| CHECKED R.M. | | JOB NO. 90-200.2 |
| DATE Nov. 1990 | | FILE NO. |

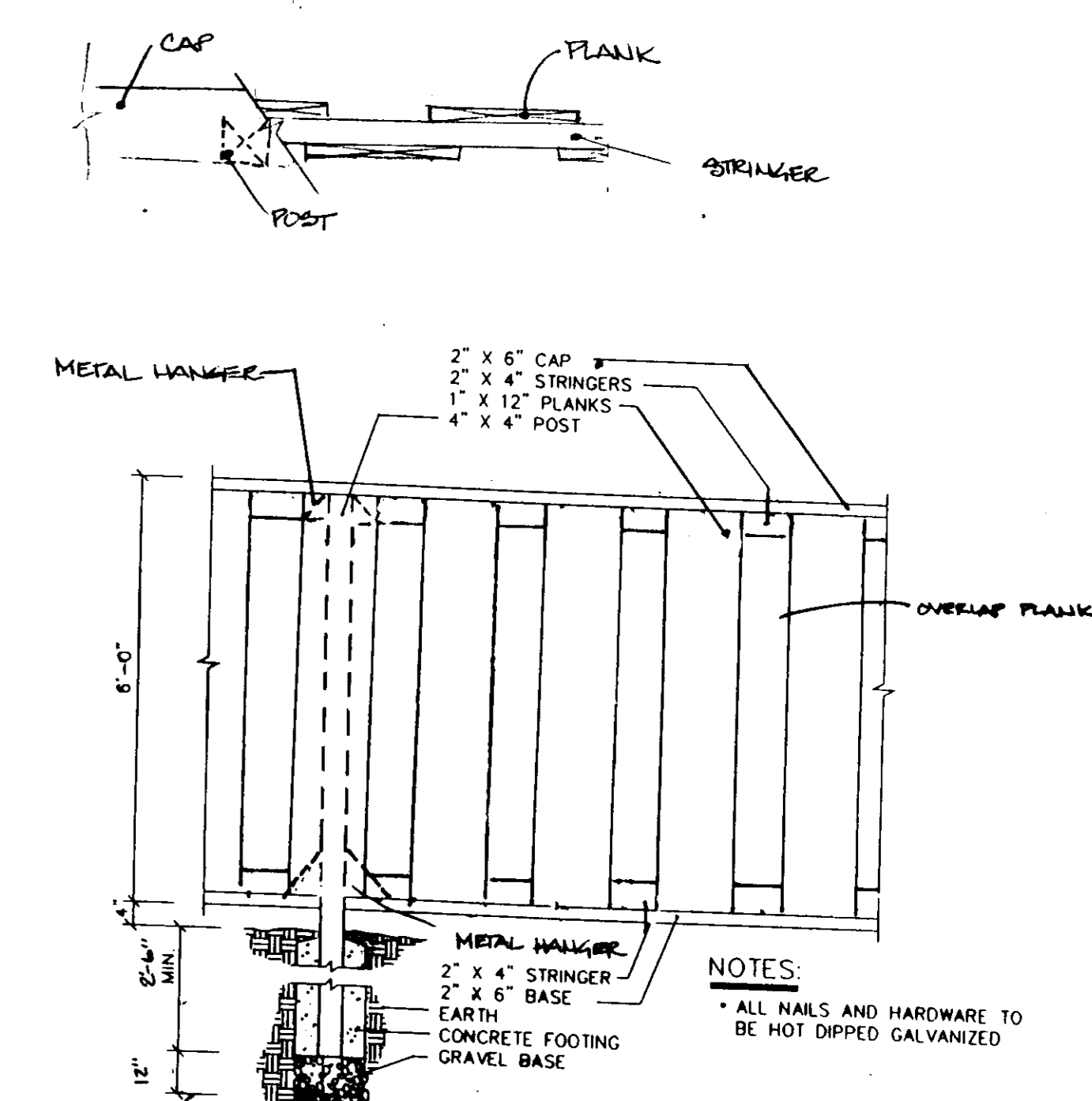
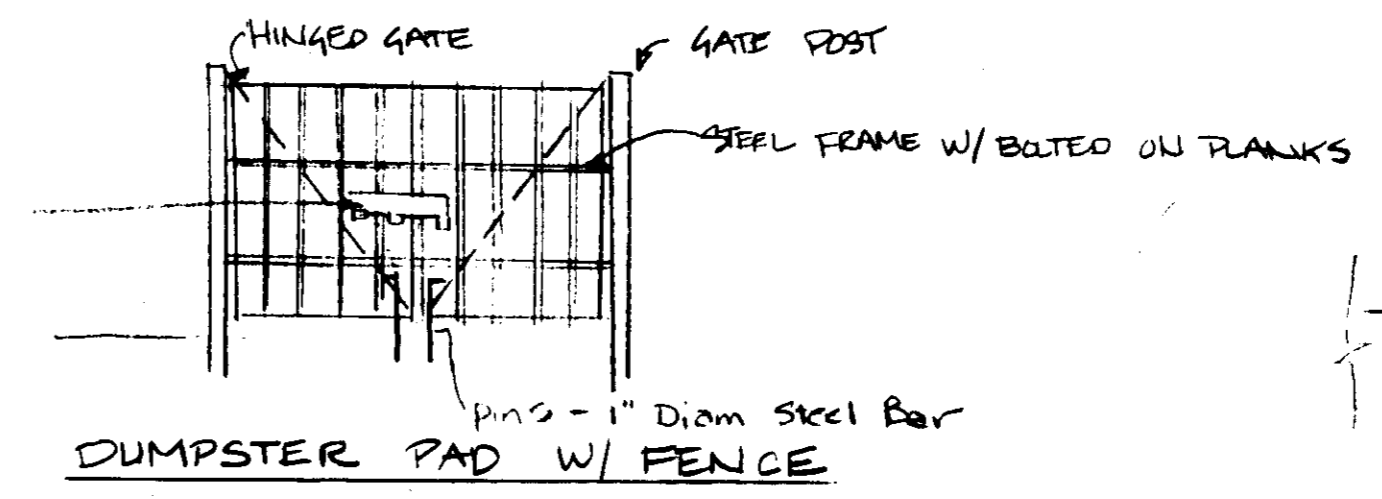
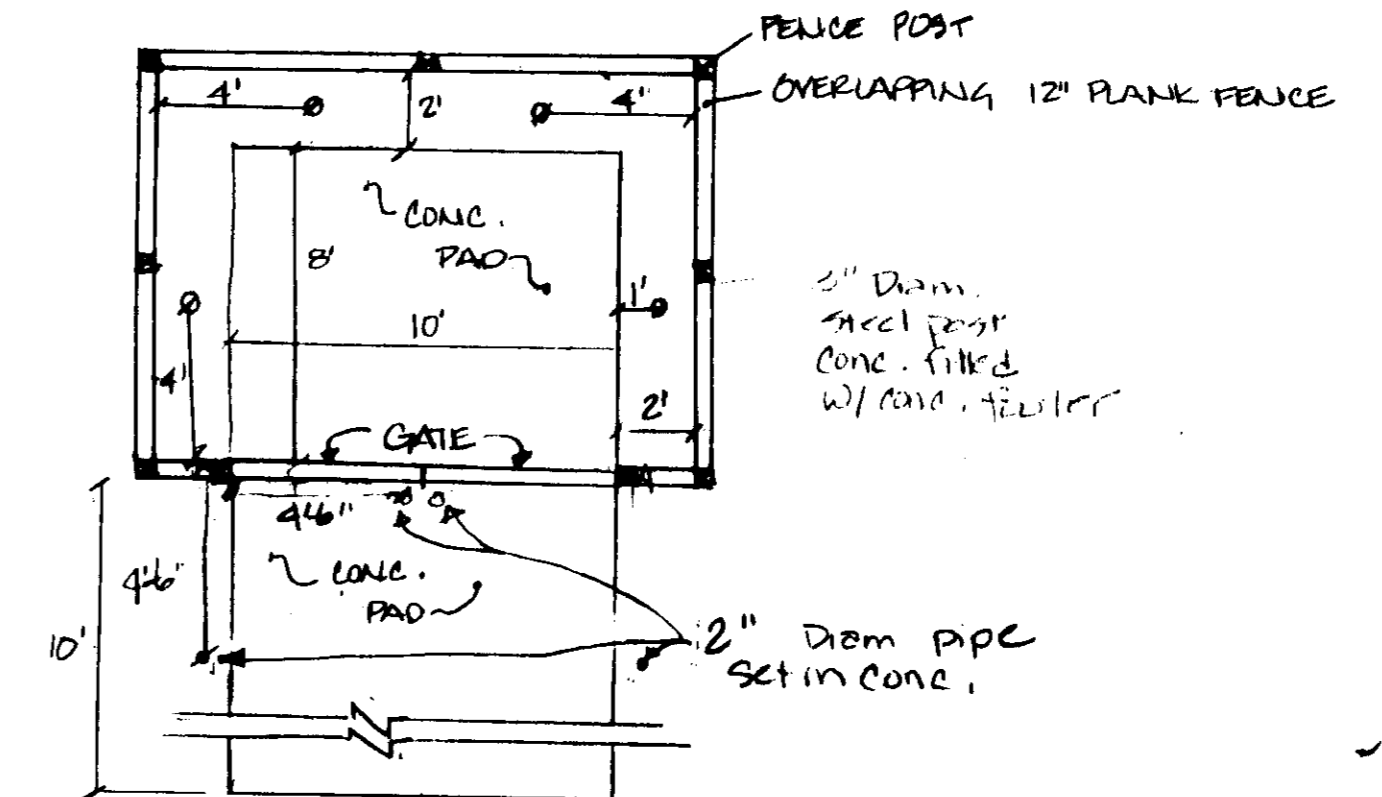
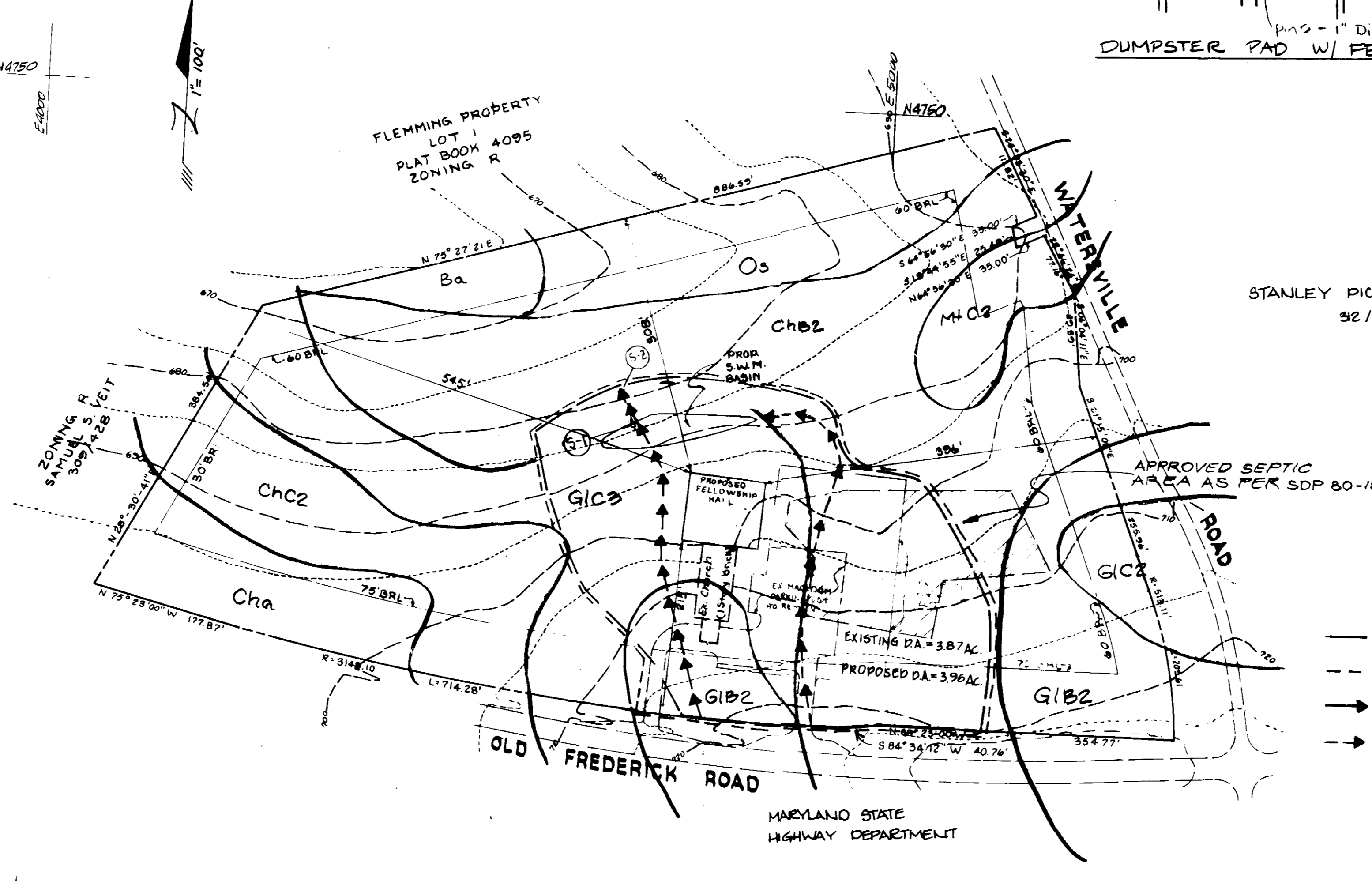
OWNER: LISBON CHURCH
16700 OLD FREDERICK ROAD
LISBOIL, MARYLAND 21771

MINOR NOTES

- Site Preparation**
Areas under the borrow areas, embankment, pond and structural works shall be cleared, grubbed and the topsoil stripped to reveal all trees, stumps, roots or other objectionable material. Damaged banks and eroded material shall be sloped to no steeper than 1:1. All cleared and eroded material shall be disposed of outside the limits of the site and suitable location for use on the embankment and other areas to be used.
- Fill**
The fill material shall be taken from approved designated borrow areas or areas. It shall be free of roots, stumps, weeds, rubbish, frozen or other objectionable materials. The fill shall be placed in layers to an elevation which provides for the anticipated settlement to the design elevations. The fill height will along the length of the embankment shall be increased above the design elevation, including freeways, as shown on the plans.
- Placement**
Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in 8" thick maximum entire length of the fill. The next borrow material shall be placed in the downstream of the embankment.
- Compaction**
The movement of the hauling and spreading equipment over the fill shall be controlled so that the surface of each lift shall be compacted to 95% of ASTM Specification D-1557 for equivalent moisture. Full material shall contain sufficient moisture to yield the required degree of compaction with the equipment used.
- Care Trenches**
A care trench shall be excavated along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be governed by the equipment used for excavation, with feet or shovels on the plans. The side slopes of the trench shall be the most superior material available and shall be compacted with equipment or rollers to assure maximum density and minimum permeability.
- Structural Backfill**
Backfill material shall be of the best available material from the approved borrow areas. The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other compaction equipment. The material needs to fill completely all spaces under and adjacent to pipe, up to the top of the structure. Under no feet, measured horizontally, to any part of the structure. Under no circumstances shall the contractor drive equipment over any part of a concrete structure or pipe unless there is a compacted fill of twenty-four inches or greater over the structure or pipe.
- Corroded Metal Pipe Schedule**
a. **Material** (Steel Pipe) - This pipe and its appurtenances shall be galvanized and fully bituminous coated and shall conform to the requirements of ASTM Specification A-138 Type "A" with watertight coupling bands. Any bituminous coating damaged or otherwise removed shall be replaced with cold applied bituminous compound.
b. **Connections** - All connections with pipes must be completely watertight. The drain pipe, barrel and manhole connection to the riser shall be welded all around. Watertight coupling bands shall be used at all joints. Anti-rust collars shall be connected to the pipe in such a manner as to be completely watertight.
c. **Bedding** - The pipe shall be firmly and uniformly bedded throughout its entire length where rock or soft, sandy or other unstable soil is encountered. All of the bedding shall be replaced with suitable earth compacted to provide adequate support.
d. **Laying** - The pipe shall be placed with inside circumferential lap pointing downstream and with the longitudinal lap at the side.
e. **Backfilling** shall conform to structural backfill as shown above.
f. Other details (anti-rust collars, valves, etc.) shall be as shown on the drawings.

- CONCRETE**
1. **Materials**
a. **Cement** - Normal Portland cement shall conform to the latest ASTM Specification C-150.
b. **Water** - The water used in concrete shall be clean, free from oils, acids, alkalis, organic matter or other objectionable substances.
c. **Sand** - The sand used in concrete shall be clean, hard, strong and durable, and shall be well graded with 100 percent passing a No. 40 sieve, not finer than No. 20 sieve and shall not be used.
d. **Coarse Aggregate** - The coarse aggregate shall be clean, hard, strong and durable, and shall be well graded with one and one-half (1 1/2) inches.
2. **Design Mix** - The concrete shall be mixed in the following proportions, measured by weight. The water-cement ratio shall be 0.45 to a U.S. gallon of water per 100 pounds of cement. The proportion of materials for the trial mix shall be 1:1.25:2.75. The combination of aggregate shall be selected to produce a plastic and workable mix that will not produce hardness in placing or hardening in the structure.
3. **Mixing** - The concrete ingredients shall be mixed in batch elevators until the mixture is homogeneous and of uniform consistency. The mixing of each batch shall continue for not less than one and one-half minutes after all the ingredients, except the full amount of water, are in the mixer. The minimum mixing time is predicted on the proper control of the speed of rotation of the mixer and of the introduction of the materials, including water, into the mixer. Water shall be added prior to, during and following the above-mentioned operations. Excessive overmixing requiring the addition of water to produce the required concrete consistency shall not be permitted. Truck mixing will be allowed provided that the use of this method shall meet the conditions of any applicable provisions of the specifications given here.
4. **Formes** - The formes shall have sufficient strength and rigidity to hold the concrete and to withstand the necessary pressure, pumping, and vibration without distortion from the prescribed times. They shall be watertight and constructed so that they can be removed without hammering or jarring against the concrete. The inside of formes shall be oiled with a non-staining mineral oil or thoroughly wetted before concrete is placed. Formes may be removed 24 hours after the placement of concrete. All wire ties and other devices used shall be recessed from the surface of the concrete.
5. **Reinforcing Steel** - All reinforcing material shall be free of dirt, rust, scale, oil, paint or any other coatings. The steel shall be accurately placed and securely tied and blocked into position so that no movement of the steel will occur during placement of concrete.

- Consolidation** - Concrete shall be consolidated with internal type mechanical vibrators. Vibration shall be supplemented by spading and handamping as necessary to insure strength and dense concrete along form surfaces in corners, and around embedded steel.
- Finishing** - Defective concrete, honeycombed areas, voids left by removal of tie rods, ridges on all concrete surfaces, structure shall be repaired immediately after the removal of forms. All voids shall be recessed and completely filled with dry-patching mortar.
- Protection and Curing** - Exposed surfaces of concrete shall be protected from the direct rays of the sun for at least one first at least ten (10) days after being placed. Moisture may be applied by spraying or sprinkling as necessary to prevent the concrete from drying. Concrete shall not be exposed to freezing during the curing period. Curing compounds may also be used.
- Placing Temperature** - Concrete may not be placed at temperatures below 32 degrees F with the temperature falling, or 34 degrees F with the temperature rising.
- Stabilization**
All borrow areas shall be graded to provide proper drainage and left in a suitable condition. All exposed surfaces of the embankment, spillway, road and borrow areas, and dikes shall be stabilized by seeding, mowing, fertilizing and mulching if required in accordance with the negative treatment specifications or as shown on the accompanying drawings.
- Erosion and Sediment Control**
Construction operations will be carried out in such a manner that erosion will be controlled and water and air pollution minimized. State and local laws concerning pollution abatement will be followed. Construction plans shall detail erosion and sediment control measures to be employed during the construction process.



