GENERAL NOTES

- SUBJECT PROPERTY ZONED RR-DEO PER THE 02/02/04
- COMPREHENSIVE ZONING PLAN. COURSES AND COORDINATES SHOWN HEREON ARE BASED ON A GPS SURVEY ESTABILISHED IN HOWARD, CO REFLECTING A HORIZONTAL DATUM BASED ON NAD 83/91 AND A VERTICAL DATUM OF NAVD 88 AND HAS BEEN DERIVED FROM THE FOLLOWING HOWARD COUNTY CONTROL STATIONS.

N 539,925.13 E 1,337,205.77 N 538,656.76 E 1,339,461.55 DENOTES PRIVATE DRIVEWAY EASEMENT.

- WATER AND SEWER SERVICE TO THE SUBJECT IS PRIVATE. PUBLIC WATER AND SEWAGE ALLOCATION WILL BE GRANTED AT THE TIME OF ISSUANCE OF THE BUILDING PERMIT IF CAPACITY IS AVAILABLE AT THAT TIME.
- THERE IS AN EXISTING DWELLING/STRUCTURE LOCATED ON LOT TO REMAIN. NO NEW BUILDINGS, EXTENSIONS OR ADDITIONS TO THE EXISTING DWELLING(S) ARE TO BE CONSTRUCTED AT A DISTANCE LESS THAN THE ZONING REGULATIONS REQUIRE.
- ALL EASEMENTS SHOWN ON THIS PLAN FOR WATER, SEWER, STORM DRAINAGE, OTHER PUBLIC UTILITIES, ANY CONVEYANCES OF THE AFORESAID LOTS/PARCELS SHALL BE SUBJECT TO THE EASEMENTS HEREIN RESERVED, WHETHER OR NOT EXPRESSLY STATED IN THE DEED(S CONVEYING SAID LOT(S) / PARCELS, UPON COMPLETION OF THE PUBLIC UTILITIES AND THEIR ACCEPTANCE BY HOWARD COUNTY, AND THE RELEASE OF THE DEVELOPER'S SURETY POSTED WITH SAID AGREEMENT, THE COUNTY SHALL ACCEPT THE EASEMENTS AND RECORD THE DEED(S)
- OF EASEMENT IN THE LAND RECORDS OF HOWARD COUNTY. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, OR PLACEMENT OF NEW STRUCTURES IS PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAM(S), OR THEIR BUFFERS AND FOREST CONSERVATION EASEMENT
- FOR FLAG OR PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM AND ROAD RIGHT-OF-WAY LINE NOT TO THE PIPESTEM LOT
- THERE ARE NO HISTORIC STRUCTURES OR CEMETERIES LOCATED ON THIS SITE ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, I.E. STANDARD SPECIFICATIONS AND DETAILS FOR
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FROM BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S
- OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS TO VERIFY THEIR LOCATION AND ELEVATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF LOCATION OF UTILITIES IS OTHER THAN SHOWN.
- CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS VERIZON TELEPHONE COMPANY 992-2366 HOWARD COUNTY BUREAU OF UTILITIES 393-3553 AT&T CABLE LOCATION DIVISION
- BALTIMORE GAS & ELECTRIC COMPANY STATE HIGHWAY ADMINISTRATION HOWARD COUNTY CONSTRUCTION/ INSPECTION/ SURVEY DIVISION 192-7272 (24 HOURS NOTICE PRIOR TO COMMENCEMENT OF WORK)

TOPO TAKEN FROM FIELD SURVEY DATED OCTOBER, 2005 BY

- KCI TECHNOLOGIES INC. THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS RIGHTS AND/OR RIGHTS-OF-WAY THAT MAY BE REQUIRED FOR THE SEDIMENT AND EROSION CONTROL PRACTICES, STORM WATER MANAGEMENT PRACTICES AND THE DISCHARGE OF STORM WATER ONTO OR ACROSS ADJACENT OR DOWNSTREAM PROPERTIES INCLUDED IN THIS PLAN. HE IS ALSO RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS AND/OR RIGHTS-OF-WAY THAT MAY BE REQUIRED FOR GRADING AND/OR WORK ON ADJACENT PROPERTIES
- INSTALLATION OF TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE
- LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. ALL ON-SITE PARKING AND DRAINAGE STRUCTURES SHALL BE PRIVATELY OWNED # MAINTAINED.
- GRAVITY SEWER HOUSE CONNECTIONS WILL BE 4" PVC. THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION REGULATIONS AND
- THE ZONING REGULATIONS AS AMENDED BY COUNCIL BILL 50-2001. STORMWATER MANAGEMENT WILL BE PROVIDED THROUGH NON-STRUCTURAL SWM PRACTICES ie: A SANDFILTER FACILITY.
- AN APFO STUDY IS EXEMPT PER DMVIII SECTION 4.7.4.G.
 THIS SITE IS IN THE PATUXENT RIVER WATERSHED AND IS CLASSIFIED AS A USE IV-P.
- THERE ARE STEEP SLOPES, WETLANDS, STREAMS ON THIS SITE. NO DISTURBANCE IN THE ENVIRONMENTAL AREA IS PROPOSED.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124
- OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. THIS SDP IS EXEMPT FROM FOREST CONSERVATION BECAUSE THE LOD FOR THIS PROJECT IS CONTAINED WITHIN THAT FOR SDP-96-93, PC. Sec. 16.1202(6)(1)(11) of the forest Con. Manual. FINANCIAL SURETY FOR 14 SHADE TREES AND 15 EVERGREENS IN THE AMOUNT OF \$6,450.00
- SHALL BE POSTED WITH THE DEVELOPERS AGREEMENT FOR THIS SITE DEVELOPMENT PLAN, OUTDOOR LIGHTING SHALL BE IN ACCORDANCEWITH SECTION 134 OF THE ZONING REGULATIONS.
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S SEE DEPARTMENT OF PLANNING & ZONING FILE NOS. BA 90-57E, BA 95-12E, F-91-172,

REVISIONS

Drafting CS

Check THM

WP-96-109, BA 07-039C, SDP-96-93, WP92-67, WP-91-109. BOARD OF APPEALS CASE NO. 07-39C WAS GRANTED ON MARCH IT, 2008 WITH THE

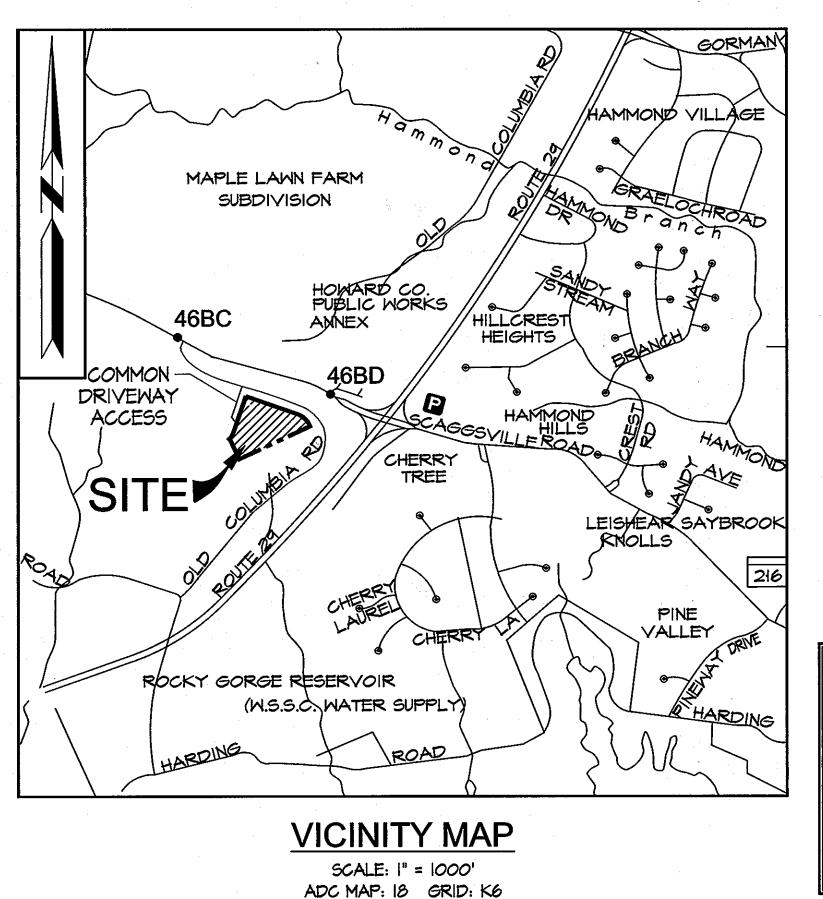
PERC APPLICATION # A49922, WATER APPROPRIATION PERMIT NO. HC95G009(01),

- THE PROPOSED WORK BE CONSTRUCTED IN ACCORDANCE WITH THE
- APPROVED CONDITIONAL USE PLAN DATED JANUARY 3, 2008. THE BUILDING PERMIT FOR PHASE I SHALL BE OBTAINED WITHIN FIVE
- (5) YEARS OF THE DECISION DATE ON OR BEFORE MARCH 17, 2013. THE BUILDING PERMIT FOR PHASE II SHALL BE OBTAINED WITHIN FIFTEEN
- (15) YEARS OF THE DECISION DATE.
- THE BUILDING PERMIT FOR PHASE III SHALL BE OBTAINED WITHIN TWENTY

(20) YEARS OF THE DECISION DATE. THIS AREA DESIGNATES A PRIVATE SEWAGE EASEMENT OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND DEPARTMENT OF ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEMERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEMAGE EASEMENT. RECORDATION OF A REVISED SEMAGE EASEMENT SHALL NOT BE MECESCARY.

ST. FRANCIS OF ASSISI FAITH FORMATION CENTER

8300 OLD COLUMBIA ROAD **FULTON, MD 20759**



MILLIAM H. KEELER
THE MOST REVEREND ROMAN CATH ARCH
C/O GALLACHER ET AL
218 N CHARLES ST. STE 400
BALTIMORE, MD 21201-4033
PHONE: (410) 121-1102

WILLIAM H. KEELER THE MOST REVEREND ROMAN CATH ARCH

THE MOST REVEREND ROTATION OF THE MOST REPORT OF TH

LAUREL, MARYLAND 20708

PHONE: (410) 792-8086

Fax: (410) 792-7419

N 539,925.13 N 538,656.76 E 1,337,205.77 E 1,339,461.55 PROPERTY OWNER:

C/O GALLAGHER ET AL 218 N. CHARLES ST. STE. 400 BALTIMORE, MD 21201-4033

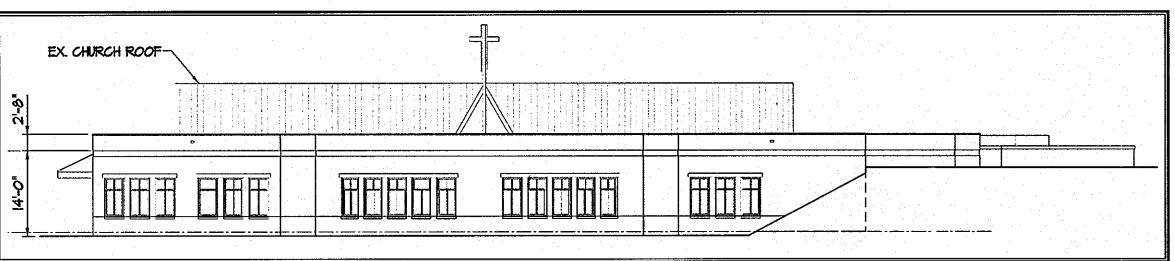
2. SITE DATA: TAX MAP 46, GRID 3 TRACT AREA: 543,193 S.F. OR 12.47 Ac. PART OF LOTS

> PLAT NO. 10125 ELECTION DISTRICT: 5 ADC MAP: 14, GRID C-13 200 SHEET NO. 218NET EXISTING ZONE: RR-DEO SCHOOL PLANNING AREA: 112 LIMIT OF DISTURBANCE: 1.66 Ac.

- DEED REFERENCE: 02300/0310
- PROPOSED USE: ONE-STORY 12,487 sqft. FAITH FORMATION CENTER FOR MEETINGS, CHOIR, SUNDAY SCHOOL AND GROUP ACTIVITY CENTER
- NO DAYCARE IS PROPOSED.
- HORIZONTAL CONTROL SHOWN HEREON IS BASED ON A TOPOGRAPHIC SURVEY BY KCI TECHNOLOGIES DATED OCTOBER, 2006.
- THIS SITE IS SERVED BY PRIVATE WATER AND SEWAGE.
- BUILDING COVERAGE EXISTING 12,000 SF 2,20% BUILDING COVERAGE PROPOSED 24,487 SF 4.50%

SITE NOTES

| | | _ |
|-------|--|------|
| SHEET | DESCRIPTION | No. |
| C-1 | TITLE SHEET | 1 |
| C-2 | EXISTING CONDITIONS | 2 |
| C-3 | SITE PLAN | 3 |
| C-4 | GRADING / SEDIMENT & EROSION CONTROL PLAN | 4 |
| C-5 | SEDIMENT & EROSION CONTROL NOTES | 5 |
| C-6 | SEDIMENT & EROSION CONTROL DETAILS & NOTES | 6 |
| C-7 | EXISTING DRAINAGE AREA MAP | 7 |
| C-8 | STORMWATER MANAGEMENT PLAN | 8 |
| C-9 | STORMWATER MANAGMENET DETAILS & NOTES | 9 |
| C-10 | SITE DETAILS | 10 |
| LSP-1 | ENLARGED LANDSCAPE PLAN | : 11 |
| LSP-2 | LANDSCAPING DETAILS & NOTES | 12 |
| LSP-3 | LANDSCAPING DETAILS & NOTES | 13 |
| C-12 | SEPTIC PLAN AND PROFILE | 14 |
| | INDEX OF SHEETS | |



FAITH FORMATION CENTER NORTH ELEVATION NOT TO SCALE

APPROVED: I/WE CERTIFY THAT ALL DEVELOPMENT AND CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSIO FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT. CONSTRUCTION WILL BE DONE ACCORDING TO THIS CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN, FOR SEDIMENT AND EROSION CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN THE CONSTRUCTION PROJECT WILL HAVE A ACCORDANCE WITH THE REQUIREMENTS OF THE CERTIFICATE OF ATTENDANCE AT A DEPARTMENT HOWARD SOIL CONSERVATION DISTRICT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND ROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT. OZUHO9 FR. DENNIS P. DIEHL CHIEF, DIVISION OF LAND DEVELOPMENT 😽 PARISH CORP. ST. FRANCIS OF ASSISI, ROMAN CATHOLIC CONGREGATION, INC.

Engineers

CONSTRUCTION MANAGERS

12,000sqft/1000sqft x 10 = 120 SPACES REQUIRED EX. CHURCH USE: FORMATION CENTER: 12,487sqft/1000sqft. x 10 = 125 SPACES REQUIRED TOTAL NUMBER OF PARKING SPACES REQUIRED: 245 STANDARD SPACES 6 HANDICAP SPACES TOTAL NUMBER OF PARKING SPACES PROVIDED: 258STANDARD SPACES (includes) THANDICAP SPACES BEST AND HIGHEST USE. CLASSROOMS WILL NOT BE IN USE DURING SUNDAY SESSIONS.

