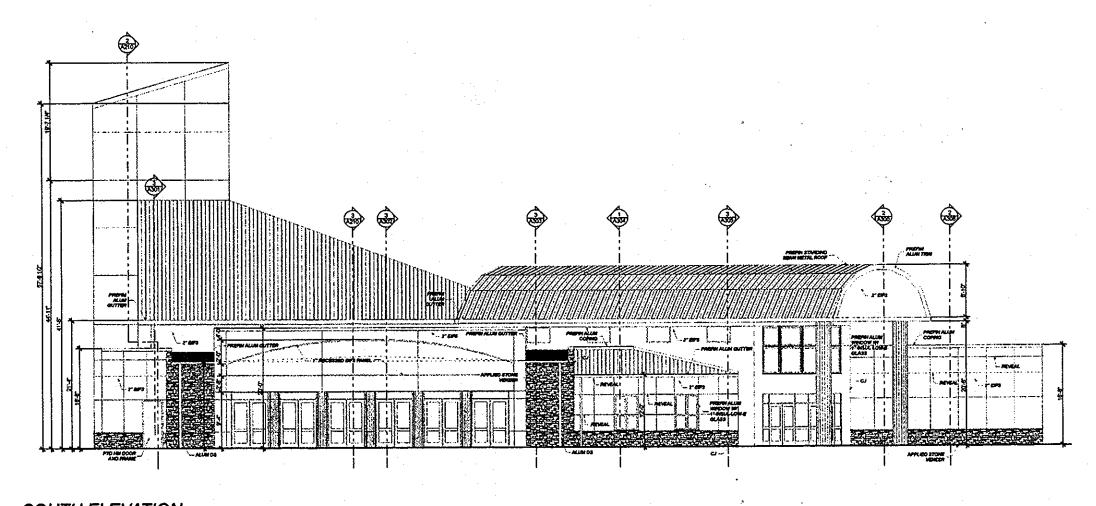
VICTORY TEMPLE - LAUREL

ENVIRONMENTAL CONCEPT PLAN ECP - 11 - 056

HOWARD COUNTY, MARYLAND



SITE ANALYSIS DATA SHEET

	e.	
A. TOTAL SITE AREA:	1.9434 ac.	84,655 S.F.
B. TOTAL WETLANDS AREA:	0.1707 ac.	7,437 S.F.
C. TOTAL FLOODPLAINS AREA:	0.4552 ac.	19,828 S.F.
D. TOTAL FORESTED AREA:	1.5611 ac.	68,000 S.F.
E. TOTAL STEEP SLOPES (≥ 15%):	0.3903 ac.	17,000 S.F.
F. TOTAL STREAM BUFFER AREA:	0.2571 ac.	11,200 S.F.
G. LIMIT OF DISTURBED AREA:	1.3200 ac.	57,500 S.F.
H. PROPOSED USES FOR SITE AND		

I. OPEN SPACE ON SITE:

STRUCTURES:

J. PROPOSED IMPERVIOUS AREA: PERVIOUS PAVEMENT AREA: IMPERVIOUS PAVEMENT AREA: BUILDING AREA:

K. BUILDING COVERAGE OF SITE:

L. PRESENT ZONING DESIGNATION: M. GROSS FLOOR AREA:

N. PROPOSED NUMBER OF SEATS:

O. NUMBER OF PARKING SPACES REQUIRED: NUMBER OF PARKING SPACES

06/25/10.

147/3=49 SPACES (1.0 SPACES PER 3 SEATS)

CE-CLI. CORRIDOR EMPLOYMENT DISTRICT -

CONTINUING LIGHT INDUSTRIAL OVERLAY DISTRICT

17,760 (1st FLR) + 1,476 (2nd FLR) = 19,236 S.F. (TWO STORY)

CHURCH, PERMITTED BY RIGHT

0.0955 ac. = 4.158 S.F.

0.4954 ac. = 21,582 S.F.

0.4077 ac. = 17,760 S.F.

0.9448 ac. = 41,155 S.F. (48.6%)

0.4077 ac. = 17,760 S.F. (21.0%)

0.9986 ac. = 43,500 S.F., INCLUDING

PER ZONING REGULATION SECTION 127.2.B.22.

49 SPACES (ON SITE), INCLUDING 2 H/C SPACES PROVIDED: P. APPLICABLE DPZ FILE REFERENCES:

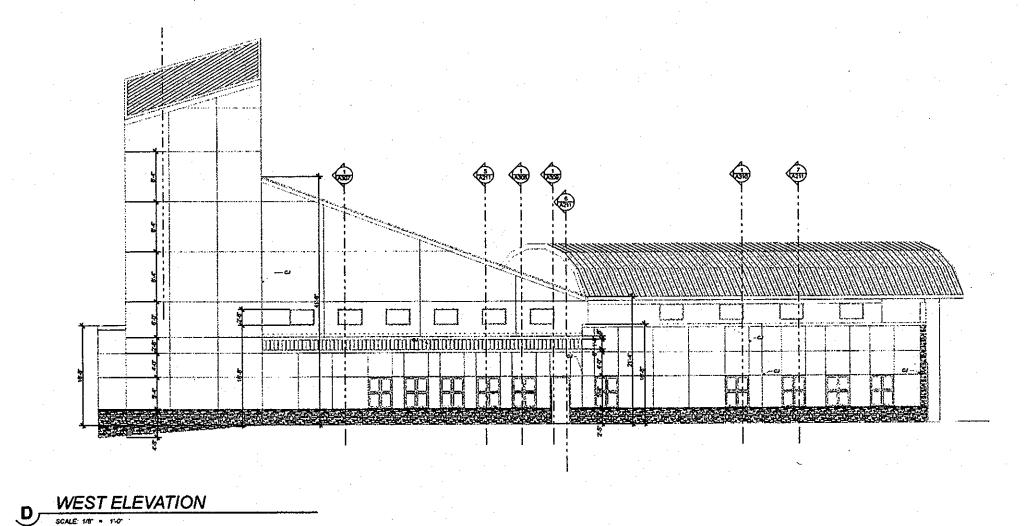
F-98-182: SECTION ONE, MAIER INDUSTRIAL PARK, PARCELS 8-5 & B-6. A RESUBDIVISION OF PARCEL B-4, PLAT #7620. APPROVED 02/03/00. F-02-010: SUBDIVISION PLAT, A.C. MILLER PROPERTY PARCELS A & B. A SUBDIVISION OF A.C. MILLER PROPERTY, PLATS #16329 THROUGH 16332. RECORDED 11/20/03.

EMPLOYMENT BY THE HOWARD COUNTY COUNCIL, (d. 02/04/04). SDP-07-022: A.C. MILLER PROPERTY, PARCEL A & MAIER INDUSTRIAL PARK, SECTION 1, PARCEL B-6 (SINGH PROPERTY), PROPOSED FLEX SPACE BUILDING, PLAN DETERMINED TO BE TECHNICALLY

PROPERTY WAS SUBJECT TO LEGISLATIVE REZONING FROM M-2 LIGHT INDUSTRIAL TO CE-CORRIDOR

DAP 2010-05-26: DPZ DIRECTOR'S ENDORSEMENT OF DAP RECOMMENDATIONS HAS BEEN RECEIVED

COMPLETE 07/18/07. WP-08-065: REQUEST TO WAIVE 16.156(i), TO REACTIVATE SDP-07-022, AND GRANT A 180 DAY EXTENSION TO SUBMIT SDP-07-022 AS A "MAJOR REVISION BY APPLICANT" FOR A PROPOSED RELIGIOUS FACILITY. WAIVER REQUEST APPROVED FEBRUARY 28, 2008. SUBSEQUENT DEADLINE HAD BEEN MISSED.