- LEGEND**
- DRAINAGE DIVIDE - EXISTING
 - - - DRAINAGE DIVIDE - PROPOSED
 - TIME OF CONCENTRATION PATH - EXISTING CONDITIONS
 - TIME OF CONCENTRATION PATH - PROPOSED CONDITIONS

APPROVED: DEPARTMENT OF PUBLIC WORKS.
FOR STORM DRAINAGE SYSTEMS AND ROADS.
James A. ...
DIRECTOR, PUBLIC WORKS
DATE: 6/3/92

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Anna ...
PLANNING DIRECTOR
DATE: 6/1/92
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY HEALTH DEPARTMENT
FOR PRIVATE WATER AND SEWERAGE SYSTEMS.
John M. ...
HEALTH OFFICER
DATE: 5-21-92

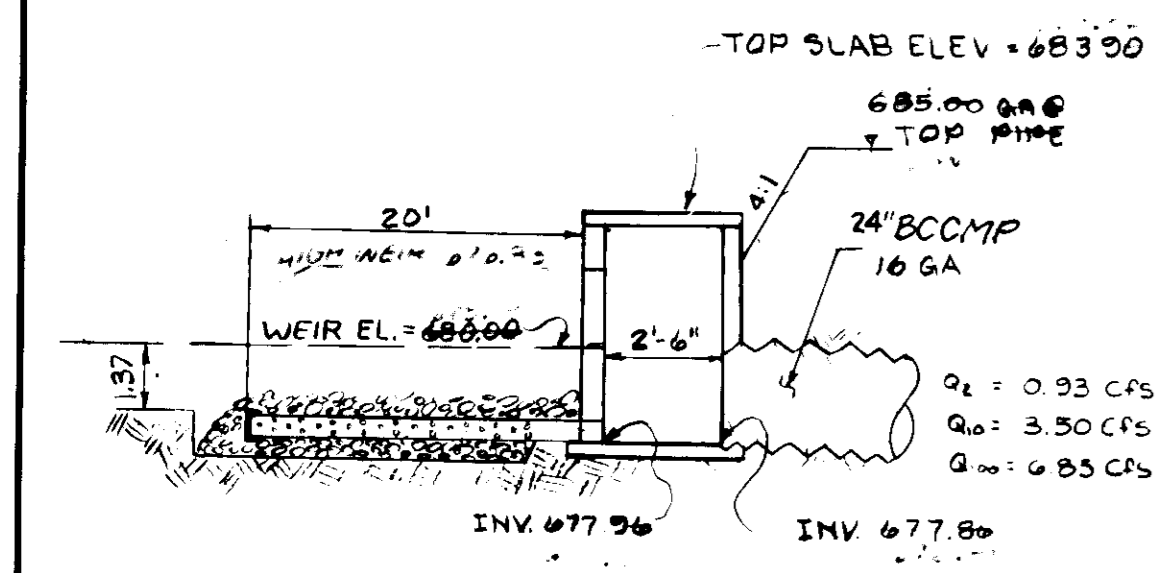
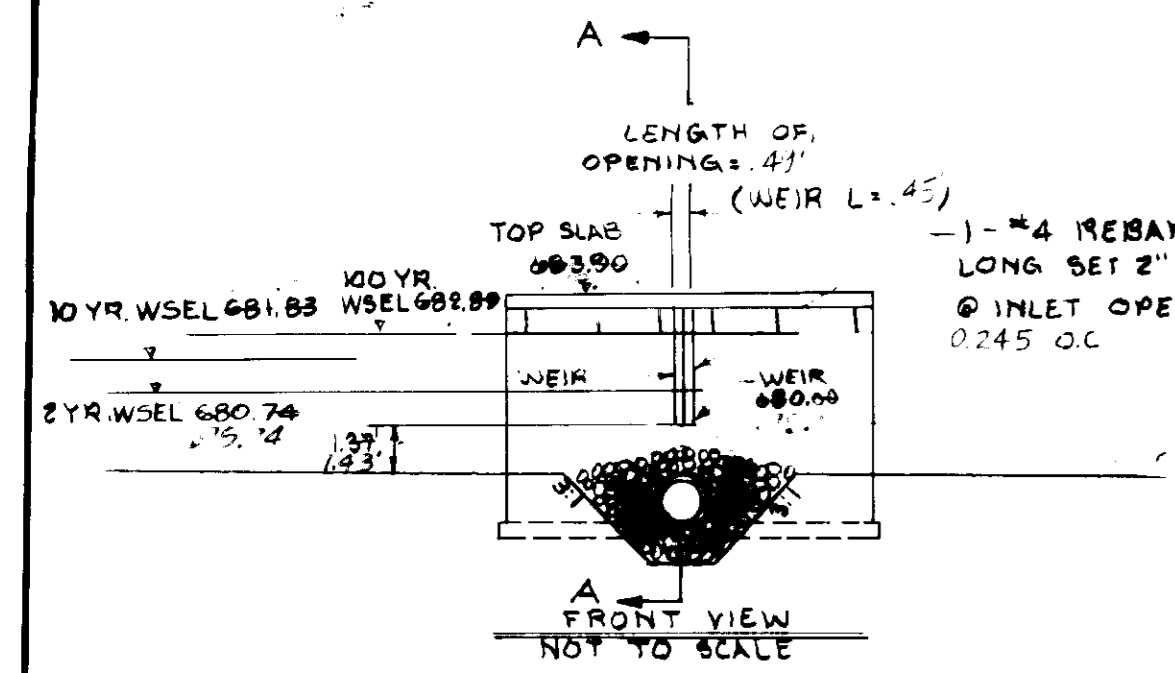
These plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.
John M. ...
Howard Soil Conservation District
DATE: 7/4/91

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.
John M. ...
S. Soil Conservation Service
DATE: 7/4/91

BY THE ENGINEER:
"I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer that he must provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion."
Robert M. ...
SIGNATURE OF ENGINEER
DATE: 6-91

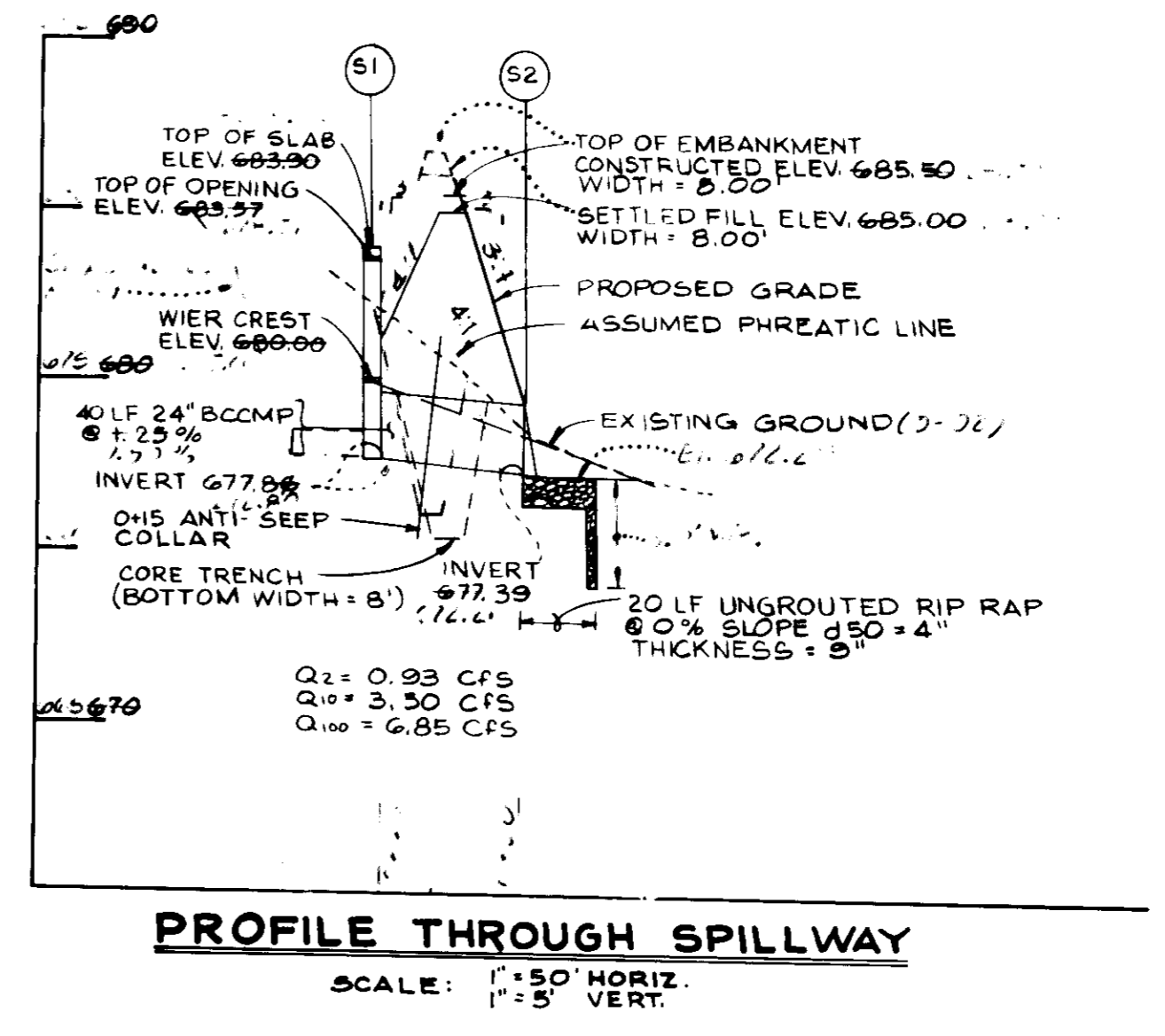
DEVELOPER'S CERTIFICATE
"I/We certify that all development and/or construction will be done according to these plans, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I will provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District."
James ...
SIGNATURE OF DEVELOPER
DATE: 6/18/91

| | | |
|--|-----------|------------------|
| LAND DESIGN ENGINEERING, INC. 10920 Guilford Road • Suite 210 • Jessup • Maryland 20794 • (301) 804-6264 • (301) 880-0034 | | |
| DESIGNED | L.M. | SCALE 1" = 100' |
| DRAWN | W.J. | DRAWING 3 OF 6 |
| CHECKED | R.M. | JOB NO. 90-200.2 |
| DATE | Nov. 1990 | FILE NO. |
| STORM WATER MANAGEMENT NOTES & DRAINAGE AREA MAP & SOILS MAP BUILDING ADDITION TO CHURCH OF THE OPEN BIBLE LIBER 951 FOLIO 300 TAX MAP NO. 7 PARCEL 172 PREVIOUS 6040 4TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND PREVIOUS S.D.P. 8018 OWNER: LISBON CHURCH 16700 OLD FREDERICK ROAD LISBON, MARYLAND 480-4321 | | |



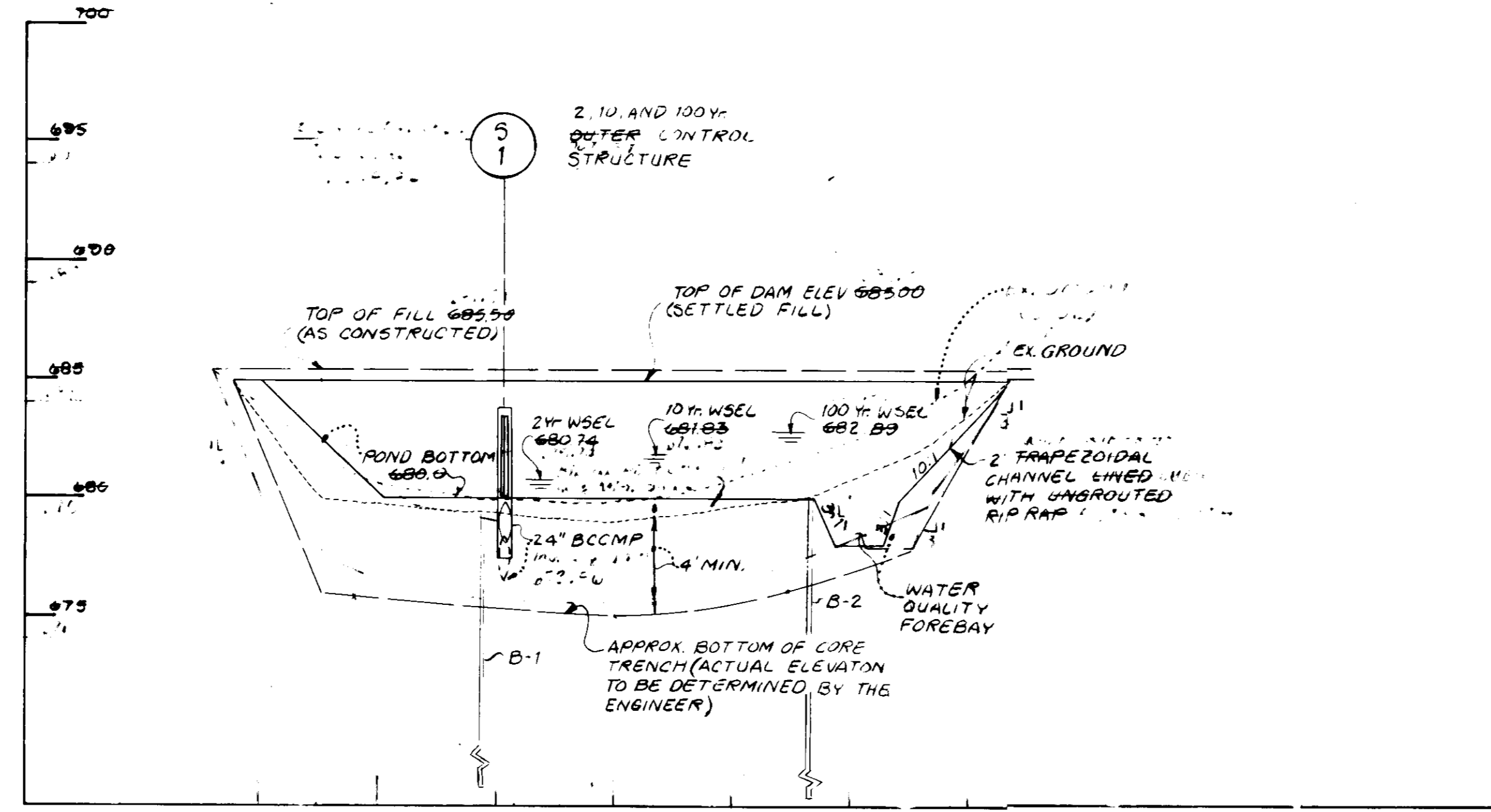
NOTE: MODIFIED HO. CO A-5 INLET. EXTERIOR & INTERIOR DIMENSIONS COMPLY W/ST D. ALSO INLET SLAB W/IRIM & STEEL REINFORCEMENT SCHEDULE SEE HO CO STD DRAWG. 64-A 106 110A FOR REFERENCE. USE ONLY ONE BAR - 4 MAX SPACE

S-1 DETAIL
OUTLET CONTROL STRUCTURE

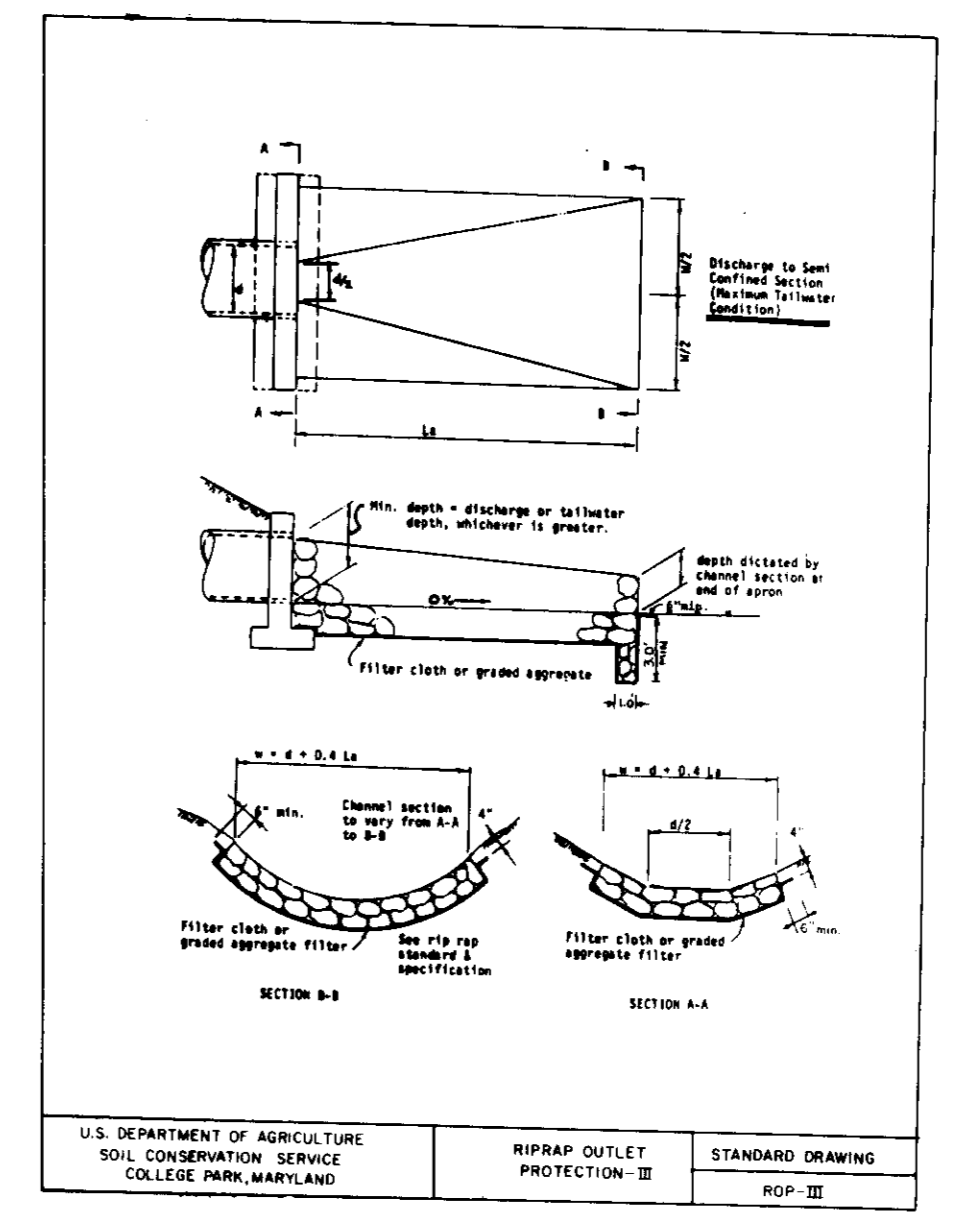


PROFILE THROUGH SPILLWAY
SCALE: 1"=50' HORIZ.
1"=5' VERT.

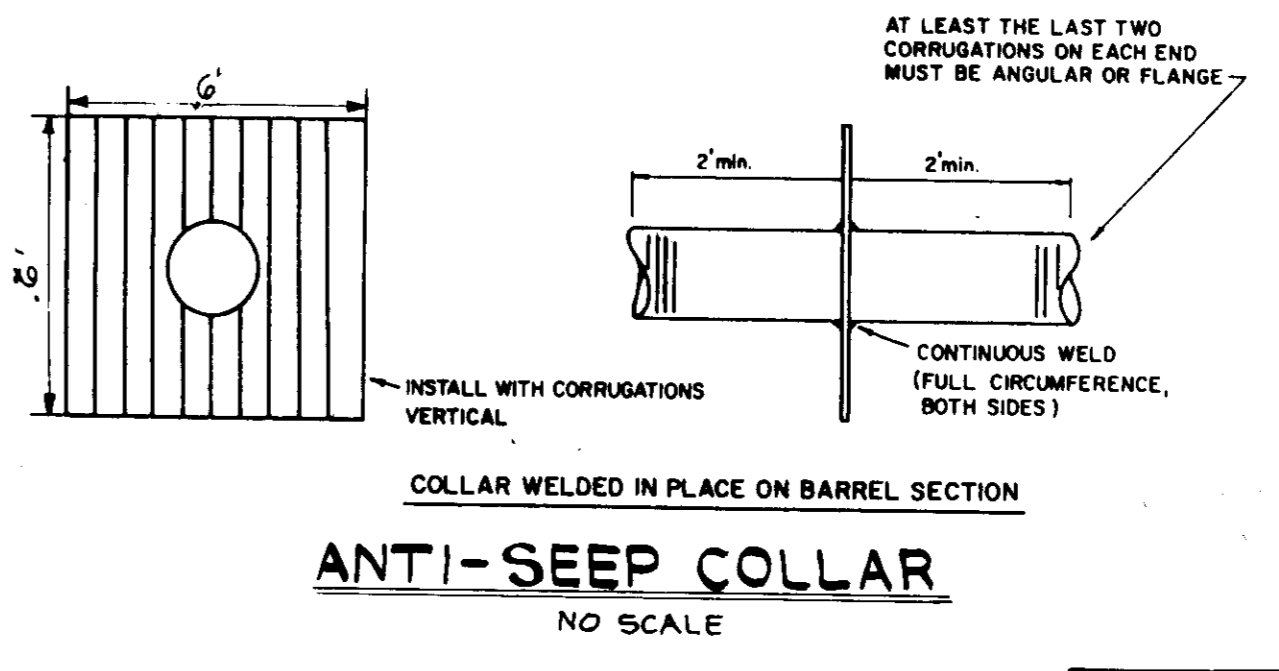
| STRUCTURE SCHEDULE | | | | | |
|--------------------|--------------|---------|--------|---------------|-----------------------|
| NO. | TYPE | INV. IN | IN OUT | TOP ELEVATION | REMARKS |
| 5-2 | HO CO 90.5M | 677.38 | | | |
| 5-1 | HO CO 90.401 | 677.88 | | 678.28 | Modified. See details |



PROFILE TOP OF DAM
SCALE: HOR: 1"=50'
VER: 1"=5'



U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
COLLEGE PARK, MARYLAND



ANTI-SEEP COLLAR
NO SCALE

HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

RECORD OF SOIL EXPLORATION

Project Name: Church of the Open Bible
Location: Lisbon, Maryland

| NO. | DEPTH | DIAMETER | DATE | REMARKS |
|-----|-------|----------|----------|-----------|
| 1 | 0-12 | 12" | 12-14-11 | 2' extent |
| 2 | 0-10 | 12" | 9-10-13 | 3' extent |
| 3 | 0-10 | 12" | 10-5-7 | 4' extent |
| 4 | 0-10 | 12" | 7-5-5 | 5' extent |
| 5 | 0-10 | 12" | 5-10-10 | 6' extent |
| 6 | 0-10 | 12" | 11-7-9 | 7' extent |

HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

RECORD OF SOIL EXPLORATION

Project Name: Church of the Open Bible
Location: Lisbon, Maryland

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| 5 | 0-10 | 12" | 5-10-10 | 6' extent |
| 6 | 0-10 | 12" | 11-7-9 | 7' extent |

SOIL BORINGS

These plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.