ADDRESS CHART

8300 OLD COLUMBIA ROAD

PARKING TABULATION ANALYSIS

PERMIT INFORMATION CHART SUBDIVISION NAME SECTION/AREA LOT/PARCEL NO ST. FRANCIS OF ASSISI SUBDIVISION LOT | \ 337 PLAT NUMBER GRID# ZONING TAX MAP# CENSUS TRACT RR-DEO 6051.02 WATER CODE SEWER CODE XXX-X XX-XXX

BUILDING SQUARE FOOTAGE BREAKDOWN

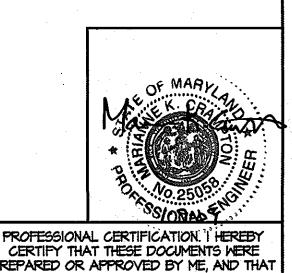
FAITH FORMATION CENTER:

TOTAL PROPOSED:

12,000 SF

12,487 SF

24,487 SF



I AM A DULY LICENSED PROFESSIONAL

NGINEER UNDER THE LAWS OF THE STATE

OF MARYLAND, LICENSE NO. 25058

EXPIRATION DATE: 11-17-10

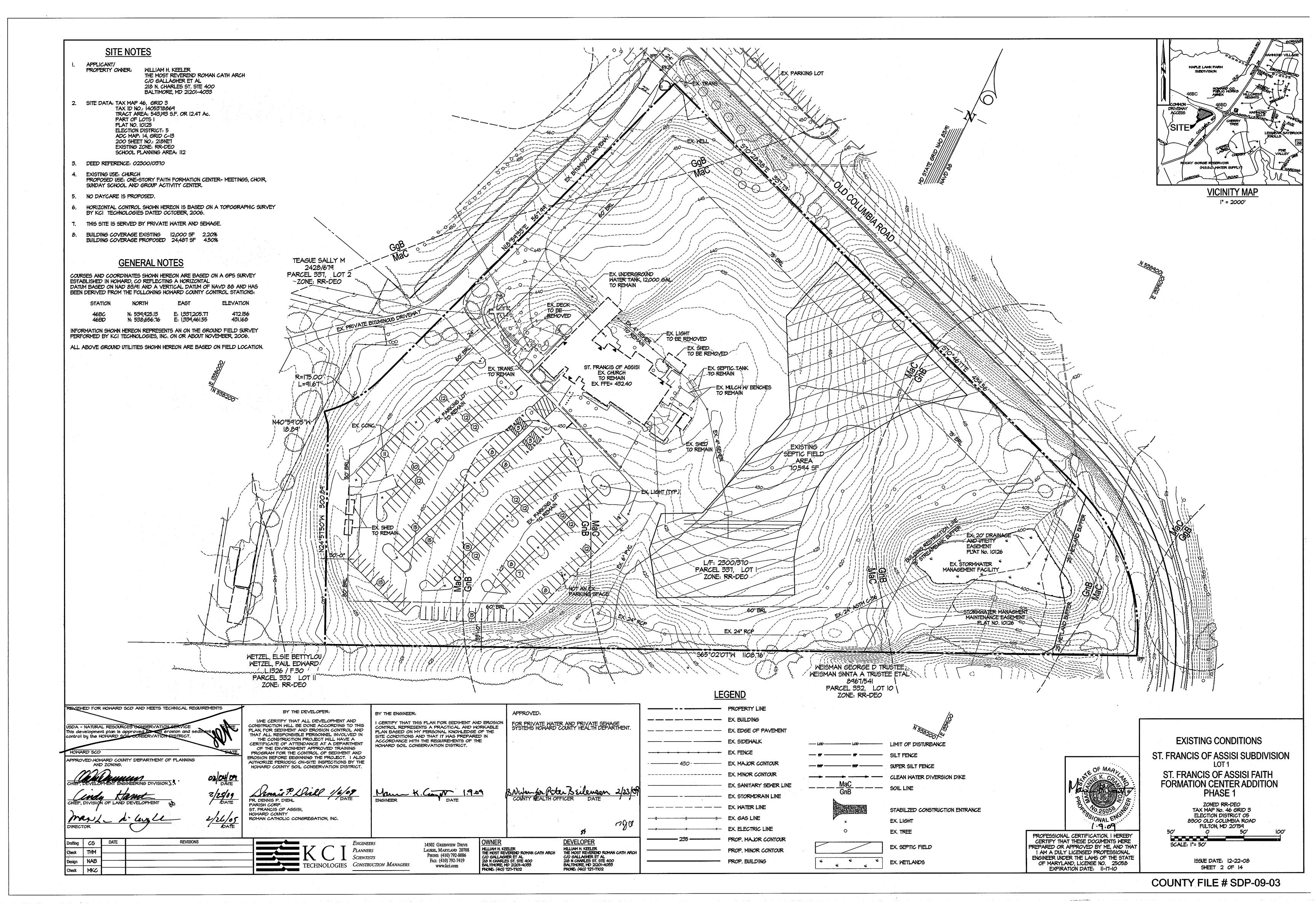
TITLE SHEET

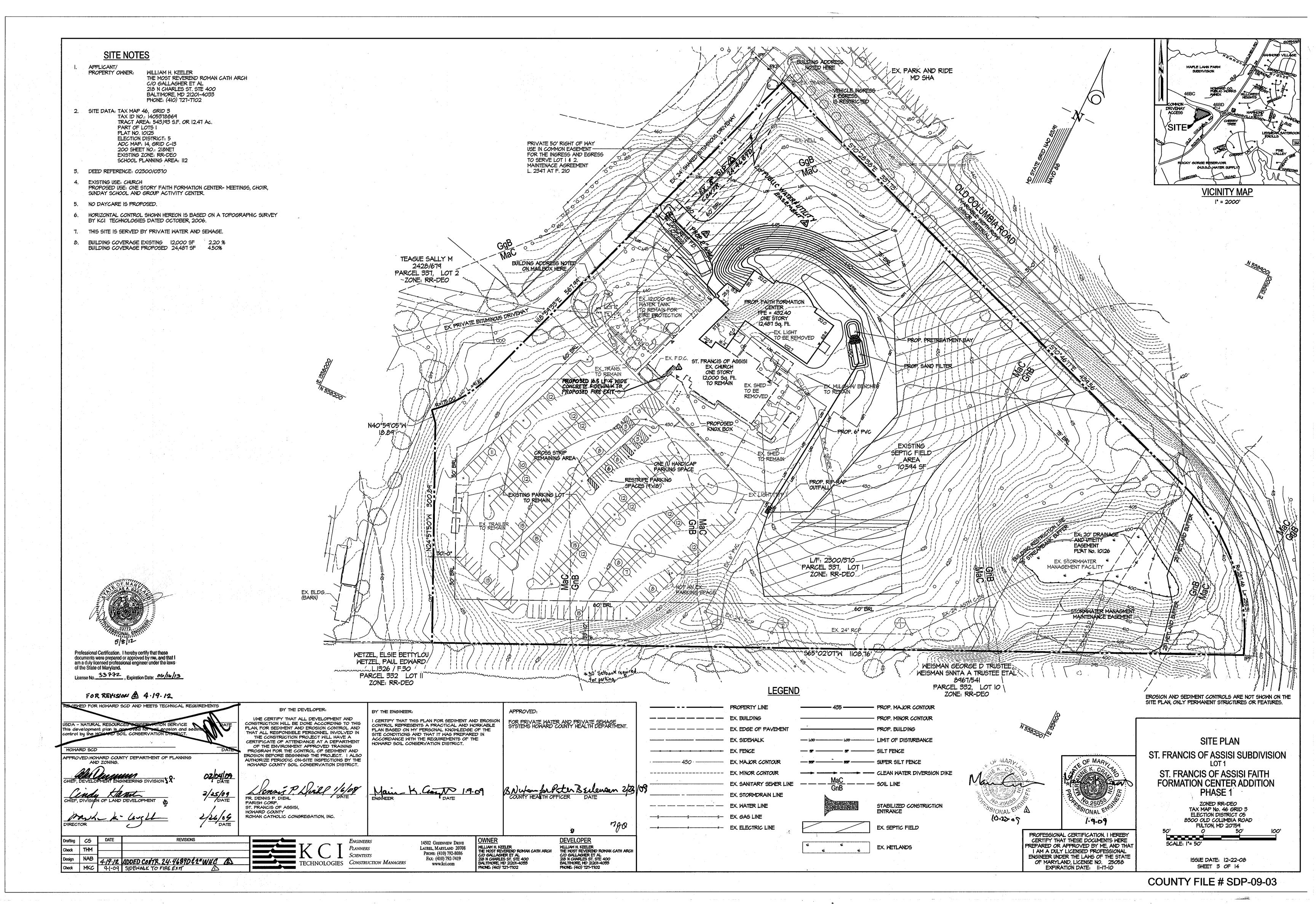
ST. FRANCIS OF ASSISI SUBDIVISION

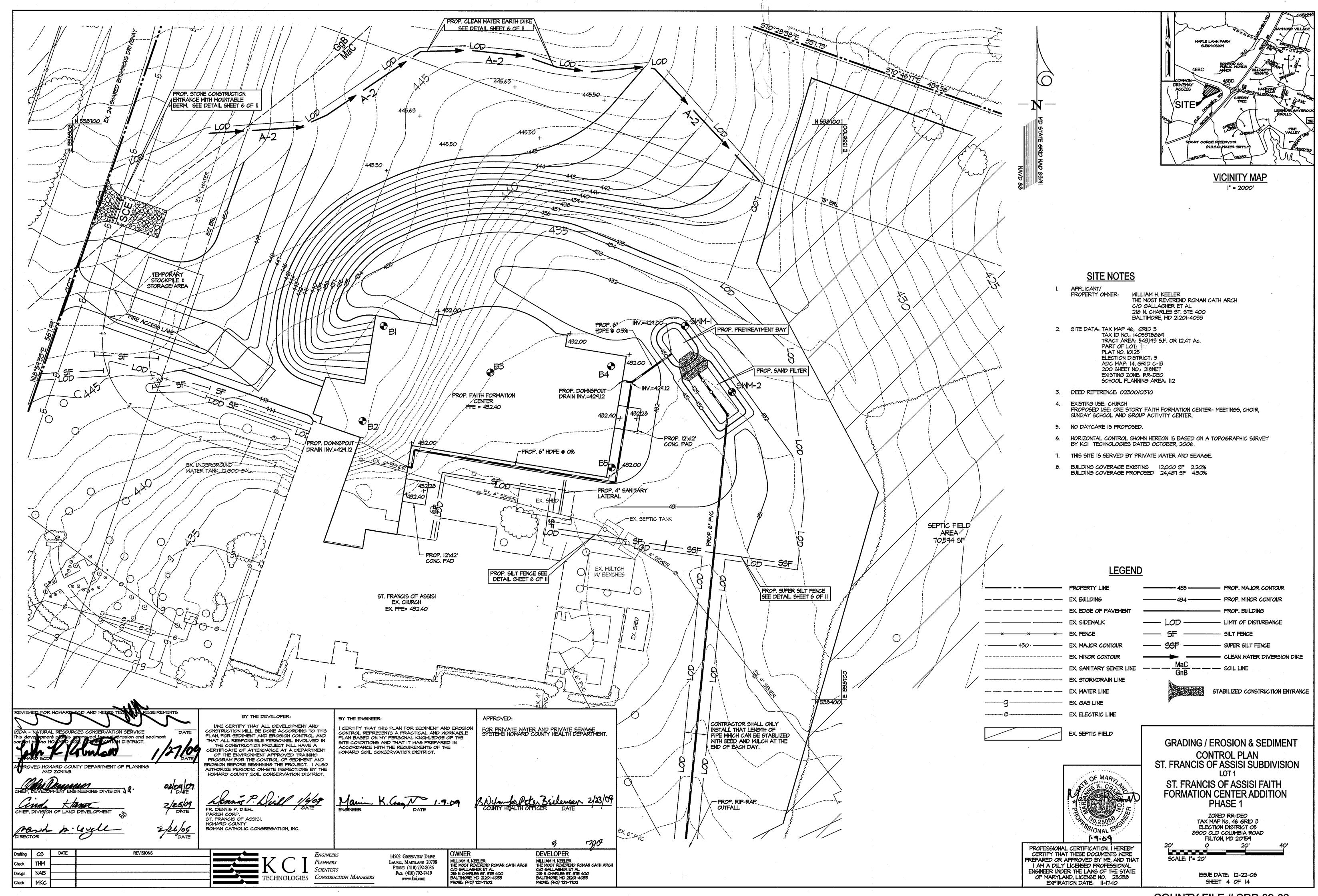
ST. FRANCIS OF ASSISI FAITH FORMATION CENTER ADDITION PHASE 1

> ZONED RR-DEO TAX MAP No. 46 GRID 3 ELECTION DISTRICT 05 8300 OLD COLUMBIA ROAD FULTON, MD 20159 DPZ FILE # F-91-127

ISSUE DATE: 12-22-08 SHEET I OF 14







SECTION I-VEGETATIVE STABILIZATION METHODS & MATERIALS

A. Site Preparation

- 1. Install erosion and sediment control structures (either temporary or permanent) such as diversions, grade stabilization structures, berms, waterways, or sediment control basins.
- II. Perform all grading operations at right angles to the slope. Final arading and shaping is not usually necessary for temporary seeding.
- III. Schedule required soil test to determine soil amendment composition and application rates for sites having disturbed area over 5 acres.
- B. Soil Amendments (Fertilizer and Lime Specifications) i. Soil test must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas over 5 acres. Soil analysis may be preformed by the University of Maryland or a recognized commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.
- II. Fertilizers shall be uniform in composition, free flowing and suitable for accurate application by approved equipment. Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers shall all be delivered to the site fully labeled according to the applicable state fertilizer laws and shall bear the name, trade name or trademark and warrantee of the producer.
- III. Lime materials shall be ground limestone (hydrated or burnt lime may be substituted) which contains at least 50% total oxides (calcium oxide plus magnesium oxide). Limestone shall be ground to such fineness that at least 50% will pass through a #100 mesh sleve and 98 - 100% will pass through a #20 mesh sleve.
- iv. Incorporate lime and fertilizer into the top 3 5" of soil by disking or other suitable means.

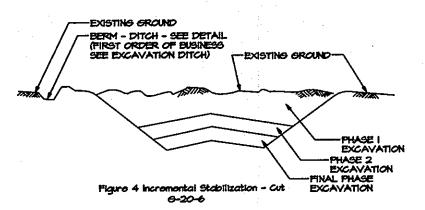
C. Seedbed Preparation

Temporary Seeding

- a. Seedbed preparation shall consist of loosening soll to a depth of 3" to 5" by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened it should not be rolled or dragged smooth but left in the roughened condition. Sloped areas (greater than 3:1) should be tracked leaving the surface in an irregular condition with ridges running parallel to the contour of the slope.
- b. Apply fertilizer and lime as prescribed on the plans.
- c. Incorporate lime and fertilizer into the top 3 5" of soil by disking or other suitable means.

ii. Permanent Seeding

- a. Minimum soil conditions required for permanent vegetative establishment:
- 1. Soil pH shall be between 6.0 and 7.0
- 2. Soluble salts shall be less that 500 parts per million (ppm). 3. The soil shall contain less that 40% clay but enough fine arained material (> 30% silt plus clau) to provide the capacity to hold a moderate amount of moisture. An exception is if lovegrass or serecia lespedeza is to be planted, then an sandy soil (< 30% silt plus clay) would be acceptable.
- Soil shall contain 1/5% minimum organic matter of weight 5. Soll must contain sufficient pore space to permit
- adequate root penetration.
- 6. If these conditions cannot be met by soils on site, adding topsoil is required in accordance with Section 21 Standard and specification for Topsoil.
- b. Areas previously graded in conformance with the drawings shall be maintained in a true and even grade, then scarified or otherwise loosened to a depth of 3 - 5" to permit bonding of the topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil from sliding down a slope.



Note: Once excavation has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions in the operation or completing the operation out of the seeding season will necessitate the application of temporary stabilization.

- c. Apply soil amendments as per soil test or as included on the plans.
- d. Mix soil amendments into the top 3 5" of topsoil by disking or other suitable means. Lawn areas should be raked to smooth the surface, remove large objects like stones and branches, and ready the area for seed application. Where site conditions will note permit normal seedbed preparation, loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface. Steep slopes (steeper than 3:1) should be tracked by a dozer leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. The top I -3" of soil should be loose and friable. Seedbed loosening may not be necessary on newly disturbed areas.

D. Seed Specifications

- 1. All seed must meet the requirements of the Maryland State Seed Law. All seed shall be subject to re-testing by a recognized seed laboratory. All seed used shall have been tested within the 6 months immediately preceding the date of sowing such material on this job.
- Note: Seed tags shall be made available to the inspector to verify type and rate of seed used.
- ii. Inoculant The inoculant for treating legume seed in the seed mixtures shall be a pure culture of nitrogen-fixing bacteria prepared specifically for the species. Inoculants shall not be used later than the date indicated on the container. Add fresh inoculant as directed on package. Use four times the recommended rate when hydroseeding. Note: It is very important to keep inoculant as cool as possible until used. Temperatures above 75-80° F. can weaken bacteria and make the inoculant less effective.

E. Methods of Seeding

- Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer), broadcast or drop seeder, or a cultipacker seeder.
- a. If fertilizer is being applied at the time of seeding, the application rates amounts will not exceed the following: nitrogen; maximum of 100 lbs. per acre total of soluble nitrogen; F205 (phosphorous): 200 lbs/ac; K20 (potassium): 200 lbs/ac.
- b. Lime use only ground agricultural limestone, (Up to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons are applied by hydroseeding at any one time. Do not use burnt or hydrated
- c. Seed and fertilizer shall be mixed on site and seeding shall be done immediately and without interruption.
- 11. Dry Seeding: This includes use of conventional drop or broadcast spreaders.
- a. Seed spread dry shall be incorporated into the subsoil at the rates prescribed on the Temporary or Permanent Seeding Summaries or Tables 25 or 26. The seeded area shall then be rolled with a weighted roller to proved good seed to soil contact.
- b. Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.

III. Drill or Cultipacker Seeding: Mechanized seeder that apply and cover seed with soil.

- a. Cultipacking seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seedbed must be firm
- b. Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.