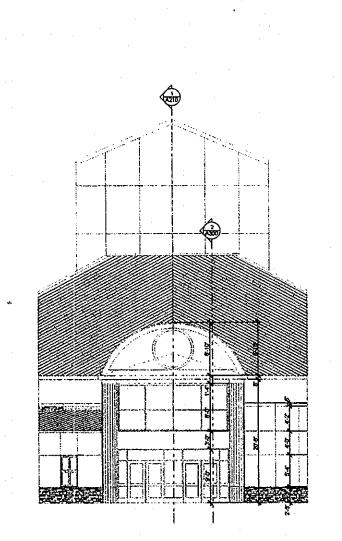


LIST OF DRAWINGS

COVER SHEET 2 OF 6 EXISTING CONDITIONS PLAN

3 OF 6 CONCEPT SITE DEVELOPMENT PLAN CONCEPT SEDIMENT CONTROL PLAN 4 OF 6

CONCEPT SEDIMENT CONTROL DETAILS 5 OF 6 CONCEPT SWM ESD PLAN 6 OF 6



ENTRANCE ELEVATION

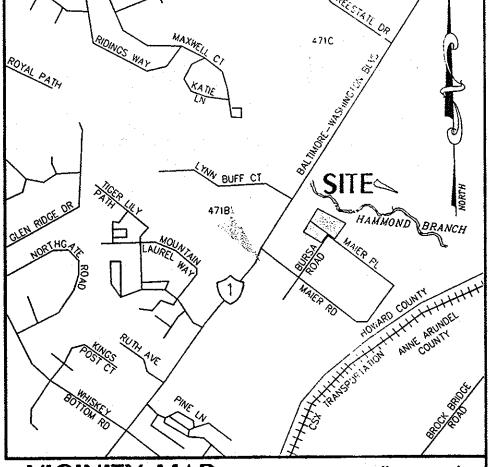
BENCHMARKS

<u>HOWARD CO. HUB NO. 471C, EL. 189.05</u> N 532036.885 E 1362819.058 A BRASS DISC (1" TO 2" BELOW TERRAIN SURFACE) SET ON TOP OF CONCRETE CYLINDRIĆ BASE.

HOWARD CO. HUB NO. 471B, EL. 180.71 N 529701.579 E 1361469.758 3/4" IRON ROD WITH STAMPED ALUMINUM CAP

1. OWNERS:

DEED REFERENCE:



VICINITY MAP

SCALE: 1"=1000' ADC 5169-H1, J1

11264/592 (FLAT #14092)

06-554016

GENERAL NOTES

THE REDEEMED CHRISTIAN CHURCH OF GOD, INC. (VICTORY TEMPLE) LAUREL, MARYLAND 13701 ANNAPOLIS ROAD BOWIE, MD 20720

9100 BURSA ROAD AND 2. PROPERTY LOCATION: 9110 BURSA ROAD

LAUREL, MARYLAND 20723 3. TAX ACCOUNT NO. **ELECTION DISTRICT:**

11090/518 (PLAT #16329) 47, GRID 23, PARCEL 540 1.3089 AC. (57,017 S.F.)

47. GRID 23. PARCEL 848 0.6345 AC. (27,638 S.F.) 4. SITE AREA CALCULATIONS: GROSS AREA: 2.0598 AC.=89,726 S.F.; NET AREA: 1.9434 AC.=84,655 S.F. 5. THE SUBJECT PROPERTY IS ZONED CE-CLI CORRIDOR EMPLOYMENT-CONTINUING LIGHT INDUSTRIAL

6. PUBLIC WATER AND SEWER SERVICE TO THIS PARCEL HAS BEEN APPROVED PER WATER AND SEWER

100-YR FLOODPLAIN OVER PARCEL A, PLAT #16329 IS ALREADY RECORDED IN THE LAND RECORDS WITH PLAT #16330

9. STORMWATER MANAGEMENT: STORMWATER MANAGEMENT FOR THIS SITE IS PRIVATE AND SHALL BE MAINTAINED BY THE OWNER. STORMWATER MANAGEMENT REQUIREMENTS FOR THE SITE ARE PROVIDED BY MICRO-BIORETETION, PERMEABLE PAVEMENTS, RAINWATER HARVESTING, AND PERIMETER SANDFILTERS.

ARE NO SIGNIFICANT VIEWS OR SITE FEATURES THAT MAY AFFECT THE DEVELOPMENT PROPOSAL. THERE ARE NO SIGNIFICANT REGULATED PLANT OR WILD LIFE COMMUNITIES BASED UPON DNR DATA.

11. FOREST CONSERVATION: THIS PROJECT COMPLIES WITH THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE. FOREST CONSERVATION REQUIREMENTS FOR A.C. MILLER PROPERTY, PARCELS A & B WERE ADDRESSED AS PART OF A PREVIOUSLY APPROVED SUBDIVISION PLAT (F-02-10), RECORDED IN THE LAND RECORDS WITH PLAT #16330, AND APPROVED STORM DRAIN AND FOREST CONSERVATION PLAN (F-02-10). MAIER IND. PARK SECT. 1, PARCEL B-6 IS EXEMPT FROM FOREST CONSERVATION REGULATIONS UNDER SECTION 16.1202(b)(1)(i) BECAUSE IT IS LESS THAN 40,000 SQ. FT. IN SIZE.

12. WETLANDS: WETLANDS SHOWN HEREON WERE DELINEATED BY KCW ENGINEERING TECHNOLOGIES, INC. AND VERIFIED BY HOWARD SOIL CONSERVATION DISTRICT SEPT. 14, 2001 AS PART OF A PREVIOUSLY APPROVED SUBDIVISION PLAT OF A.C. MILLER PROPERTY, PARCELS A & B (F-02-10). WETLANDS HAD BEEN RECORDED IN THE LAND RECORDS WITH PLAT #16332 ON 11/20/03. UPDATED WETLAND DELINEATION PLAN AND REPORT DATED JUNE 28, 2011 PREPARED BY HUMAN AND ROHDE, INC. ARE SUBMITTED HEREWITH.

13. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE WETLANDS, STREAM(S) OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100-YEAR FLOODPLAIN.

14. COMPLIANCE WITH THE ROUTE 1 MANUAL: THIS PROJECT HAS BEEN DESIGNED IN ACCORDANCE WITH ROUTE 1 MANUAL REQUIREMENTS FOR NEW DEVELOPMENTS LOCATED IN THE CE-CLI ZONE, THIS ENVIRONMENTAL CONCEPT PLAN SUBMISSION PROVIDES ALL APPLICABLE STREETSCAPE, SITE AND BUILDING DESIGNS RESPONDING TO THE ROUTE 1 MANUAL'S REQUIREMENTS AND RECOMMENDATIONS. DPZ DIRECTOR'S ENDORSEMENT OF DAP RECOMMENDATIONS HAS BEEN RECEIVED 06/25/10.

15. "APPROVAL OF THIS ECP DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION PLAN/PLAT AND/OR SITE DEVELOPMENT PLAN AND/OR RED-LINE REVISION PLAN. REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE HOWARD COUNTY ZONING REGULATIONS SHALL OCCUR AT THE SUBDIVISION PLAN/PLAT AND/OR SITE DEVELOPMENT PLAN STAGES AND/OR RED-LINE REVISION PROCESS. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED REVIEW COMMENTS (INCLUDING COMMENTS THAT MAY ALTER THE OVERALL SITE DESIGN) AS THIS PROJECT PROGRESSES THROUGH

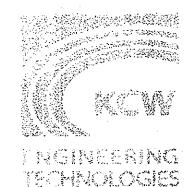
16. THE DESIGN NARRATIVE CAN BE FOUND ON CONCEPT SWM ESD PLAN, SHEET 6 OF 6, AND IN STORMWATER MANAGEMENT

17. EXISTING 75' PRIVATE BGE EASEMENT FOR TRIMMING AND CUTTING TREES: PER DEED RECORDED IN LIBER 626, FOLIO 590 AND THE INQUISITION RECORDED IN LIBER 623, FOLIO 174 BGE HAS THE RIGHT TO TRIM, CUT DOWN, AND REMOVE TREES ON PARCEL OF LAND DESCRIBED AS PARCEL No. 2 AND AS SHOWN ON THESE PLANS. THERE ARE NO OTHER RIGHTS PRESCRIBED TO BGE ON PARCEL No. 2 PER DOCUMENTS MENTIONED HEREIN. BGE'S APPROVAL FOR PROPOSED DEVELOPMENT ON PARCEL No. 2 IS NOT REQUIRED.