John R. Whitson 9/4/91
Director, Public Works

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.

Jessica M. Nelson 9/4/91
S.S. Soil Conservation Service

APPROVED: DEPARTMENT OF PUBLIC WORKS FOR STORM DRAINAGE SYSTEMS AND ROADS.

James M. Lewis 4/28/92
DIRECTOR, PUBLIC WORKS

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Howard Smith 6/3/92
PLANNING DIRECTOR

Elmira Kilpatrick 6/1/92
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

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

Joseph Boykin 5-21-92
HEALTH OFFICER

BY THE ENGINEER:

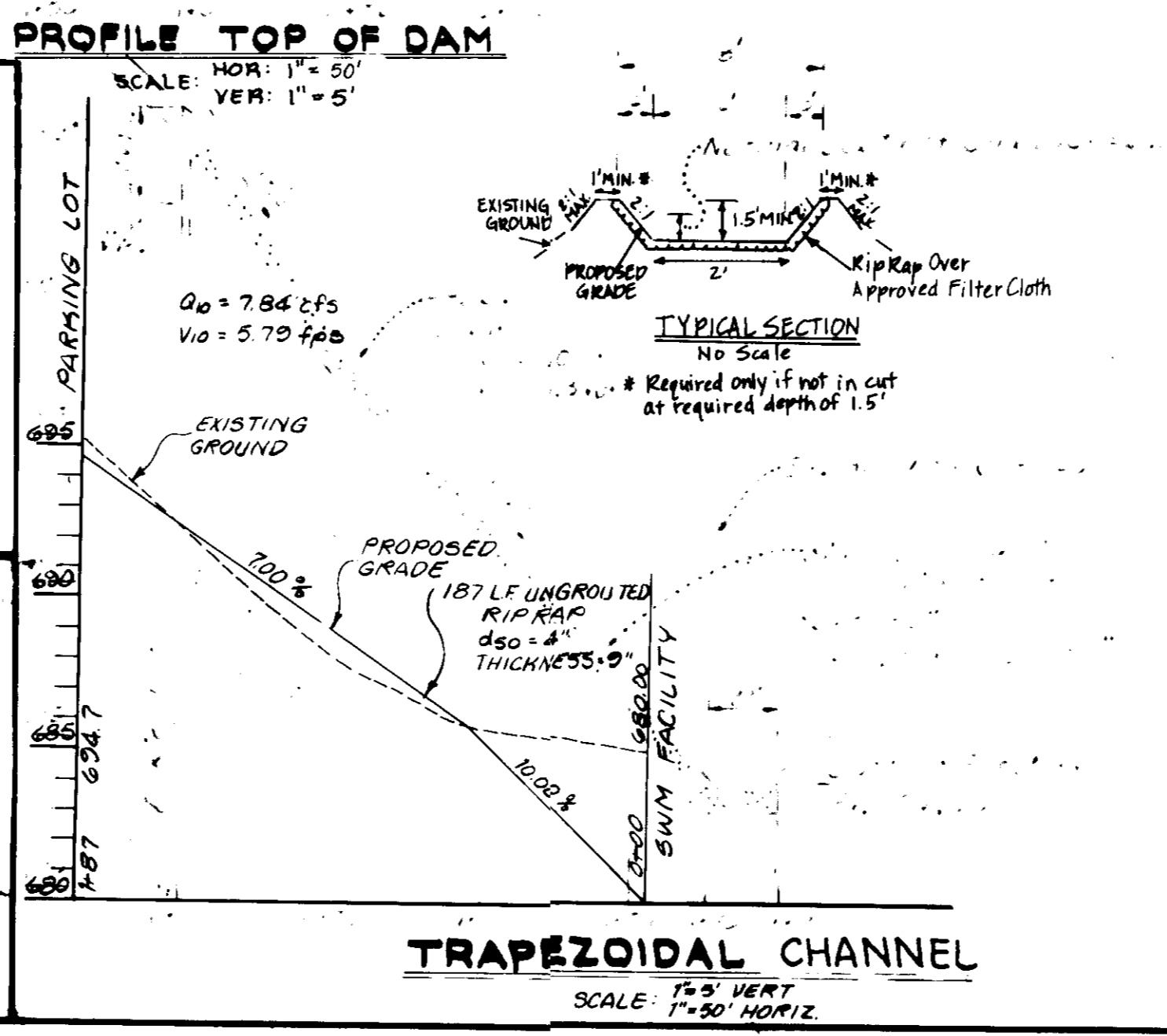
"I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer that he must provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion."

Signature of Engineer: [Signature]
Date: 8/15/91

DEVELOPER'S CERTIFICATE

"I/We certify that all development and/or construction will be done according to these plans, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I will provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District."

Signature of Developer: [Signature]
Date: 8/12/91



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

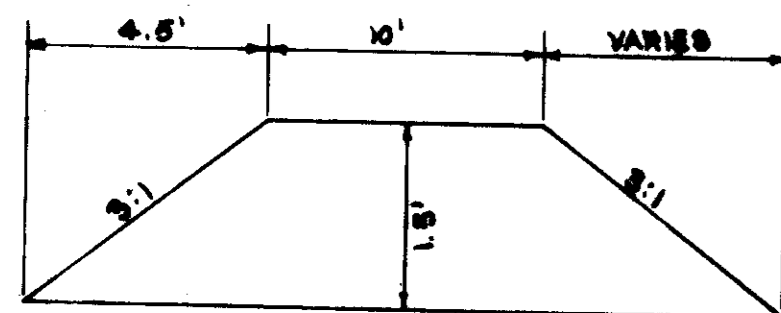
LAND DESIGN ENGINEERING, INC.
10620 Guilford Road • Suite 210 • Jessup • Maryland 20794 • (301) 864-6264 • (301) 860-0034

| | | |
|-------------------|--|---|
| DESIGNED L.M. | STORM WATER MANAGEMENT DETAILS BUILDING ADDITION TO CHURCH OF THE OPEN BIBLE LIBER 051 FOLIO 300 TAX MAP NO. 7 PARCEL 172 CENSUS 6040 4TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND PREVIOUS FILE NO. SPP 8018 | SCALE |
| DRAWN W.J. | | DRAWING 406 G |
| CHECKED R.M. | | JOB NO. 90-2002 |
| DATE Nov. 1990 | | FILE NO. |
| | | OWNER: LISBON CHURCH 4016 OLD FREDERICK ROAD LISBON, MARYLAND 21771 |

END

SEDIMENT BASIN

| | |
|---------------------|--------|
| Proposed Spot Elev. | 400 |
| Existing Spot Elev. | 401.5 |
| Proposed Spot Elev. | 01.8 |
| Contour Interval | 2 FEET |
| Drainage Direction | → |



LANDSCAPE BERM DETAIL
NOT TO SCALE

NOTE TO CONVERT THE SEDIMENT BASIN TO A PERMANENT STORMWATER MANAGEMENT BASIN THE FOLLOWING ITEMS MUST BE DONE:

1. REMOVE ALL STONE AROUND THE DEWATERING DEVICE
2. EXCAVATE THE WATER QUALITY FOREBAY TO THE DIMENSION INDICATED ON THE SITE PLAN SHEET 1 OF 6.
3. REPLACE THE FILTER CLOTH AROUND THE 6" PERFORATED PVC PIPE. ADD NEW STONE OVER PIPE.
4. STABILIZE THE WATER QUALITY FOREBAY WITH PERMANENT SEED AND MULCH.
5. REMOVE BRICKS FROM THE WEIR OPENING TO RESTORE THE DESIGNED DIMENSIONS.
6. INSTALL CONCRETE TOP ON STRUCTURE S-1.

NOTE: CONSTRUCTION TECHNIQUES WILL BE LIMITED TO A NARROW ACCESS PATH AS SHOWN TO PROTECT EXISTING PROPOSED SEPTIC LINES.

- CONSTRUCTION METHODS**
1. OBTAIN GRADING PERMIT AND INSTALL EROSION CONTROL MEASURES (SILT FENCE, SOD, ETC.) BEFORE ANY EXCAVATION.
 2. EXCAVATE FOR FOUNDATION, SEPTIC TRENCH AND STABILIZER. STABILIZER IS NEW.
 3. CONSTRUCT FOUNDATION, SEPTIC TRENCH, STABILIZER, AND BAY.
 4. FINAL GRADE AND STABILIZER IS ACCORDING TO PLAN AND SPEC. IN NAME.
 5. FINAL REVIEW OF THE SEDIMENT CONTROL MEASURES, PERMIT, EROSION CONTROL AND STABILIZER SYSTEMS AND APPROVALS. A COPY

APPROVED: DEPARTMENT OF PUBLIC WORKS FOR SEWER SYSTEMS

APPROVED: DEPARTMENT OF PLANNING AND ZONING

APPROVED: DEPARTMENT OF PUBLIC UTILITIES

APPROVED: DEPARTMENT OF PUBLIC SAFETY

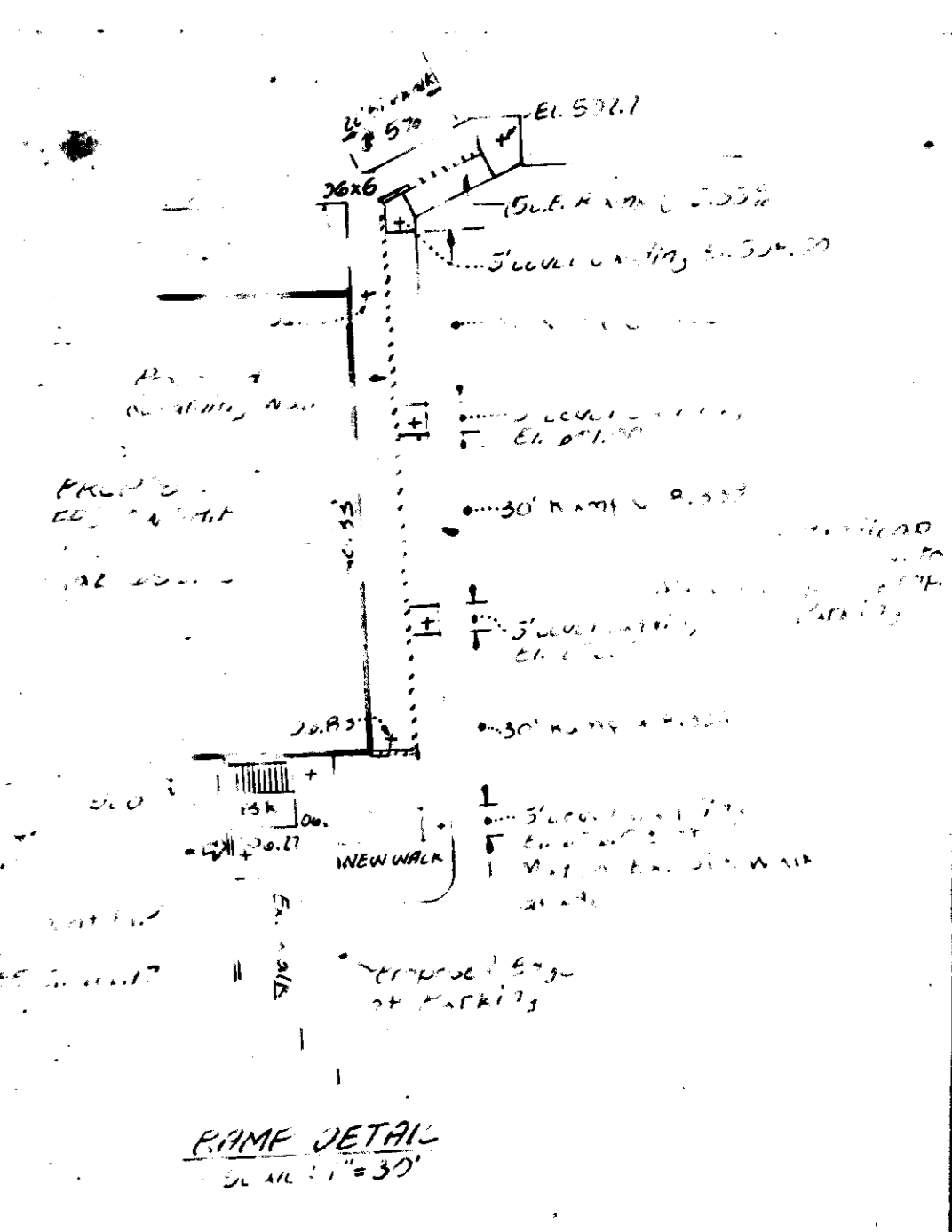
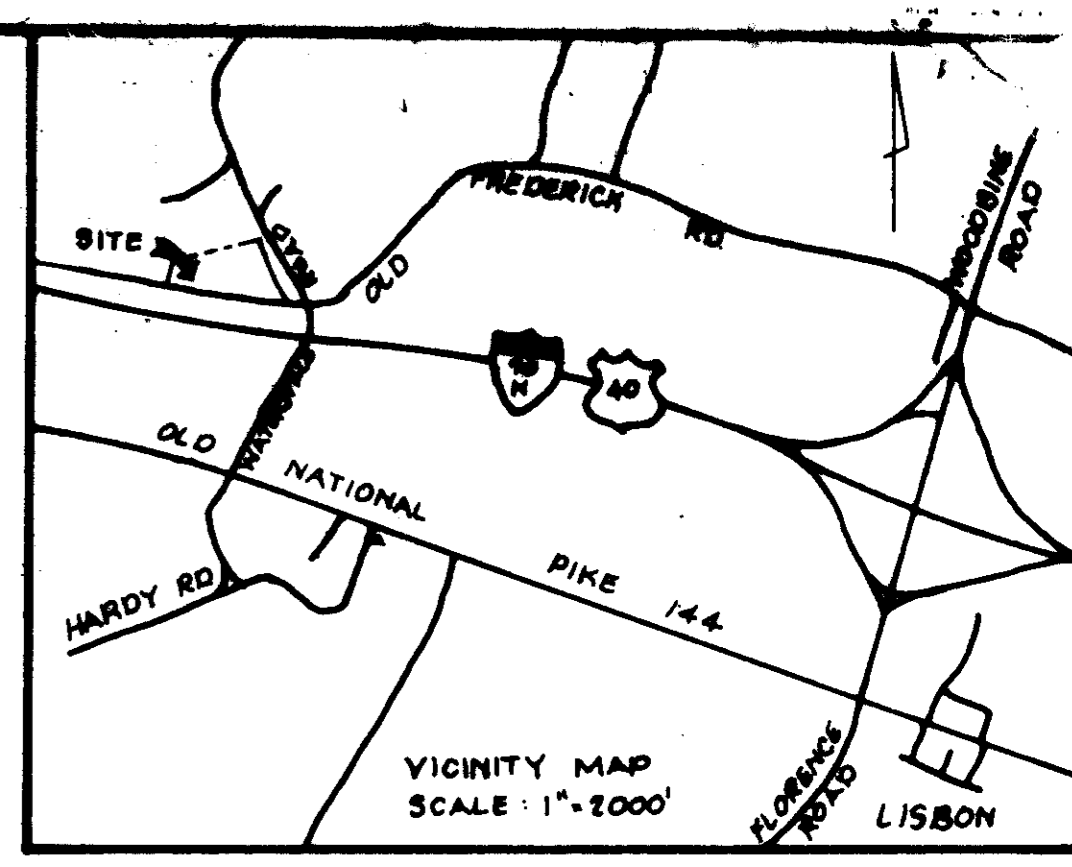
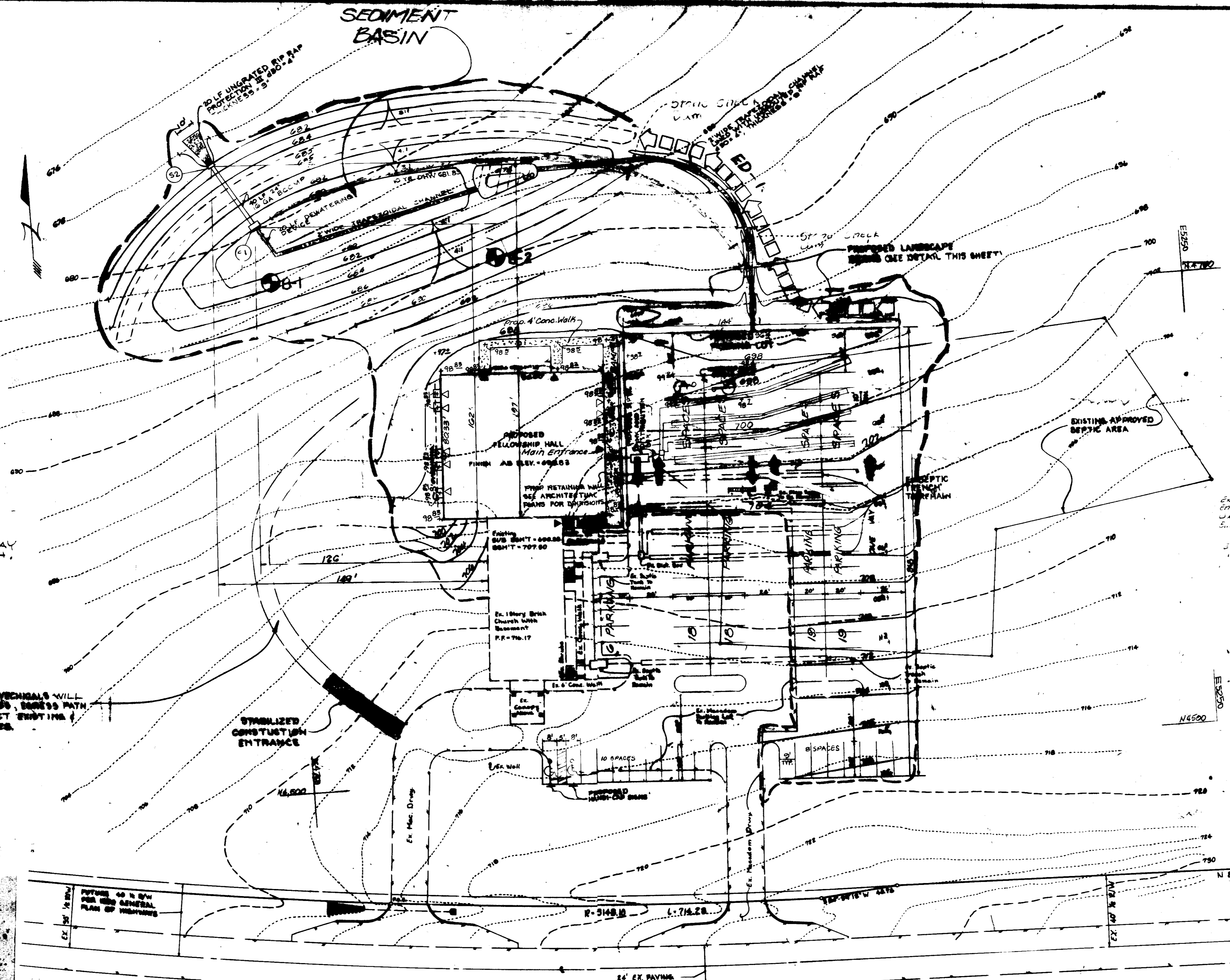
APPROVED: DEPARTMENT OF PUBLIC HEALTH

APPROVED: DEPARTMENT OF PUBLIC WORKS

APPROVED: DEPARTMENT OF PUBLIC UTILITIES

APPROVED: DEPARTMENT OF PUBLIC SAFETY

APPROVED: DEPARTMENT OF PUBLIC HEALTH



PRIME DETAIL
SCALE: 1" = 30'

REVISIONS

NOV 1990

APPROVED: DEPARTMENT OF PUBLIC WORKS FOR SEWER SYSTEMS

APPROVED: DEPARTMENT OF PLANNING AND ZONING

APPROVED: DEPARTMENT OF PUBLIC UTILITIES

APPROVED: DEPARTMENT OF PUBLIC SAFETY

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APPROVED: DEPARTMENT OF PLANNING AND ZONING

APPROVED: DEPARTMENT OF PUBLIC UTILITIES

APPROVED: DEPARTMENT OF PUBLIC SAFETY

APPROVED: DEPARTMENT OF PUBLIC HEALTH

LAND DESIGN ENGINEERING, INC.

DESIGNED BY DWJ

DRAWN BY W.J.

CHECKED BY R.M.