F. Mulch Specifications (In order of preference)

- i. Straw shall consist of thoroughly threshed wheat, rue or oat straw, reasonably bright in color, and shall not be musty, moldy, caked, decayed, or excessively dusty and shall be free of noxious weed seeds as specified in the Maryland Seed Law.
- ii. Wood Cellulose Fiber Mulch (WCFM)
- a. WCFM shall consist of specially prepared wood cellulose processed into a uniform fibrous physical state.
- b. WCFM shall be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly
- c. WCFM, including due, shall contain no germination or growth inhibiting factors.
- d. WCFM materials shall be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a omogenous slurry. The mulch material shall form a blotter-like ground cover, on application, having moisture absorption and percolation properties and shall cover and hold grass seed in contact with the soil without inhibiting the growth of the arass seedlings.
- e. WCFM material shall contain no elements or compounds at concentration levels that will be phyto-toxic.
- f. WCFM must conform to the following physical requires:
 fiber length to approximately 10 mm., diameter approximately 1 mm., pH range of 4.0 to 85, as content of 1.6% maximum and water holding capacity of 90%

BY THE ENGINEER:

Note: Only sterile straw mulch should be used in areas where one species

- 6. Mulching Seeded Areas Mulch shall be applied to all seeded areas immediately
- If grading is completed outside of the seeding season, mulch alone shall be applied as prescribed in this section and maintained until the seeding season réturns and seeding can be performed in accordance with these spécifications.
- ii. When straw mulch is used, it shall be spread over all seeded areas at the rate of 2 tons/acres. Mulch shall be applied to a uniform loose depth of between 1" and 2". Mulch applied shall achieve a uniform distribution and depth so that the soil surface is not exposed. If a mulch anchoring tool is to be used, the rate should be increased to 2.5 tons/acre.
- iii. Wood cellulose fiber used as a mulch shall be applied at a net dry weight of 1,500 lbs. per acres. The wood cellulose fiber shall be mixed with water, and the mixture shall contain a maximum of 50 lbs. of wood cellulose fiber per 100 gallons of water.
- H. Securing Straw Mulch (Mulch Anchoring): Mulch anchoring shall be performed immediately following mulch application 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 and erosion hazard:
- 1. A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of two (2) inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safely. If used on sloping land, this practice should be used on the contour
- ii. Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied at a net dry weight of 750 pounds/acres. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
- iii. Application of liquid binders should be heavier at the edges where wind catches mulch, such as in valleys and on crests of banks. The remainder of area should be appear uniform after binder application. Synthetic binders - such as Acrylic DLR (Agro-Tack), DCA-70, Petroset, Terra Tax N, Terra TAck AR or other approved equal may be used at rates recommended by the manufacturer to anchor mulch.
- iv. Lightweight: plastic netting may be stapled over the mulch according to manufacturer's recommendations. Netting is usually available in rolls 4' to 15 feet wide and 300 to 3,000 feet long.

1. Incremental Stabilization - Cut Slopes

- i. All cut siopes shall be dressed, prepared, seeded and mulched as the work progresses. Slopes shall be excavated and stabilized in equal increments not to exceed 15'.
- ii. Construction sequence (refer to Figure 4, page 6-20-6):
- a. Excavate and stabilize all temporary swales, side ditches, or berms that will be used to convey runoff from the excavation.
- b. Perform phase I excavation, dress, and stabilize.
- c. Perform phase 2 excavation, dress, and stabilize Overseed phase I areas as necessary.
- d. Perform final phase excavation, dress, and stabilize. Overseed previously seeded areas as necessary.
- J. Incremental Stabilization of Embankments Fill Slopes
- i. Embankments shall be constructed in lifts as prescribed on the plans
- 11. Siopes shall be stabilized immediately when the vertical height of the multiple lifts reaches 15', or when the grading operation ceases as prescribed in the plans.
- iii. At the end of each day, temporary berms and pipe slope drains should be constructed along the top edge of the embankment to intercept surface runoff and convey it down the slope in a non-erosive manner to a sediment trapping device.
- iv. Construction sequence: Refer to Figure 4, page 6-20-7.
- a. Excavate and stabilize all temporary swales, side ditches, or berms that will be used to divert runoff around the fill. Construct Slope Silt Fence on low side of fill as shown in Figure 5, unless other methods shown on the plans address this area.
- b. Place phase I embankment, dress and stabilize.
- c. Place phase 2 embankment, dress and stabilize. d. Place final phase embankment, dress and stabilize.
- Overseed previously seeded areas as necessary.
- Note: Once the placement of fill has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (If required) and permanent seed and mulch. Any interruptions in the operation or completing the operation out of the seeding season will necessitate the application of temporary stabilization.

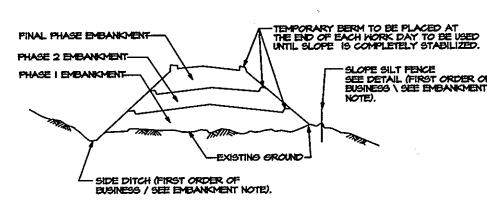


Figure 5 Incremental Stabilization - Fill 6-20-7

APPROVED:

I/WE CERTIFY THAT ALL DEVELOPMENT AND CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT. CONSTRUCTION WILL BE DONE ACCORDING TO THIS CONTROL REPRESENTS A PRACTICAL AND WORKABLE LAN, FOR SEDIMENT AND EROSION CONTROL AND PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN SITE CONDITIONS AND THAT IT WAS PREPARED IN THE CONSTRUCTION PROJECT WILL HAVE A ACCORDANCE WITH THE REQUIREMENTS OF THE CERTIFICATE OF ATTENDANCE AT A DEPARTMENT HOWARD SOIL CONSERVATION DISTRICT. OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND PROSION BEFORE BEGINNING THE PROJECT. I ALSO OVED:HOWARD COUNTY DEPARTMENT OF PLANNING AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT. Tande FR. DENNIS P. DIEHL ST. FRANCIS OF ASSISI, HOWARD COUNTY ROMAN CATHOLIC CONGREGATION, INC. ngo DEVELOPER <u>OWNER</u> REVISIONS DATE Engineers 14502 Greenview Drive MILLIAM H. KEELER
THE MOST REVEREND ROMAN CATH ARCH
C/O GALLASHER ET AL
218 N CHARLES ST. STE 400
BALTIMORE, MD 21201-4053
PHONE: (410) 727-7102 WILLIAM H. KEELER THE MOST REVEREND ROMAN CATH ARCH LAUREL MARYLAND 20708 **PLANNERS** PHONE: (410) 792-8086 C/O GALLAGHER ET AL 218 N CHARLES ST. STE 400 BALTIMORE, MD 21201-4033 **SCIENTISTS** FAX: (410) 792-7419 CONSTRUCTION MANAGERS www.kci.com

BY THE DEVELOPER:

Section II- Temporary Seeding

Vegetation - annual grass or grain used to provide cover on disturbed areas for up 12 months. For longer duration of vegetative cover, Permanent Seeding is required.

A. Seed Mixtures - Temporary Seeding

- 1. Select one or more of the species or mixtures listed in Table 26 for the appropriate Plant Hardiness Zone (from Figure 5) and enter them in the Temporary Seeding Summary, page 6-20-8, along with application rates, seeding dates and seeding depths. If this Summary is not put on the plans and completed, then Table 26 must be put on the plans.
- ii. For sites having soil tests performed, the rates shown on this table shall be deleted and the rates recommended by the testing agency shall be written in. Soil tests are not required for Temporary Seeding.

TEMPORARY SEEDING SUMMARY

| | \$EED M | ILXTURE (HARDINESS Z | ONE <u>68</u>) | | FERTILIZER RATE | LIME RATE |
|-----|----------|-------------------------------|----------------------------|-------------------|------------------------------------|-------------------------------------|
| No. | SPECIES | APPLICATION RATE (LB / AC) | SEEDING DATES | SEEDING DEPTHS | (10 -10 -10) | |
| - | BARLEY | 122 | 3/1 - 4/30 8/15 - 10/13 | 1-2 | | |
| 2 | MILLET | 50 | 5/1-8/14 | 1/2" | 600 LB / AC * (15 LB / 1000 SF) | 2 TONS / AC * (100 LB / 1000 SF) |
| 5 | RYE PLUS | 150 LB6 | 3/1 - 11/15 | la . | | |

Section III - Permanent Seeding

Seeding grass and legumes to establish ground cover for a minimum period of one year on disturbed areas generally receiving low maintenance.

A. Seed Mixtures - Permanent Seeding

- i. Select one or more of the species or mixtures listed in Table 25 for the appropriate Plant Hardiness Zone (from Figure 5) and enter them in the Permanent Seeding Summary below, along with application rates and seeding dates. Seeding depths can be estimated using Table 26. If this Summary is not put on the construction plans and completed, then Table 25 must be put on the plans. Additional planting specifications for exceptional sites such as shorelines, stream banks, or dunes or for special purposes such as wildlife or aesthetic treatment may be found
- in USDA-SCS Technical Field Office Guide, Section 342 -Critical Area Planting. For special lawn maintenance areas, see sections III Sod and II Turfgrass.

ii. For sites having disturbed area over 5 acres, the rates shown

on this table shall be deleted and the rates recommended by

the soil testing agency shall be written in. (46-0-0) at 3.5 lbs/1000 s.f. (150 lbs/ac), in addition to the above soil amendments shown in the table, page 6-20-9, to

PERMANENT SEEDING SUMMARY

| | SEED MIXTURE (HARDI | NESS ZONE68 | | | FERT | ILIZER RATE (K |) -20-20) | |
|-----|---|-------------------------------|--|-------------------|--------------|----------------|-------------------|---------------|
| No. | SPECIES | APPLICATION RATE (LB / AC) | SEEDING DATES | SEEDING DEPTHS | N | P205 | K20 | LIME RATE |
| 5 | TALL FESCUE (85%) PERENNIAL RYEGRAGG(10%) KENTUCKY BLUE GRAGG(5%) | 125 15 10 | 3/1 - 5/15 8/13 - 10/13 | | 40 LB / AC * | 115 LB / AC * | 115 LB / AC * | 2 TONS / AC * |
| 7 | TALL FESCUE (85%) MEEPING LOVEGRASG (2%) PLUS SERECIA LESPEDEZA (15%) | 110 3 20 | 3/1 - 5/15 5/16 - 8/14 8/15-10/15 | | 1000 SF) | 1000 SF) | 1000 SF) | 1000 SF) |

*For 5-16 to 8-14 10 lbs. of Millet to Mixture #3 SECTION IV - SOD: to provide quick cover on disturbed areas (2:1 grade or flatter)

be performed at the time of seeding.

A. General specifications

- i. Class of turfgrass sod shall be Maryland or Virginia State Certified or Approved. Sod labels shall be made available to the job foreman and inspector.
- 11. Sod shall be machine cut at a uniform soil thickness of 3", plus or minus 1/2", at the time of cutting. Measurement for thickness shall exclude top growth and thatch. Individual pieces of sod shall be cut to the suppliers width and length. Maximum allowable deviation from standard widths and lengths shall be 5 percent. Broken pads and torn or uneven ends will not be acceptable.
- 111. Standard size sections of sod shall be strong enough to support their own weight and retain their size and shape when suspended vertically with a firm grasp on the upper 10 percent of the section.
- iv. Sod shall not be harvested or transplanted when moisture content (excessively dry or wet) may adversely affect its survival.
- y. Sod shall be harvested, delivered, and installed within a period of 36 hours. Sod not transplanted within this period shall be approved by an agronomist or soil scientist prior to its installation.

B. Sod Installation

- During periods of excessively high temperature or in areas having dry subsoil, the subsoil shall be lightly irrigated immediately prior to
- ii. The first row of sod shall be laid in a straight line with subsequent rows placed parallel to and tightly wedged against each other.

 Lateral joints shall be staggered to promote more uniform growth and strength. Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids which would cause air drying of the roots.
- iii. Wherever possible, sod shall be laid with the long edges parallel to the contour and with staggering joints. Sod shall be rolled and tamped, pegged or otherwise secured to prevent slippage on slopes and to ensure solld contact between sod roots and the underlying soil surface.
- IV. Sod shall be watered immediately following rolling or tamping until the underside of the new sod pad and soil surface below the sod are thoroughly wet. The operations of laying, tamping and irrigating for any piece of sod shall be completed within eight hours.

C. Sod Maintenance

- i. In the absence of adequate rainfall, watering shall be performed daily or as often as necessary during the first week and in sufficient quantities to maintain moist soil to a depth of 4". Watering should be done during the heat of the day to prevent wilting.
- ii. After the first week, sod watering is required as necessary to maintain adequate moisture content.
- ill. The first mowing of should not be attempted until the sod is firmly rooted. No more than 1/3 of the grass leaf shall be removed by the initial cutting or subsequent cuttings. Grass height shall be maintained between 2" and 5" unless otherwise specified.

Section IV- Turfgrass Establishment

Areas where turforass may be desired include lawns, parks, playarounds, and commercial sites which will receive a medium to high level of maintenance. Areas to receive seed shall be tilled by disking or other approved methods to a depth of 2 to 4 inches, leveled and raked to prepare a proper seedbed. Stones and debris over 1.5 inches in diameter shall be removed. The resulting seedbed shall be in such condition that future mowing of grasses will pose no difficulty.

Note: Choose certified material. Certified material is the best quarantee of cultivar purity. The certification program of the Maryland Department of Agriculture, Turf and Seed Section, provides a reliable means of consumer protection and assures a pure genetic line.

A. Turfarass Mixtures

- Kentucky Bluegrass Full sun mixture For use in areas that receive intensive management. Irrigation required in the areas of central Maryland and eastern shore. Recommended Certified Kentucky Bluegrass Cultivars Seeding Rate: 1.5 to 2.0 pounds/1000 square feet. A minimum of three bluegrass cultivars should be chosen ranging from a minimum of 10% to a maximum of 35% of the mixture by weight.
- ii. Kentucky Bluegrass/Perennial Rye Full sun mixture For use when turf will receive medium to intensive management. Certified Perennial Ryegrass Cultivars/Certified Kentucky Bluegrass Seeding rate: 2 pounds mixture/ 1000 square feet. A minimum of 3 Kentucky Bluegrass Cultivars must be chosen, with each cultivar ranging from 10% to 35% of the mixture by weight.
- III. Tall Fescue/Kentucky Bluegrass Full sun mixture For use in drought prone areas and/or for areas receiving low to medium management in full sun to medium shade. Recommended mixture includes; certified Tall Fescue Cultivars 95 - 100%, certified Kentucky Bluegrass Cultivars 0 - 5%. Seeding rate: 5 to 8 lb/1000 s.f. One or more cultivars may be blended.
- iv. Kentucky Bluegrass/Fine Fescue Shade mixture For use in areas with shade in Bluegrass lawns. For establishment in high quality, intensively managed turf area. Mixture includes; certified Kentucky Bluegrass Cultivars 30-40% and certified Fine Fescue and 60-70%. Seeding rate: 1.5-3 lbs/1000 square feet. A minimum of 3 Kentucky bluearass cultivars must be chosen, with each
- Note: Turforass varieties should be selected from those listed in the most current University of Maryland Publication, Agronomy Mimeo #71, "Turfgrass Cultivar Recommendations for Maruland".
- cultivar ranging from a minimum of 10% to a maximum of 35% of the mixture by weight.

B. Ideal times of seeding

Western MD: March 15-June 1, August 1- October 1 (hardiness zones - 5B, 6A) Central MD: March 1- May 15, August 15 - October 15 (hardiness zone -6B) Southern MD Eastern Shore: March 1- May 15, August 15 - October 15 (Hardiness Zone - 7A, 7B)

C. Irrigation

If soil moisture is deficient, supply new seedings with adequate water for plant growth (1/2" - 1" every 3 to 4 days depending on soil texture) until they are firmly established. This is especially true when seedings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites.

D. Repairs and Maintenance

Maryland" Bulletin No. 171.

Inspect all seeded areas for failures and make necessary repairs, replacements, and reseedings within the planting season.

- 1. Once the vegetation is established, the site shall have 95% groundcover to be considered adequately stabilized.
- II. If the stand provides less that 40% ground coverage, reestablish following original lime, fertilizer, seedbed preparation and seeding recommendations.
- coverage, overseeding and fertilizing using half of the rates originally iv. Maintenance fertilizer rates for permanent seedings are shown in Table 24. For lawns and other medium to high maintenance turfgrass areas, refer to the University of Maryland publication "Lawn Care in

iii. If the stand provides between 40% and 94% ground

SEQUENCE OF CONSTRUCTION

- Obtain a grading permit from Howard County Soil Conservation District. Meet with inspector for pre-construction meeting.
- Clear for and install sediment control measures (ie. silt fence, Earth Dike A-2 Days 2-4 stone construction entrance). Notify inspector upon completion of sediment control measures installation.
- Strip and stockpile topsoil and rough grade lot. Excavate for building and place fill on up slope in front of building construct builiding
- Fine grade slopes and disturbed areas around building. Install SWM Facility and stablize pipe outfall below SSF, contractor should only disturb that area which can be stablized at the end of
- each day with seed and mulch. Apply topsoil and stablize all remaining disturbed areas.
- With Inspector's approval, remove Sediment Control Measures and apply seed and mulch stabilization to all areas disturbed by this process at the end of each day.

Total Days: 230

Day I

Days 5-15

Days 196-206

Days 206-216

Days 216-220

Days 220-230



PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THA I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 25058 EXPIRATION DATE: 11-17-10

SEDIMENT & EROSION CONTROL NOTES ST. FRANCIS OF ASSISI SUBDIVISION

LOT 1

ST. FRANCIS OF ASSISI FAITH FORMATION CENTER ADDITION PHASE 1 ZONED RR-DEO TAX MAP No. 46 GRID 3

> 8300 OLD COLUMBIA ROAD FULTON, MD 20759

ELECTION DISTRICT 05

ISSUE DATE: 12-22-08 SHEET 5 OF 14

TOPSOIL STANDARDS AND SPECIFICATIONS

Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

Purpose: To provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

Conditions Where Practice Applies

- I. This practice is limited to areas having 2:1 or flatter slopes
- a. The texture of the exposed subsoil/parent material is not
- adequate to produce vegetative growth.

 b. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
- c. The original soil to be vegetated contains material toxic to plant growth. d.' The soil is so acidic that treatment with limestone is not
- II. For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the

Construction and Material Specifications to the placement of topsoil.

- Lime shall be disturbed . Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil tupe can be found in the representative soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experimental Station.
- Topsoil Specifications Soil to be used as topsoil must meet the
- i. Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1.5" in diaméter.
- ii. Topsoil must be free of plants or plant parts such as bermuda grass quackgrass, Johnsongrass, nutsedge, poison ivy, thistle, or others as specified.