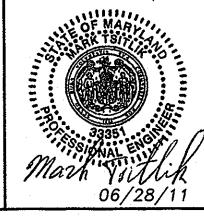
18. EXISTING 50' STRUCTURE AND USE SETBACKS PER PLATS #14092 AND # 16329: THESE SETBACKS WILL BE ELIMINATED DURING SITE DEVELOPMENT PLAN VIA NEW PLAT.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development



KCW Engineering Technologies, Inc. 810 Landmark Drive, Suite 215 Glen Burnie, MD 21061 Phone: 410.768.7700 Fax: 410.768.0200 www.kcw-et.com



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. 33351. Expiration Date 06-30-2012.

OWNER:

THE REDEEMED CHRISTIAN CHURCH OF GOD, INC. (VICTORY TEMPLE) LAUREL, MARYLAND 13701 ANNAPOLIS ROAD BOWIE, MD 20720

Attn: Bayo Adeyokunnu, Pastor Tele: (301) 352-0707 Fax: (301) 352-3339

OWNER'S REPRESENTATIVE/ DEVELOPER

TLI DESIGNGROUP INC. 3308 DORCHESTER ROAD BALTIMORE, MD 21215

Attn: Taiwo Iluyomade, President Toll Free/Fax/Voice mail: 1-866) 616-1497

Mobile: (443) 831-6703

KCW J.O.: 2080018 VICTORY TEMPLE - LAUREL SCALE: AS SHOWN DESIGNED: MT

ECP-11-056

TAX MAP 47

PARCEL 540 (PAR. A, PLAT #16329)

PARCEL 848 (PAR. 8-6, PLAT #14092)

DRAWN: MT

CHECKED: KCA

DATE: JUNE 28, 2011

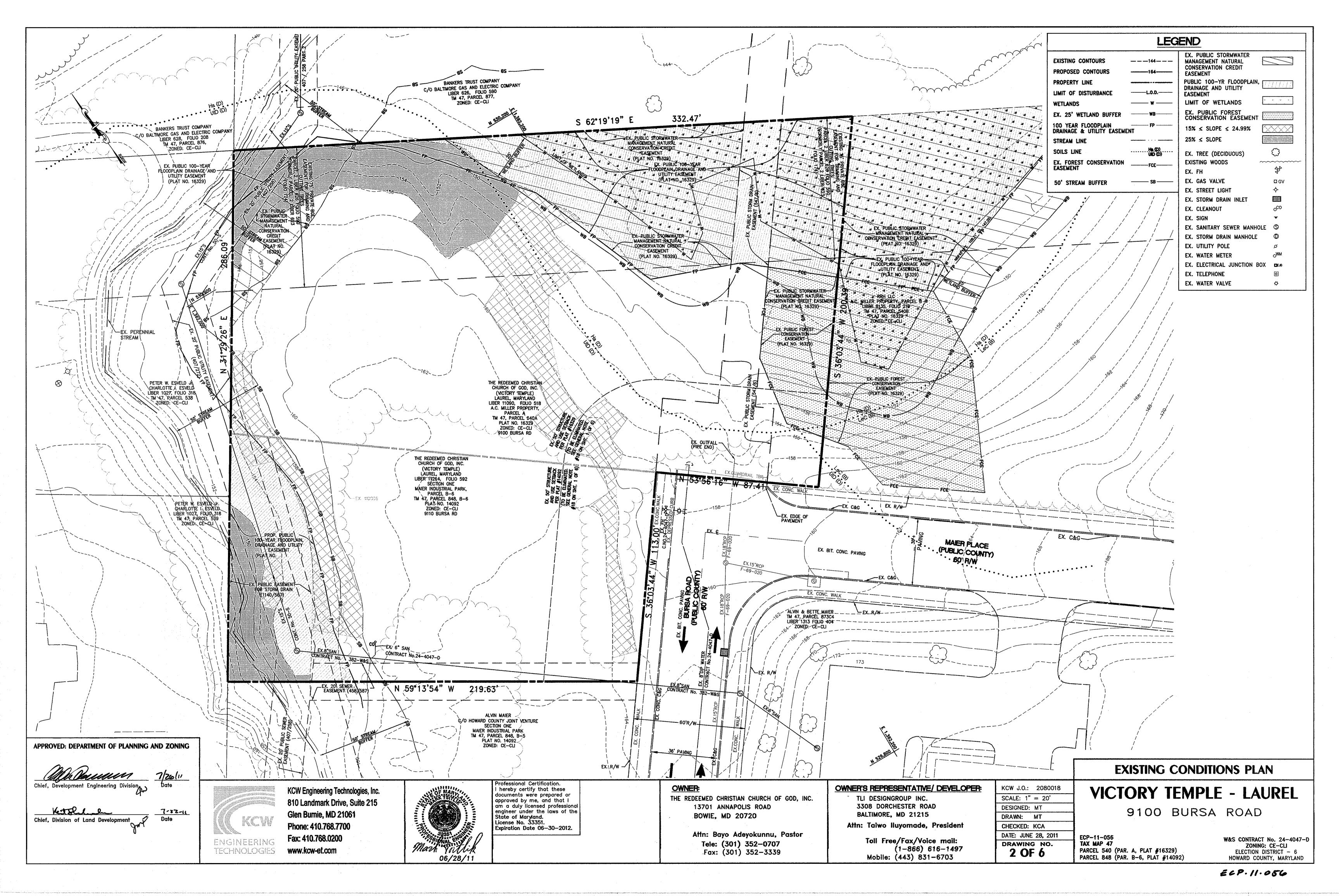
DRAWING NO.