DATE Nov 1990

SEDIMENT CONTROL PLAN

BUILDING ADDITION TO CHURCH OF THE OPEN BIBLE

LIBER 951 FOLIO 500

TAX MAP NO. 2 PARCEL 1721

4TH ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

PREVIOUS FILE NO. 82P 0018

OWNER: LISBON CHURCH

16700 OLD FREDERICK ROAD LISBON, MARYLAND 21771

SCALE 1" = 30'

DRAWING 5 OF 6

JOB NO. 90-2002

FILE NO.

28P-11-71

VEGETATIVE STABILIZATION
TEMPORARY MEASURES

Planting short-term vegetation on critical areas.

Purpose
To temporarily stabilize the soil to reduce damage from sediment and runoff to downstream areas; improve wildlife habitat; enhance natural beauty.

Conditions Where Practices Apply
Graded or cleared areas which are subject to erosion for a period of 14 days or more.

Specifications

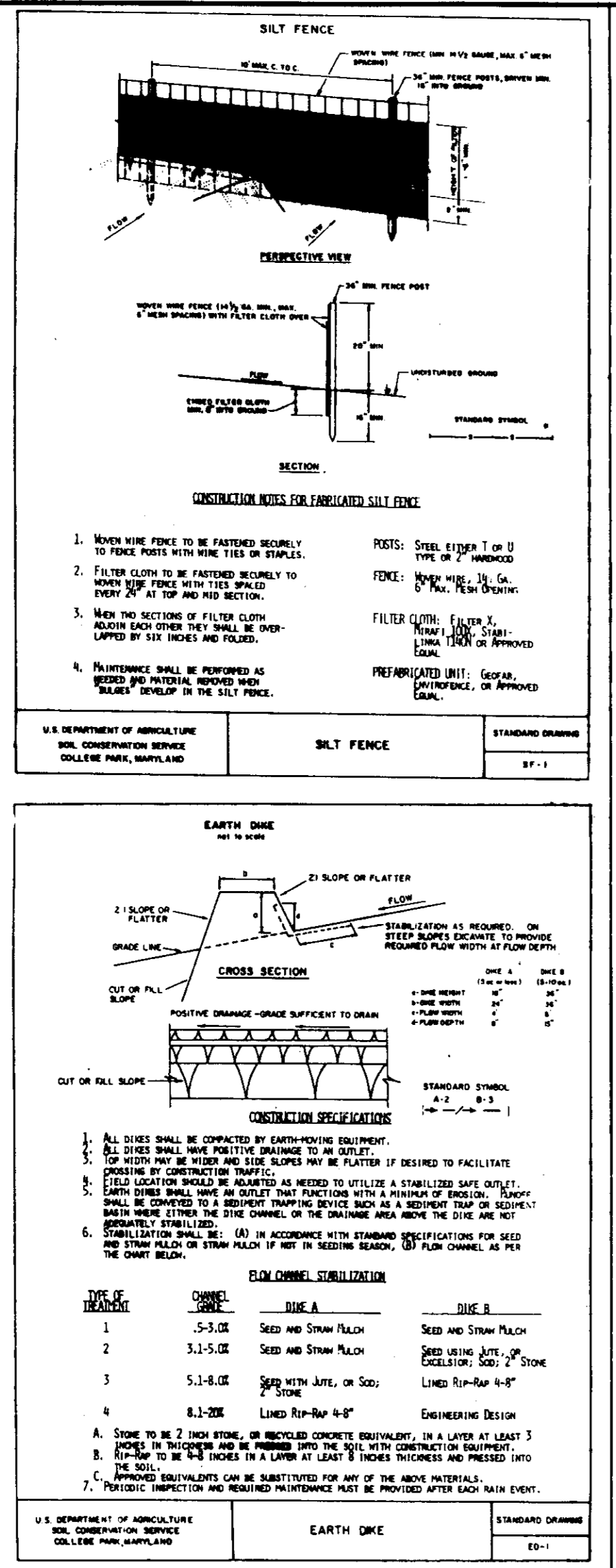
- Site Preparation**
 - Prior to seeding, install erosion control practices such as silt fences, grade stabilization structures, berm, dikes, grassed waterways, and sediment basins.
 - Final grading and shaping has usually been completed for temporary seedings.
- Soil Assessment**

For temporary seedings, fertilizer shall be applied at the rate of 600 lbs/acre, or 15 lbs/1,000 sq. ft., using 10-10-10 or equivalent. Soils which are highly acid should be limed.
- Seedbed Preparation**

When the area to be seeded has been recently tilled to the extent that an adequate seedbed exists, no additional treatment is required. However, when the area to be seeded is packed, crusted, and hard, the top layer of soil shall be loosened by tilling, raking, or other acceptable means before seeding.
- Seeding**
 - Select a mixture from Table S-1.
 - Apply seed uniformly with a cyclone seeder, drill, collapser seeder or broadcast seed (airly included seed and fertilizer).
- Mulching**

When seedings are made on critical areas or adverse soil conditions, mulch material will be applied immediately after seeding. Seedings made during wet weather conditions and with favorable soils on very flat areas may not need to be mulched. Much materials are listed in order of their effectiveness.

 - Materials and Amounts**
 - Mulch Matting** - such as jute or cellulose blanket shall be applied to the surface in waterways and on steep slopes. Lighter materials of paper, plastic and cotton mulch matting may be used where erosion hazard is not severe. If the area is to be mowed, do not use metal staples.
 - Styrofoam** - Material shall be uncrushed small grain cover applied at the rate of 1/2 to 2 tons per acre, or 70 to 300 (two-bales) pounds per 1,000 sq. ft. Much materials shall be relatively free of all kinds of weeds and shall be free of prohibited noxious weeds such as thistles, Johnsongrass and quackgrass. Spread uniformly by hand or mechanically. For uniform distribution of hand spread mulch, divide area into approximately 1,000 sq. ft. sections and place 70-90 lbs. of mulch in each section.
 - Wood Chips** - at the rate of approximately 6 tons per acre or 150 pounds per 1,000 sq. ft. may be used when available and when feasible to use.
 - Wood Cellulose Fiber** - mulch at the rate of 1,500 pounds per acre or 35 pounds per 1,000 sq. ft. may be applied by hydroseeding.
 - Mulch Anchoring** shall be accomplished immediately after mulch placement to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon size of area, erosion hazard, and cost. On sloping land, practice No. 1 below, should be done on the contour wherever possible, except "tracking" should be done up and down the slope with 1/4 inch cleat marks running across the slope.
 - Mulch Anchoring Tool and Tracking** - A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the surface 2 inches of soil. This practice affords maximum erosion control but is limited to flat slopes where there is no or a slight rise. Tracking is primarily used where equipment can operate safely. Tracking is primarily used on slopes that will not erode and fill slopes on or near the mulch into the soil with cleared bulldozer tracks.
 - Mulch Matting** - Staple lightweight biodegradable paper, plastic or cotton matting over the mulch according to manufacturer's recommendations. Matting is usually available in rolls 4 feet wide and up to 300 feet long.
 - Liquid Mulch Binders** - Application of liquid binders should be heavier at edges where wind catches mulch, in valleys, and at crests of banks. Residue of area should be uniform in appearance. Caution should be used with asphalt in residential and similar areas.



STANDARD AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION PERMANENT SEEDINGS

Planting vegetation such as grasses and legumes on critical areas.

Purpose
To stabilize the soil to reduce damage from sediment and runoff to downstream areas; improve wildlife habitat; enhance natural beauty.

Conditions Where Practices Apply
Graded or cleared areas subject to erosion and where a permanent, long-lived vegetative cover is needed.

Specifications
Vegetation cannot be expected to provide an erosion control cover and prevent soil slippage on a soil that is not stable due to its texture, structure, water movement, or excessive steep slopes.

Mulch and conditions needed for the establishment and maintenance of a long-lived vegetative cover

- Range (non-grazed) materials (over 30 percent till plus clay) to provide the capacity to hold at least a moderate amount of available moisture. Recyclable mulch would be planting topsoil and organic topsoil which can be planted on a steady soil.
- Sufficient pore space to permit adequate root penetration.
- The soil shall be free from any material harmful to plant growth.
- If these conditions cannot be met, see specification, Topsoil (S-10).

I. Site Preparation

- Install needed erosion and sediment control practices such as dikes, contour striping, erosion steps, channel linings, sediment basins, or other practices.
- Grade as needed and feasible to permit the use of conventional equipment for seedbed preparation, seeding, mulch application, and maintenance.

II. Soil Preparation

Flat areas and slopes up to 3 to 1 grade shall be loose and friable to a depth of at least 1/2 inch. The top layer of soil shall be loosened by raking, discing or other suitable means before seeding.

Slopes steeper than 3 to 1 shall have the top 1/2 inch of soil loose and friable before seeding.

III. Soil Assessment

Soil and fertilizer according to soil tests. Lime and fertilizer needs can be determined by a soil testing laboratory, such as the University of Maryland's Soil Testing Laboratory.

In lieu of soil test results, apply two tons delimitic limestone per acre and one of the following rates of fertilizer: 1,000 pounds 10-10-10 or equivalent per acre. For a longer lasting fertilizer treatment, apply 600 pounds 10-10-10 or equivalent per acre and six in and at time of seeding apply an additional 400 pounds of a urea-form fertilizer of a grade of at least 30-0-0 per acre. Apply the lime and fertilizer before seeding and before or directly into the soil to a minimum depth of 1/2 inch on slopes steeper than 3:1. On slopes steeper than 3:1, the lime and fertilizer shall be spread on the surface and then worked into the soil to a minimum depth of 1/2 inch. On slopes steeper than 3:1, the lime and fertilizer shall be spread on the surface and then worked into the soil to a minimum depth of 1/2 inch. On slopes steeper than 3:1, the lime and fertilizer shall be spread on the surface and then worked into the soil to a minimum depth of 1/2 inch.

Note: The slow release urea-form fertilizer will supply nitrogen over a longer period of time.

IV. Seeding

- Select a mixture from Table S-1.
- Apply seed uniformly with a cyclone seeder, drill, collapser seeder or broadcast seed (airly included seed and fertilizer) at a minimum seed rate of 600 lbs/acre, or 15 lbs/1,000 sq. ft. of seed. Maximum seeding depth should be 1/2 inch on clay soils and 1/4 inch on sandy soils, when using other than hydroseeder method of application. Note: If hydroseeding is used and the seed and fertilizer is mixed, they will be mixed on site and the seeding shall be immediate without irrigation.

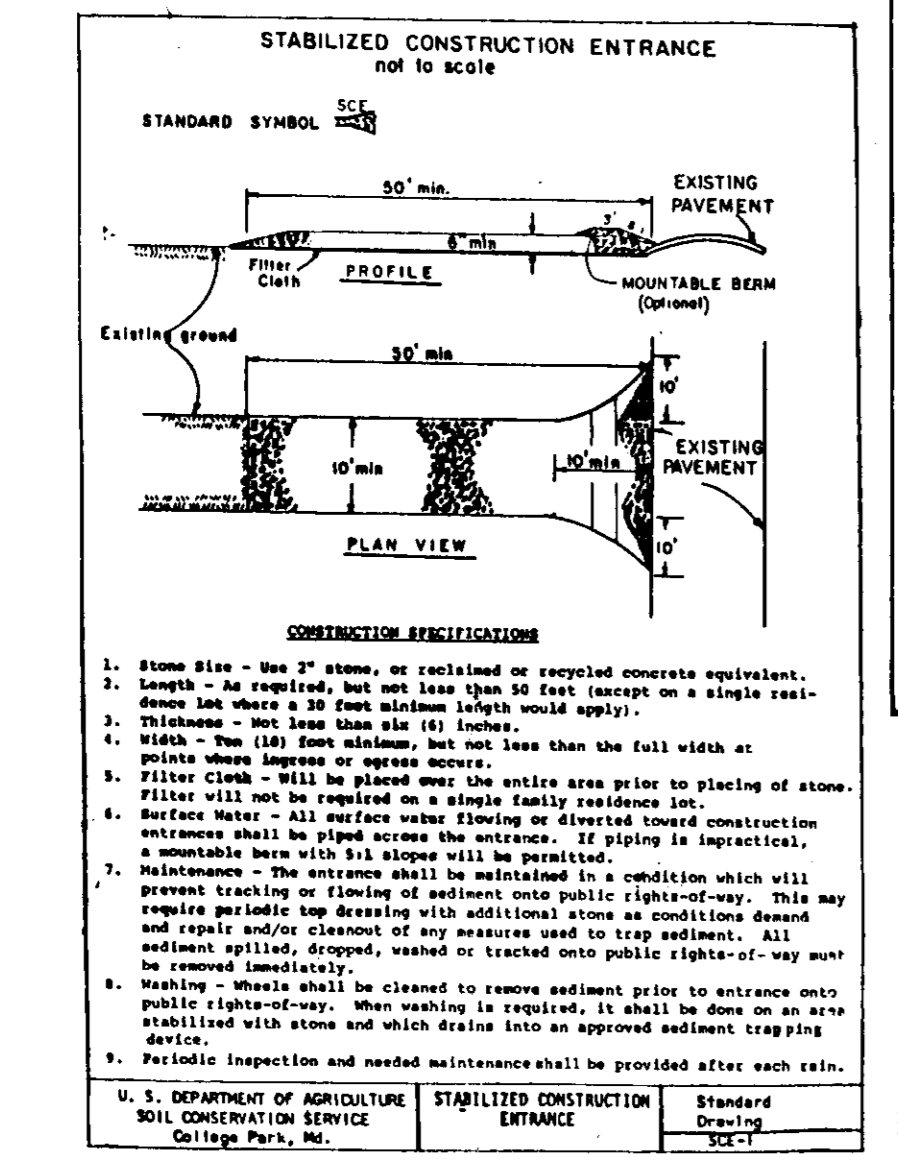
V. Mulching

Much materials are listed in order of their effectiveness. Much materials are normally only used on critical areas such as waterways or steep slopes.

- Materials and Amounts**
 - Mulch Matting** - such as jute or cellulose blanket shall be applied to the surface in waterways and on steep slopes. Lighter materials of paper, plastic and cotton mulch matting may be used where erosion hazard is not severe. If the area is to be mowed, do not use metal staples.
 - Styrofoam** - Material shall be uncrushed small grain applied at the rate of 1/2 to 2 tons per acre, or 70 to 300 (two-bales) pounds per 1,000 sq. ft. Much materials shall be relatively free of all kinds of weeds and shall be free of prohibited noxious weeds such as thistles, Johnsongrass and quackgrass. Spread uniformly by hand or mechanically. For uniform distribution of hand spread mulch, divide area into approximately 1,000 square foot sections and place 70-90 pounds of mulch in each section.
 - Wood Chips** - at the rate of approximately 6 tons per acre or 275 pounds per 1,000 square foot may be used when available and when feasible. These are particularly well suited for utility and road right-of-way. If wood chips are used, increase the application rate of nitrogen fertilizer by 20 pounds (200 pounds 10-10-10 or 66 pounds 30-0-0).
 - Wood Cellulose Fiber** - mulch at the rate of 1,500 pounds per acre or 35 pounds per 1,000 square foot may be applied by hydroseeding.
- Mulch Anchoring** shall be accomplished immediately after mulch placement to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon size of area, erosion hazard, and cost. On sloping land, practice No. 1 below, should be done on the contour wherever possible, except "tracking" should be done up and down the slope with 1/4 inch cleat marks running across the slope.
 - Mulch Anchoring Tool and Tracking** - A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the surface 2 inches of soil. This practice affords maximum erosion control but is limited to flat slopes where there is no or a slight rise. Tracking is primarily used where equipment can operate safely. Tracking is primarily used on slopes that will not erode and fill slopes on or near the mulch into the soil with cleared bulldozer tracks.
 - Mulch Matting** - Staple lightweight biodegradable paper, plastic or cotton matting over the mulch according to manufacturer's recommendations. Matting is usually available in rolls 4 feet wide and up to 300 feet long.
 - Liquid Mulch Binders** - Application of liquid binders should be heavier at edges where wind catches mulch, in valleys, and at crests of banks. Residue of area should be uniform in appearance. Caution should be used with asphalt in residential and similar areas.

TABLE S-1
Temporary Seedings by Rate, Depth and Date

| Species | Per Acre Sq. Ft. | Seeding Rate | | Seeding Depth | | Remarks |
|---------|------------------|--------------|--------|---------------|--------|----------|
| | | (Inches) | (Feet) | (Inches) | (Feet) | |
| Grass | 10/10/10 | 2 1/2 | 3 1/2 | 1 1/2 | 3 1/2 | By 10/15 |
| Grass | 10/10/10 | 2 1/2 | 3 1/2 | 1 1/2 | 3 1/2 | By 10/15 |
| Grass | 10/10/10 | 2 1/2 | 3 1/2 | 1 1/2 | 3 1/2 | By 10/15 |
| Grass | 10/10/10 | 2 1/2 | 3 1/2 | 1 1/2 | 3 1/2 | By 10/15 |



APPROVED: DEPARTMENT OF PUBLIC WORKS, FOR STORM DRAINAGE SYSTEMS AND ROADS.
DATE: 5/21/92

APPROVED: DEPARTMENT OF PLANNING AND ZONING.
DATE: 6/1/92

APPROVED: HOWARD COUNTY HEALTH DEPARTMENT FOR PRIVATE WATER AND SEWERAGE SYSTEMS.
DATE: 5-21-92

These plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.
John R. Robertson 9/4/91 Date
Howard Soil Conservation District

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.
James M. Helwig 9/4/91 Date
U.S. Soil Conservation Service

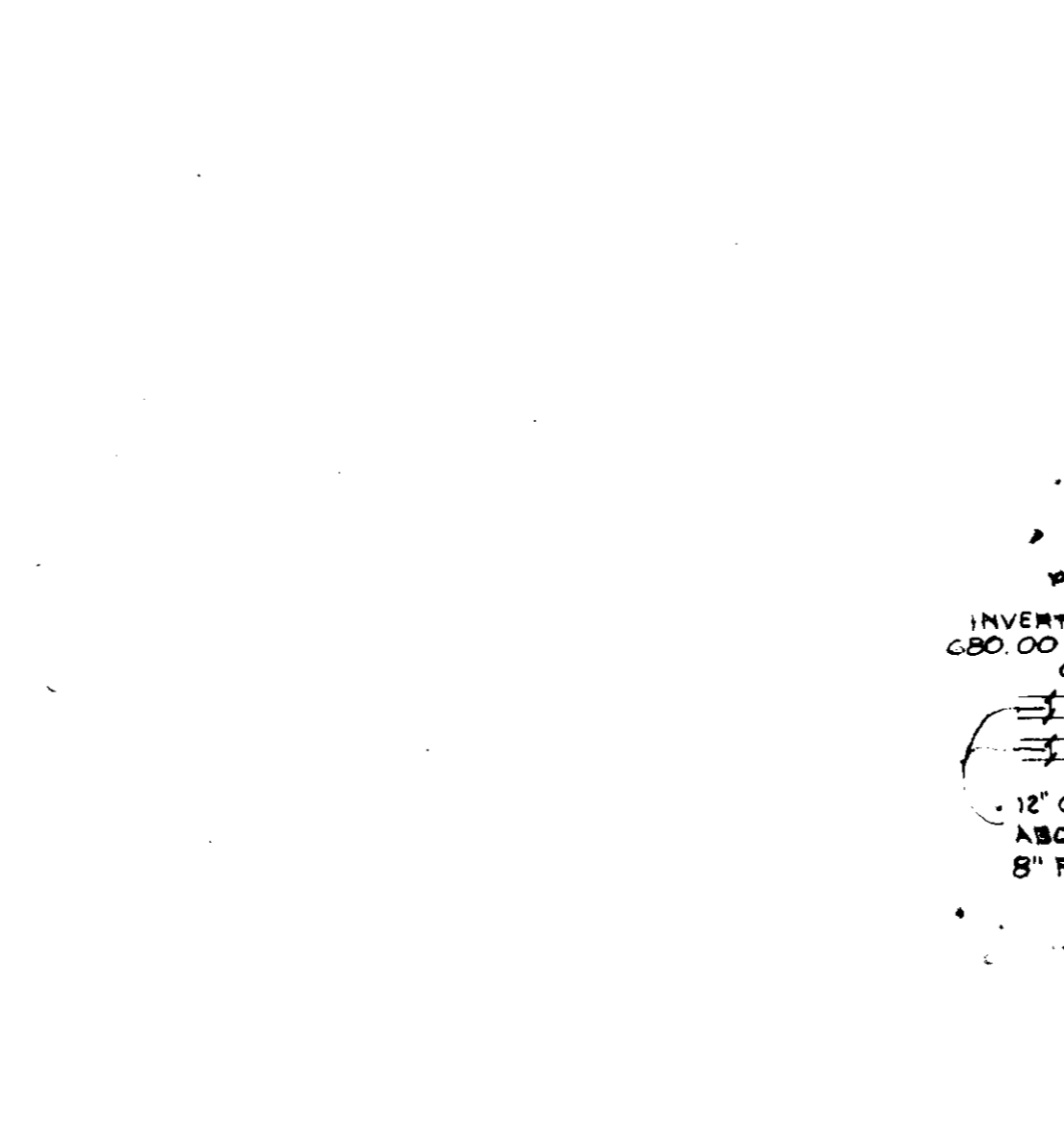
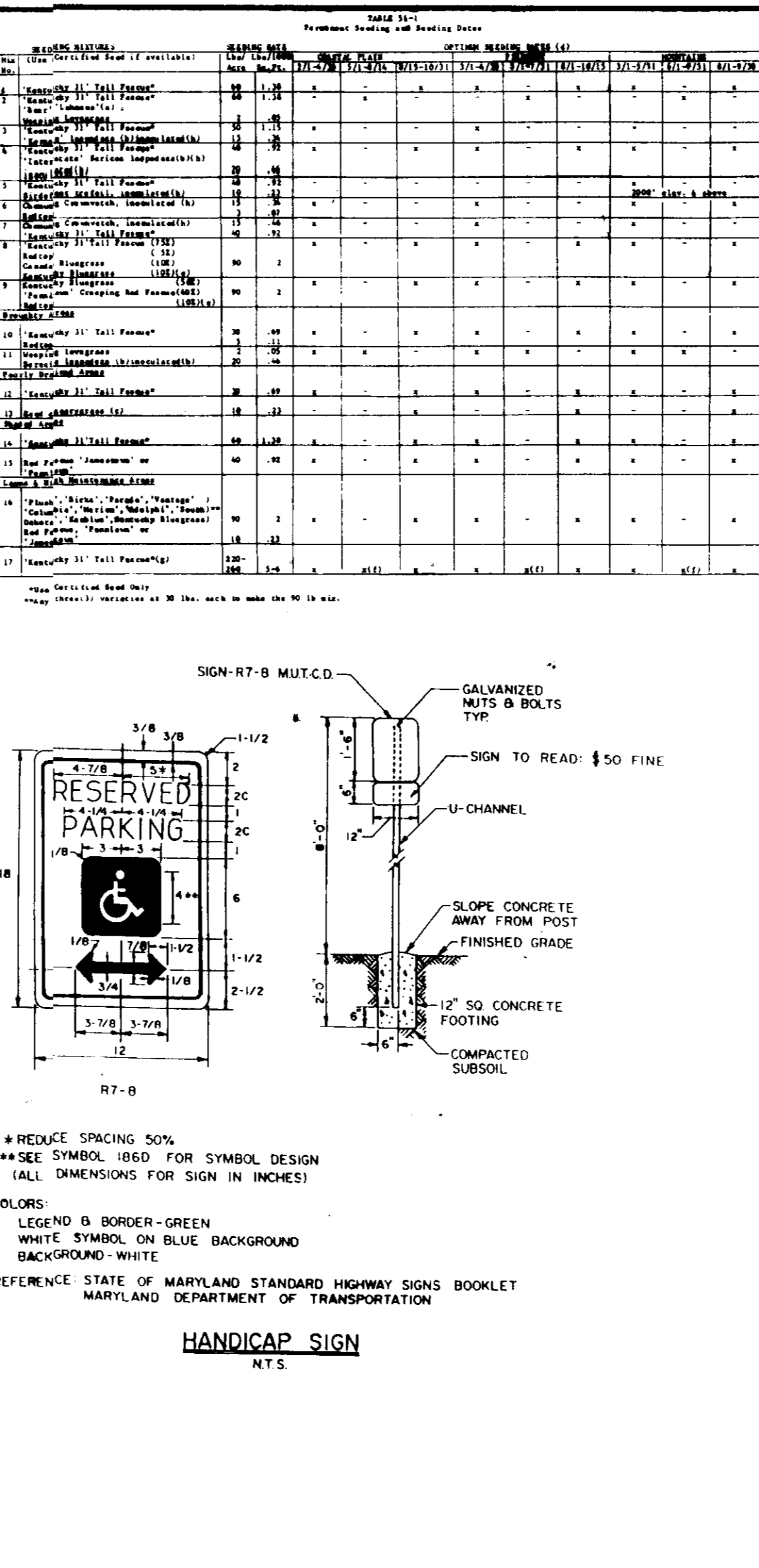
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Temporary Seedings by Rate, Depth and Date