 III. Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds
- per 1,000 square feet) prior uniformly over designate areas and worked into the soil in conjunction with tillage operations as described in the following procedures. III. For sites having disturbed areas under 5 acres: Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and
- IV. For site having disturbed areas over 5 acres: i. On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following: a. pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5
 - b. Organic content of topsoil shall be not less than 1.5 percent by weight.
 c. Topsoil having soluble salt content greater than 500 parts per million shall
 - d. No sod or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time as elapsed (14 days min.) to permit dissipation of phyto-toxic materials. agronomist or soil scientist and approved by the appropriate approval authority, may be used in
- II. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization Section I Vegetative Stabilization Methods and

24.0 MATERIALS AND SPECIFICATIONS

| OPEN RESIDE | STRENGTH LB. MIN. | BURST STRENGTH PSI MIN. |
|---------------|---|--|
| | | |
| 0.30** | 250 | 500 |
| 0.60 | 200 | 320 |
| 030 | 200 | 320 |
| 0.60 | 90 | 145 |
| 030 | 90 | 145 |
| 0.40 - 0.80 * | 90 | 190 |
| | 0.60 0.30 0.60 0.30 0.40 - 0.80 * | 0.60 200 0.30 200 0.60 40 0.30 40 0.40 - 0.80 * 40 |

.50 MM. MAX. FOR SUPER SILT FENCE THE PROPERTIES SHALL BE DETERMINED IN ACCORDANCE WITH THE FOLLOWING PROCEDURES: - APPARENT OPENING SIZE MSMT 323

-GRAB TENSILE STRENGTH ASTM D 1682 4"x8" SPECIMEN I"x2" CLAMPS, 12"/ MIM. STRAIN RATE IN BOTH PRINCIPAL DIRECTIONS OF GEOTEXTILE FABRIC.

-BURST STRENGTH ASTM D 3786

THE FABRIC SHALL BE INERT TO COMMONLY ENCOUNTERED CHEMICALS AND HYDRCARBONS, AND WILL BE ROT AND MILDEM RESISTANT. IT SHALLBE MANUFACTTURED FROM FIBERS CONSISTING OF LONG CHAIN SYNHETIC POLYMERS, AND COMPPOSED OF A MINIMUM OF 85% BY WEIGHT OF POLYOLEPHINS, POLYESTERS, OR POLYAMIDES. THE GEOTEXTILE FABRIC SHALL RESISTDETERIORATION FROM ULTRAVIOLET EXPOSURE.

IN ADDITION CLASSES A THROUGH E SHALL HAVE A O.OI CM/SEC MINIMUM PERMEABILITY WHEN TESTED IN ACCORDANCE WITH MSMT 501, AND AN APPARENT MINUMUM ELONGATION OF 20 PERCENT (20%) WHEN TESTED IN ACCORDANCE WITH THE GRAB TENSILE STRENGHT REQUIREMENTS LISTED

SILT FENCE

CLASS F GEATEXTILE FABRICS FOR ALL SILT FENCE SHALL HAVE A 50LB/IN. MINIMUM TENSILE STRENTH AND A 20 LB/IN MINIMUM TENSILE MODULES WHEN TESTED IN ACCORDANCE WITH MSMT 509. MATERIAL SHALL ALSO HAVE A 0.3 GAL/FT.SQUARED/MIN. FLOW RATE ND SEVENTY-FIVE PERCENT (75%) MINIMUMFILTERING EFFICIENCY WHEN TESTED IN ACCORDANCE WITH MSMT 322.

GEOTEXTILE FABRICS USED IN THE CONSTRUCTION OF THE SILT FENCE SHALL RESIST DETERIORATION FROM ULTRAVIOLET EXPOSURE. THE FABRIC SHALL CONTAIN SUFFICIENT AMOUNTS OF ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE AMINIMUM OF 12 MOUNTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERTURE RANGE OF O TO 120

V. Topsoil Application

- i. When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Traps and Basins.
- ii. Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4" - 8" higher in elevation.
- iii. Topsoil shall be uniformly distributed in a 4" 8" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or
- iv. Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that my otherwise be detrimental to proper grading and seedbed preparation.
- VI. Alternative for Permanent Seeding Instead of applying the full amounts of lime and commercial fertilizer, composted sludge and amendments may be applied as specified below:
- Composted Sludge Material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribe amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements:
- a. Composted Sludge shall be supplied by, or originate from, a person or persons that are permitted (at the time of acausition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06.
- o. Composted sludge shall contain at least I percent nitroaen, 1.5 percent phosphorus, and 0.2 percent potassium and have a pH of 7.0 to 8.0. If compost does not meet these requirements, the appropriate constituents must be added to meet the requirements
- c. Composted sludge shall be applied at a rate of I ton/1,000 square feet.
- li. Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4 lb/1,000 square feet, and 1/3 the normal lime application rate.

GENERAL NOTES

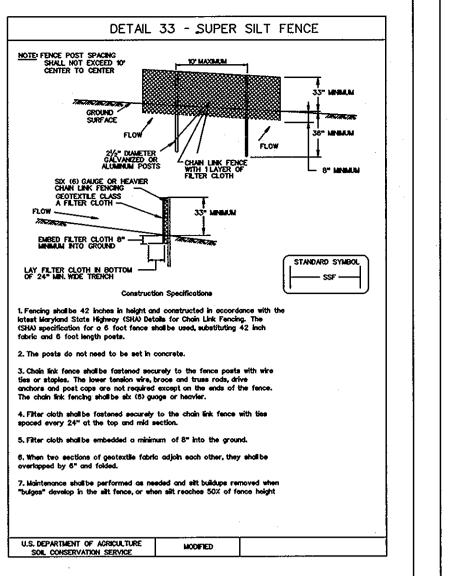
- A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (313-1855).
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most current MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.
- Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
- All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol 1, Chapter 12 of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding (Sec. 51), sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- 6. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard Country Sediment Control Inspector.
- 7. Site Analysis:

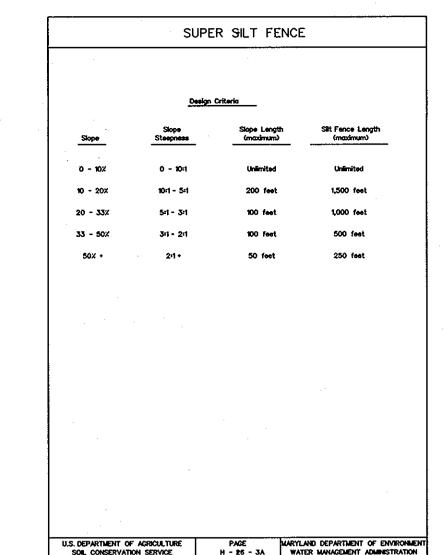
| | A |
|---|----------|
| Area Disturbed: 166 A | Acres |
| A ca biski boa. | cres |
| | Acres |
| Area to be vegetatively stabilized: 1.40A | cres |
| Total Cut: 2328 | CU. Y |
| Total Fill: 2328 | CU. Y |
| Offsite waste/borrow area location: O Cu. | Yds. |

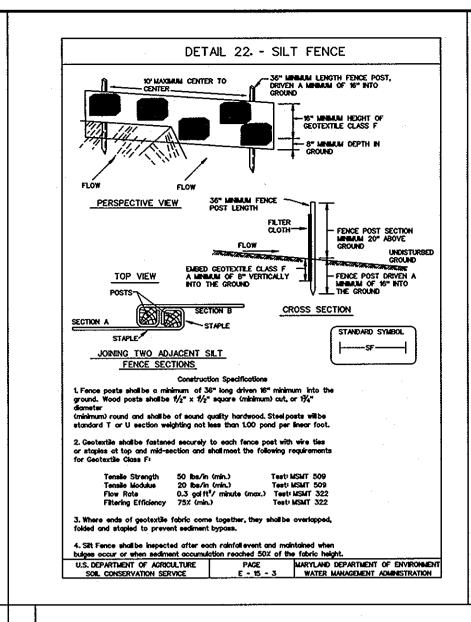
- 8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment control must be provided, if deemed necessary by the Howard County Sediment
- 10. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made. T

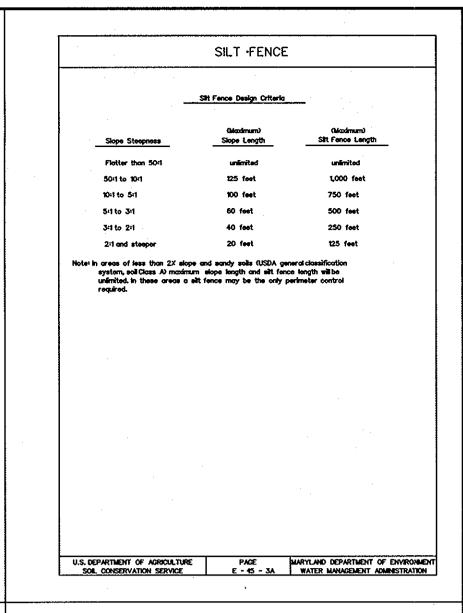
www.kci.com

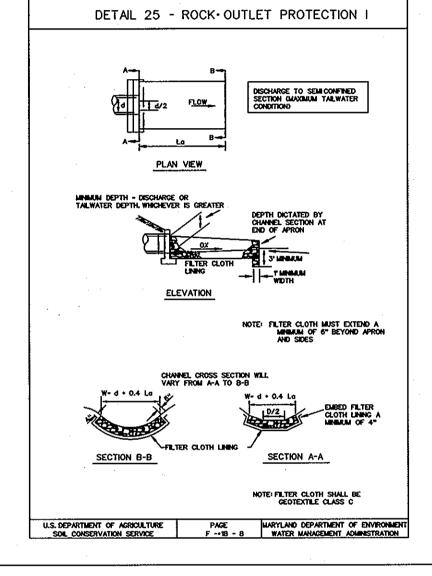
Trenches for the construction of utilities is limited to three pipe lengths or that which shall be back-filled and stabilized by the end of each work day, whichever is shorter.

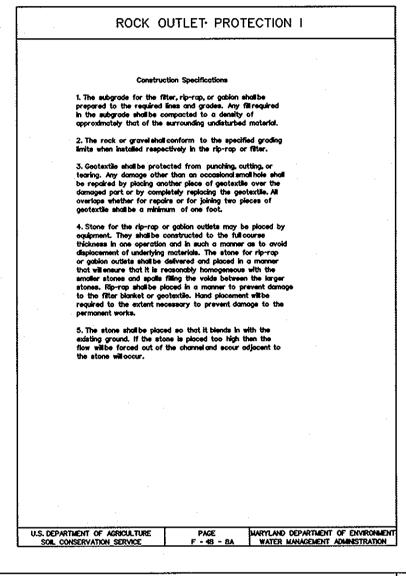


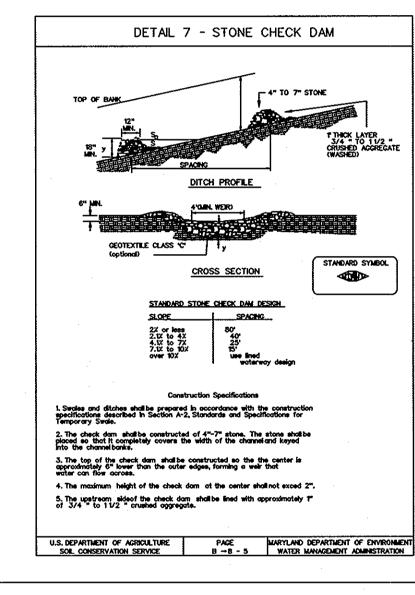


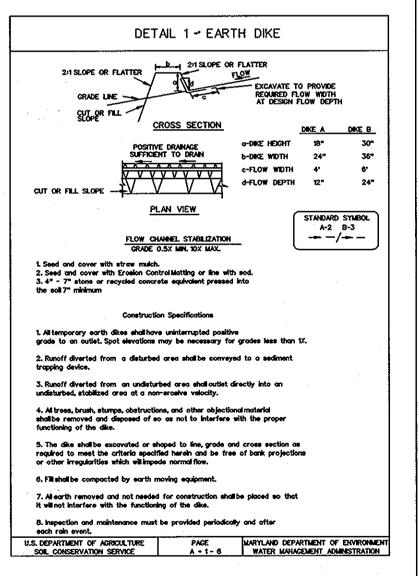


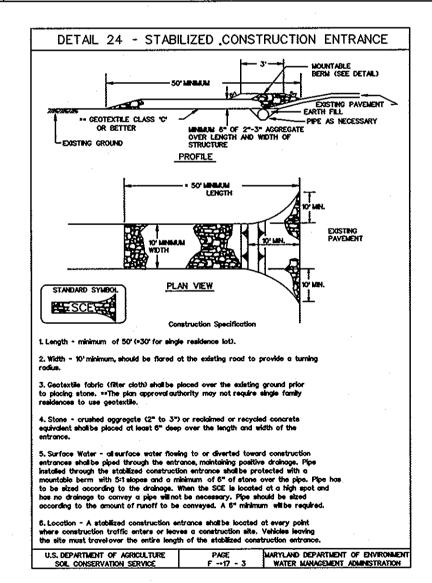


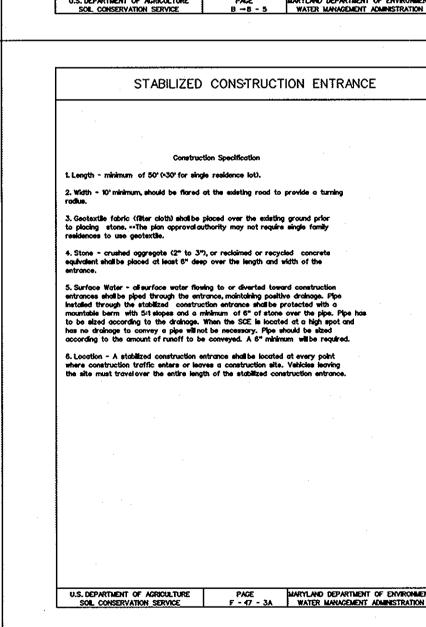


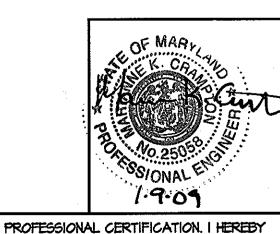












SEDIMENT & EROSION CONTROL DETAILS & NOTES ST. FRANCIS OF ASSISI SUBDIVISION

ST. FRANCIS OF ASSISI FAITH FORMATION CENTER ADDITION

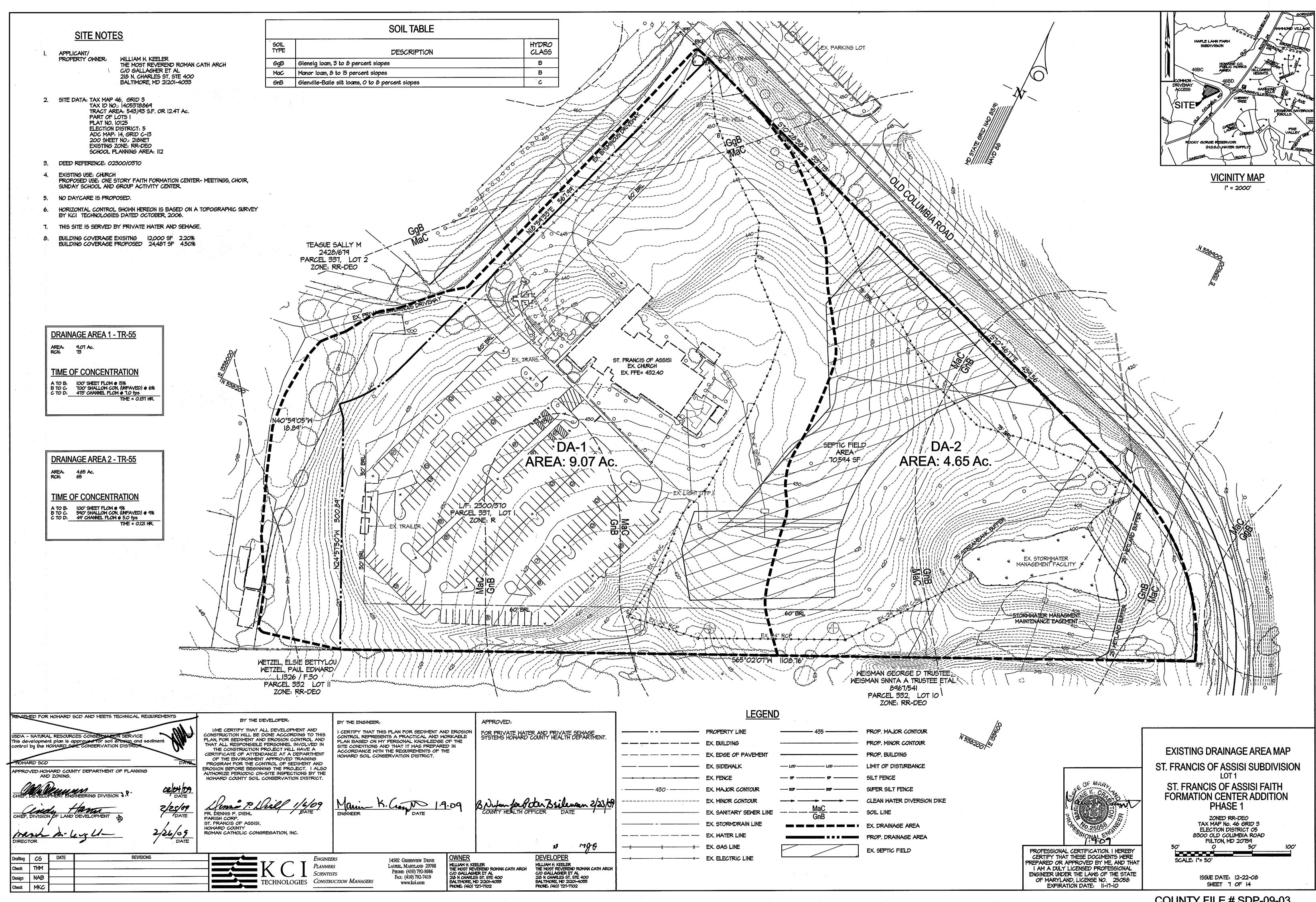
PHASE 1 ZONED RR-DEO TAX MAP No. 46 GRID 3