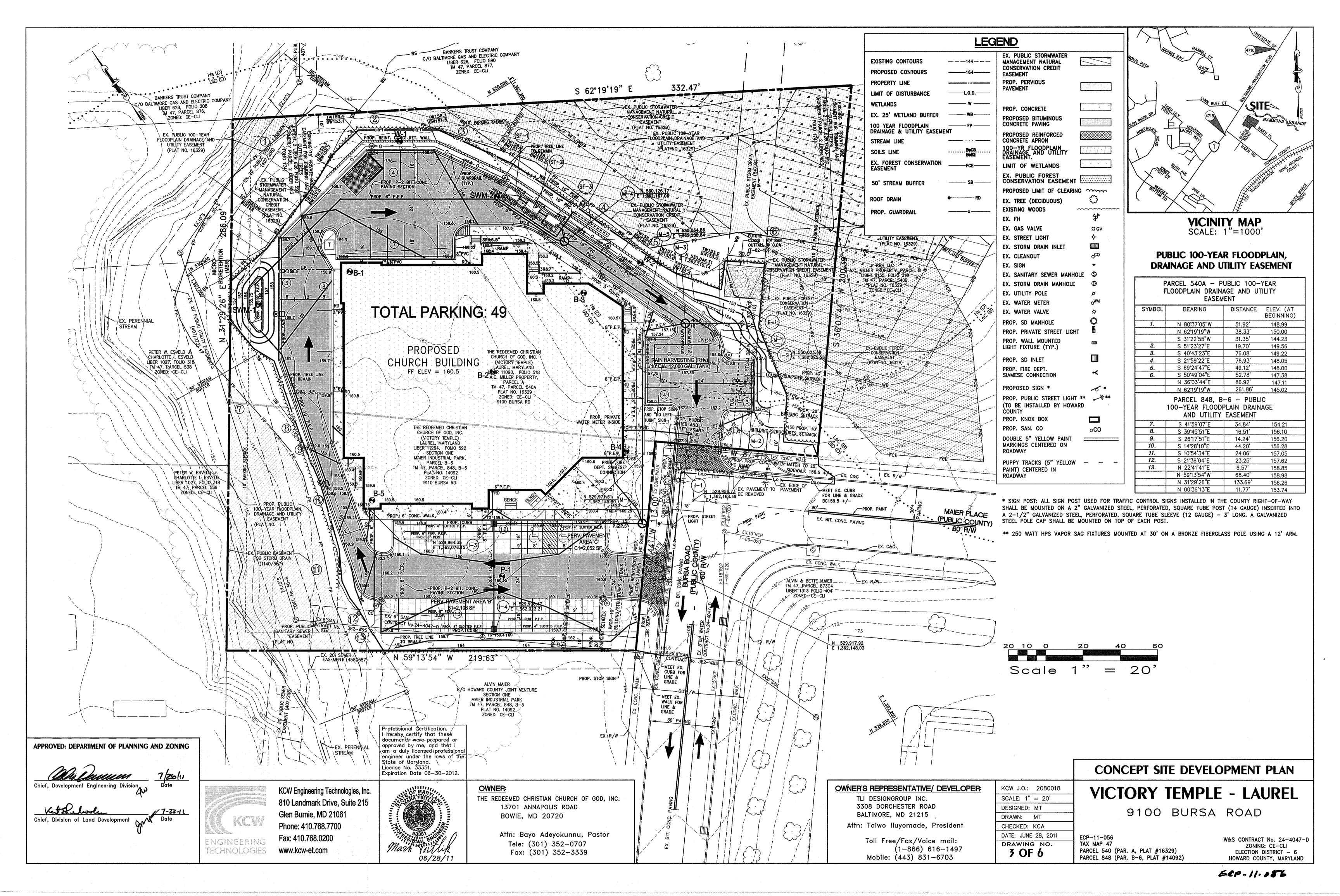
1 OF 6

9100 BURSA ROAD

COVER SHEET

W&S CONTRACT No. 24-4047-D ZONING: CE-CLI ELECTION DISTRICT - 6 HOWARD COUNTY, MARYLAND





SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT FROM HOWARD COUNTY. THIS PROJECT MAY NOT BEGIN UNTIL THE RECEIVING PUBLIC STORMDRAIN SYSTEM F-02-010 IS CONSTRUCTED.
- . NOTIFY HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS AT 410-313-1880 AT LEAST 24 HOURS PRIOR TO COMMENCING ANY WORK.
- 3. INSTALL BLAZE ORANGE MESH WHERE REQUIRED. (2 DAYS)
- 4. CLEAR AND GRUB THE SITE FOR SEDIMENT CONTROL. (5 DAYS)
- 5. INSTALL SEDIMENT CONTROL, INCLUDING STABILIZED CONSTRUCTION ENTRANCES, SUPER SILT FENCE, AND SILT (5 DAYS)
- 6. CLEAR AND GRUB THE REMAINING OF THE SITE. BEGIN GRADING SITE. (7 DAYS)
- . INSTALL RETAINING WALL, WHEN PARKING AREA IS AT SUBGRADE INSTALL STORM DRAINS, STORMWATER MANAGEMENT SANDFILTERS. RAINWATER HARVESTING UNDERGROUND CISTERN. BLOCK THE INLET PIPE FOR RAINWATER HARVESTING UNDERGROUND CISTERN DURING SEDIMENT CONTROL PHASE. DO NOT INSTALL FILTER MEDIA AND GEOTEXTILE FABRIC IN SWM SANDFILTERS DURING SEDIMENT CONTROL PHASE. (60 DAYS)
- . INSTALL REMAINING ON-SITE UTILITIES. CONSTRUCT BUILDING WITH ROOF DRAINS. (120 DAYS)
- INSTALL REMAINING SWM FACILITIES: PERVIOUS PAVEMENT AREAS 'B' AND 'C' AND MICRO-BIORETENTION. CARE SHOULD BE TAKEN NOT TO ALLOW ANY SEDIMENT LADEN RUNOFF INTO ANY SWM FACILITIES. INSTALL REMAINING CURB AND GUTTER. (30 DAYS)
- 10. FINE GRADE AND PAVE THE SITE. (5 DAYS)
- 11. UPON STABILIZATION OF ALL DISTURBED AREAS AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL DEVICES AND VEGETATIVELY STABILIZE THE AREA DISTURBED BY THIS PROCESS. (3 DAYS)
- 12. PLACE FILTER MEDIA AND GEOTEXTILE FABRIC IN SWM SANDFILTERS. REMOVE ALL PLUGS FROM STORMDRAIN PIPES USED FOR SEDIMENT CONTROL PHASE. (2 DAYS)

SOIL TYPES TABLE

HA Hatboro-Codorus silt loam, 0-3% slopes

Hatboro component makes up 60% of the map unit. The assigned Kw erodibility factor is .37. This soil is poorly drained. The slowest permeability within 60 inches is slow. Available water capacity is very high and shrink swell potential is low. This soil is occasionally flooded and is frequently ponded. The top of the seasonal high water table is at 3 inches. It is nonirrigated land capability class 5w. This component is a hydric soil. The depth to a restrictive feature is greater than 60 inches.

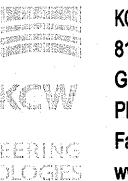
Codorus component makes up 35% of the map unit. The assigned Kw erodibility factor is .37. This soil is moderately well drained. The slowest permeability within 60 inches is moderate. Available water capacity is very high and shrink swell potential is low. This soil is occasionally flooded and is not ponded. The top of the seasonal high water table is at 24 inches. It is nonirrigated land capability class 2w. This component is not a hydric soil.

LEGORE URBAN - 4 to 10 feet depth to bedrock; 20+ feet to water table; slight to moderate limitations for sewage disposal fields and homes with basements depending on slopes; erosion hazard.

LIMIT OF DISTURBANCE

1.32 Ac. / 57,500 S.F.

APPROVED: DEPARTMENT OF PLANNING AND ZONING



C/O BALTIMORE GAS AND ELECTRIC COMPANY

LIBER 628, FOLIO 208 TM 47, PARCEL 876, ZONED: CE-CLI

EX. PUBLIC 100-YEAR

UTILITY EASEMENT (PLAT NO. 16329)

CHARLOTTE J. ESVELD

LIBER 1027, FOLIO 318 TM 47, RARCEL 538

ZONED: CE-CLI

PETER W. ESVELD Jr. CHARLOTTE I. ESVELD LIBER 1027, FOLIO 318 TM 47, PARCEL 539

ZONED: CE-CLI

RIM=155,531

CL INV. = 746. 70

EX. PERENNIAL

STREAM\

-MANAGEMENT -

NATURAL CONSERVATION

PROP. PUBLIC 100 YEAR FLOODPLAIN, DRAINAGE AND UTILITY

PUBLIC BASEMENT

FOR STORM DRAIN!

SUPER\SILT FENCE SEE DETAIL SHEET

SANITARY SEWER EASEMENT

EX PERENNIAL STREAM

() EASEMENT

KCW Engineering Technologies, Inc. 810 Landmark Drive, Suite 215 Glen Burnie, MD 21061 Phone: 410.768.7700 Fax: 410.768.0200 www.kcw-et.com



INITIAL LOCATION ABOVE

FINAL LOCATION BELOV

MICRO-BIORETENTION

THIS PIPE DURING

CHURCH BUILDING

FF ELEV = 160.5

THE REDEEMED CHRISTIAN

CHURCH OF GOD, INC.

