

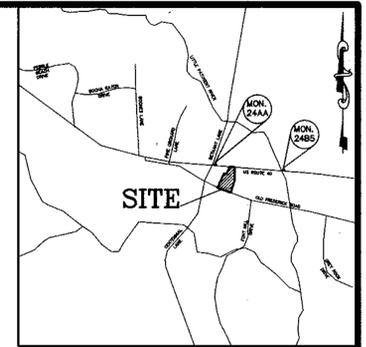
# STAVLAS - ROUTE 40 DINER

## 2nd ELECTION DISTRICT

### HOWARD COUNTY, MARYLAND

#### GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS, BUREAU OF ENGINEERING, AND CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED. THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH TWO FOOT CONTOUR INTERVALS PREPARED BY DESIGN TECH, INC., DATED JULY 1997.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 244A AND 244S WERE USED FOR THIS PROJECT.
- WATER IS PUBLIC. STATE CONTRACT NO. 131-S.
- SEWER IS PUBLIC. STATE CONTRACT NO. 411-S.
- STORMWATER MANAGEMENT CONTROL IS TO BE PROVIDED BY PRIVATE UNDERGROUND STORAGE PIPES WITH STORMCEPTORS AND WILL BE MAINTAINED BY OWNER OF PROPERTY.
- THERE IS NO FLOODPLAIN ON SITE.
- THERE ARE NO WETLANDS ON THIS SITE.
- NO TRAFFIC STUDY IS REQUIRED FOR THIS PROJECT.
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALLS.
- PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT TO SUBGRADE.
- ALL STORM DRAIN PIPE BEDDING SHALL BE AS SHOWN IN DETAIL G2.01 (TRENCH IN ROCK OR TRENCH IN EARTH AS DETERMINED BY FIELD CONDITIONS) IN VOL. IV OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR AS SHOWN ON THE DRAWINGS.
- THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, 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-OF-WAY AND/OR WORK ON ADJACENT PROPERTIES INCLUDED IN THIS PLAN.
- THE OWNER SHALL PROVIDE A SEPARATE AND INDEPENDENT SEWER CONNECTION FOR EACH TENANT OR OCCUPANT OF ANY BUILDING, SHOWN ON THIS SITE DEVELOPMENT PLAN, WHO WILL DISCHARGE NON-DOMESTIC WASTE TO THE PUBLIC SEWERAGE SYSTEM. IF THIS WASTE IS REGULATED UNDER SECTION 18.122A OF THE HOWARD COUNTY CODE, EACH SEPARATE AND INDEPENDENT SEWER CONNECTION SHALL INCLUDE A STANDARD MANHOLE AND OTHER WATER PRETREATMENT DEVICES AS REQUIRED AND APPROVED BY HOWARD COUNTY. WASTE LINES ON THE INTERIOR OF THE BUILDING SHALL BE DESIGNED, CONSTRUCTED OR MODIFIED SUCH THAT NON-DOMESTIC WASTE WILL BE DISCHARGED TO THE SEPARATE AND INDEPENDENT SEWER CONNECTION. NO PLAN SHALL DISCHARGE REGULATED NON-DOMESTIC WATER TO PUBLIC SEWERAGE SYSTEM PRIOR TO INSTALLATION OF THE SEPARATE AND INDEPENDENT SEWER CONNECTION AND RELATED INTERIOR WASTE LINES. THE ABOVE REQUIREMENTS SHALL APPLY TO ALL INITIAL AND FUTURE OCCUPANTS OR TENANTS.
- ALL IMPROVEMENTS AS SHOWN ON THESE PLANS WITHIN THE R/W OF U.S. ROUTE 40 WILL BE THE RESPONSIBILITY OF THE DEVELOPER.
- ALL EXTERIOR LIGHTING SHALL CONFORM TO SECTION 134 - OUTDOOR LIGHTING, ZONING REGULATIONS.
- NO UNDERGROUND/GROUNDWATER TESTING CONDUCTED FOR THE PRESENCE OF CONTAMINANTS BY GAMMA ENGINEERING AT THIS TIME.