| Species | Per Acre Sq. Ft. | Seeding Rate | | Seeding Depth | | Remarks |
|---------|------------------|--------------|--------|---------------|--------|----------|
| | | (Inches) | (Feet) | (Inches) | (Feet) | |
| Grass | 10/10/10 | 2 1/2 | 3 1/2 | 1 1/2 | 3 1/2 | By 10/15 |
| Grass | 10/10/10 | 2 1/2 | 3 1/2 | 1 1/2 | 3 1/2 | By 10/15 |
| Grass | 10/10/10 | 2 1/2 | 3 1/2 | 1 1/2 | 3 1/2 | By 10/15 |
| Grass | 10/10/10 | 2 1/2 | 3 1/2 | 1 1/2 | 3 1/2 | By 10/15 |

APPROVED: DEPARTMENT OF PUBLIC WORKS, FOR STORM DRAINAGE SYSTEMS AND ROADS.
DATE: 5/21/92

APPROVED: DEPARTMENT OF PLANNING AND ZONING.
DATE: 6/1/92

APPROVED: HOWARD COUNTY HEALTH DEPARTMENT FOR PRIVATE WATER AND SEWERAGE SYSTEMS.
DATE: 5-21-92

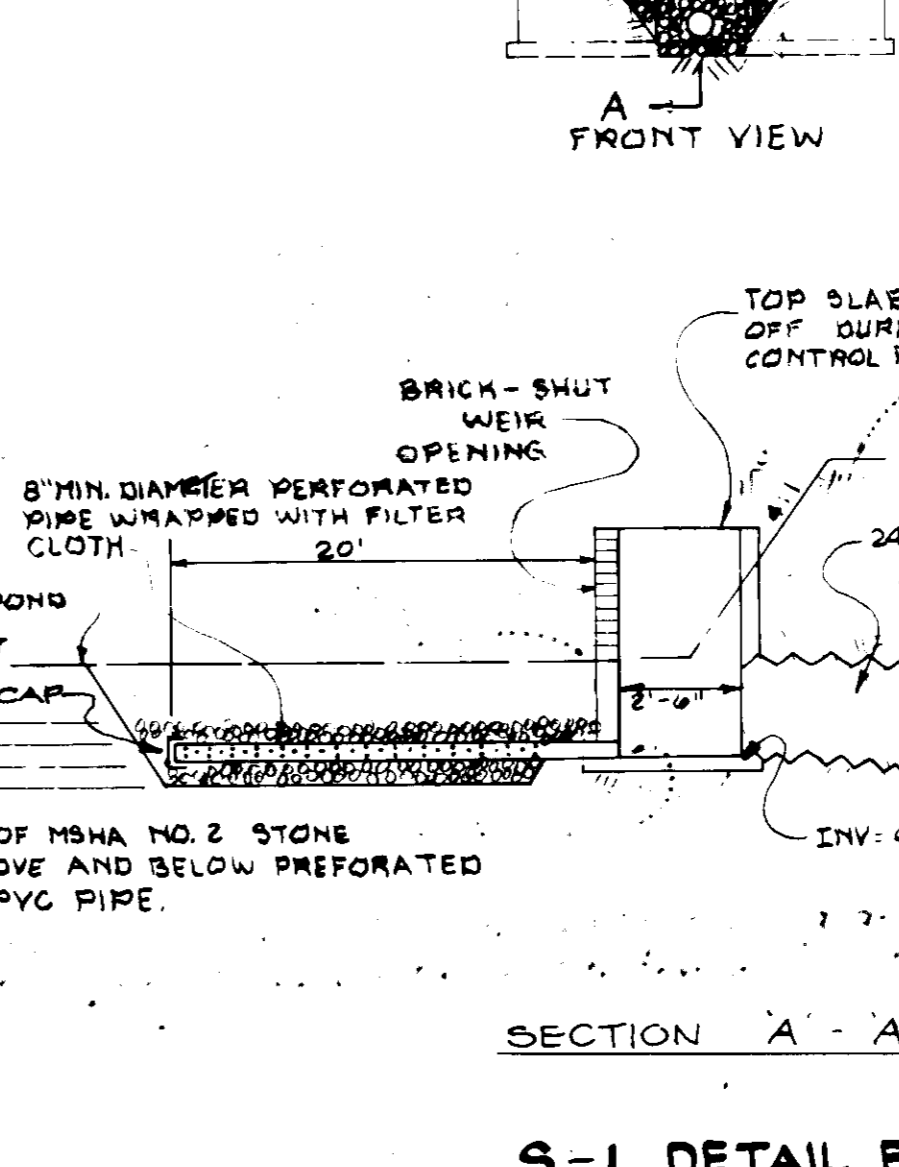


DEVELOPER'S CERTIFICATE
"I/We certify that all development and/or construction will be done according to these plans, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I will provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District."

BY THE ENGINEER:
"I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer that he must provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion."

VEGETATIVE STABILIZATION PERMANENT SEEDINGS

| Species | Per Acre Sq. Ft. | Seeding Rate (Inches) | Seeding Rate (Feet) | Seeding Depth (Inches) | Seeding Depth (Feet) | Remarks |
|---------|------------------|-----------------------|---------------------|------------------------|----------------------|----------|
| Grass | 10/10/10 | 2 1/2 | 3 1/2 | 1 1/2 | 3 1/2 | By 10/15 |
| Grass | 10/10/10 | 2 1/2 | 3 1/2 | 1 1/2 | 3 1/2 | By 10/15 |
| Grass | 10/10/10 | 2 1/2 | 3 1/2 | 1 1/2 | 3 1/2 | By 10/15 |
| Grass | 10/10/10 | 2 1/2 | 3 1/2 | 1 1/2 | 3 1/2 | By 10/15 |



LAND DESIGN ENGINEERING, INC.
10620 Guilford Road • Suite 210 • Jessup • Maryland 20794 • (301)864-6264 • (301) 860-0034

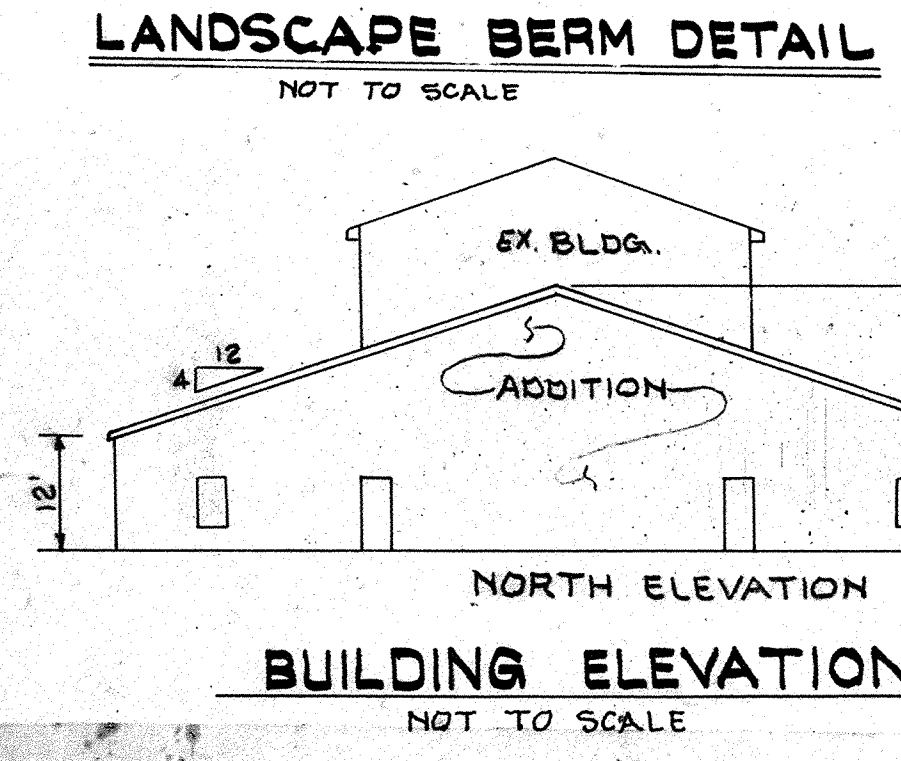
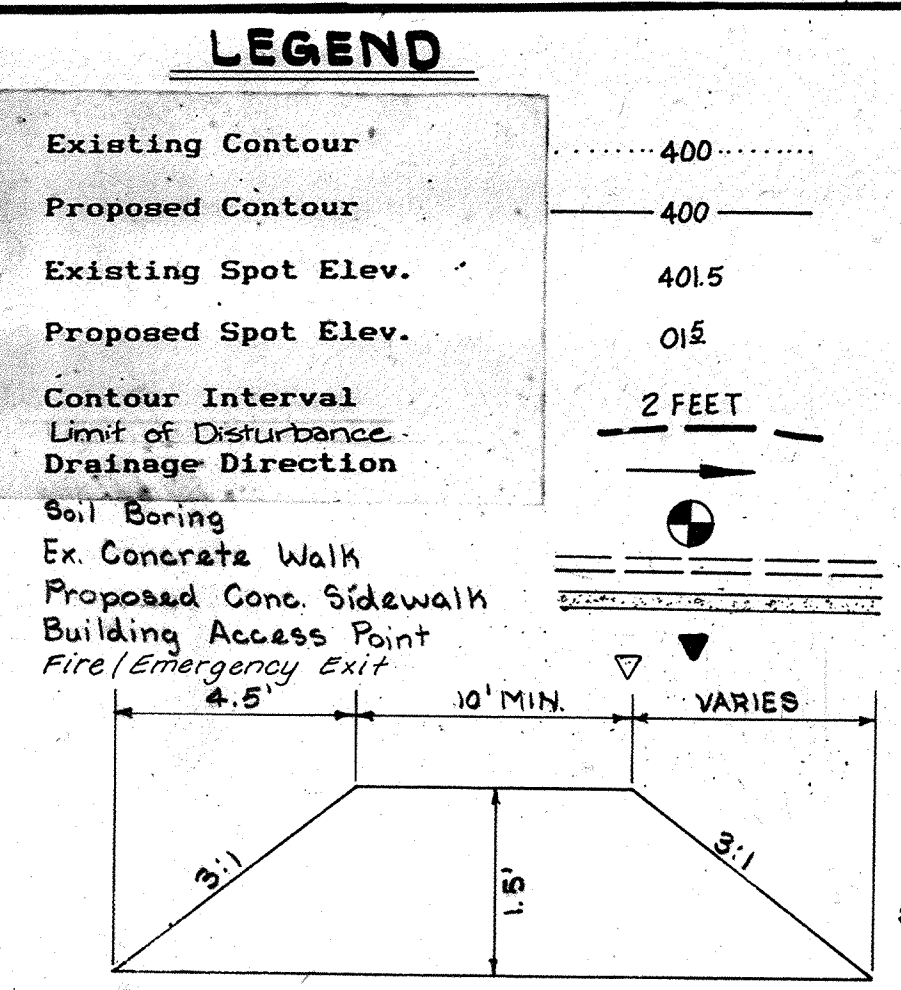
DESIGNED: DWJ
DRAWN: W.J.
CHECKED: R.M.
DATE: Nov. 1990

SCALE: 60' = 6"
JOB NO: 90-2002
FILE NO:

SEDIMENT CONTROL DETAILS
BUILDING ADDITION TO
CHURCH OF THE OPEN BIBLE
LIBER 951 FOLIO 300
TAX MAP NO.7 PARCEL 172
CENBUS 6040
4TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
PREVIOUS FILE NO. SDP 8018

OWNER: LISBON CHURCH
16700 OLD FREDERICK ROAD
LISBON, MARYLAND 21771

SDP-91-71



GENERAL NOTES

- Reference Board of Appeals Case No. BA 90-18E, Hearing dated Sept. 4, 1990. Special Exception to expand the Church and school facility was approved subject to Howard County Site Plan review and approvals. (See Reference Below)
- Existing Septic System to remain in operation and additional Septic will serve the proposed Fellowship Hall. Construction equipment will circulate by using the southwest side of the church to avoid access over existing septic system. (See Note # 6 below)
- The proposed Septic System is designed to handle both the New Fellowship hall facilities and the existing facilities. At such times when the existing septic system fails to function, a future connection shall be made between the existing waste lines and the proposed Septic Tank. (See future connections shown on the site plan)
- The proposed 2-1/2" Base Paving will be installed on existing ground less all topsoil. A 1-1/2" Surface Course will be applied to the proposed Base Paving and existing parking lot paving.
- Building and Retaining wall information will be provided by Architectural plans prepared by others.
- See Sheet 3 for location of building with reference to side and rear property lines and setbacks.

PRIVATE WATER & SEWER SPECIFICATIONS

Well: The existing well is located in front of the existing church 35 feet plus/minus off the southwest corner.

Septic System: The existing Church Septic System shall remain in place.

Proposed Fellowship Hall
Slab Elevation = 696.83
Sewer line Inv. Out. = 695.83 (at foundation wall)
694.33

Septic Tank
Required septic tank capacity is 15 gallons per student and staff.
75 Students x 15 gallons = 1125 gallons
8 Staff x 15 gallons = 120 gallons
Total required capacity = 1245 gallons
Septic tank capacity provided will be 1500 gallons

Trench/Distribution Box
Septic trenches shall be three feet wide by 5 feet deep.
Required number of 100' long trenches at 300 sq. ft. per trench = 1245 gallons ÷ 300 = 4.15
4 Trenches provided, 100' long.
Existing ground elevation at distribution box = 702.40
Proposed elevation at distribution box = 702.4', Inv. In = 698.30

**** See Septic System Profile this sheet for additional Trench Data**

Note: No food preparation will be done on site.
No shower facilities will be provided on this site.

APPROVED: DEPARTMENT OF PUBLIC WORKS.
FOR STORM DRAINAGE SYSTEMS AND ROADS.

James M. ... 4/29/92
DIRECTOR, PUBLIC WORKS

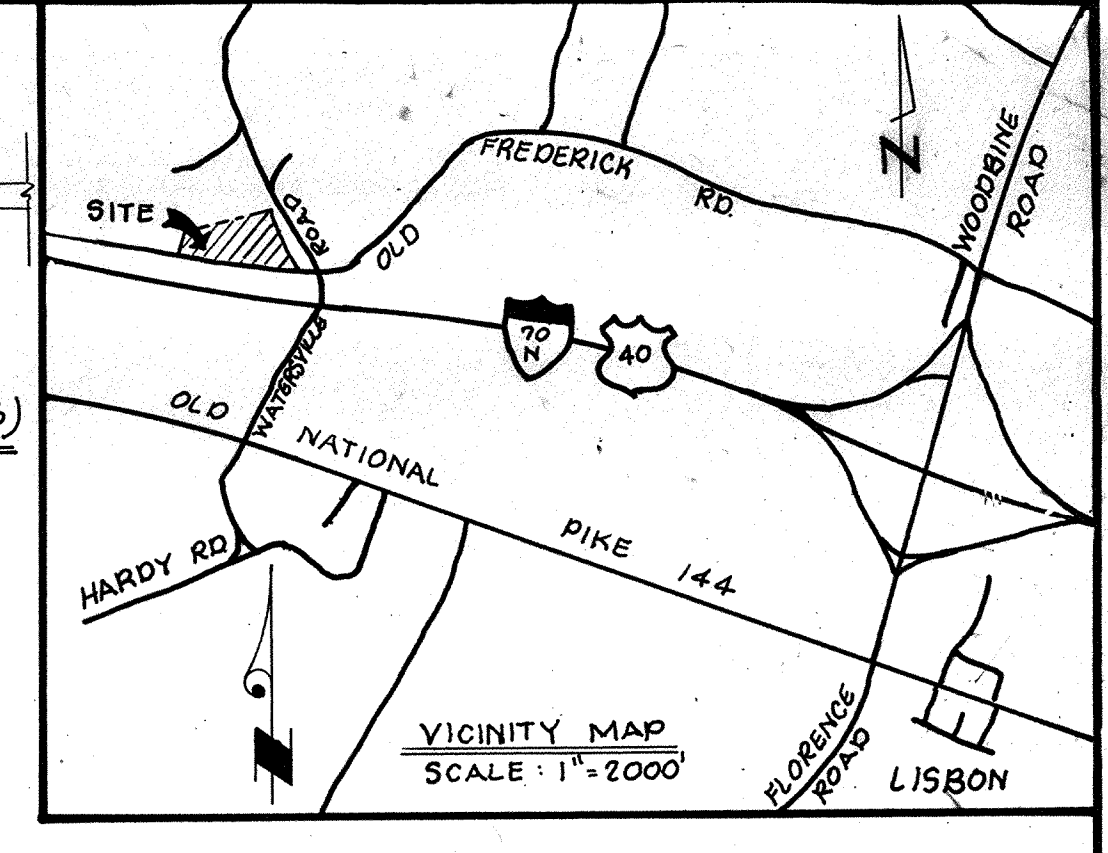
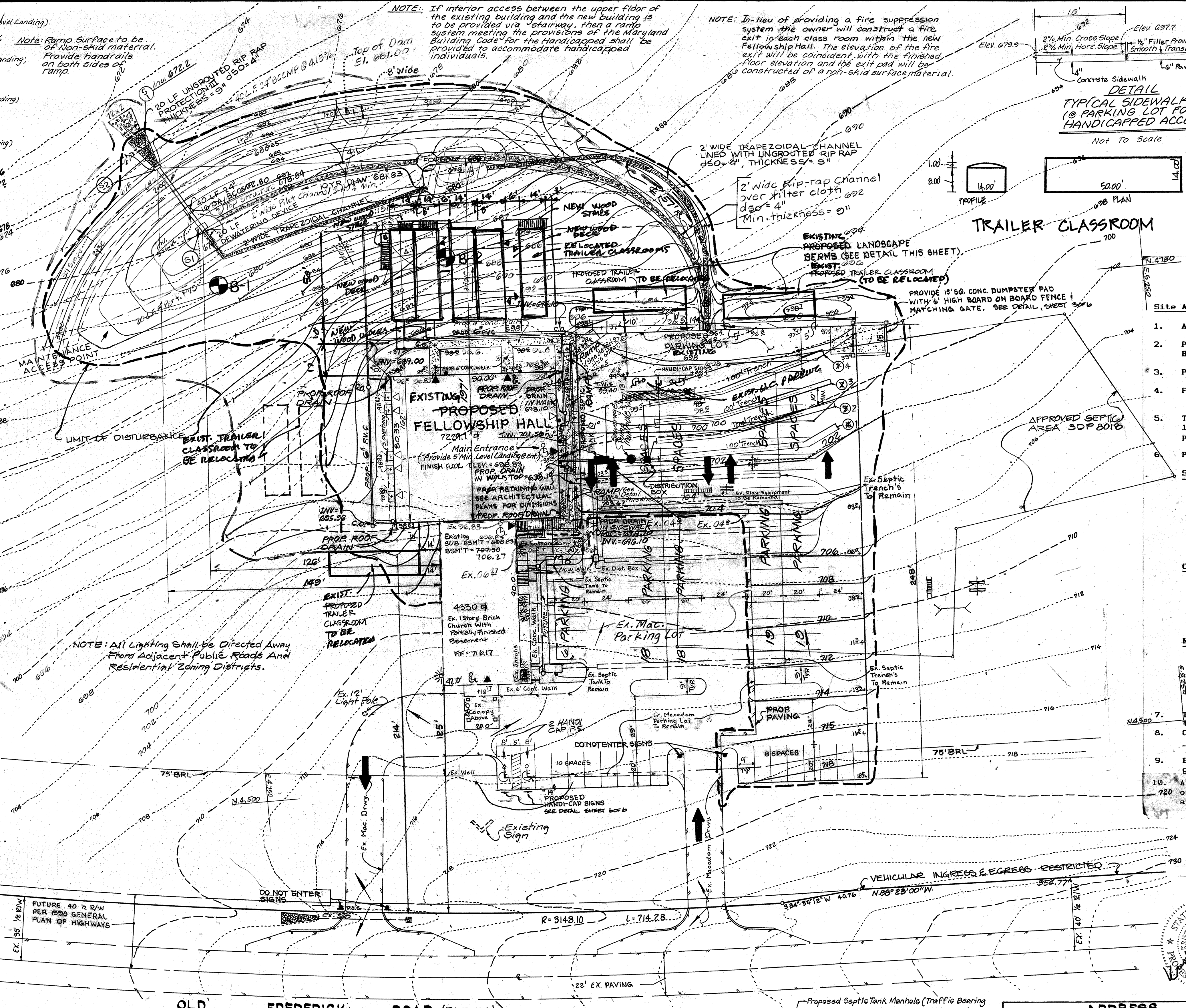
APPROVED: DEPARTMENT OF PLANNING AND ZONING