(VICTORY TEMPLE) LAUREL MARYLAND LIBER 17264. FOLIO 592

SECTION ONE
MAIER INDUSTRIAL PARK,
PARCEL B-6
TM 47, PARCEL 848, B-6

PLAT NO. 14092

ZONED: CE-CLI 9110 BURSA RD

TEMPORARY STOCKPILE AREA

END OF PROP. SUPER SILT FENCE, BEGINNING OF SILT FENCE SEE DETAIL SHEET

PROP. 6' CONC. WALK. 160.4X

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. 33351. Expiration Date 06-30-2012.

C/O BALTIMORE GAS AND ELECTRIC COMPAN)

LIBER 626, FOLIO 590 TM 47, PARCEL 877,

ZONED: CE-CLI

THE REDEEMED CHRISTIAN

CHURCH OF GOD, INC.

(VICTORY TEMPLE)

LAUREL MARYLAND

LIBER 11090, FOLIO 518

A.C. MILLER PROPERTY,

TM 47. PARCEL 540A

PLAT NO. 16329 ZONEO: CE-CLI

AREA 'C C1=2,052 SI

ALVIN MAIER

G/O HOWARD COUNTY JOINT VENTURE

SECTION ONE

MAIER INDUSTRIAL PARK TM 47, PARCEL 848, 8-5 PLAT NO. 14092

ZONED: CE-CLI

THIS PIPE DURING CONSTRUCTION

STABILIZED CONSTRUCTION ENTRANCE SEE DETAIL SHEET

S 62°19'19"

CONSERVATION-CREDIT

EX. PUBLIC TOB-YEAR

UTILITY EASEMENT
(PLAT-NO., 16329)

OWNER:

EX.\R/W

PROPERTY LINE, LOD AND BLAZE ORANGE MESH ARE RUNNING HERE SIMULTANEOUSLY AND

SHOWN SEPARATELY FOR CLARITY

THE REDEEMED CHRISTIAN CHURCH OF GOD, INC. 13701 ANNAPOLIS ROAD BOWIE, MD 20720

> Attn: Bayo Adeyokunnu, Pastor Tele: (301) 352-0707 Fax: (301) 352-3339

OWNER'S REPRESENTATIVE/ DEVELOPER:

TLI DESIGNGROUP INC. 3308 DORCHESTER ROAD BALTIMORE, MD 21215

Attn: Taiwo Iluyomade, President

Toll Free/Fax/Voice mail: (1-866) 616-1497 Mobile: (443) 831-6703

KCW J.O.: 2080018 SCALE: 1" = 20' DESIGNED: MT DRAWN: MT CHECKED: KCA DATE: JUNE 28, 2011

DRAWING NO.

4 OF 6

MAIER PLACE

(PUBLIC COUNTY)

W/R '08 ·

CONSERVATION CREDIT/ EASEMENT

FLOODPLAIN DRAINAGE AND

JUTILITY EASEMENT

O LIBER 8135, FOLIO 218

TM 47, PARCEL 5408

ZONED: CEACLI

EASEMENT

-- (PLAT-NO: 16329) -:

END OF PROP. SUPER

SILT FENCE SEE-DETAIL SHEET

−EX. C&G

EX. BIT. CONC. PAVING

EX. CONC. WALK

ALVIN & BETTE MAIER TM 47, PARCEL 873C4

UBER 1313 FOLIO 404 -ZONED: CE-CLI

EX. PUBLIC STORMWATER
MANAGEMENT NATURAL
STREET ASEMENT

EX. EDGE OF

9100 BURSA ROAD

PARCEL 540 (PAR. A, PLAT #16329)
PARCEL 848 (PAR. B-6, PLAT #14092)

PROPOSED CONTOURS PROPERTY LINE LIMIT OF DISTURBANCE **BLAZE ORANGE MESH** _____ вом ____ WETLANDS 25' WETLAND BUFFER 100 YEAR FLOODPLAIN DRAINAGE AND UTILITY EASEMENT SOILS LINE SILT FENCE SUPER SILT FENCE STREAM BUFFER FOREST CONSERVATION EASEMENT FCE ---- $0\% \le SLOPE \le 14.99\%$ 15% < SLOPE < 24.99% 25% < SLOPE .~~~~ EXISTING WOODS mm PROPOSED LIMIT OF CLEARING AT GRADE INLET PROTECTION **CURB INLET PROTECTION** STABILIZED CONSTRUCTION ENTRANCE W/MOUNTABLE BERM MOUNTABLE BERM SUMP PIT SP 🛛

SEDIMENT CONTROL LEGEND

SCALE: 1"=1000'

VICINITY MAP

EXISTING CONTOURS

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

ENGINEER'S CERTIFICATE:

"I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL



06/28/11

4-29-11

DEVELOPER'S CERTIFICATE:

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

Margaret Adeyokunnu (Pate)

VICTORY TEMPLE - LAUREL

CONCEPT SEDIMENT CONTROL PLAN

ECP-11-056 TAX MAP 47 W&S CONTRACT No. 24-4047-D

ECP-11.056

ZONING: CE-CLI

ELECTION DISTRICT - 6

HOWARD COUNTY, MARYLAND

VEGETATIVE STABILIZATION

- i. Install erosion and sediment control structures (either temporary or permanent) such a diversions, grade stabilization structures, berms, waterways, or sediment control basins. Perform all grading operations at right angles to the slope. Final grading and shaping is not usually necessary for temporary seeding.
- iii. Schedule requires soil tests to determine soil amendment composition and application rates for sites having disturbed area over 5 acres.
- B. SOIL AMENDMENTS (Fertilizer and Lime Specifications) Soil test must be performed to determine the exact ratios and application rates for lime and fertilizer on sites having disturbed areas over 5 acres. Soil analysis may be performed by the University of Maryland or a recognized commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analysis.
- ii. Fertilizers shall be uniform in composition, free flowing and suitable for accurate by approved equipment. Manure may be substituted for fertilizer with prior approval fro to the site fully labeled the Soil Conservation District. Fertilizers shall all be delivered according to applicable State fertilizer to the site fully labeled according to the applicable State fertilizer laws and shall bear the name or trademark and warrantee of the producer.
- iii. Lime materials shall all be ground limestone (hydrated or burnt lime may be substituted) wich contains at least 50% total oxides (calcium oxide plus magnesium oxide). Limestone shall be ground to such fineness that at least 50% will pass thru a #100 and 98-100% will pass thru a #20 mesh sieve. iv. Incorporate lime and fertilizer into the top 3-5" of soil by discing or other suitable means.
- SEEDBED PREPARATION Temporary Seeding a. Seedbed preparation shall consist of loosening soil to a depth of 3" to 5" by means of suitable agricultural or construction such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is mounted on 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 discing or other suitable means.

- 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 than 500 parts per million(ppm).
 3. The soil shall contain less than 40% clay but enough fine grained material (>30% silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception is if Lovegrass or Serecia Lespedeza is to be planted, then a sandy soil (<30% silt plus clay) would be.
 4. Soil shall contain 1.5% minimum organic matter by weight.
 5. Soil 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 Sect. 21 Standards and Specs. for Topsoil.
 b. Areas previously graded in conformance with the drawings shall be maintained in a true.
- 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.
- 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 discing or other suitable means. Lawn areas should be raked to smooth the surface, remove large objects like stones and branches, and ready the area for seed application. Where site conditions will not permit normal seedbed preparation, loosen surface soil by dragging with a heavy chain chain or other equipment to roughen surface. Steep slopes (steeper than 3:1) should be tracked by a dozer leaving the soil in a irregular condition with ridges running parallel to the running contour of the slope. The top 1"-3" of soil should be loose and

riable. Seedbed loosening may not be necessary on newly disturbed areas.