#### LANDSCAPING NOTES

- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
- FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DPW DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$ 2,400.00.
- THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH PLANT MATERIALS AND BERMS, FENCES, AND WALLS. ALL PLANT MATERIALS IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
- FUTURE PHASE 2 DEVELOPMENT SOUTH OF PHASE 1 WILL REQUIRE SUBMISSION OF A SITE DEVELOPMENT PLAN, LANDSCAPING OBLIGATIONS FOR PHASE 2 ARE DEFERRED UNTIL DEVELOPMENT IS PROPOSED FOR THAT AREA.

DEVELOPER'S/BUILDERS CERTIFICATE  
 WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. WE FURTHER CERTIFY THAT UPON COMPLETION A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

*Michael Stavlas* 11/5/97  
 MICHAEL STAVLAS - OWNER DATE  
*Michael Helfrich* 11/5/97  
 MICHAEL H. HELFRICH MD, REGISTRATION NO. 15542 DATE

AS BUILT CERTIFICATE  
 MICHAEL H. HELFRICH MD, REGISTRATION NO. 15542 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.  
*Joyce M. Boyd* 11-26-97  
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.  
*Joseph St. John* 12/3/97  
 DIRECTOR DATE

*Cathy Hamilton* 12/3/97  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*Mark Dammicus* 11/25/97  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

OWNER / DEVELOPER  
 LIVADE INC.  
 1726 DORSEY ROAD  
 HANOVER, MD. 21076

PROJECT  
 STAVLAS - ROUTE 40  
 DINER

AREA  
 TAX MAP 24 PARCEL 68  
 2nd ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

TITLE  
 LANDSCAPE PLAN

**GAMMA ENGINEERING**  
 844 WEST STREET  
 ANNAPOLIS, MD 21401  
 (410) 626-1070

DESIGNED BY: MHH  
 DRAWN BY: APF  
 PROJECT NO.  
 DATE: AUG. 1997  
 SCALE: 1" = 50'  
 DRAWING NO. 1 OF 5

#### PERIMETER LANDSCAPE EDGE SCHEDULE

CATEGORY	ADJACENT TO ROADWAYS	ADJACENT TO PERIMETER PROPERTIES	
		WEST	EAST
LANDSCAPE TYPE	E	A	A
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	196'	219'	380'
CREDIT OF EXISTING VEGETATION	NO	NO	YES 224'± OF EX. CEDAR
CREDIT FOR WALL, FENCE, OR BERM	NO	NO	NO
NUMBER OF PLANTS REQUIRED			
SHADE TREES	196/40 = 5	219/60 = 4	380/60 = 6
EVERGREEN TREES	0	0	0
SHRUBS	196/4 = 50	0	0
NUMBER OF PLANTS PROVIDED			
SHADE TREES	5	4	0
EVERGREEN TREES	0	13	0
OTHER TREES (2:1 SUB.)	0	0	0
SHRUBS	66	0	0

\*EST. 30± EX. CEDAR (EVERGREEN) SUBSTITUTED FOR REQUIRED 6 SHADE TREES

#### SITE TABULATION

AREA OF PARCEL	5.006 AC.
AREA OF PLAN OF SUBMISSION	2.39 AC.
PRESENT ZONING	B-2
PROPOSED USE	RESTAURANT (DINER) AND PARKING
PROPOSED BUILDING COVERAGE	0.15 AC. (6,521 S.F.) (3% OF SITE)
PROPOSED BUILDING AREA	6,544 S.F.
PROPOSED BASEMENT AREA (UNFINISHED STORAGE ONLY)	6,944 S.F.
MAXIMUM NO. OF EMPLOYEES	20
NUMBER OF PARKING SPACES REQUIRED (BASED ON F.F. AREA ONLY)	92 SPACES (14 SPACES PER 1,000 S.F.)
NUMBER OF PARKING SPACES PROVIDED	92 SPACES (INCLUDES 4 HANDICAP)
LIMIT OF DISTURBANCE	104,002.39 S.F. (48% OF SITE)
OPEN SPACE ON SITE	164,220.95 S.F. (75% OF SITE)
LANDSCAPE ISLANDS REQUIRED (1 PER 20 SPACES)	92/20 = 4.6 4.6 @ 200 S.F. EACH MIN. 12' WIDE
LANDSCAPE ISLANDS PROVIDED	5 ISLANDS WITH MIN. 12' WIDTH & 200 S.F.
DEED REFERENCE:	4075/612