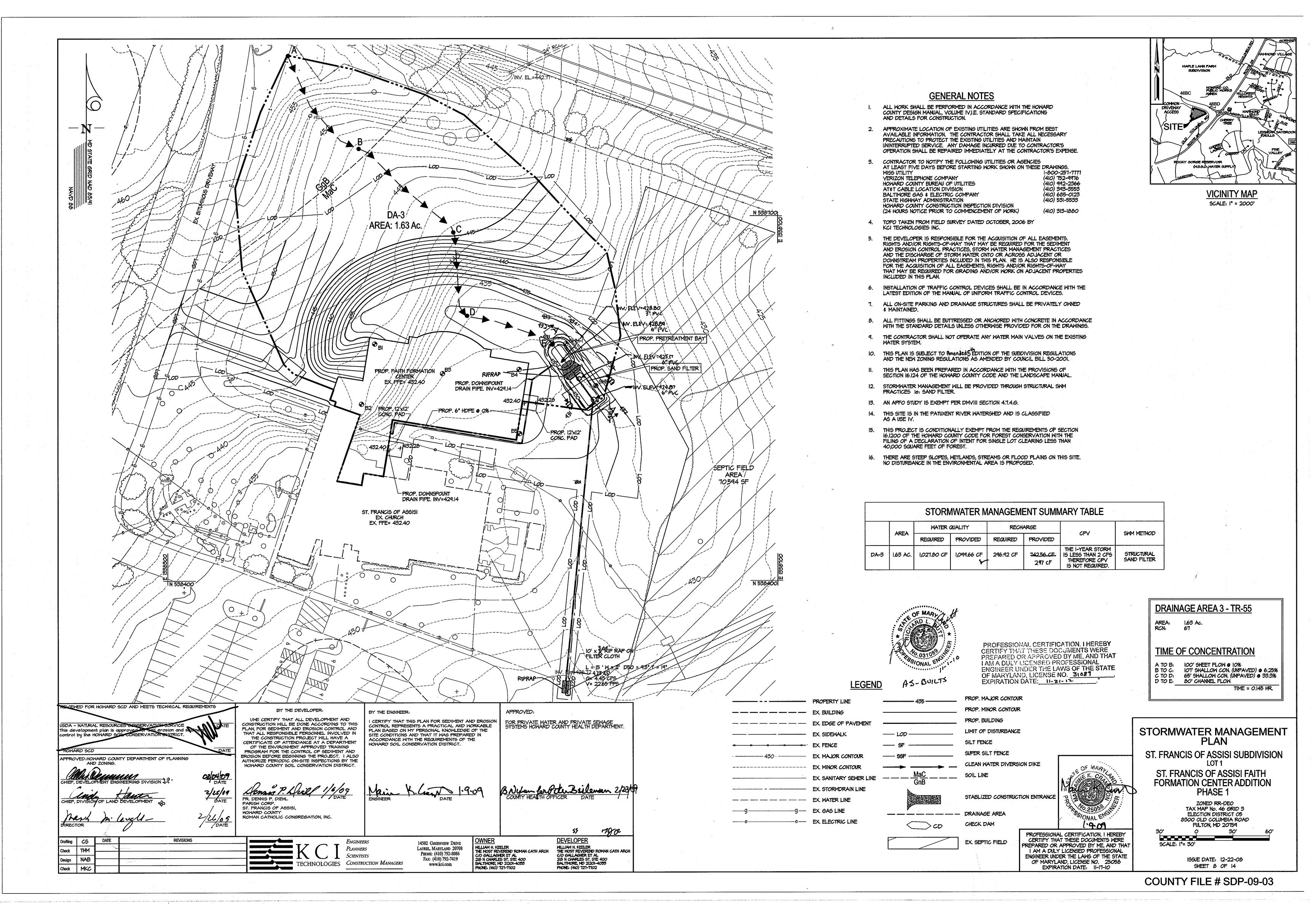
ELECTION DISTRICT 05 8300 OLD COLUMBIA ROAD FULTON, MD 20159

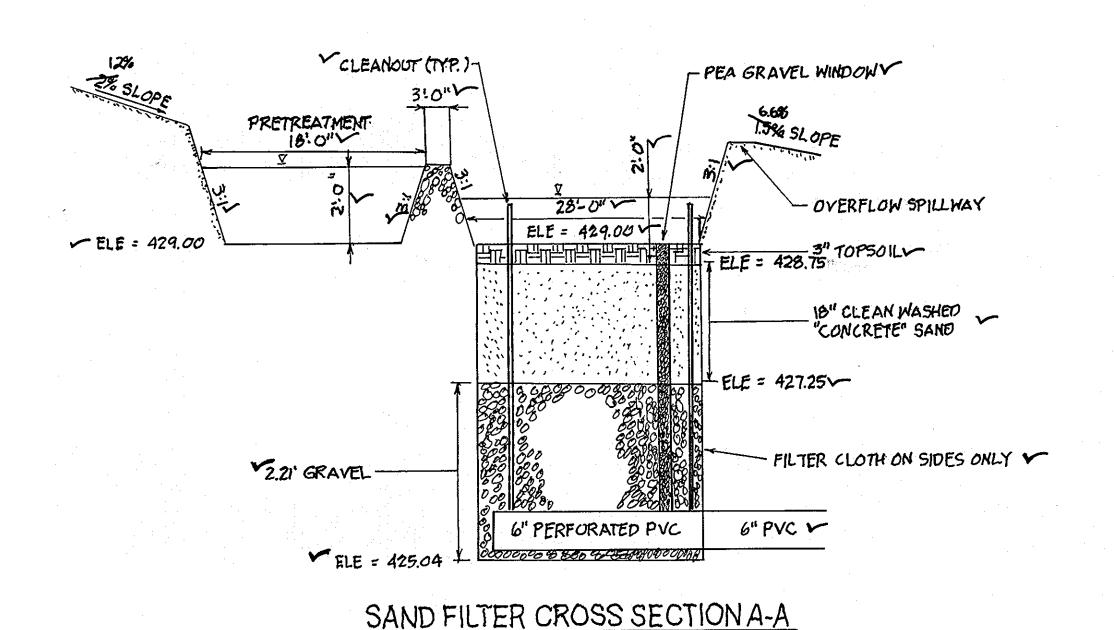
> ISSUE DATE: 12-22-08 SHEET 6 OF 14

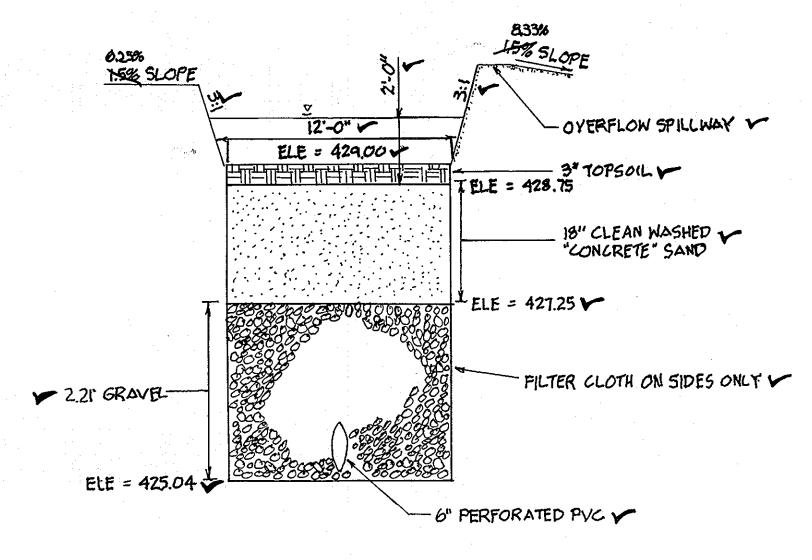
APPROVED: I/WE CERTIFY THAT ALL DEVELOPMENT AND CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT CONSTRUCTION WILL BE DONE ACCORDING TO THIS CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN, FOR SEDIMENT AND EROSION CONTROL AND PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN SITE CONDITIONS AND THAT IT WAS PREPARED IN THE CONSTRUCTION PROJECT WILL HAVE A ACCORDANCE WITH THE REQUIREMENTS OF THE CERTIFICATE OF ATTENDANCE AT A DEPARTMENT HOWARD SOIL CONSERVATION DISTRICT. OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO PROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE AND ZONING. HOWARD COUNTY SOIL CONSERVATION DISTRICT. FR. DENNIS P. DIEHL PARISH CORP. ST. FRANCIS OF ASSISI, ROMAN CATHOLIC CONGREGATION, INC. <u>DEVELOPER</u> Drafting CS ENGINEERS MILLIAM H. KEELER THE MOST REVEREND ROMAN CATH ARCH villiam H. Keeler LAUREL, MARYLAND 20708 **PLANNERS** THE MOST REVEREND ROMAN CATH ARCH C/O GALLACHER ET AL. 218 N CHARLES ST. STE 400 BALTIMORE, MD 21201-4033 PHONE: (410) 792-8086 C/O GALLAGHER ET AL. 218 N CHARLES ST. STE 400 BALTIMORE, MD 21201-4093 PHONE: (410) 727-7702 Fax: (410) 792-7419 CONSTRUCTION MANAGERS

CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THA I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 25058 EXPIRATION DATE: 11-17-10









NOT TO SCALE A

SAND FILTER CROSS SECTION B-B NOT TO SCALE 1

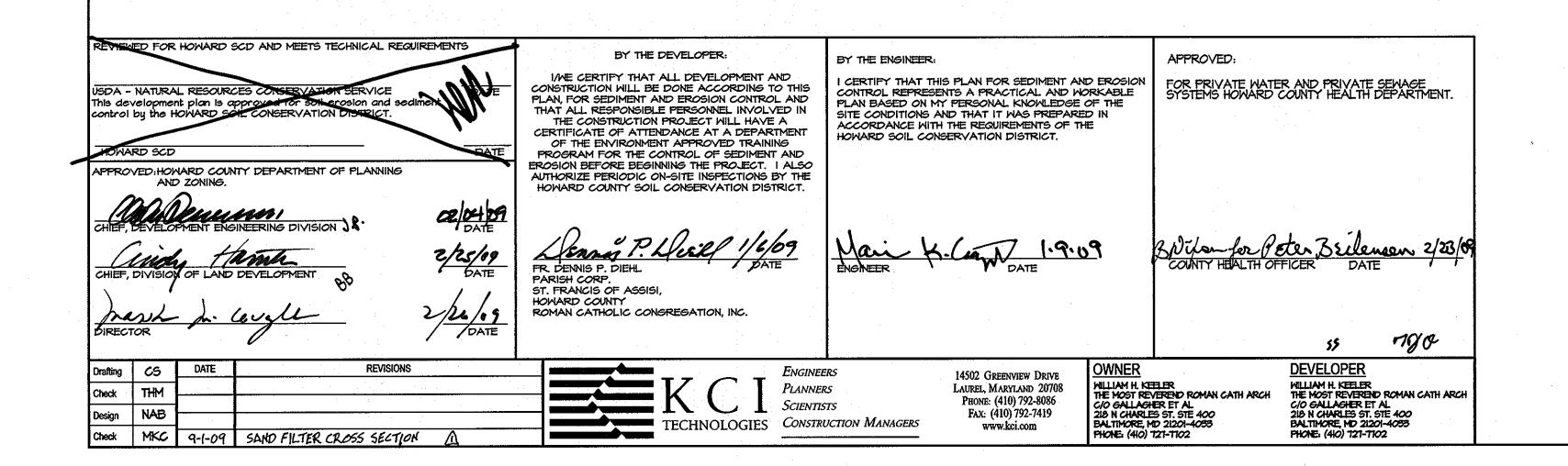
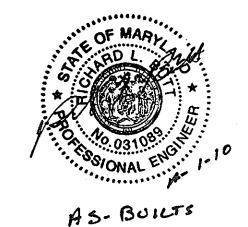


Table B.3.1 Material Specifications for Sand Filters

| Material | Specification/I est Method | Size | Notes Par Commence of the Comm |
|------------------------------------|--|--|--|
| sand | clean AASHTO-M-6 or ASTM-C- 33 concrete sand | 0.02" to 0.04" | Sand substitutions such as Diabase and Graystone #10 are not acceptable. No calcium carbonated or dolomitic sand substitutions are acceptable. No "rock dust" can be used for sand. |
| peat | ash content: < 15% pH range: 5.2 to 4.9 loose bulk density 0.12 to 0.15 g/cc | n/a | The material must be reed-sedge hemic peat, shredded, uncompacted, uniform, and clean. |
| leaf compost | | n/a | |
| underdrain gravel | AASHTO-M-43 | 0.375" to 0.75" | |
| geotextile fabric (if required) | ASTM-D-4833 (puncture strength - 125 lb.) ASTM-D-4632 (Tensile Strength - 300 lb.) | 0.08" thick equivalent opening size of #80 sieve | Must maintain 125 gpm per sq. ft. flow rate. Note: a 4" pea gravel layer may be substituted for geotextiles meant to "separate" sand filter layers. |
| impermeable liner (if required) | ASTM-D-4833 (thickness) ASTM-D-412 (tensile strength 1,100 lb., elongation 200%) ASTM-D-624 (Tear resistance - 150 lb./in) ASTM-D-471 (water adsorption: +8 to -2% mass) | 30 mil thickness | Liner to be ultraviolet resistant. A geotextile fabric should be used to protect the liner from puncture. |
| underdrain piping | F 758, Type PS 28 or AASHTO-M- 278 | 4" - 6" rigid schedule 40 PVC or SDR35 | 3/8" perf. @ 6" on center, 4 holes per row; minimum of 3" of gravel over pipes; not necessary underneath pipes |
| concrete (cast-in-place) | MSHA Standards and Spees. Section 902, Mix No. 3, f'e = 3500 psi, normal weight, air-entrained; re-inforcing to meet ASTM-615-60 | n/a | on-site testing of poured-in-place concrete required: 28 day strength and slump test; all concrete design (cast-in-place or precast) not using previously approved State or local standards requires design drawings sealed and approved by a professional structural engineer licensed in the State of Maryland |
| concrete (pre-cast) | per pre-cast manufacturer | n/a | SEE ABOVE NOTE |
| non-rebar steel | ASTM A-36 | n/a | structural steel to be hot-dipped galvanized ASTM-A-123 |

OPERATION AND MAINTENANCE SCHEDULE FOR SAND FILTERS

- I. THE STORMWATER WETLAND FACILITY SHALL BE INSPECTED ANNUALLY AND AFTER MAJOR STORMS. INSPECTIONS SHALL BE PERFORMED DURING WET WEATHER TO DETERMINE IF THE FACILITY IS FUNCTIONING PROPERLY.
- 2. THE TOP AND SIDE SLOPES OF THE EMBANKMENT SHALL BE MOWED A MINIMUM OF ONCE PER YEAR,, WHEN VEGETATION REACHES 18" IN HEIGHT OR AS NEEDED.
- 3. FILTERS THAT HAVE A GRASS COVER SHALL BE MOWED A MINIMUM OF THREE (3) TIMES PER GROWING SEASON TO MAINTAIN A MAXIMUM GRASS HEIGHT OF LESS THAT 12 INCHES.
- 4. DEBRIS AND LITTER SHALL BE REMOVED DURING REGULAR MOWING OPERATIONS AND AS NEEDED.
- 5. VISIBLE SIGNS OF EROSION IN THE FACILITY SHALL BE REPAIRED AS SOON AS IT IS NOTICED.
- 6. REMOVE SILT WHEN IT EXCEEDS FOUR (4) INCHES DEEP IN THE FOREBAY.
- 7. WHEN WATER PONDS ON THE SURFACE OF THE FILTER BED FOR MORE THAN 12 HOURS, THE TOP FEW INCHES OF DISCOLORED MATERIAL SHALL BE REPLACED WITH FRESH MATERIAL. PROPER CLEANING AND DISPOSAL OF THE REMOVED MATERIALS AND LIQUID MUST BE FOLLOWED BY THE OWNER.
- 8. A LOGBOOK SHALL BE MAINTAINED TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
- 9. THE MAINTENANCE LOGBOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.
- IO. ONCE THE PERFORMANCE CHARACTERISTICS OF THE INFILTRATION SYSTEM HAVE BEEN VERIFIED, THE MONITORING SCHEDULE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.



PROFESSIONAL CERTIFICATION. I HEREBY

CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 31089, EXPIRATION DATE: 11-24-12.