- D. SEED SPECIFICATIONS i. 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 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 andrate 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 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 deg. F. can weaken bacteria and make the inoculant less effective.
- 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 rate amounts will not exceed the following: nitrogen: maximum of 100 lbs/acre total of soluble nitrogen P205 (phosphorous): 200 lbs/acre; and K20 (potassium): 200 lbs/acre.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division

VEGETATIVE STABILIZATION (continued)

- b. Lime; use only ground agricultural limestone, (up to 3 tons / 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 lime.
- Seed and fertilizer shall be mixed on site and seeding shall be done immediately and without interruption. ii. 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 be rolled with a weighted roller to provide good seed to seed to soil contact. Where practical, seed should be applied in two directions perpendicular to each direction Apply half the seeding rate in each direction.
- iii. Drill or Cultipacker Seeding: Mechanized seeders 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 after planting. b. Where practical, seed should be applied in two directions perpendicular to each other Apply half the seeding rate in each direction.
- MULCH SPECIFICATIONS (In Order of Preference) Straw shall consist of thoroughly threshed wheat, rye 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 MD State Law. Wood Cellulose Fiber Mulch (WCFM)
- a. WCFM shall consist of specially prepares 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 that provide an appropriate color to facilitate visual inspection of the uniformly spread slurry.
- . WCFM, including dye, 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 homogeneous 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 grass seedlings.
- . WCFM material shall contain no elements or compounds at concentration levels that will be phyto-toxic
- f. WCFM must conform to the following physical requirements: fiber length to approximately 10 mm., diameter approx. 1 mm., pH range of 4.0 to 8.5, ash content of 1.6% max. and water holding capacity of 90% min. Note: Only sterile straw mulch should be used in areas where one species of grass is desired. MULCHING SEEDED AREAS
 - Mulch shall be applied to all seeded areas immediately after seeding. 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 returns and seeding can be performed in accordance with these specifications.
- ii. When straw mulch is used, it shall be spread over all seeded areas at the rate of 2 tons/acre. 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/acre. 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.
- 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:
- A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of 2". 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, if possible.
- Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied a net dry weight of 750 lbs / acre. The wood cellulose fiber shall be mixed with water the mixture shall contain a maximum of 50 lbs. shall contain a of wood cellulose fiber per 100 gallons of water. 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 the area should appear uniform after binder application. Synthetic binders, such as Acrylic DLR (Agro-Tack), DCA-70, Petroset, Terra Tax II, Terra Tack AR, or other approved equal, may be used at rates recommended by manufacturer to anchor mulch.

PERMANENT SEEDING NOTES

REFERENCE: "1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL". PAGE G-20-1 THRU G-20-5. APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT, LONGED-LIVED VEGETATIVE COVER IS NEEDED. SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED. SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES: 1. PREFERRED: APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SF) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SF) BEFORE SÉEDING. HÁRROW OR DISC INTOUPPER THREE INCHES OF SOIL. AT TIME OF SEEDING APPLY 400 LBS PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS/1000 SF) 2. ACCEPTABLE: APPLY 2 TONS PER ACRE (92 LBS/1000 SF) DOLOMITIC LIMESTONE AND 1000 LBS PER ACRE (23 LBS/1000 SQ. FT.) OF 10-10-10 FERTILIZER BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 600 LB. PER AC. (1.4 LB. PER 1000 S.F.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU LB PER 1000 S.F.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THROUGH FEBRUARY 28, PROTECT SITE BY: OPTION (1) 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OPTION (2) USE SOD. OPTION (3) SEED WITH 60 LBS/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW. MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SF) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL PER ACRE (5 GAL/1000 SF) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER. USE 348 GAL PER ACRE (8 GAL/1000 SF) FOR ANCHORING. MAINTENANCE: INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

SUMP PIT SUCTION LINE TO PUMP ----STANDPIPE SHOULD EXTEND AT LEAST 12" TO 18" ABOVE THE TOP OF THE PIT OR ABOVE STANDING WATER. FXISTING GROUND LINE IN 1/2" HARDWARE CLOTH AND GEOTEXTILE --- SIDE SLOPE (VARIES) 12" - 36" DIAMETER PERFORATED CORREGATED METAL OR PVC PIPE WATERTIGHT CAP OR CLEAN GRAVEL OR AASHTO M-43 # 57 AGGREGATE FILL STANDPIPE NOTE: This measure must be located CROSS SECTION STANDARD SYMBOL where it will be readily accessible to allow for its practical usage.

1. Pit dimensions are variable, with the minimum diameter being 2 times the 2. The standpipe should be constructed by perforating a 12" to 24" diameter corrugated or PVC pipe. Then wrapping with 1/2" hardware

cloth and Geotextile Class E. The perforations shall be $1/2" \times 6"$ slits or 1" diameter holes. 3. A base of filter material consisting of clean gravel or #57 stone should be placed in the pit to a depth of 12". After installing the standpipe, the pit surrounding the standpipe should then be backfilled with

the same filter material. 4. The standpipe should extend 12" to 18" above the lip of the pit or the riser crest elevation (basin dewatering only) and the filter material should extend 3" minimum above the anticipated standing water elevation.

KCW Engineering Technologies, Inc.

TECHNOLOGIA

810 Landmark Drive. Suite 215 Glen Burnie, MD 21061 Phone: 410.768.7700 Fax: 410.768.0200 www.kcw-et.com

06/28/11

rofessional Certification hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professiona engineer under the laws of the State of Maryland. License No. 33351. Expiration Date 06-30-2012.

SOD ESTABLISHMENT

- To provide quick cover on disturbed greas (2:1 grade or flatter).
- Class of turfgrass sod shall be Maryland or Virginia State certified or approved.
 Sod labels shall be made available to the job foreman and the Inspector. b. Sod shall be machine cut at a uniform soil thickness of 3/4", plus or minus 1/4" at the time of cutting. Measurement for thickness shall exclude top growth and thatch. Individual pieces of sod shall be cut to the suppliers width and length. Max. allowable deviation from standard widths and lengths shall be 5%. Broken pads and torn or uneven ends will not be acceptable c. 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
- d. Sod shall not be harvested or transplanted when moisture content (excessively wet or dry) may adversely affect its survival.
- e. 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.
- During period of excessively high temperature or in areas having dry subsoil, the subsoil shall be lightly irrigated immediately prior to laying the sod. 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
- contour and with staggering joints. Sod shall be rolled and tamped, pegged or otherwise secured to prevent slippage on slopes and to ensure solid contact between sod roots and the underlying soil surface.
- d. 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 8 hours.
- SOD MAINTENANCE a. In the absence of adequate rainfall, watering shall be performed daily or as often as necessary during the first week and in sufficient quantities to maintain moist soil to a depth of 4". Watering should be done during the
- heat of the day to prevent wilting. After the first week, sod watering is required as necessary to maintain
- rooted. No more than 1/3 of the grass leaf shall be removed by the initial cutting or subsequent cuttings. Grass height shall be maintained between 2" and 3", unless otherwise specified.