ABBREVIATION	BOTANICAL NAME	COMMON NAME	QUANTITY	SIZE	SPACING	COST	INSTALLED	REMARKS
QR	QUERCUS	RED OAK	12	2 1/2" - 3"		\$	\$	
PY	PRUNUS	SARGENT CHERRY	13	2 1/2" - 3"		\$	\$	
JC	JUNIPERUS CHINEHSIS	GREEN SERGEANT JUNIPER	150	18" - 24"	4' O.C.	\$	\$	
PS	PINUS STROBUS	WHITE PINE	13	6" - 8"		\$	\$	
IC	ILEX CRENATA COMPACTA	JAPANESE HOLLY	5	2 1/2" - 3"		\$	\$	
TOTAL PLANTS			223			TOTAL PRICE	\$	

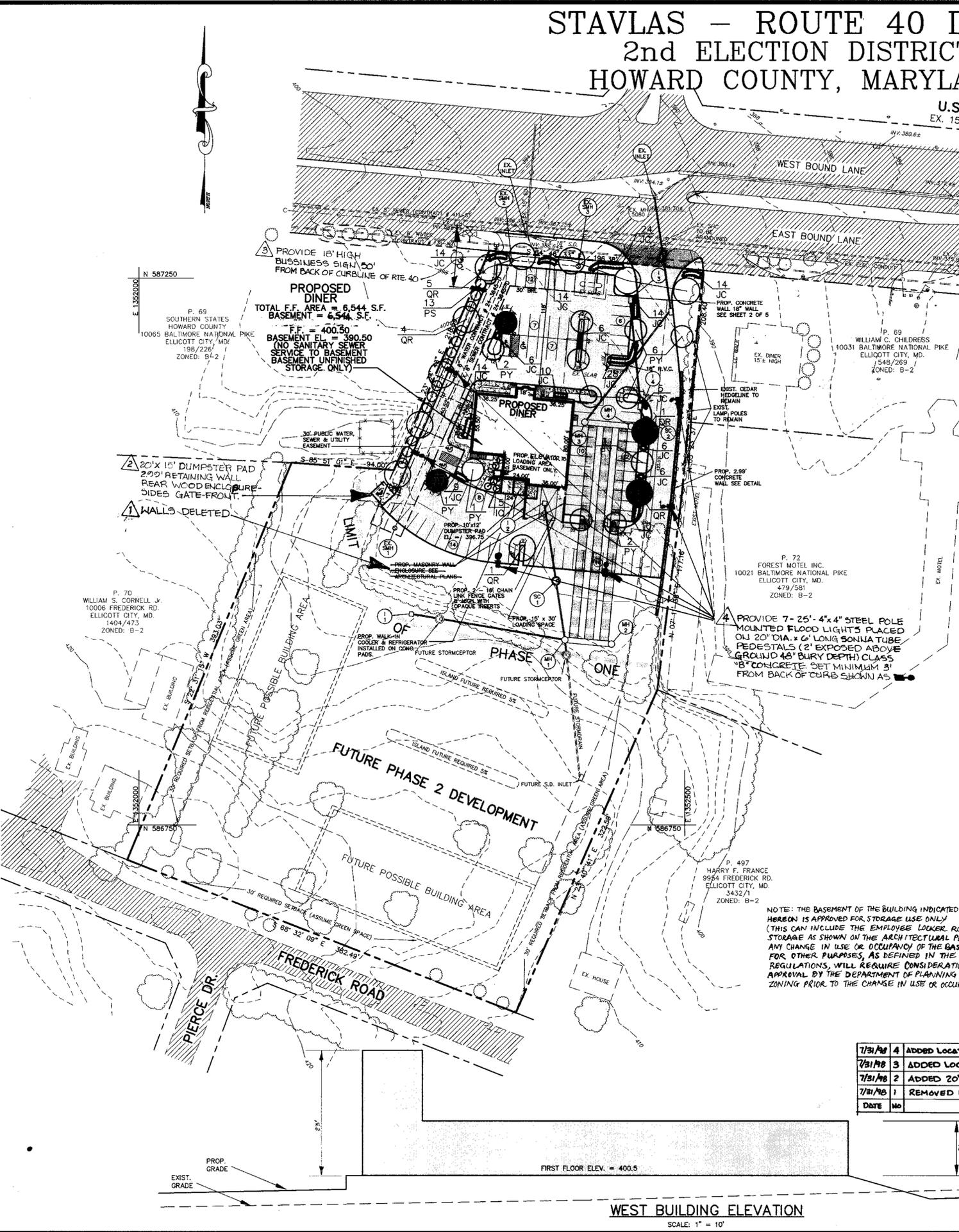
NOTE: THE BASEMENT OF THE BUILDING INDICATED HEREON IS APPROVED FOR STORAGE USE ONLY (THIS CAN INCLUDE THE EMPLOYEE LOCKER ROOM STORAGE AS SHOWN ON THE ARCHITECTURAL PLANS). ANY CHANGE IN USE OR OCCUPANCY OF THE BASEMENT FOR OTHER PURPOSES, AS DEFINED IN THE ZONING REGULATIONS, WILL REQUIRE CONSIDERATION AND APPROVAL BY THE DEPARTMENT OF PLANNING AND ZONING PRIOR TO THE CHANGE IN USE OR OCCUPANCY.