STORMWATER MANAGEMENT

NOTES AND DETAILS

ST. FRANCIS OF ASSISI SUBDIVISION

LOT 1

ST. FRANCIS OF ASSISI FAITH

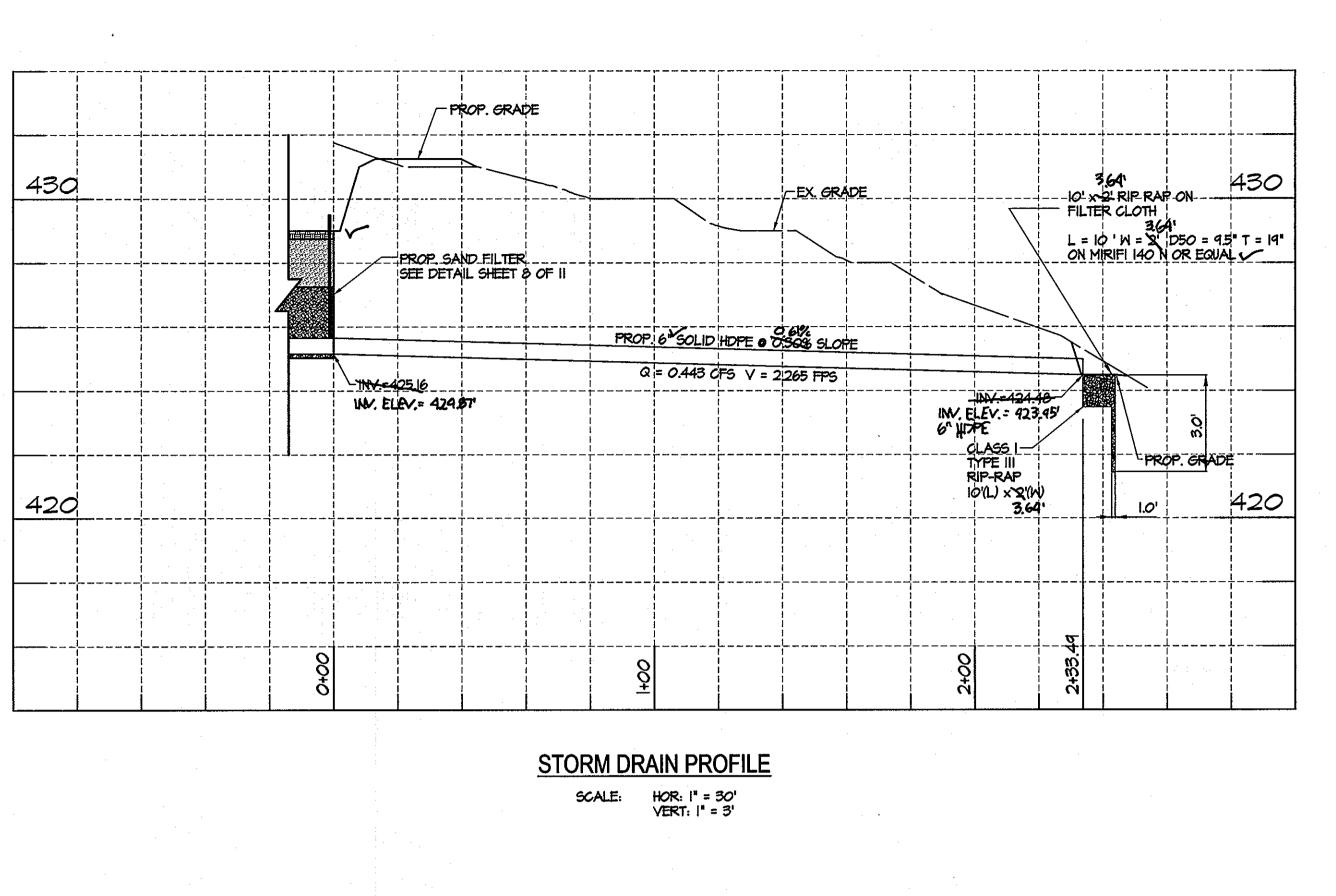
FORMATION CENTER ADDITION

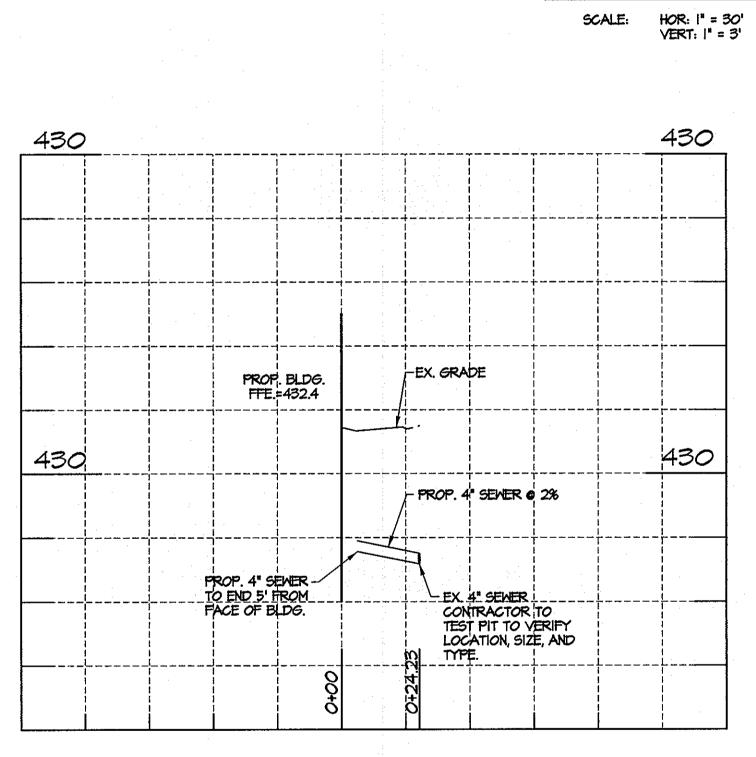
10/20109

PROFESSIONAL CERTIFICATION. I HEREBY
CERTIFY THAT THESE DOCUMENTS WERE
PREPARED OR APPROVED BY ME, AND THAT
I AM A DULY LICENSED PROFESSIONAL
ENGINEER UNDER THE LAWS OF THE STATE
OF MARYLAND, LICENSE NO. 25058
EXPIRATION DATE: II-I7-I0

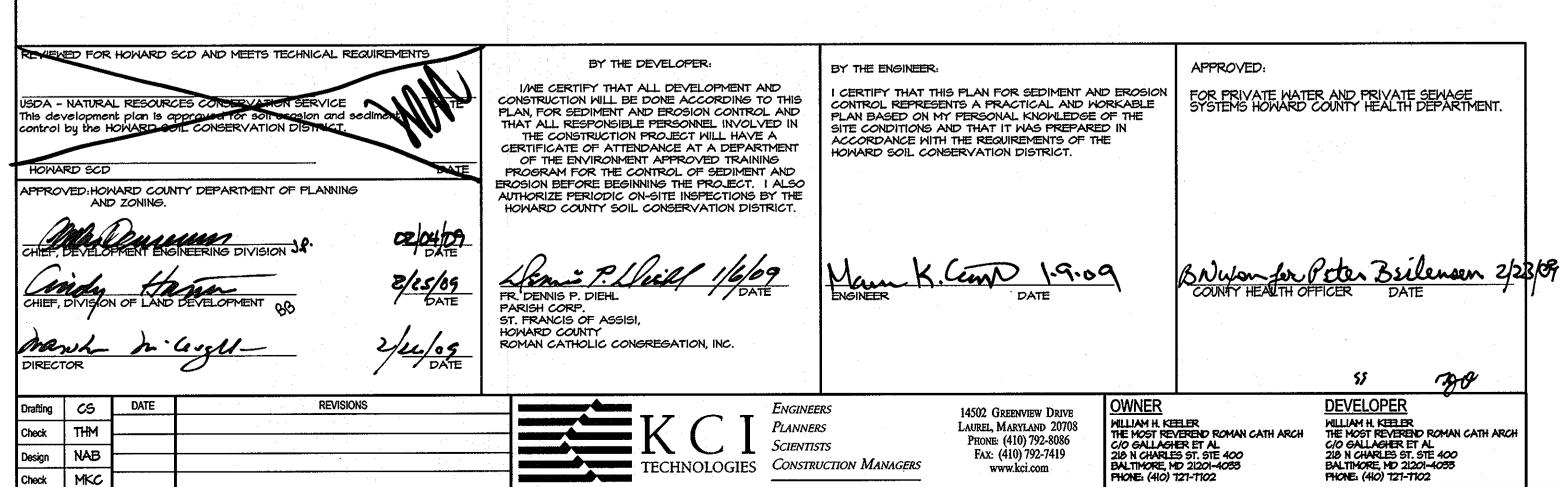
PHASE 1 ZONED RR-DEO TAX MAP No. 46 GRID 3 ELECTION DISTRICT 05 8300 OLD COLUMBIA ROAD FULTON, MD 20759

> NOT TO SCALE ISSUE DATE: 12-22-08 SHEET 9 OF 14

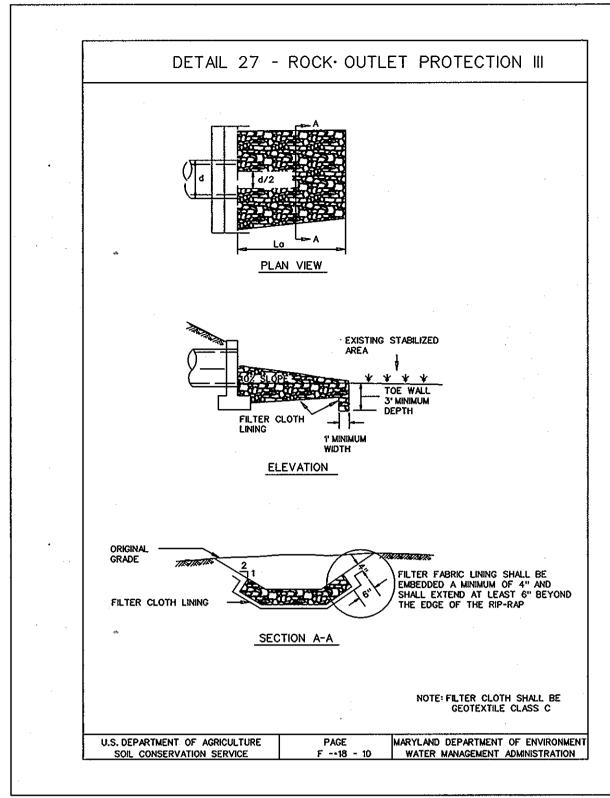


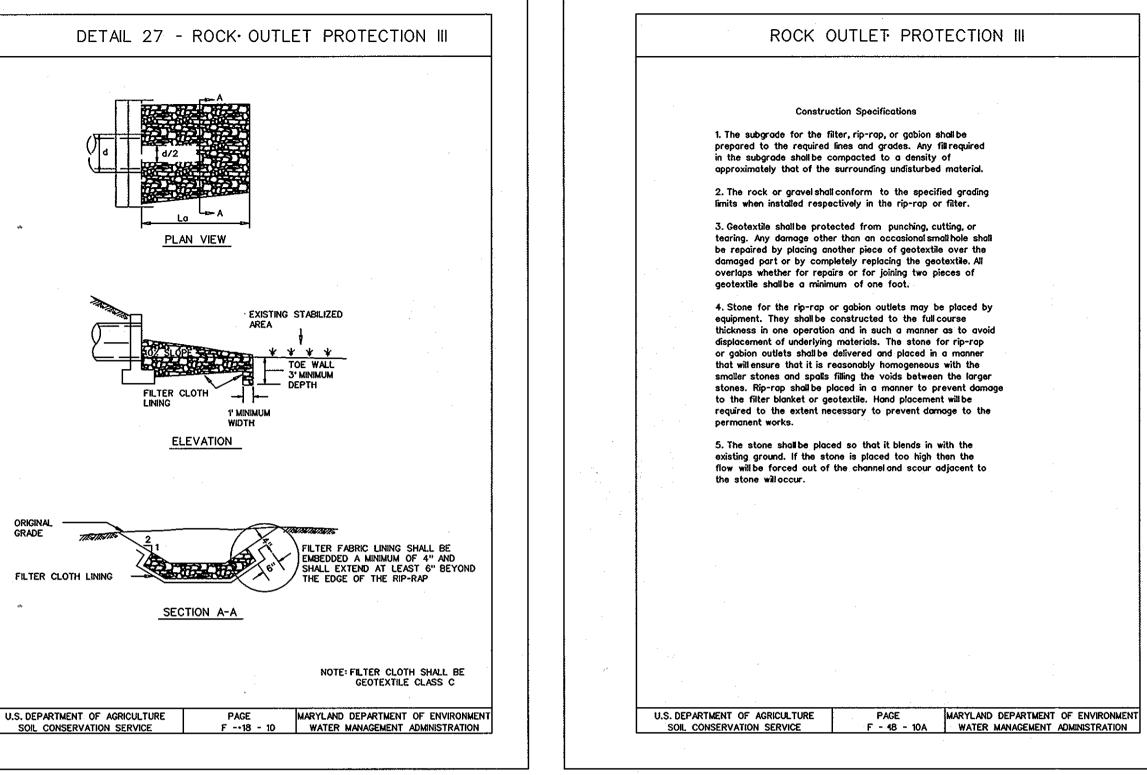


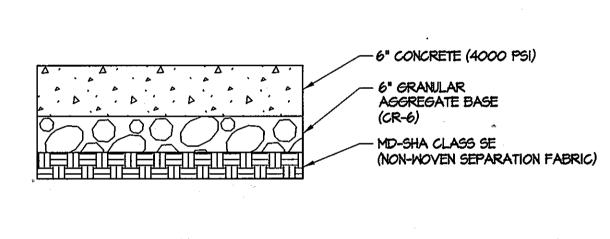
SANITARY SEWER LATERAL HOR: |" = 30' VERT: |" = 3'



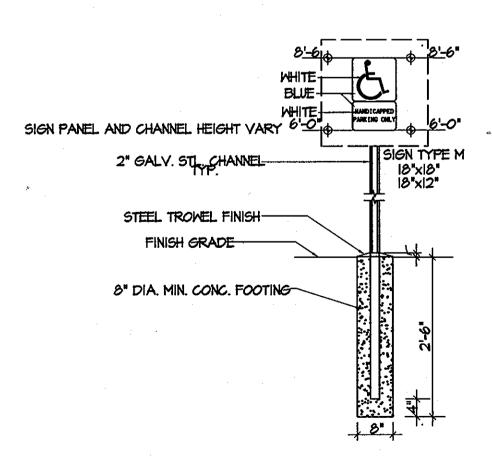
www.kci.com



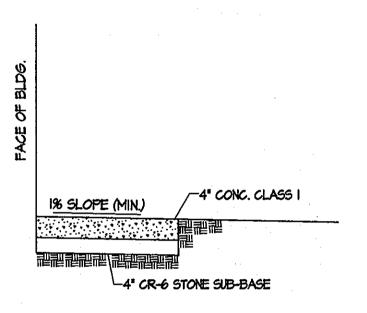




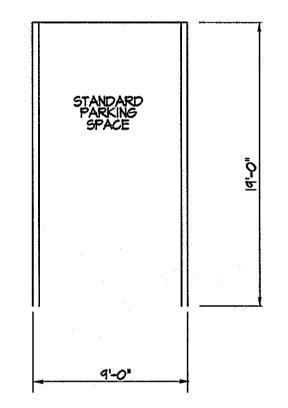




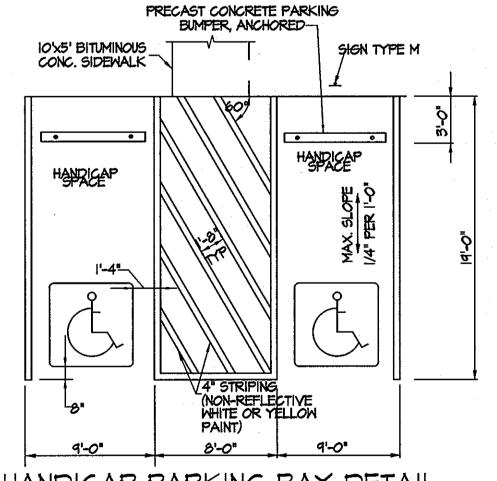
HANDICAP SIGN & POLE NOT TO SCALE



CONCRETE PAD NOTE: CONCRETE SHALL BE 3,500PSI; HOWARD COUNTY MSHA #3 MIX AIR NOT TO SCALE ENTRAINED CONCRETE W BRUSH FINISH



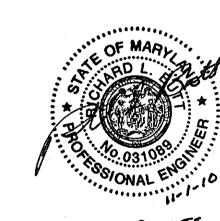




HANDICAP PARKING BAY DETAIL

NOT TO SCALE

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 25058 EXPIRATION DATE: 11-17-10