COMPACTED FILL

- Embankment shall be constructed of approved materials from the excavation, or from other sources. The material shall be free of organic materials, trash, muck, roots, frost and other deterious substances.
- Before depositing fills, the ground surface shall be cleared of all refuse, brush, grass, roots, ice and frozen material. All organic matter and otherwise unsuitable soils shall be removed from the surface to be filled. The exposed surface shall be plowed, disced, or scarified to a depth of 6 inches. Soils so scarified, or which have been disturbed by grubbing and stripping operations, shall be compacted to undisturbed soil below by discing, leveling, rolling and compacting at the moisture content and to the density specified below for
- ground on which the fill is to be placed shall be plowed or scarified deeply, or where the slope ratio of the ground is steeper than 5 horizontal to 1 vertical (5:1), the bank shall be stepped or benched, as directed by the Soils Engineer prior to permit placement of the fill in horizontal layers.
- 4. Placing, spreading and compacting fill materials:

 a. The fill material shall be approved by the Soils Engineer and placed in layers which, before compaction, shall not exceed 8 inches. Each layer shall be spread uniformly and evenly, and shall be thoroughly blade mixed during the spreading to insure uniformity of materials in each layer.
 b. After each layer has been placed, mixed and spread evenly, it shall be thoroughly compacted to not less than the percentage of maximum dry density as determined by ASTM D-1577 specified below:

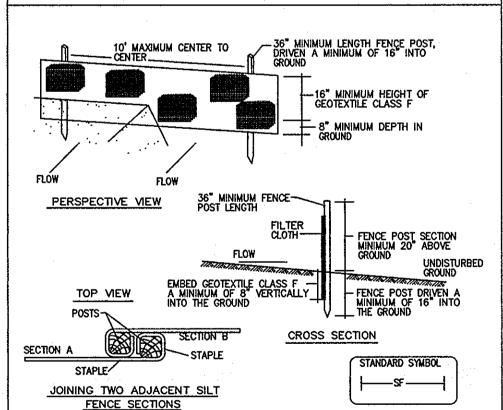
 i. 95% in areas under and within 10 feet of foundations.
 ii. 95% in areas to be paved.
 iii. 92% in areas to be vegetatively stabilized.

 c. The moisture content of the fill shall be as required to attain the degree of compaction specified.
 d. Compaction shall be by approved multiple—wheel pneumatic tired rollers vibratory rollers, or other types of acceptable rollers.
 e. The filling operation shall be continued as specified above until the fill
- The filling operation shall be continued as specified above until the fill has been brought to subgrade shown on the plans.

 The fill shall be constructed in such a manner that the surface will be sloped to drain at all times, and fill shall be deposited to prevent
- excessive moisture accumulation from rainwater.

 When the work is interrupted by rain, filling shall not be resumed until tests indicate that the moisture content and density of the top 6 inches of fill conform to the above specification requirements.

SILT FENCE



Construction Specifications 1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 11/2" x 11/2" square (minimum) cut, or 13/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foot.

2. Geotextile shall be fastened securely to each fence post with wire tiesor staples at top and mid-section and shall meet the following requirements for Geotextile Class F Tensile Strength
Tensile Modulus
Tensile Modulus
20 lbs/in (min.)
Test: MSMT 509
Test: MSMT 509
Test: MSMT 509
Test: MSMT 509
Test: MSMT 322
Filtering Efficiency
75% (min.)
Test: MSMT 322
Test: MSMT 322

3. Where ends of geotextile fabric come together, they shall be overlapped folded and stapled to prevent sediment bypass. 4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

TEMPORARY SEEDING NOTES

OOR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM IS NEEDED. APPLY 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SF). SEED WITH 2-1/2 BUSHEL PER AC OF ANNUAL RYE (3.2 LB. PER 100S.F.). FROM MAY 1 TO AUGUST 14 SEED WITH 3 LB. PER AC. (0.07 LB. PER 1000 S.F.) OF WEEPING LOVEGRASS. FOR THE PERIOD OF NOVEMBER 16 THRU FEBRUARY 28, FOR PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SF) OF UNROTTED WEED-FREE, SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL PER ACRE (5 GAL/1000 SF) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FT. OR HIGHER, USE 348 GAL PER ACRE (8 GAL/1000 SQ. FT.) FOR ANCHORING.

SEDIMENT CONTROL NOTES

- A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION (410) 313-1859 ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISION THERE TO.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY stabilization SHALL BE COMPLETED WITHIN:

 A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1,

 B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- 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 SEEDINGS (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.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR. SITE ANALYSIS: TOTAL AREA OF SITE AREA DISTURBED

AREA TO BE PAVED (NEW CONSTR.)
AREA TO BE VEGETATIVELY STABILIZED

- OFFSITE WASTE/BORROW AREA LOCATION: "A SITE WITH AN APPROVED GRADING PLAN" ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES. APPROVAL 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 BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THE PIPE LENGTHS OR THAT WHICH SHALL BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.
- ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE IN ACCORDANCE WITH THIS SEDIMENT AND EROSION CONTROL PLAN, AND FURTHER, AUTHORIZE THE RIGHT O ENTRY FOR PERIODIC ON—SITE EVALUATION BY THE HOWARD COUNTY INSPECTION STAFF OR THEIR AUTHORIZED AGENTS. ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE FROM THE MARYLAND DEPARTMENT OF THE ENVIRONMENT'S APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.
- THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS, RIGHT-OF-WAY(S) THAT MAY BE REQUIRED FOR THE SEDIMENT AND EROSION CONTROL PRACTICES, STORMWATER MANAGEMENT PRACTICES, AND THE DISCHARGE OF STORMWATER ONTO OR ACROSS ADJACENT OR DOWNSTREAM PROPERTIES INCLUDED IN THIS PLAN. HE IS ALSO RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS, AND/OR RIGHT-OF-WAY(S) THAT MAY BE REQUIRED FOR GRADING AND/OR WORK ON ADJACENT PROPERTIES INCLUDED IN THIS PLAN. THE SEDIMENT CONTROL APPROVALS ON THIS PLAN EXTEND ONLY TO AREAS AND
- THE APPROVAL OF THIS PLAN FOR SEDIMENT AND EROSION CONTROL DOES NOT RELIEVE THE DEVELOPER/CONSULTANT FROM COMPLYING WITH ANY FEDERAL/STATE COUNTY REQUIREMENTS APPURTENANT TO ENVIRONMENTAL ISSUES.

GEOTEXTILE FABRICS

TABLE 27 GEOTEXTILE FABRICS				Fuge H-24-1
CLASS	APPARENT OPENING SIZE MM MAX.	GRAB TENSILE STRENGTH LB. MIN.	BURST STRENGTH PSI MIN.	
A	0.30	250	500	
В	0.60	200	320	
С	0.30	200	320] .
D	0.60	90	145	
Ε	0.30	90	145	
F (SILT FENCE)	0.40-0.80 *	90	190	

* U.S. STD. SIEVE CW-02215 Grab Tensile Strength ASTM D 1682: 4" x 8" specimen, 1"x2" clamps, 12"/min. strain rate in both principal directions of geotextile fabric.

The fabric shall be inert to commonly encountered chemicals and hydrocarbons, and will be rot and mildew resistant. It shall be manufactured from fibers consisting of long chain synthetic polymers, and composed of a minimum of 85% by weight of

polyolephins, polyesters, or polyamides. The geotextile fabric shall resist deterioration from ultraviolet exposure. In addition, Classes A through E shall have a 0.01 cm/sec minimum permeability when tested in accordance with MSMT 507, and an apparent elongation of 20 percent (20%) when tested in accordance with the grab tensile strength requirements above.

SILT FENCE
Class F geotextile fabrics for silt fence shall have a 50 lb/in minimum tensile strength and a 20 lb/in minimum tensile modules when tested in accordance with MSMT 509.
The material shall also have a 0.3 gal/sf/min flow rate and seventy—five percent (75%) minimum filtering efficiency when tested in accordance with MSMT 322.

Geotextile fabrics used in the construction of "silt fence" shall resist deterioration from ultraviolet exposure. The fabric shall contain sufficient amounts of ultraviolet ray inhibitors and stabilizers to provide a minimum of 12 months of expected usable construction life at a temperature range of 0 to 120° F.

THE REDEEMED CHRISTIAN CHURCH OF GOD, INC.