James M. ... 6/3/92
PLANNING DIRECTOR

Anna ... 6/1/92
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

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

James M. ... 5/21/92
HEALTH OFFICER



Site Analysis

- Area of Parcel: 14.029 Ac., 611,103.24 sq. ft.
- Present Zoning: R, Board of Appeals Case No. BA 79-19 and BA 90-18E. Previous approved site plan - SDF 8018.
- Proposed use of structures: Fellowship hall expansion to existing church and school facility.
- Floor Space: Ex. Church = 4330 sq. ft. (Both Floors)
Fellowship Hall School = 7229.70 sq. ft. (Single story)
- The church consists of 150 members. School capacity is limited to 75 students. The school presently has 8 staff personnel.
- Parking Requirements:

School Facilities:

- Staff parking: 4 spaces
- Visitor parking: 10 spaces
- Student parking: 2 spaces
- Parking for all-purpose room: 78 spaces

TOTAL REQUIRED PARKING: 94 SPACES

Church:

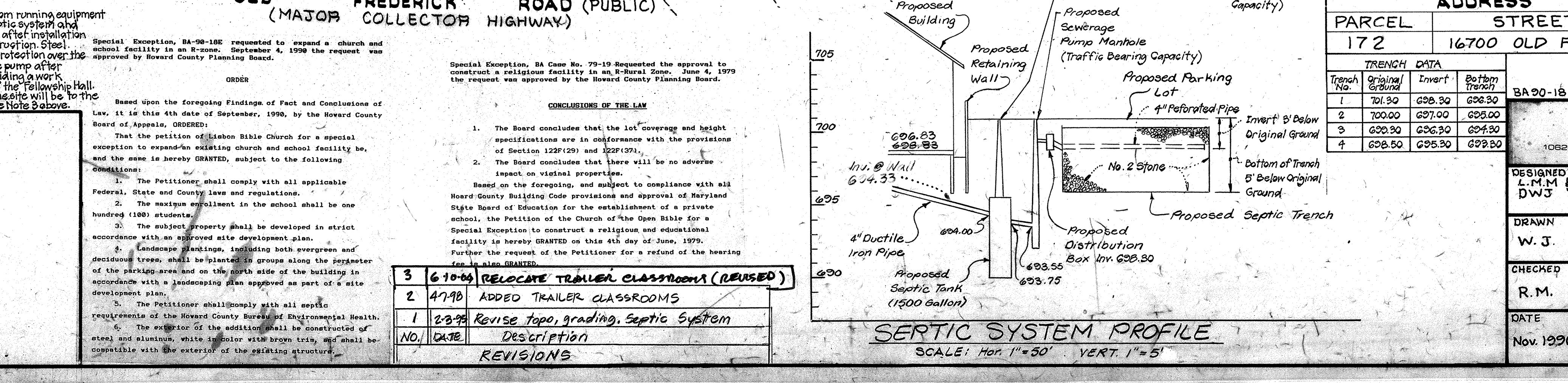
- Total seating: 140
- Parking required: 1 space per 3 seats

Total Required Parking: 140 / 3 = 47 spaces

Note: Since the Church and school functions operate at different hours, the School and Church can share the parking provided. Use the larger parking requirement plus handicapped requirement.
Handi-cap parking required = 4 spaces

- Total Parking Spaces Required = 94 spaces + 4 Handi-Cap = 98 spaces
Total Parking Spaces Provided = 94 spaces + 4 handicapped = 98 spaces
- Open space (green area) to remain on site: 12.76 ac. and 21% of net area.
- Building coverage of site 0.25 ac. area and 1.78% of gross.
- All utility companies must be notified 24 hours in advance of any construction. Call "Miss Utility" 48 hours in advance of construction 1-800-257-7777.

NOTE: THE TOPOGRAPHY SHOWN ON THIS PLAN IS TAKEN FROM THE TOPOGRAPHIC SURVEY PREPARED FOR APPROVED SITE DEVELOPMENT PLAN (SDF-8018).
NOTE: TEMPORARY CLASSROOMS ARE PERMITTED IN ACCORDANCE WITH BA 70-22E.



ADDRESS CHART

| PARCEL | STREET ADDRESS |
|--------|--------------------------|
| 172 | 16700 OLD FREDERICK ROAD |

TRENCH DATA

| Trench No. | Original Ground | Invert | Bottom Trench |
|------------|-----------------|--------|---------------|
| 1 | 701.30 | 696.30 | 696.30 |
| 2 | 700.00 | 697.00 | 695.00 |
| 3 | 698.30 | 696.30 | 694.30 |
| 4 | 698.50 | 695.30 | 693.30 |

REVISIONS

| NO. | DATE | DESCRIPTION |
|-----|---------|---------------------------------------|
| 3 | 6/10/92 | RELOCATE TRAILER CLASSROOMS (REVISED) |
| 2 | 4/7/92 | ADDED TRAILER CLASSROOMS |
| 1 | 2/23/92 | REVISE TOPO, GRADING, SEPTIC SYSTEM |

APPROVED: DEPARTMENT OF PUBLIC WORKS FOR STORM DRAINAGE SYSTEMS AND ROADS.

James M. ... 4/29/92
DIRECTOR, PUBLIC WORKS

APPROVED: DEPARTMENT OF PLANNING AND ZONING

James M. ... 6/3/92
PLANNING DIRECTOR

Anna ... 6/1/92
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

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

James M. ... 5/21/92
HEALTH OFFICER

STATE OF MARYLAND
DEPARTMENT OF ENVIRONMENTAL & GENERAL SERVICES
DIVISION OF PROFESSIONAL ENGINEERING
Professional Engineer
[Signature]
7/26/92

LAND DESIGN ENGINEERING, INC.
10820 Guilford Road, Suite 210, Jessup, Maryland 20794-1301/804.6264 / (301) 800.0334

SITE DEVELOPMENT PLAN
BUILDING ADDITION TO
CHURCH OF THE OPEN BIBLE
LIBER 951 FOLIO 300
TAX MAP NO. 7 PARCEL 172
4TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
PREVIOUS FILE NO. SDF 8018, BA 90-18E

DESIGNED: L.M.M. & DWJ
DRAWN: W.J.
CHECKED: R.M.
DATE: Nov. 1990

SCALE: 1" = 30'
DRAWING: 1 OF 6
JOB NO: 90-200.2
FILE NO.:

OWNER: LISBON CHURCH
16700 OLD FREDERICK ROAD
LISBON, MARYLAND 21771

SDF-91-71

GENERAL NOTES

- Property is within the Metropolitan District.
- Public water and sewer will be used within this site.
- The Contractor shall notify the following utility companies or agencies at least 48 working days before starting work shown on these plans:
 - State Highway Administration 410.531.5533
 - BGE(Contractor Services) 410.950.4620
 - BGE(Underground Damage Control) 410.787.9068
 - Miss Utility 1.800.257.7777
 - Colonial Pipeline Company 410.795.1380
 - Howard County, Dept. of Public Works, Bureau of Utilities 410.313.1300
 - Howard County Health Department 410.313.2640
 - AT&T 1.800.257.1153
 - Verizon 1.800.743.0033/410.224.9210
- The contractor shall notify Miss Utility at 1-800-257-7777 at least 48 hours prior to any excavation work being done.
- The contractor shall notify the Department of Public Works/Bureau of Engineering Construction Inspection Division at (410) 313-1880 at least five (5) working days prior to the start of work.
- The lot shown hereon complies with the minimum ownership, width and lot area as required by the Maryland State Department of the Environment.
- This project is in conformance with the latest Howard County Standards unless waivers have been approved.
- No clearing, grading or construction is permitted within wetlands, streams or their required buffers. Stream Disturbance at the Storm Water Management outfall approved under MDE tracking/permit number: 200461672.
- This plan has been prepared in accordance with the provisions of section 16.124 of the Howard County code and Landscape Manual. 2. Financial surety for the required landscaping must be posted as part of the Developer's Agreement in the amount of \$49,050.00 (9% shade trees @ \$300.00 each, 30 ornamental trees @ \$150.00 each, and 105 evergreen trees @ \$150.00 each).
- All curb and gutter to be Howard County Standard R-3.01 Curb and gutter unless otherwise noted. See Detail Sheet 6.
- All paving to be P-1 unless otherwise noted, see sheets 2-6 for limits and sheet 6 for details.
- All proposed spot elevations along curb and gutter are to the finished surface unless otherwise noted.
- This project complies with the requirements of section 16.1200 of the Howard County Code for Forest Conservation by planting 4.07 acres of afforestation and 0.84 acres of retention within Forest Conservation Easement 1. Total easement area = 4.92ac., \$95,962.68 surety posted with the Developer's Agreement. See record plat #16724-16729.
- All construction shall be in accordance with the latest standards and specifications of Howard County in addition to MSHA standards and specifications if applicable.
- Contractor is responsible to construct all handicap ramps and handicap access in accordance with current ADA requirements. Handicap Ramps to conform to Howard County Standard Detail R.4.03 or Detail Sheet 6. (See plan for type). See sheet 6 for Handicap Parking Signs.
- Any damage to public right-of-ways, paving or existing utilities will be corrected at the contractor's expense.
- Existing utilities are located by the use of any or all of the following: Road Construction Plans, Field Surveys, Public Water and Sewer Plans and other available record drawings. Approximate location of the existing utilities are shown for the contractor's information. Contractor shall locate existing utilities well in advance of construction activities and take all necessary precautions to protect the existing utilities and to maintain uninterrupted service. Any damage incurred due to the contractor's operation shall be repaired immediately at the contractor's expense.
- All reinforced concrete for storm drain structures shall have a minimum of twenty-eight (28) days strength at 3,500 psi. RCP Storm Drain pipe bedding shall be Class 'C'.
- All HDPE pipe specifications shall meet AASHTO M-252 Type S, M-294 Type S and ASTM D2321.
- Soil compaction specifications, requirements, methods and materials are to be in accordance with the recommendations of the project Geotechnical Engineer. Geotechnical Engineer to confirm acceptability of proposed paving section, based on soil test, prior to construction.
- All traffic control devices, markings and signing shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD).
- Estimates of Earthwork quantities are provided solely for the purpose of calculating fees.
- The coordinates shown hereon are based on the Howard County Geodetic Control, which is based upon the Maryland State Plane Coordinate System. Howard County monument numbers 41GA and 46B2 were used for this project.
- Boundary of Lots 1 & 2 taken from Record Plat #16724-16729. Two foot contours for Lot 1 are based on a field run survey prepared by C.B. Miller and Associates, Inc. in November 2002. Two foot contours for Lot 2 are based on a field run survey prepared by C.B. Miller and Associates Inc. in December, 2001. Five foot contours for Lot 2 are based on Howard County 1993 Aerial Topographic Surveys.
- Geotechnical reports provided by Herbst/Benson & Associates and dated December 12, 2002, November 17, 2003 and December 18, 2003 are integrated with these plans and should be evaluated together with these plans for bid and construction purposes.
- Traffic study provided by The Traffic Group, Inc. on November 06, 2003.
- A noise study is not required for this project due to Non-Residential use.
- There are no known cemeteries or burial grounds located on this site.
- The proposed Stormwater Management facility will be privately owned and maintained.
- Stormwater Management is provided via a Wet Pond Extended Detention facility for both water quality and quantity. The SWM Facility is to be privately owned and maintained. The SWM Facility classification is Hazard Class 'A'.
- All exterior light fixtures shall be oriented to direct light inwards and downwards on-site away from all adjoining residential properties and public roads in accordance with Section 134 of the Howard County Zoning Regulations. Parking lot lights shall be full cutoff, 400W per fixture, metal halide mounted on 25 foot tall dark bronze poles. Wall mounted lights to be metal halide or fluorescent downlights. See Architectural plans for more details.
- For bearings and distances of Forest Conservation Easements, see Record Plat #16724-16729 recorded in the Land Records of Howard County.
- This project is subject to the amended Fifth Edition of the Subdivision and Land Development Regulations.
- This Site Development Plan is for Phase I improvements only. Phase II and any other future improvements will require a Redline to this plan or a new SDP, to be determined by the Subdivision Review Committee.
- Stormwater Management is provided for all development under this contract, for the future parking and building expansions, and an additional impervious surface for currently undefined potential use shown in the SWM report maps. If future development occurs beyond the future expansions shown, SWM based on requirements at time of submittal, will be provided.
- Contractor to store screened topsoil on site, and redistribute in a 4" layer over the redistribution area.
- MDE tracking/permit number: 200461672
- Existing well and septic system to be properly abandoned per Health Department requirements prior to issuance of a house demolition permit.
- See Architectural Plans for stair and railing details. Contractor to provide sleeving in sidewalks for railings.
- Contractor to provide wheel stops for handicap parking at any locations that require depressed curb bordering the parking space.
- In accordance with Section 128.A.10 of the Howard County Zoning Regulations, setbacks to lot lines internal to a development are not required.
- See sheet 6 for sidewalk details.
- This Site Development Plan is subject to case #BA-03-078-C. On April 12th, 2004 the hearing examiner ordered that the petition of Grace Community Church for a conditional use for a structure used primarily for religious services in an RR-DEO zoning be granted. Phase II of the development will be substantially completed by the end of 2015.
- Let 2 is subject to the covenants set forth in Liber 5992 Folio 341 stating that in the event of a future resubdivision of Lot 2 that would place Building One and Building Two on two separate lots, Building Two will require independent water supply for a fire suppression system.

SITE DEVELOPMENT PLAN

GRACE COMMUNITY CHURCH

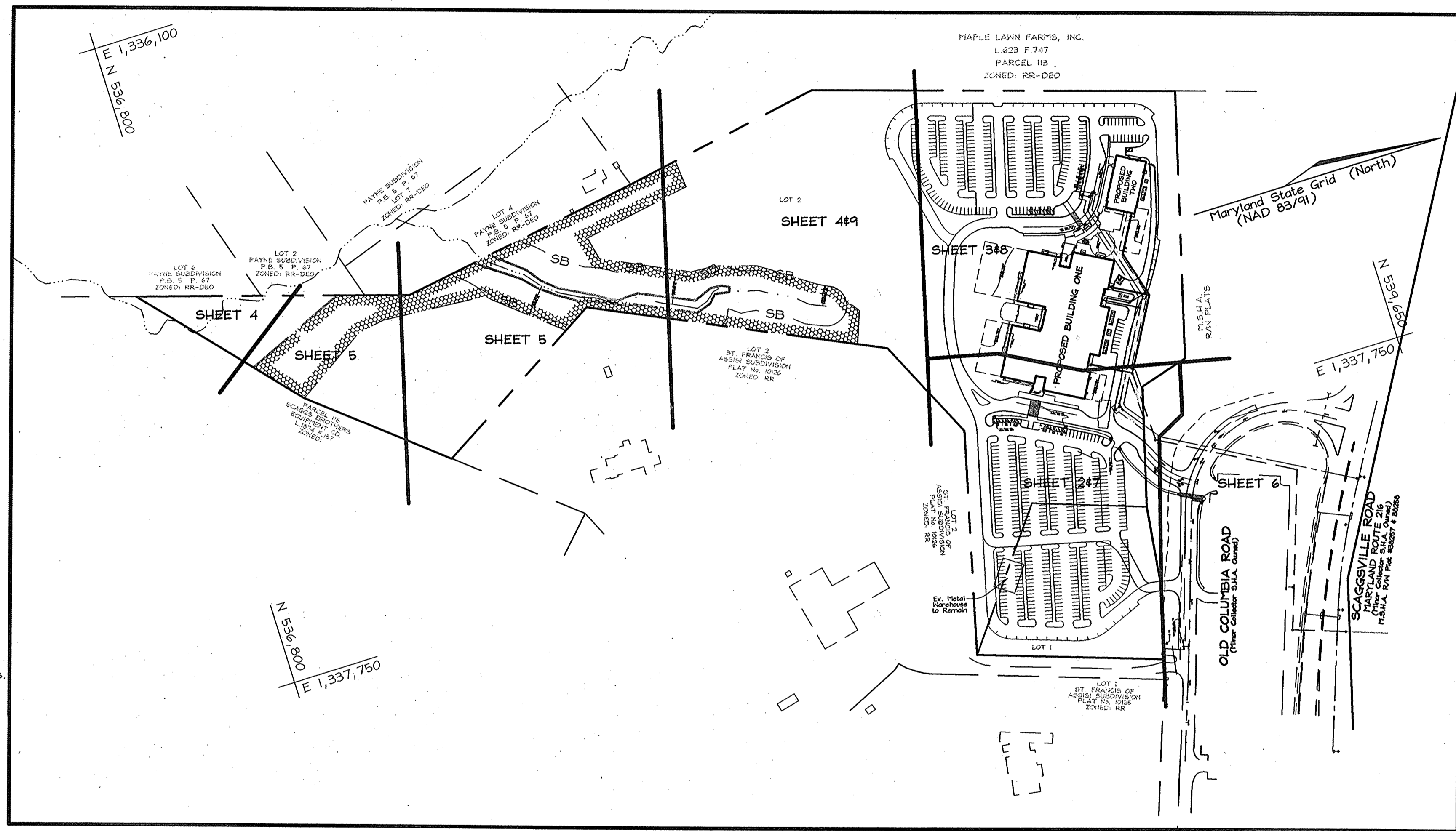
PHASE I

HOWARD COUNTY, MARYLAND

LEGEND

- Existing Contour: - - - - -382
- Proposed Contour: ————+82.53
- Spot Elevation: ●
- Direction of Flow: →
- Existing Trees to Remain:
 - Overhead (25')
 - Overhead
 - Wall Mounted
 - Pole (12')
 - Accent
- Light Fixtures:
 - Overhead (25')
 - Overhead
 - Wall Mounted
 - Pole (12')
 - Accent
- P-2 Paving Section: [Pattern]
- Existing Traffic Flow: [Arrow]
- Proposed Traffic Flow: [Arrow]
- Forest Conservation Easement: [Pattern]
- Gutter slope direction: [Arrow]
- Face of Curb: [Arrow]

VICINITY MAP
Scale: 1"=2000'