AS-BUILTS

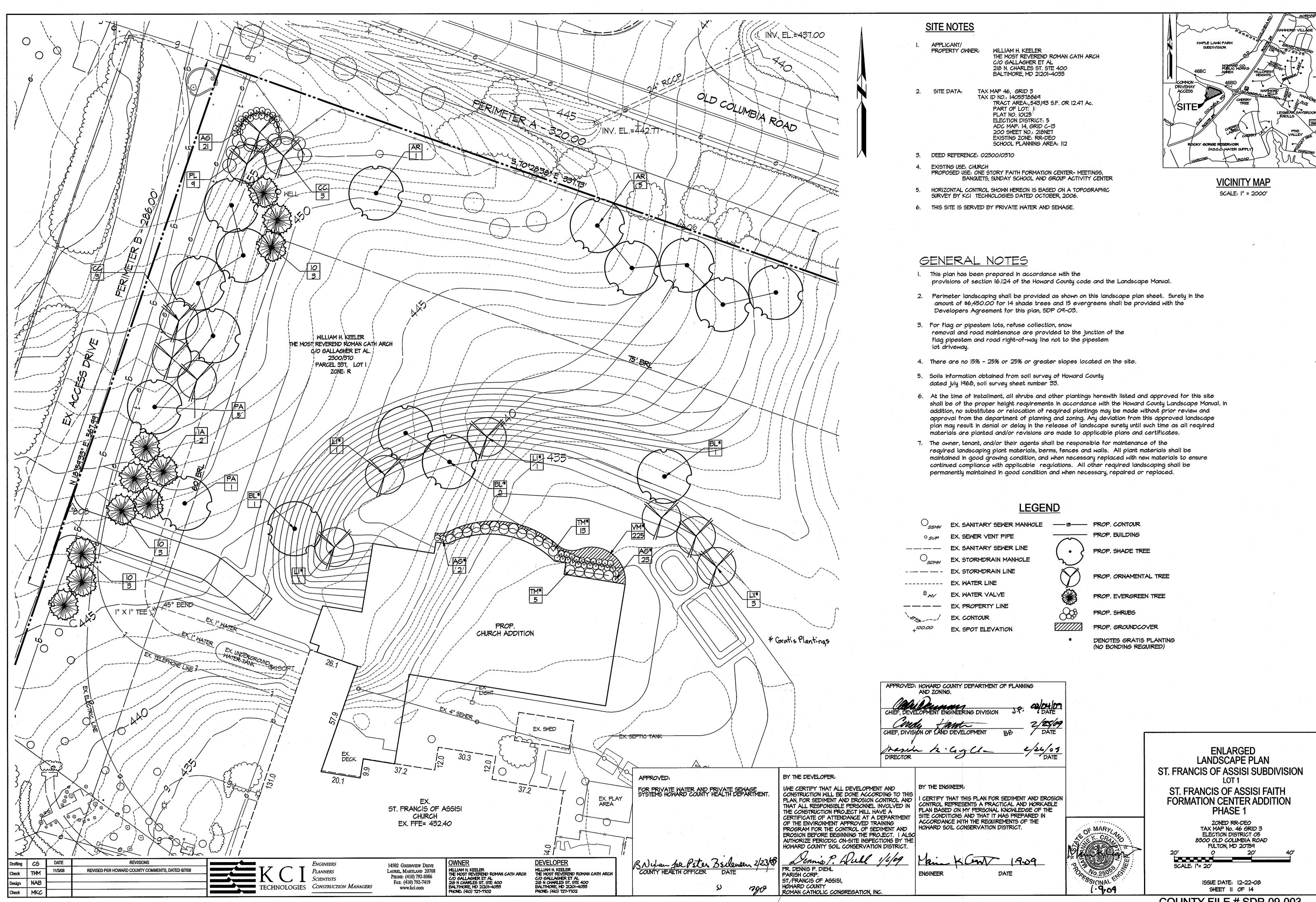
PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT IAM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 31089 EXPIRATION DATE: 11-21-10

> SITE DETAILS & NOTES ST. FRANCIS OF ASSISI SUBDIVISION LOT 1

ST. FRANCIS OF ASSISI FAITH FORMATION CENTER ADDITION PHASE 1

> ZONED RR-DEO TAX MAP No. 46 GRID 3 ELECTION DISTRICT 05 8300 OLD COLUMBIA ROAD FULTON, MD 20159

ISSUE DATE: 12-22-08 SHEET 10 OF 14



SPECIFICATIONS

PLANT MATERIALS AND PLANTING METHODS

A. Plant Materials

The landscape contractor shall furnish and install and/or dig, ball, burlap, and transplant all of the plant materials called for on drawings and/or listed in the Plant Schedule.

1. Plant Names

Plant names used in the Plant Schedule shall conform to "Standardized Plant Names", latest edition.

2. Plant Standards

All plant material shall be equal to or better than the requirements of the "USA Standard for Nursery Stock", latest edition, as published by the American Association of Nurserymen (hereafter referred to as AAN Standards). All plants shall be typical of their species and variety, shall have a normal habit of growth, and shall be first quality, sound, vigorous, well-branches and with health, wellfurnished root systems. They shall be free of disease, insect pests and mechanical injuries.

- a. All plants shall be nursery grown and shall have been grown under the same climate as the location of this project for at least two years before planting. Neither heeled-in plants nor plants from cold storage will be
- b. Collected plants or transplanted trees may be called for by the landscape architect and used, provided, however, that locations and soil conditions will permit proper balling.

3. Plant Measurements All plants shall conform to the measurements specified in the Plant Schedule as approved by the A.C.

- a. Caliper measurements shall be taken six inches (6") above grade for trees under four-inch (4") caliper and twelve inches (12") above grade for trees four inches (4" in caliper and over.
- b. Minimum branching height for all trees shall be six feet (6'), maximum eight feet (81).
- c. Minimum size for planting shade trees 2 1/2" 3" caliper 12' 14' in
- d. Minimum size for planting minor shade trees shall be 2-1/2"-3" caliper, 8-10' Height. e. Caliper, height, spread and size of ball shall be generally as follows:

Caliper Height Spread Size of Ball 2 1/2" - 3" 12' - 14' 6' - 8' 28" diameter 3" - 3 1/2" 14' - 16' 6' - 8' 32" diameter 3 1/2" - 4" 14' - 16' 8' - 10' 36" diameter

4" - 4 1/2" 16' - 18' 8' - 10' 40" diameter 4 1/2" - 5" 16' - 18' 10' - 12' 34" diameter

5" - 5 1/2" 16' - 20' 10' - 12' 48" diameter 5 1/2" - 6" 18' - 20' 12' - 14' 52" diameter All plant material shall generally average the median for the size ranges indicated above as indicated in the "AAN Standards".

Legible labels shall be attached to all shade trees, minor trees, specimen shrubs and bundles or boxes of other plant material giving the botanical and common names, size and quantity of each. Each shipment of plants shall bear certificates of inspection as required by Federal, State and County authorities.

The AC may, upon request by the builder or developer, at least ten (10) days prior to the installation of any proposed plant material, inspect all proposed plant material at the source of origin. B. Planting Methods

Plant installation must conform with the minimum standards cited in the latest edition of "Landscape Specifications Guidelines" published by the Landscape Contractors Association. All proposed plant material that meet the specifications in the Planting Schedule are to be planted in accordance with the following planting methods during the proper planting seasons as described in the following:

I. Planting Seasons

The planting of deciduous trees, shrubs and vines shall be from March 1st to June 15th and from September 15th to december 15th. Planting of deciduous material may be continued during the winter months providing there is no frost in the ground and frost-free topsoil planting mixtures are used.

The planting of evergreen material shall be from March 15th to June 15th and

from August 15th to December 1st. No planting shall be done when ground is

frozen or excessively moist. No frozen or wet topsoil shall be used at any time. 2. Digging All plant material shall be dug, balled and burlapped (B+B) in accordance with

the "AAN Standards."

AND ZONING.

CHIEF, DIVISION OF LAND DEVELOPMENT

11/3/08

undy

masse

CS

Henrot

3. Excavation of Plant Pits The landscaping contractor shall excavate all plant pits, vine pits, hedge trenches and shrub beds in accordance with the following schedule:

- a. Locations of all proposed plant material shall be staked and approved in the field by the landscape architect before any of the proposed plant material is installed by the landscape contractor.
- b. All pits shall be generally circular in outline, vertical sides; depth shall not be less than 6" deeper than the root ball, diameter shall not be less than two times the diameter of the root ball as set forth in the following schedule.
- c. If areas are designated as shrub beds or hedge trenches, they shall be excavated to at least 18" depth minimum. Areas designated for ground covers and vines shall be excavated to at least 12" in depth minimum.

d. Diameter and depth of tree pits shall generally be as follows:

Plant Size Root Ball Diameter Depth

2 1/2" - 3" cal. 28" 56" 24" 3" - 3 1/2" cal. 32" 64" 28" 72" 32" 3 1/2" - 4" cal. 36" 4" - 4 1/2" cal. 40" 80" 36" 88" 40" 4 1/2" - 5" cal. 44" 5" - 5 1/2" cal. 48" 96" 44" 52" IO4" 48" 5 1/2" - 6" cal.

A 20% compaction figure of the soil to be removed is assumed and will be allowed in calculation of extra topsoil. The tabulated pit sizes are for purposes of uniform calculation and shall not override the specified depths below the bottoms of the root balls.

4. Staking, Guying and Wrapping

- All plant material shall be staked or guyed, and wrapped in accordance with the following specifications:
- a. Stakes: Shall be sound wood 2" x 2" rough sawn oak or similar durable woods, or lengths, minimum 7' - 0" for major trees and 5' - 0" minimum for minor trees.
- b. Wire and Cable: Wire shall be #10 ga. galvanized or bethanized annealed steel wire. For trees over 3" caliper, provide 5/16" turn buckles, eye and eye with 4" takeup. For trees over 5" caliper, provide 3/16", 7 strand cable cadmium plated steel, with galvanized "eye" thimbles of wire and hose on trees up to 3" in caliper.
- c. Hose: Shall be new, 2 ply reinforced rubber hose, minimum ?" I.D. "Plastic Lock Ties" or "Paul's tree Braces" may be used in place of wire and hose on trees up to 3" in caliper.
- d. All trees under 3" in caliper are to be planted and staked in accordance with the attached "Typical Tree Staking Detail". All trees over 3" in caliper are to be planted and guyed in accordance with the attached "Typical Tree Guying Detail."

5. Plant Pruning, Edging and Mulching

- a. Each tree, shrub or vine shall be pruned in an appropriate manner to its particular requirements, in accordance with accepted standard practice. Broken or bruised branches shall be removed with clean cuts flush with the adjacent trunk or branches. All cuts over I" in diameter shall be painted with an approved antiseptic tree wound dressing.
- b. All Trenches and shrub beds shall be edged and cultivated to the lines shown on the drawing. The areas around isolated plants shall be edaed and cultivated to the full diameter of the pit. Sod which has been removed and stacked shall be used to trim the edges of all excavated areas to the neat lines of the plant pit saucers, the edges of shrub areas, hedge trenches and vine pockets.
- c. After cultivation, all plant materials shall be mulched with a 4" layer of tan bark, peat moss, or another approved material over the entire area of the bed or saucer.

6. Plant Inspection and Acceptance

The AC shall be responsible for inspecting all planting projects on a periodic basis to assure that all work is proceeding in accordance with the approved plans and specifications.

7. Plant Guarantee

All Plant material shall be guaranteed for the duration of one full growing season, after final inspection and acceptance of the work in the planting project. Plants shall be alive and in satisfactory growing condition at the end of the quarantee period.

- a. For this purpose, the "growing season" shall be that period between the end of the "Spring" planting season, and the commencement of the "Fall" planting season.
- b. Guarantee for planting performed after the specified end of the "Spring" planting season, shall be extended through the end of the next following "Sprina" planting season.

C. SEEDING AND SODDING

BY THE ENGINEER:

1. All seeding and sodding shall be as per "Standards and Specifications for Soil Erosion and Sediment Control in Urbanized Areas" as published by the Department of Natural Resources.

MAINTENANCE

The developer is responsible for maintenance of the landscaping during construction and is responsible for obtaining a livear quarantee that ensures the survival or replacement of all required plant materials for I year from the date on the landscape certification.

At the end of the maintenance period, it is the developer's responsibility to transfer formally the long term responsibility for the required landscaping to the owner, tenant, homeowners association, or other agent responsible for long term maintenance of the development. Maintenance responsibilities include, but are not limited to, pruning, fertilizing, watering, mowing, weeding, and other such activities necessary to the health and survival of the landscaping The required planting should be maintained in good growing condition and, whenever necessary, replaced with new plant materials to ensure continued compliance with landscape regulations.

No plant material shall encroach on road rights-of-way so that sight distance is impeded. Required berms fences and walls shall be permanently maintained in good condition and, whenever necessary repaired or replaces.

PERIMETER A, LANDSCAPE CHART

| CATEGORY | ADJACENT TO ROADWAYS | ADJACENT TO PERIMETER PROPERTIE |
|---|--|------------------------------------|
| LANDSCAPE TYPE | A (REAR OF PROPERTY ADJACENT TO ROADWAY) | NA |
| LINEAR FEET OF ROADWAY FRONTAGE/ PERIMETER | 320 LF | NA NA |
| CREDIT FOR EXIST. VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED) | 0 | NA NA |
| CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED) | 0 | NA . |
| NUMBER OF PLANTS REQUIRED SHADE TREES EVERGREEN TREES SHRUBS | 6 0 0 | NA. |
| NUMBER OF PLANTS PROVIDED SHADE TREES EVERGREEN TREES SHRUBS OTHER TREES (2:I SUBSTITUTION) SHRUBS (IO:I SUBSTITUTION) (DESCRIBE PLANT SUBSTITUTIONS CREDITS BELOW IF NEEDED) | 6 0 0 0 | NA NA |

PERIMETER B, LANDSCAPE CHART

| | CATEGORY | ADJACENT TO ROADWAYS | ADJACENT TO PERIMETER PROPERTIES |
|---|---|-------------------------|---|
| FRONTAGE/ PERIMETER CREDIT FOR EXIST. VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED) NA O CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED) NA O NUMBER OF PLANTS REQUIRED SHADE TREES EVERGREEN TREES SHRUBS NA 6 EVERGREEN TREES SHRUBS O OTHER TREES (2:I SUBSTITUTION) SHRUBS (IO:I SUBSTITUTION) (DESCRIBE PLANT SUBSTITUTIONS CREDITS BELOW IF NEEDED) FREES AND 30 SHRUBS WERE SUBSTITUTED FOR 2 SHADE TREES | LANDSCAPE TYPE | NA NA | |
| (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED) CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED) NA O NUMBER OF PLANTS REQUIRED SHADE TREES SHRUBS NA A B EVERGREEN TREES SHRUBS NA A B EVERGREEN TREES SHRUBS O NA O SHRUBS O O O O O SHRUBS O O O SHRUBS (IO:I SUBSTITUTION) O (DESCRIBE PLANT SUBSTITUTIONS CREDITS BELOW IF NEEDED) TREES AND 30 SHRUBS WERE SUBSTITUTED FOR 2 SHADE TREES | | NA | 286 LF |
| (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED) NA O NUMBER OF PLANTS REQUIRED SHADE TREES EVERGREEN TREES SHRUBS NA 6 EVERGREEN TREES EVERGREEN TREES HRUBS O NA 6 EVERGREEN TREES FIRES O OTHER TREES (2:I SUBSTITUTION) SHRUBS (IO:I SUBSTITUTION) (DESCRIBE PLANT SUBSTITUTIONS CREDITS BELOW IF NEEDED) FREES AND 30 SHRUBS WERE SUBSTITUTED FOR 2 SHADE TREES | (YES, NO, LINEAR FEET) | NA | 0 |
| SHADE TREES EVERGREEN TREES SHRUBS NA B EVERGREEN TREES SHRUBS O NA B C C NA B C C NA B C C C C C C C C C C C C | (YES, NO, LINEAR FEET) | NA NA | 0 |
| SHADE TREES EVERGREEN TREES SHRUBS OTHER TREES (2:I SUBSTITUTION) SHRUBS (IO:I SUBSTITUTION) (DESCRIBE PLANT SUBSTITUTIONS CREDITS BELOW IF NEEDED) TREES AND 30 SHRUBS WERE SUBSTITUTED FOR 2 SHADE TREES | SHADE TREES EVERGREEN TREES | NA | 15 |
| | SHADE TREES EVERGREEN TREES SHRUBS OTHER TREES (2:1 SUBSTITUTION) | NA NA | II O 6 30 6 ORNAMENTAL TREES AND 30 SHRUBS WERE SUBSTITUTED FOR 2 SHADE TREES |