Attn: Bayo Adeyokunnu, Pastor

Tele: (301) 352-0707

Fax: (301) 352-3339

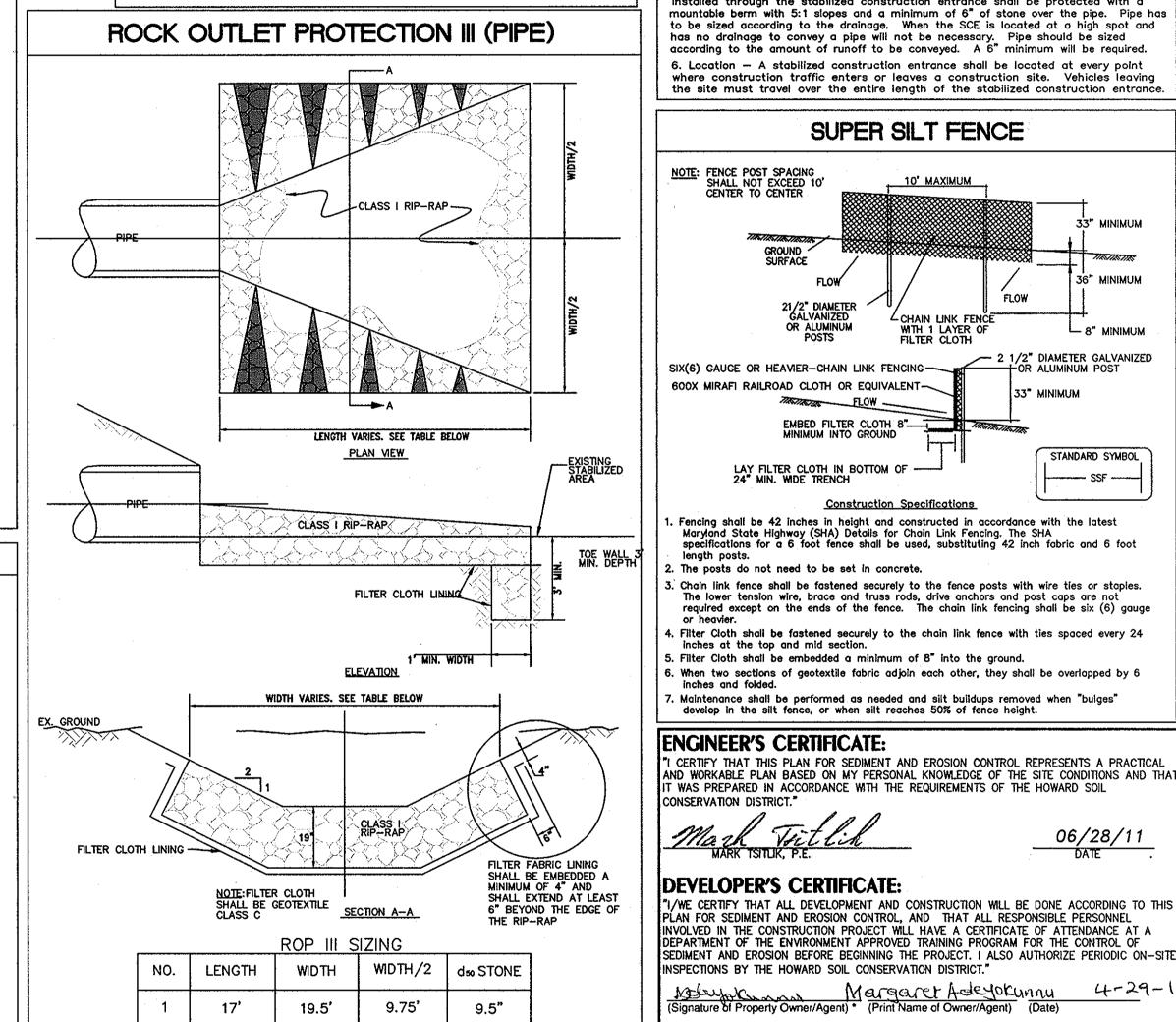
13701 ANNAPOLIS ROAD

BOWIE, MD 20720

AT GRADE INLET PROTECTION GEOTEXTILE CLASS PLAN/CUT AWAY VIEW - 6" - - 3/4" - 11/2" STONE -GEOTEXTILE CLASS E ----6" OVERLAP CROSS SECTION STANDARD SYMBO MAX. DRAINAGE AREA * 1/4 ACRE AGIP **Construction Specifications** 1. Lift grate and wrap with Geotextile Class E to completely cover all openings

2. Place 3/4" to 11/2" stone, 4"-6" thick on the grate to secure the fabric and

ROCK OUTLET PROTECTION III (PIPE)



ROCK OUTLET PROTECTION III (CONSTRUCTION SPECIFICATIONS) 1. The subgrade for the filter, rip—rap, or gabion shall be prepared to the required lines and grades. Any fill required in the subgrade shall be compacted to a density of approximately that o the surrounding undisturbed material. 2. The rock or gravel shall conform to the specified grading limits when installed respectively in the

3. Geotextile Class C or better shall be protected from punching, cutting, or tearing. Any damage other than an occasional small hole shall be repaired by placing another piece of geotextile fabric over the damaged part or by completely replacing the geotextile fabric. All overlaps whether for repairs or for joining two pieces of geotextile fabric shall be minimum of

4. Stone for the rip—rap or gabion outlets may be placed by equipment. They shall be constructed to the full course thickness in one operation and in such a manner as to avoid displacement of underlying materials. The stone for rip—rap or gabion outlets shall be delivered and placed in a manner that will ensure that it is reasonably homogenous with the smaller stones and spalls filling the voids between the larger stones. Rip—rap shall be placed in a manner to prevent damage to the filter blanket or geotextile fabric. Hand placement will be required to the extent necessary to prevent damage to the permanent works.

5. The stone shall be placed so that it blends in with the existing ground. If the stone is placed too high then the flow will be forced out of the channel and scour adjacent to the stone will occur.

OWNER'S REPRESENTATIVE/ DEVELOPER:

3308 DORCHESTER ROAD BALTIMORE, MD 21215

Attn: Taiwo Iluyomade, President

Toll Free/Fax/Voice mail: 1-866) 616-1497 Mobile: (443) 831-6703

TLI DESIGNGROUP INC.

SCALE: AS SHOWN DESIGNED: MT DRAWN: MT CHECKED: KCA DATE: JUNE 28, 2011 DRAWING NO.

5 OF 6

KCW J.O.: 2080018

CONCEPT SEDIMENT CONTROL DETAILS VICTORY TEMPLE - LAUREL

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE

STABILIZED CONSTRUCTION ENTRANCE

STRUCTURE

LENGTH

Construction Specification

2. Width — 10° minimum, should be flared at the existing road to provide a turning

3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. **The plan approval authority may not require single family

4. Stone — crushed aggregate (2" to 3") or reclaimed or recycled concrete

equivalent shall be placed at least 6" deep over the length and width of the

5. Surface Water — all surface water flowing to or diverted toward construction

entrances shall be piped through the entrance, maintaining positive drainage. Pipe

installed through the stabilized construction entrance shall be protected with a

SUPER SILT FENCE

EMBED FILTER CLOTH 8"

Construction Specifications

LAY FILTER CLOTH IN BOTTOM OF

24" MIN. WIDE TRENCH

10' MAXIMUM

PROFILE

PLAN VIEW

. Length - minimum of 50' (*30' for single residence lot).

MINIMUM 6" OF 2"-3" AGGREGATE OVER LENGTH AND WIDTH OF

** GEOTEXTILE CLASS 'C'-

OR BETTER

- EXISTING GROUND

STANDARD SYMBOL

residences to use geotextile.

NIN 118118118118 GROUND SURFACE

数数SCE然

BERM (SEE DETAIL)

---- PIPE AS NECESSARY

33" MINIMUM

36" MINIMUM

-- 2 1/2" DIAMETER GALVANIZED

STANDARD SYMBOL

---- SSF ----

06/28/11

4-29-1

OR ALUMINUM POS

" MINIMUM

EXISTING PAVEMENT -

9100 BURSA ROAD

ECP-11-056 TAX MAP 47 PARCEL 540 (PAR. A, PLAT #16329) PARCEL 848 (PAR. B-6, PLAT #14092)

HOWARD SOIL CONSERVATION DISTRICT

HOWARD SCD

W&S CONTRACT No. 24-4047-D ZONING: CE-CLI ELECTION DISTRICT - 6 HOWARD COUNTY, MARYLAND

DATE

ECP-11.056