BENCHMARKS
Howard County Monuments:

| | | |
|-----------|-------------------------------|---|
| Sta. 41GA | N 165,018.7642 E 406,545.5671 | El.: 141.0632 (meters) |
| | N 541,349.078 E 1,333,808.248 | El.: 462.805 (feet) |
| | | (Concrete Monument 5.5' SW of paving edge, 42.8' NW of C&P Pole #36.) |
| Sta. 46B2 | N 164,588.5849 E 407,584.9942 | El.: 144.8732 (meters) |
| | N 634,987.715 E 1,333,716.435 | El.: 475.305 (feet) |
| | | (Concrete Monument 62.7' NE of G&E Pole, 34.2' N of nail in cedar stump.) |

SHEET INDEX

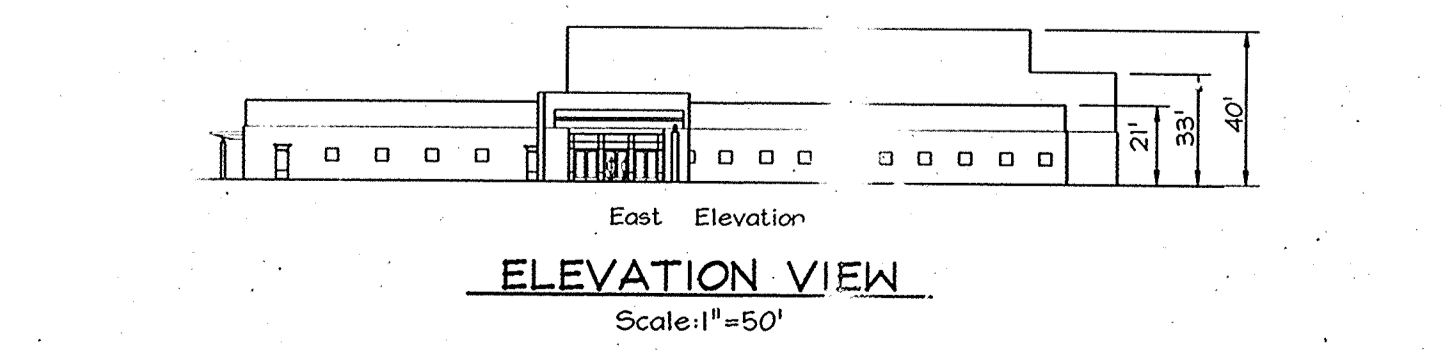
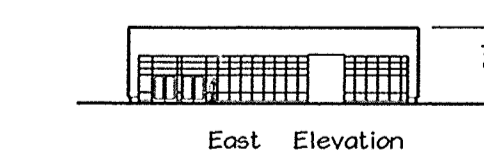
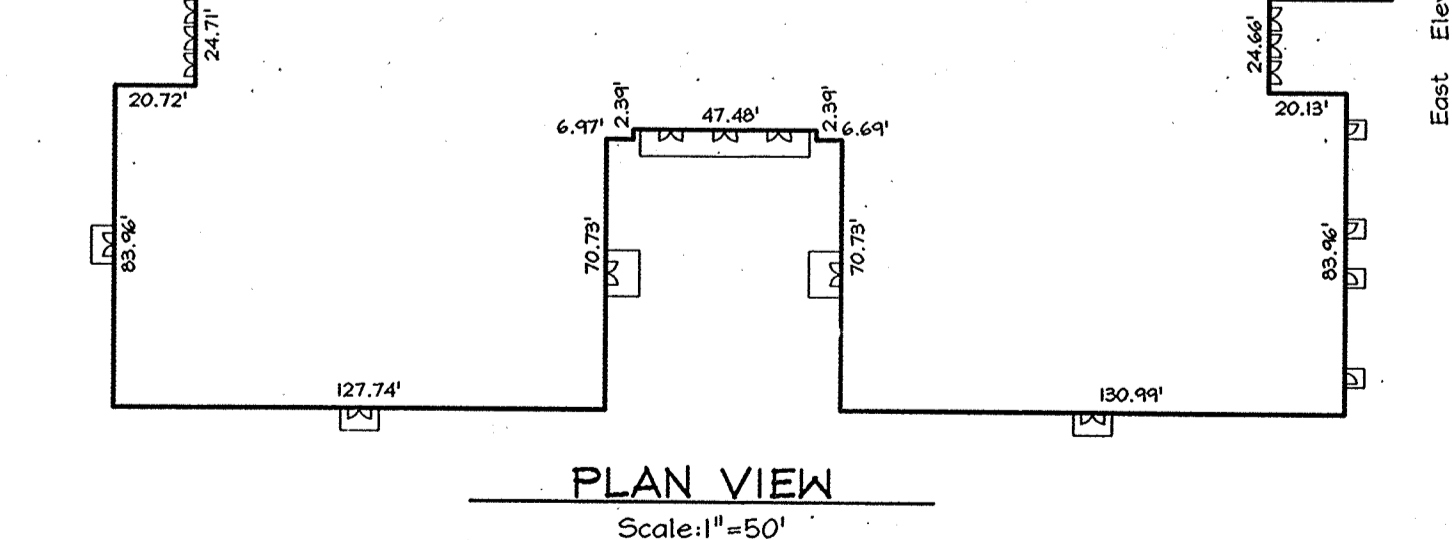
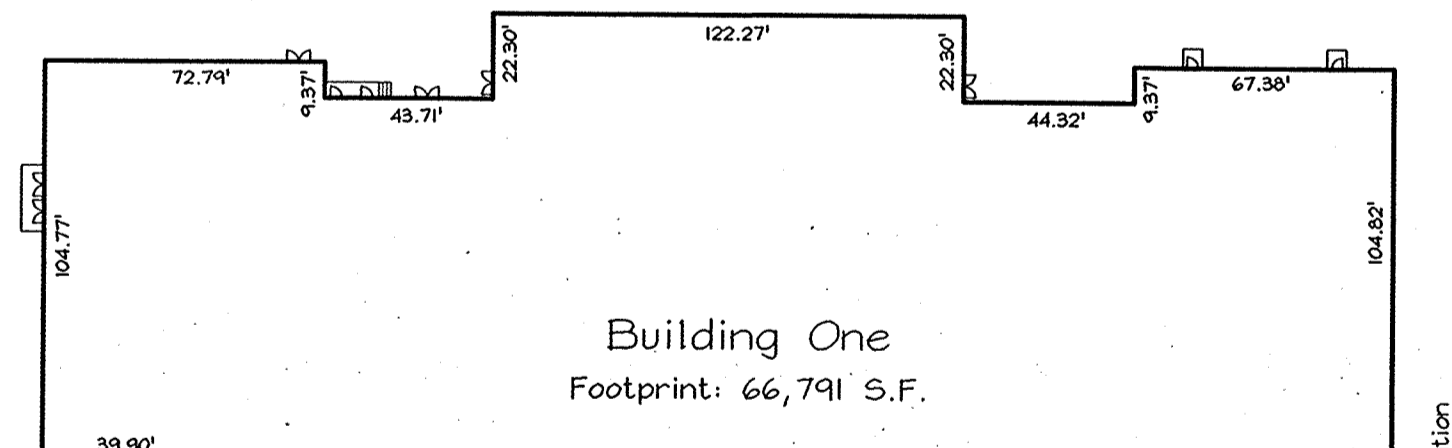
| DESCRIPTION | SHEET No. |
|---|-----------|
| Cover Sheet | 1 of 20 |
| Site Development and Grading Plan | 2 of 20 |
| Site Development and Grading Plan | 3 of 20 |
| Site Development and Grading Plan | 4 of 20 |
| Site Development and Grading Plan | 5 of 20 |
| Old Columbia Road Improvements and Sediment and Erosion Control Plan | 6 of 20 |
| Soils, Sediment and Erosion Control Plan | 7 of 20 |
| Soils, Sediment and Erosion Control Plan | 8 of 20 |
| Soils, Sediment and Erosion Control Plan | 9 of 20 |
| Sediment and Erosion Control Details | 10 of 20 |
| Landscape Plan | 11 of 20 |
| Water & Sewer Profiles, Pond Planting Plan & Details and Sediment & Erosion Control Details | 12 of 20 |
| Stormdrain Drainage Area Map | 13 of 20 |
| Storm Drain Profiles | 14 of 20 |
| Storm Drain Profiles | 15 of 20 |
| Stormwater Management Details, and Profiles | 16 of 20 |
| Stormwater Management Details and Profiles | 17 of 20 |
| Forest Conservation Plan | 18 of 20 |
| Forest Conservation Notes and Planting Details | 19 of 20 |
| Existing Conditions Plan | 20 of 20 |

ADDRESS CHART

| LOT | STREET |
|-----|---|
| 2 | 8200 Old Columbia Road (Religious Facility) |
| | 8204 Old Columbia Road (Ancillary Building) |
| 1 | 8210 Old Columbia Road |

SITE ANALYSIS DATA CHART

- Total project area: 34.06 Acres±
- Area of plan submission: 34.06 Acres±
- Limit of disturbed area: 23.66 Acres±
- Present zoning: "RR-DEO" per 02/02/04 Comprehensive Zoning Plan.
- Proposed uses for site & structures: Religious Facility
- Floor space on each level of building(s) per use: See building footprint this sheet.
- Building coverage of site: Maximum allowed for Religious facility per the Zoning Regulations: 25% of site or 8.52 acre±
- Existing Buildings to remain: 0.09 acre±
- Proposed Buildings: 1.76 acre±
- Total: 1.85 acre± or 5.4%
- DPZ file references: Plot #4382; F-80-25; Conditional Use Case #BA-02-33-C and V, #BA-03-078-C; Plot #16724-16729 F-04-172
- Number of parking spaces required: 1 space for every 3 seats (1318 seats) = 440 spaces (see Parking Tabulation below).
- Total number of parking spaces provided: 442
- Total required Handicap parking spaces: 9 spaces; including 2 van accessible spaces
- Total provided Handicap parking spaces: 24 spaces; including 8 van accessible spaces



OWNER/DEVELOPER
Grace Community Church of Howard County, Inc.
9180 Rumsey Road
Columbia, MD 21045
(410) 992-5384
C/O Joe Hancock

PERMIT INFORMATION CHART

| | | |
|---|------------------------|-----------------------------|
| Subdivision Name: Grace Community Church | Section/Area N/A | Lot/Parcel No. 1, 2, 337 |
| Plot # 16724-16729 | Grid 3 | Zoning RR-DEO |
| Tax Map No. 46 | Elect. District 5th | Census Tract 6051.02 |
| Water Code E20 | Sewer Code 7690000 | |

COVER SHEET

GRACE COMMUNITY CHURCH

PHASE I
RELIGIOUS FACILITY

TAX MAP 46 GRID 3
5TH ELECTION DISTRICT

LOTS 1 AND 2 PARCEL 337
HOWARD COUNTY, MARYLAND

FSH Associates
Engineers Planners Surveyors
8318 Forest Street, Ellicott City, MD 21043
Tel: 410-750-2251 Fax: 410-750-7350
E-mail: FSHAssociates@fsa.com

DESIGN BY: PS
DRAWN BY: KSZ
CHECKED BY: ZYF
SCALE: As Shown
DATE: July 20, 2004
I.O. No.: 3071
SHEET No.: 1 OF 20

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

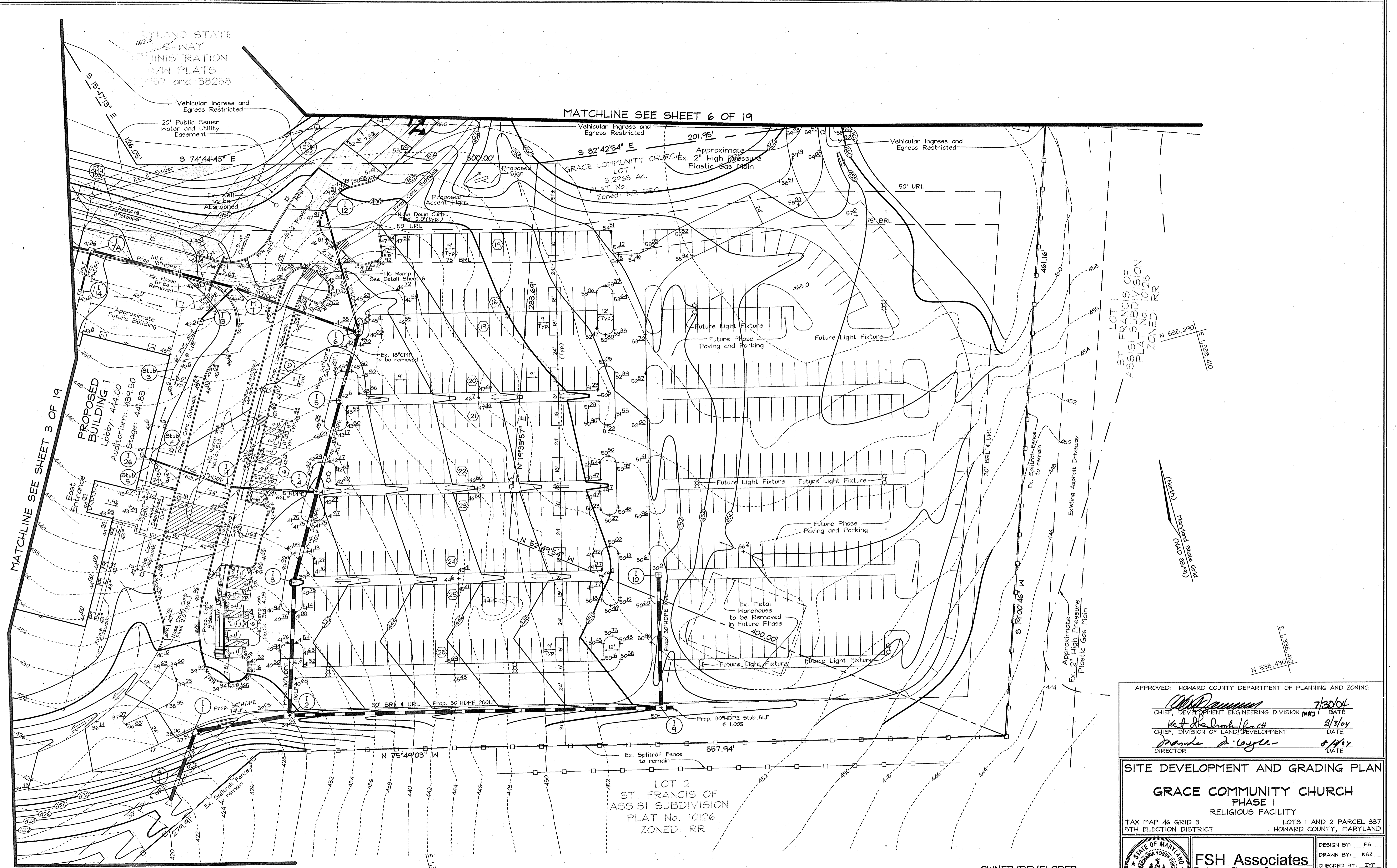
CHIEF, DEVELOPMENT ENGINEERING DIVISION: [Signature] DATE: 7/30/04

CHIEF, DIVISION OF LAND DEVELOPMENT: [Signature] DATE: 8/3/04

DIRECTOR: [Signature] DATE: 8/6/04

STLAND STATE
HIGHWAY
ADMINISTRATION
R/W PLATS
38257 and 38258

MATCHLINE SEE SHEET 6 OF 19



MATCHLINE SEE SHEET 3 OF 19

MATCHLINE SEE SHEET 4 OF 19

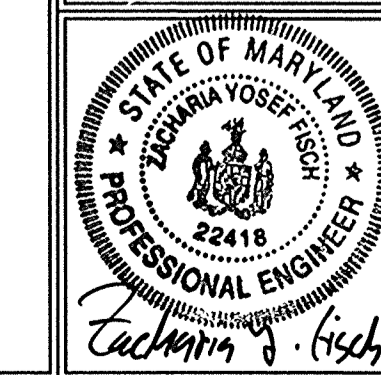
LOT 2
ST. FRANCIS OF
ASSISI SUBDIVISION
PLAT No. 10126
ZONED: RR

LOT 1
ST. FRANCIS OF
ASSISI SUBDIVISION
PLAT No. 10125
ZONED: RR

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Michael J. ... 7/30/04
 CHIEF, DEVELOPMENT ENGINEERING DIVISION MMS DATE
W. J. ... 8/3/04
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
... 8/1/04
 DIRECTOR DATE

SITE DEVELOPMENT AND GRADING PLAN
GRACE COMMUNITY CHURCH
 PHASE I
 RELIGIOUS FACILITY
 TAX MAP 46 GRID 3 LOTS 1 AND 2 PARCEL 337
 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

OWNER/DEVELOPER
 Grace Community Church of Howard County, Inc.
 9180 Ramsey Road
 Columbia, MD 21045
 (410) 992-5384
 C/O Joe Hancock



FSH Associates
 Engineers Planners Surveyors
 8318 Forrest Street Ellicott City, MD 21043
 Tel: 410-750-2251 Fax: 410-750-7350
 E-mail: FSHAssociates@cs.com

DESIGN BY: PS
 DRAWN BY: KSZ
 CHECKED BY: ZYF
 SCALE: 1"=30'
 DATE: July 20, 2004
 P.O. No.: 3071
 SHEET No.: 2 OF 20

MATCHLINE SEE SHEET 2 OF 19

MATCHLINE SEE SHEET 4 OF 19



OWNER/DEVELOPER
 Grace Community Church of Howard County, Inc.
 9180 Rumsey Road
 Columbia, MD 21045
 (410) 992-5384
 C/O Joe Hancock

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

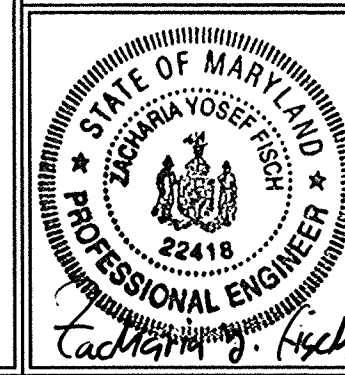
[Signature] 7/20/04
 CHIEF, DEVELOPMENT ENGINEERING DIVISION MMJ DATE

[Signature] 8/3/04
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 7/21/04
 DIRECTOR DATE

SITE DEVELOPMENT AND GRADING PLAN
GRACE COMMUNITY CHURCH
 PHASE I
 RELIGIOUS FACILITY

TAX MAP 46 GRID 3 LOTS 1 AND 2 PARCEL 337
 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

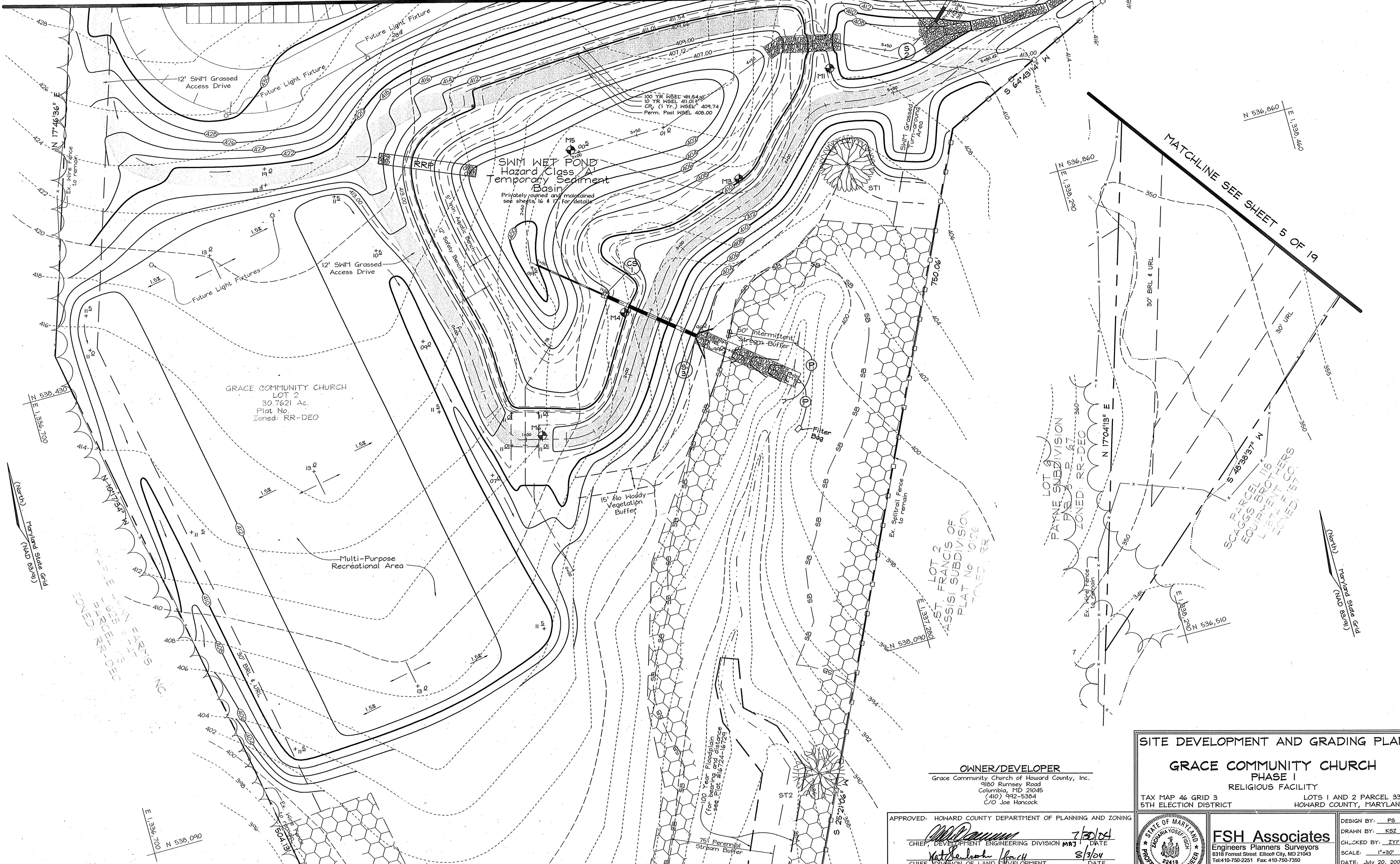


FSH Associates
 Engineers Planners Surveyors
 8318 Forest Street, Elliott City, MD 21043
 Tel: 410-750-2251 Fax: 410-750-7350
 E-mail: FSHAssociates@cs.com