| | SYM SCIENTIFIC / COMMON NAME | SIZE | ROOT | COMMENT |
|------------------------------------|--|---------------------------------------|------------|--------------------------------------|
|)E(| CIDUOUS TREES | · · · · · · · · · · · · · · · · · · · | | |
| 6 | AR ACER RUBRUM 'OCTOBER GLORY' / OCTOBER GLORY RED MAPLE | 2.5"-3" DIA | B≰B | |
| 6 | PA PLATANUS X ACERIFOLIA 'BLOODGOOD' / BLOODGOOD LONDON PLANE TREE | 2.5"-3" DIA | B≰B | MATCHED SPECIMENS |
| ORI | VAMENTAL TREES | | | |
| 6 | CC CERCIS CANADENSIS / EASTERN REDBUD | 2" DIA | B≰B | |
| EVE | | | | <u> </u> |
| 9 | IO ILEX OPACA / AMERICAN HOLLY | 6'-7' HT | B≰B | FULL TO GROUND |
| 2 | IA ILEX ATTENUATA 'FOSTERS' / FOSTERS HOLLY | 6'-8' HT | B≰B | FULL TO GROUND, I MALE PER 3 FEMALES |
| SHF | NBS | | | |
| 21 | AG ABELIA GRANDIFLORA 'LITTLE RICHARD' / LITTLE RICHARD GLOSSY ABELIA | 12"-15" HT | #3 CONT | |
| <u>4 · </u> | PL PRUNUS LAURICERASIS 'SCHIPKAENSIS' / SCHIPKAENSIS CHERRY LAUREL | 30"-36" HT | B≰B | |
| | · - ··································· | | | |
| <u> </u> | RATIS PLANTING (NO BONDING REQUIRED) | | | |
| <u> </u> | RATIS PLANTING (NO BONDING REQUIRED) SYM SCIENTIFIC / COMMON NAME | | | |
| SF | | | | |
| STY DEC | SYM SCIENTIFIC / COMMON NAME | 2.5"-3" DIA | B≰B | |
| STY DEC 4 | SYM SCIENTIFIC / COMMON NAME | 2.5"-3" DIA | B¢B | |
| STY DEC 4 | SYM SCIENTIFIC / COMMON NAME CIDUOUS TREES BL BETULA LENTA / SWEET BIRCH | 2.5"-3" DIA 6'-7' HT | B¢B B¢B | MULTI-STEM, 3 STEM MINIMUM |
| OF A OF S | SYM SCIENTIFIC / COMMON NAME CIDUOUS TREES BL BETULA LENTA / SWEET BIRCH VAMENTAL TREES | | | MULTI-STEM, 3 STEM MINIMUM |
| 2TY 2E 4 2RV 6 3HR | SYM SCIENTIFIC / COMMON NAME CIDUOUS TREES BL BETULA LENTA / SWEET BIRCH NAMENTAL TREES LI LAGERSTROEMIA INDICA X NATCHEZ / NATCHEZ CRAPEMYRTLE RUBS | | | MULTI-STEM, 3 STEM MINIMUM |
| 2TY 2EC 4 2RI 6 3HR | SYM SCIENTIFIC / COMMON NAME CIDUOUS TREES BL BETULA LENTA / SWEET BIRCH NAMENTAL TREES LI LAGERSTROEMIA INDICA X NATCHEZ / NATCHEZ CRAPEMYRTLE RUBS | 6'-7' HT 30"-36" HT | B≰B | MULTI-STEM, 3 STEM MINIMUM |
| ORI 6 SHR 25 | SYM SCIENTIFIC / COMMON NAME CIDUOUS TREES BL BETULA LENTA / SWEET BIRCH VAMENTAL TREES LI LAGERSTROEMIA INDICA X NATCHEZ / NATCHEZ CRAPEMYRTLE RUBS AG ABELIA GRANDIFLORA 'LITTLE RICHARD' / LITTLE RICHARD GLOSSY ABELIA | 6'-7' HT 30"-36" HT | B#B B#B | MULTI-STEM, 3 STEM MINIMUM |

I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION PLAN, FOR SEDIMENT AND EROSION CONTROL AND CONTROL REPRESENTS A PRACTICAL AND WORKABLE THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE THE CONSTRUCTION PROJECT WILL HAVE A ISITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE

CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD_COUNTY SOIL CONSERVATION DISTRICT.

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS

BY THE DEVELOPER:

Stenn P. Llick 1/6/09 12. DENNISP. DIENL PARISH CORP. OT FRANCIS OF ASSIST. HOWARD COXITY ROMAN CATHOLIC CONFEGATION, INC.

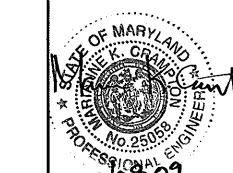
HOWARD SOIL CONSERVATION DISTRICT. Mann K Cunt 1.9.09

FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT.

Densis P. Weekl DATE 16/09

DEVELOPER/BUILDER CERTIFICATE

VWE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE PONE ACCORDING TO THE PLAN GECTION 16,124 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE LANDSCAPE MANUAL. INVEFURTHER CERTIFY THAT UPOLL COMPLETION, ALETTER OF NOTICE OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPAREMENT OF RANNING AND ZONING.



LANDSCAPE NOTES & DETAILS ST. FRANCIS OF ASSISI SUBDIVISION ST. FRANCIS OF ASSISI FAITH FORMATION CENTER ADDITION PHASE 1

ZONED RR-DEO TAX MAP No. 46 GRID 3 ELECTION DISTRICT 05 8300 OLD COLUMBIA ROAD FULTON, MD 20759

> NOT TO SCALE ISSUE DATE: 12-22-08

SHEET 12 OF 14

REVISED PER HOWARD COUNTY COMMENTS, DATED 8/7/08

REVISIONS

ENGINEERS PLANNERS TECHNOLOGIES CONSTRUCTION MANAGERS

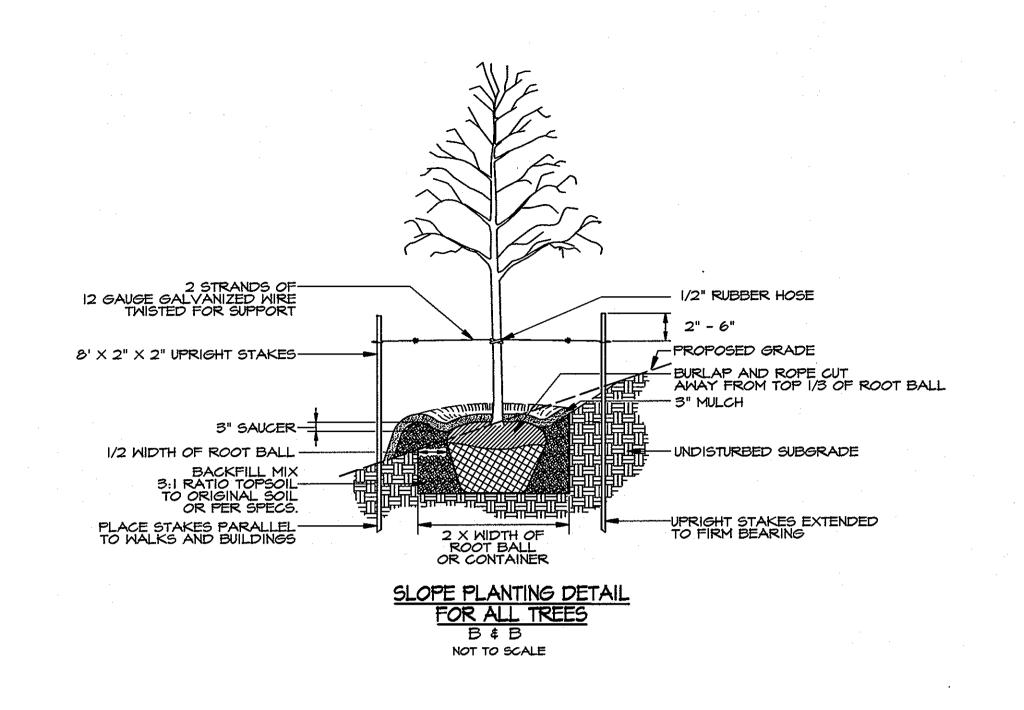
14502 GREENVIEW DRIVE LAUREL, MARYLAND 20708 PHONE: (410) 792-8086 Fax: (410) 792-7419 www.kci.com

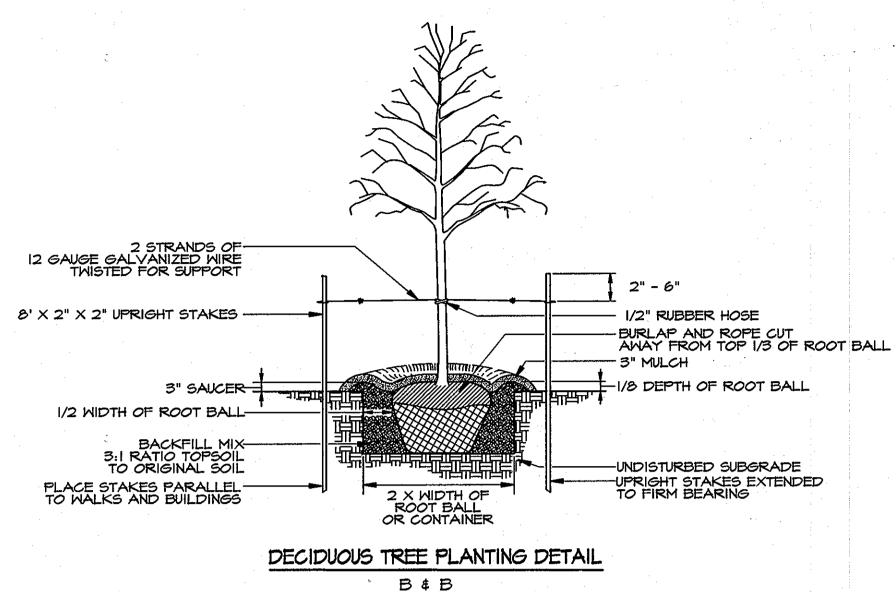
<u>OWNER</u> C/O GALLAGHER ET AL 210 N CHARLES ST. STE 400 BALTIMORE, MD 21201-4093 PHONE: (410) T27-TT02

DEVELOPER MILLIAM H. KEELER THE MOST REVEREND ROMAN CATH ARCH

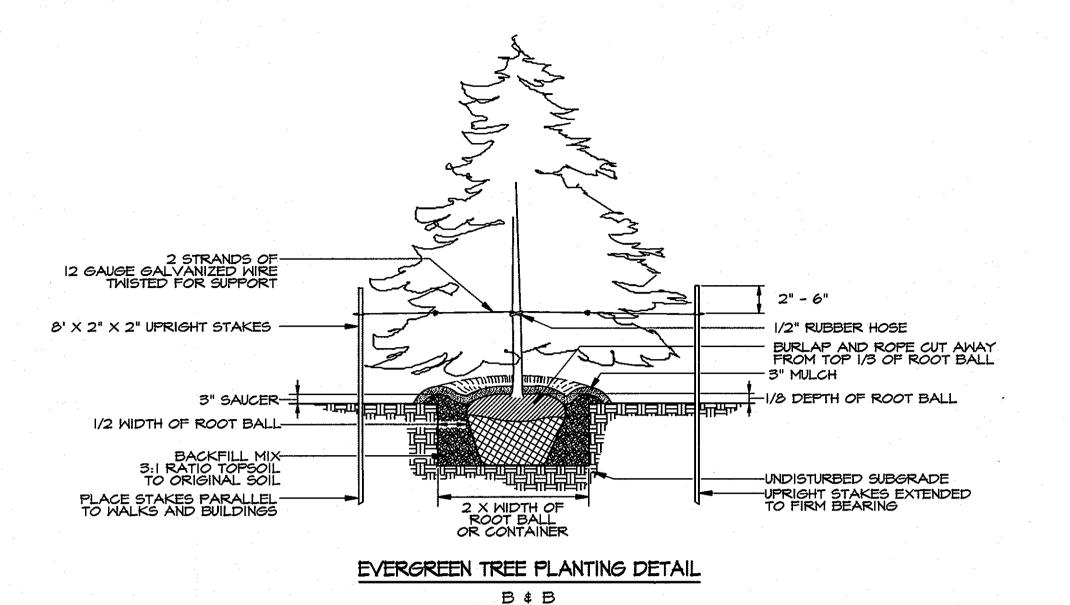
APPROVED:

WILLIAM H. KEELER THE MOST REVEREND ROMAN CATH ARCH C/O GALLAGHER ET AL. 216 N CHARLES ST. STE 400 BALTIMORE, MD 21201-4053

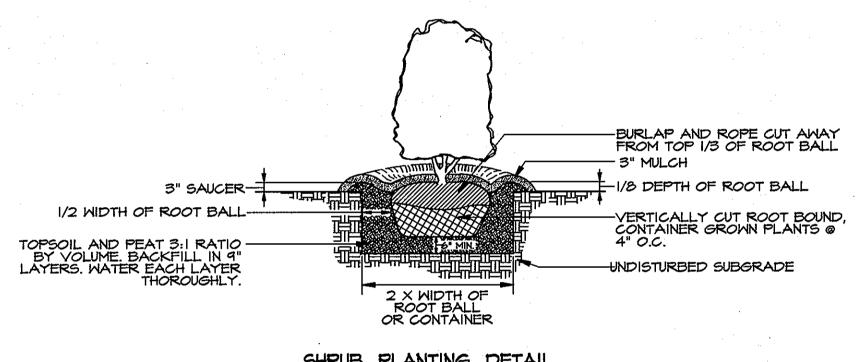




NOT TO SCALE

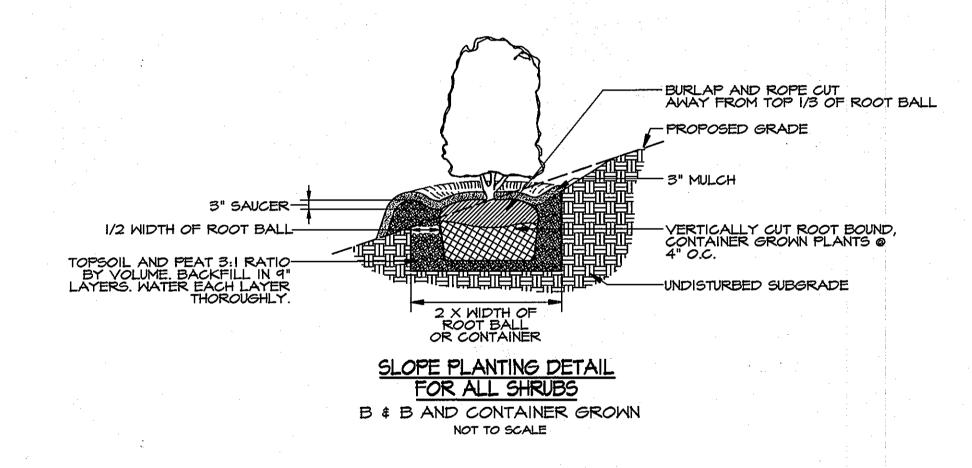


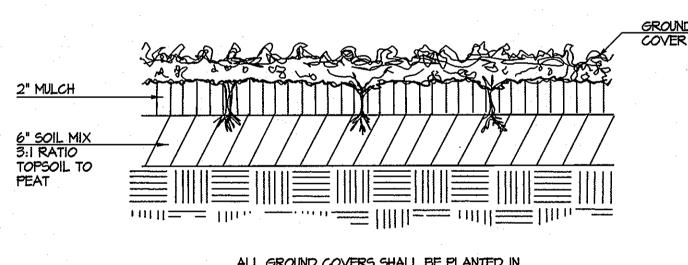
NOT TO SCALE



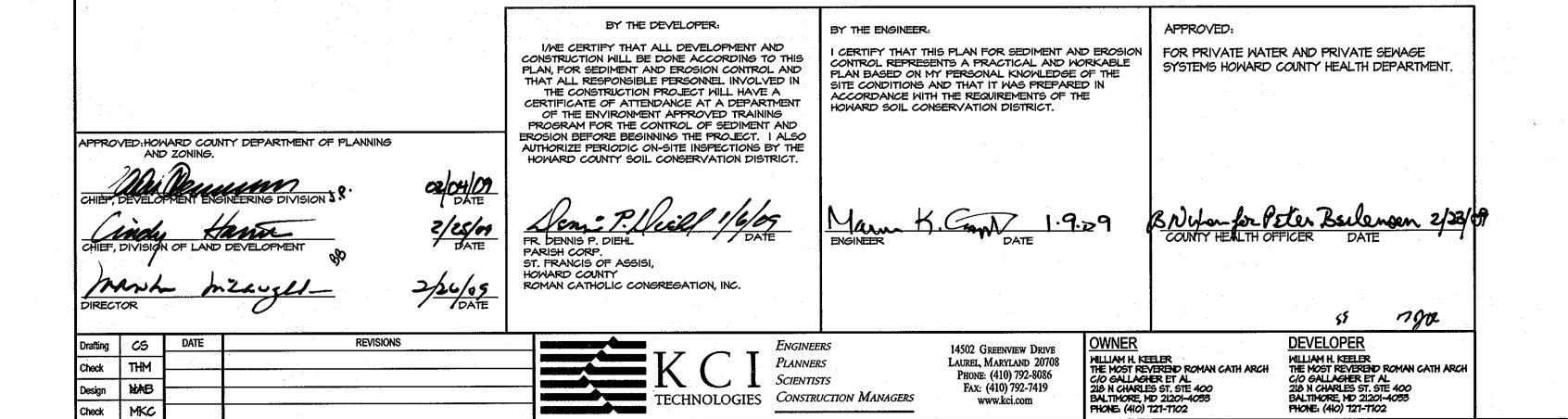
NOT TO SCALE







ALL GROUND COVERS SHALL BE PLANTED IN ACCORDANCE WITH THE PLANTING SCHEDULE GROUND COVER PLANTING DETAIL



www.kci.com

LANDSCAPE NOTES & DETAILS

ST. FRANCIS OF ASSISI SUBDIVISION

ST. FRANCIS OF ASSISI FAITH FORMATION CENTER ADDITION PHASE 1

ZONED RR-DEO
TAX MAP No. 46 GRID 3
ELECTION DISTRICT 05
8300 OLD COLUMBIA ROAD
FULTON, MD 20159

NOT TO SCALE ISSUE DATE: 12-22-08 SHEET 13 OF 14