DATE	NO.	REVISION
7/31/97	4	ADDED LOCATION OF FLOOD LIGHTS
7/31/97	3	ADDED LOCATION OF BUSINESS SIGN
7/31/97	2	ADDED 20'x15' DUMPSTER PAD
7/31/97	1	REMOVED WALLS

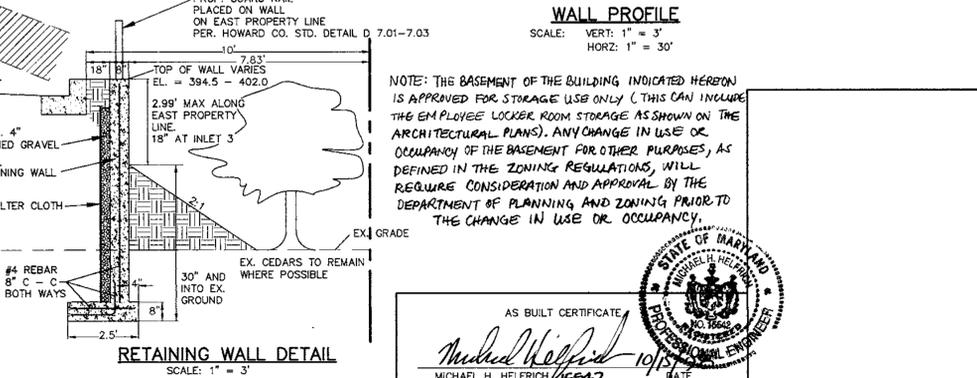