DESIGN BY: PS
 DRAWN BY: K9Z
 CHECKED BY: ZYF
 SCALE: 1"=30'
 DATE: July 20, 2004
 P.L.O. No.: 3071
 SHEET No.: 3 OF 20

MATCHLINE SEE SHEET 3 OF 19

MATCHLINE SEE SHEET 2 OF 19



MATCHLINE SEE SHEET 5 OF 19

OWNER/DEVELOPER
 Grace Community Church of Howard County, Inc.
 9180 Runsey Road
 Columbia, MD 21045
 (410) 992-5384
 C/O Joe Hancock

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Michael J. ... 7/30/04
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

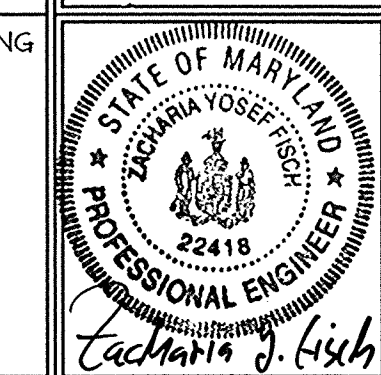
Kathleen ... 8/3/04
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Paul ... 8/3/04
 DIRECTOR DATE

SITE DEVELOPMENT AND GRADING PLAN
GRACE COMMUNITY CHURCH
 PHASE I
 RELIGIOUS FACILITY

TAX MAP 46 GRID 3
 5TH ELECTION DISTRICT

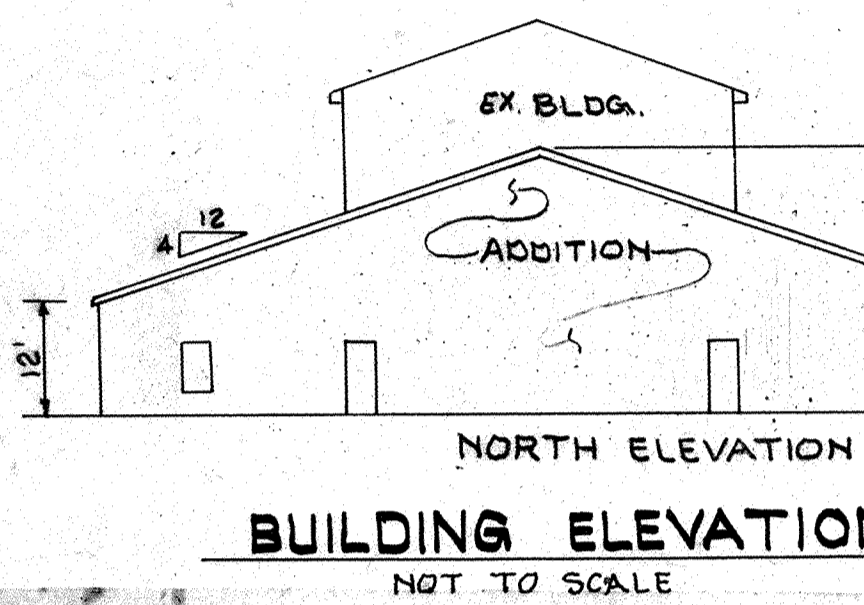
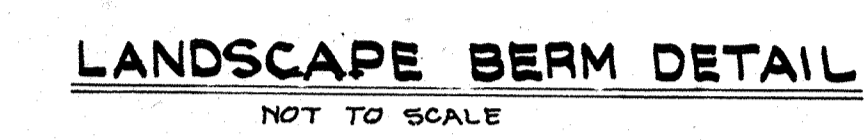
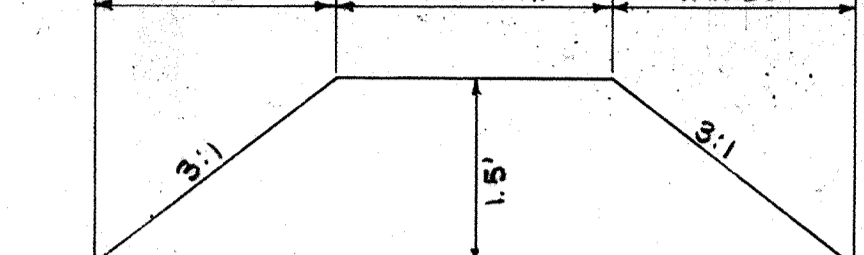
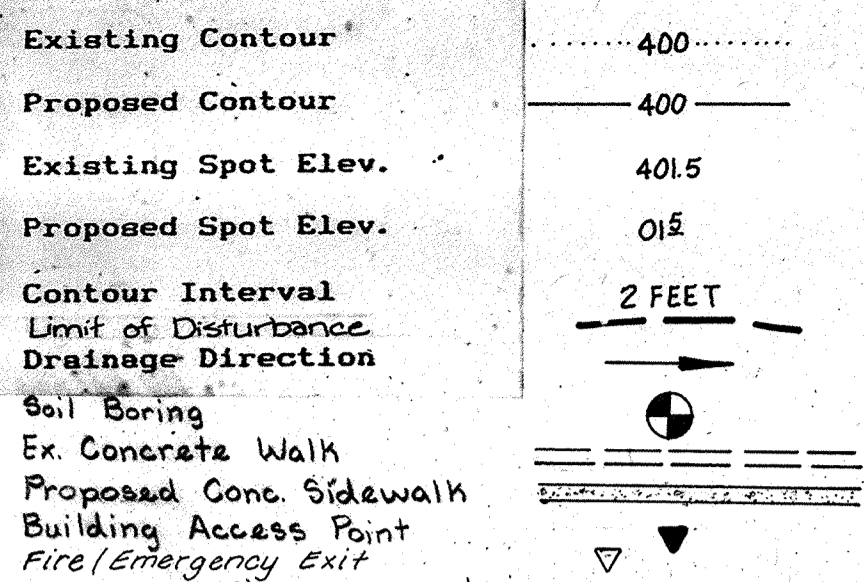
LOTS 1 AND 2 PARCEL 337
 HOWARD COUNTY, MARYLAND



FSH Associates
 Engineers Planners Surveyors
 8318 Forrest Street Ellicott City, MD 21043
 Tel: 410-750-2251 Fax: 410-750-7350
 E-mail: FSHAssociates@cs.com

DESIGN BY: PS
 DRAWN BY: KSZ
 CHECKED BY: ZYF
 SCALE: 1"=30'
 DATE: July 20, 2004
 W.O. No.: 3071
 SHEET No.: 4 OF 20

LEGEND



GENERAL NOTES

- Reference Board of Appeals Case No. BA 90-18E, Hearing dated Sept. 4, 1990. Special exception to expand the Church and school facility was approved subject to Howard County Site Plan review and approvals. (See Reference Below)
- Existing Septic System to remain in operation and additional Septic will serve the proposed Fellowship Hall. Construction equipment will circulate by using the southwest side of the church to avoid access over existing septic system. (See Note # 9 below)
- The proposed Septic System is designed to handle both the New Fellowship hall facilities and the existing facilities. At such time when the existing septic system fails to function, a future connection shall be made between the existing waste line and the proposed Septic Tank. (See future connections shown on the site plan)
- The proposed 2-1/2" Base Paving will be installed on existing ground less all topsoil. A 1-1/2" Surface Course will be applied to the proposed Base Paving and existing parking lot paving.
- Building and Retaining wall information will be provided by Architectural plans prepared by others.
- See Sheet 3 for location of building with reference to side and rear property lines and setbacks.

PRIVATE WATER & SEWER SPECIFICATIONS

Well: The existing well is located in front of the existing church 65 feet plus/minus off the southwest corner.

Septic System: The existing Church Septic System shall remain in place.

Proposed Fellowship Hall: Slab Elevation = 696.83
Sewer line Inv. Out = 695.83 (at foundation wall)
694.33

Septic Tank: Required septic tank capacity is 15 gallons per student and staff.
75 Students X 15 gallons = 1125 gallons
8 Staff X 15 gallons = 120 gallons
Total required capacity = 1245 gallons
Septic tank capacity provided will be 1500 gallons

Trench/Distribution Box: Septic trenches shall be three feet wide by 5 feet deep. Required number of 100' long trenches at 300 sq. ft. per trench 1245 gallons ÷ 300 = 4.15
4 Trenches provided, 100' long.
Existing ground elevation at distribution box = 702.40
Proposed elevation at distribution box = 702.4, Inv in = 698.90

Note: No food preparation will be done on site. No shower facilities will be provided on this site.

APPROVED: DEPARTMENT OF PUBLIC WORKS. FOR STORM DRAINAGE SYSTEMS AND ROADS.

James R. Linn 4/28/92
DIRECTOR, PUBLIC WORKS

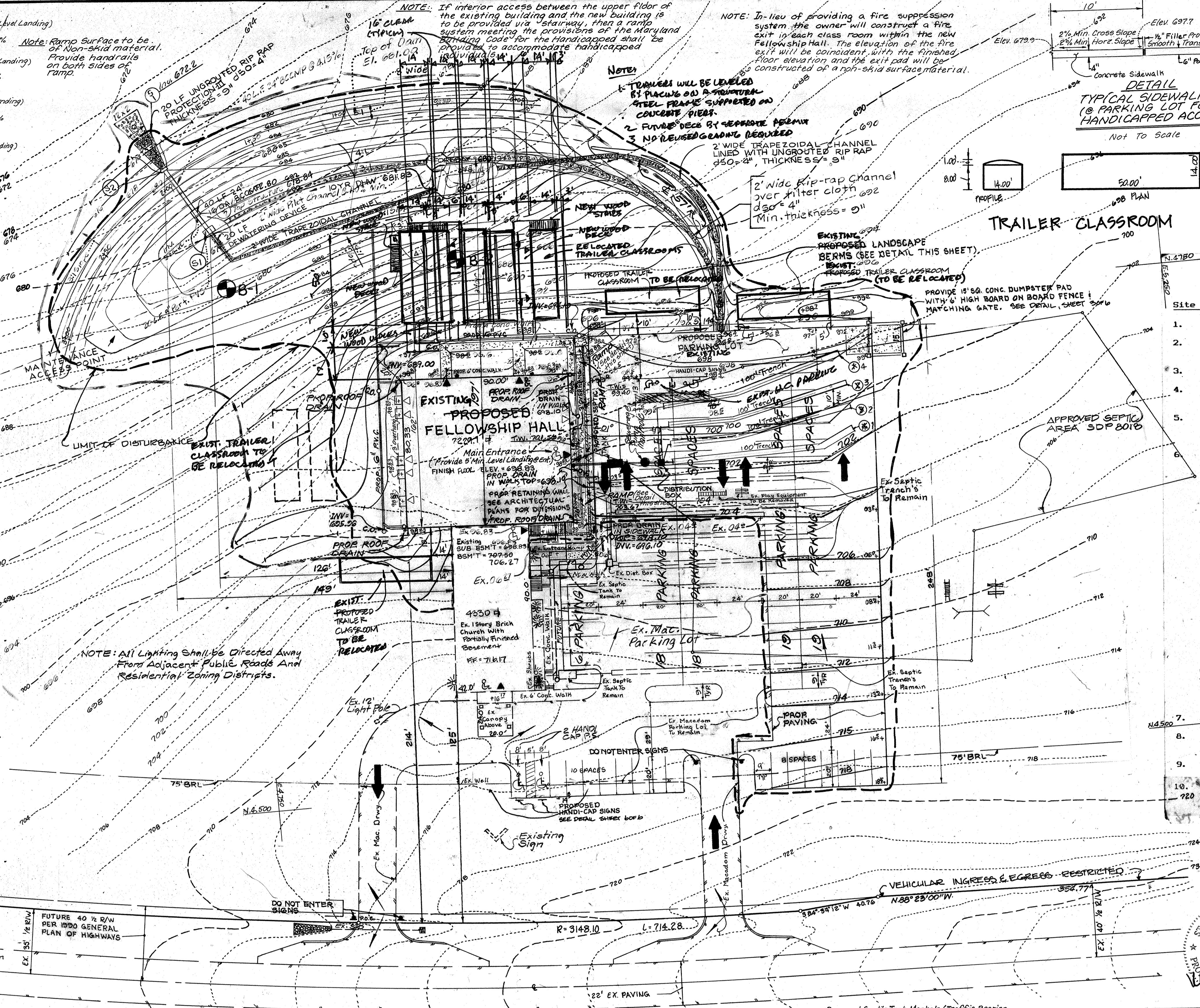
APPROVED: DEPARTMENT OF PLANNING AND ZONING

James R. Linn 6/3/92
PLANNING DIRECTOR

Amma Steinhilber 6/1/92
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

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

James R. Linn 5/21/92
HEALTH OFFICER



OLD FREDERICK ROAD (PUBLIC) (MAJOR COLLECTOR HIGHWAY)

SEPTIC SYSTEM PROFILE
SCALE: Hor. 1" = 50' VERT. 1" = 5'

| TRENCH DATA | Original Ground | Invert | Bottom |
|-------------|-----------------|--------|--------|
| 1 | 701.30 | 696.30 | 696.30 |
| 2 | 700.00 | 697.00 | 696.00 |
| 3 | 698.30 | 696.30 | 694.80 |
| 4 | 698.50 | 695.30 | 693.80 |

ADDRESS CHART

| PARCEL | STREET ADDRESS |
|--------|--------------------------|
| 172 | 16700 OLD FREDERICK ROAD |

REVISIONS

| NO. | DATE | DESCRIPTION |
|-----|---------|-------------------------------------|
| 1 | 2/23/92 | Revise topo, grading, Septic System |
| 2 | 4/7/92 | ADDED TRAILER CLASSROOMS |
| 3 | 6/10/92 | RELOCATE TRAILER CLASSROOM (REUSED) |
| 4 | 7/14/92 | RELOCATE TRAILER CLASSROOMS |

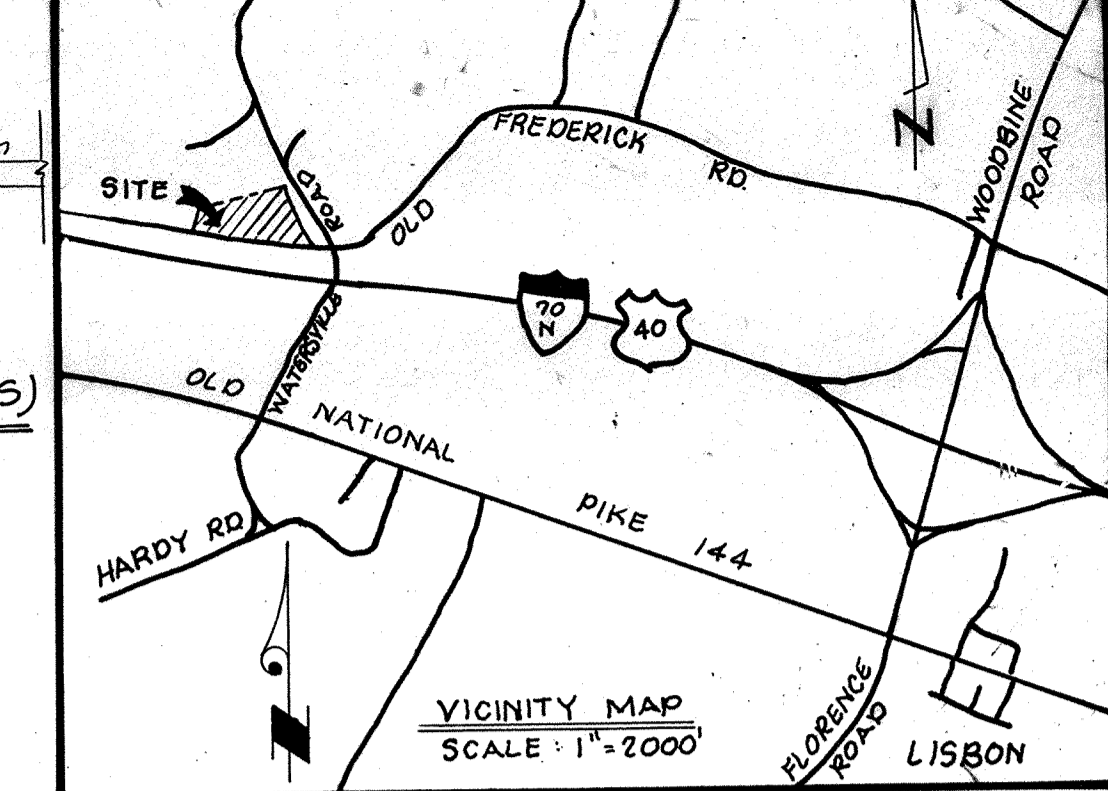
LAND DESIGN ENGINEERING, INC.
10620 Guilford Road • Suite 210 • Jessup, Maryland 20794 • (301) 864-6264 • (301) 860-0334

SITE DEVELOPMENT PLAN
BUILDING ADDITION TO CHURCH OF THE OPEN BIBLE
LIBER 951 FOLIO 300
TAX MAP NO. 7 PARCEL 172
4TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
PREVIOUS FILE NO. SPP 8018, BA20-18E

DESIGNED: L.M. DWJ
DRAWN: W.J.
CHECKED: R.M.
DATE: Nov. 1990

OWNER: LISBON CHURCH
16700 OLD FREDERICK ROAD
LISBON, MARYLAND 21771

SCALE: 1" = 30'
DRAWING: 1 OF 6
JOB NO: 90-2002
FILE NO:



Site Analysis

- Area of Parcel: 14.029 Ac., 611,103.24 sq. ft.
- Present Zoning: R, Board of Appeals Case No. BA 79-19 and BA 90-18E. Previous approved site plan - SPP 8018.
- Proposed use of structures: Fellowship hall expansion to existing church and school facility
- Floor Space: Ex. Church = 4330 sq. ft. (Both Floors)
Fellowship Hall = 7229.70 sq. ft. (Single Story)
- The church consists of 150 members. School capacity is limited to 75 students. The school presently has 8 staff personnel.
- Parking Requirements:

School Facilities:

| | |
|------------------------------|-----------|
| Staff parking | 4 spaces |
| Visitor parking | 10 spaces |
| Student parking | 2 spaces |
| Parking for all-purpose room | 78 spaces |

TOTAL REQUIRED PARKING: 94 SPACES

Church:

| | |
|-------------------|---------------------|
| Total seating: | 140 |
| Parking required: | 1 space per 3 seats |

Total Required Parking: 140 / 3 = 47 spaces

Note: Since the Church and school functions operate at different hours, the School and Church can share the parking provided. Use the larger parking requirement plus handicapped requirement. Handicapped parking required = 4 spaces

- Total Parking Spaces Required = 94 spaces + 4 Handicapped = 98 spaces
- Open space (green area) to remain on site: 12.76% and 91% of net area.
- Building coverage of site 0.26 ac area and 1.78% of gross.
- All utility companies must be notified 24 hours in advance of any construction. Call "Miss Utility" 48 hours in advance of construction 1-800-257-7777.

NOTE: THE TOPOGRAPHY SHOWN ON THIS PLAN IS TAKEN FROM THE TOPOGRAPHIC SURVEY PREPARED FOR APPROVED SITE DEVELOPMENT PLAN (SPP-8018).

NOTE: TEMPORARY CLASSROOMS ARE PERMITTED IN ACCORDANCE WITH BA-70-22E

APPROVED: DEPARTMENT OF PUBLIC WORKS. FOR STORM DRAINAGE SYSTEMS AND ROADS.

James R. Linn 4/28/92
DIRECTOR, PUBLIC WORKS

APPROVED: DEPARTMENT OF PLANNING AND ZONING

James R. Linn 6/3/92
PLANNING DIRECTOR

Amma Steinhilber 6/1/92
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

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

James R. Linn 5/21/92
HEALTH OFFICER

STATE OF MARYLAND
DEPARTMENT OF ENVIRONMENTAL & NATURAL RESOURCES
DIVISION OF PLANNING & ZONING

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James R. Linn 5/21/92
HEALTH OFFICER