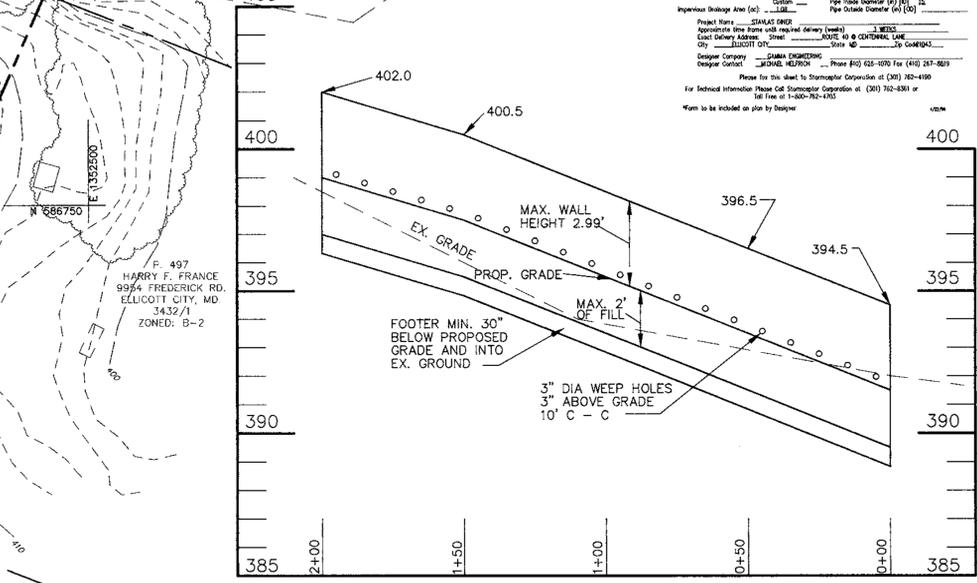
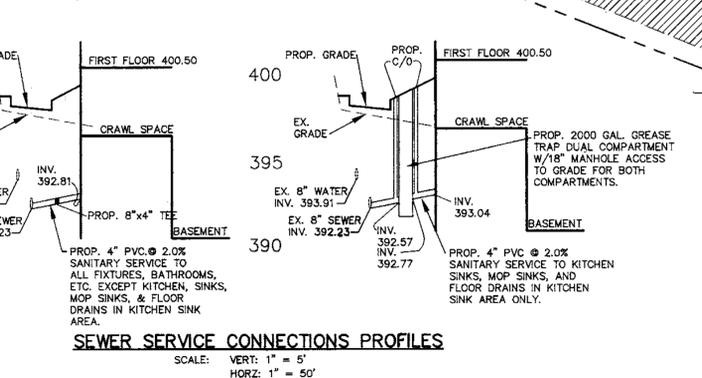
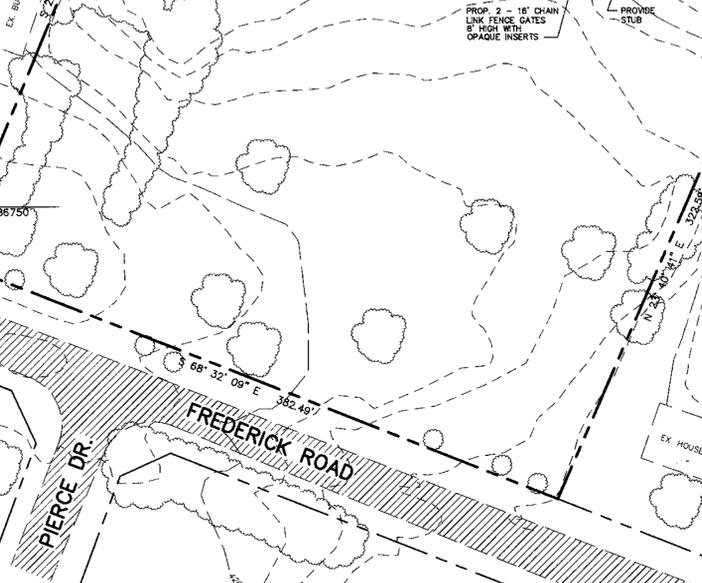
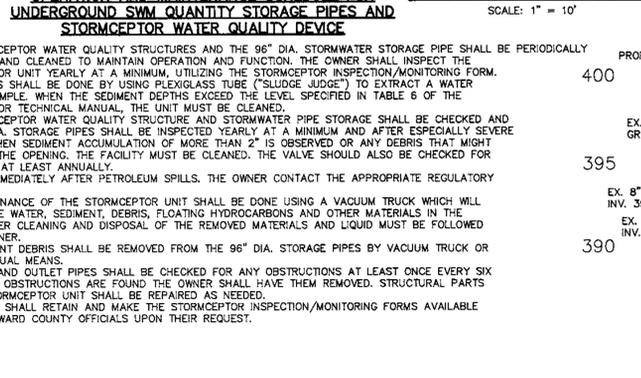
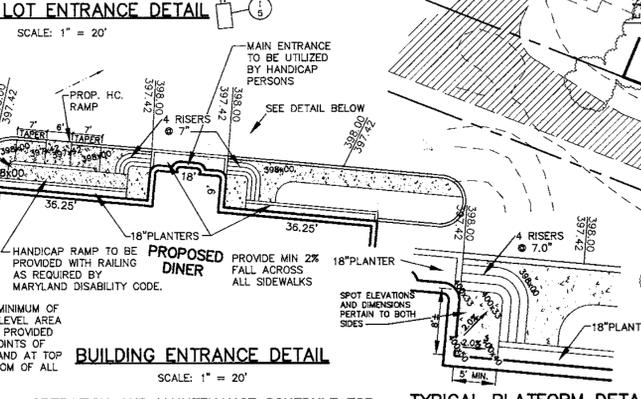
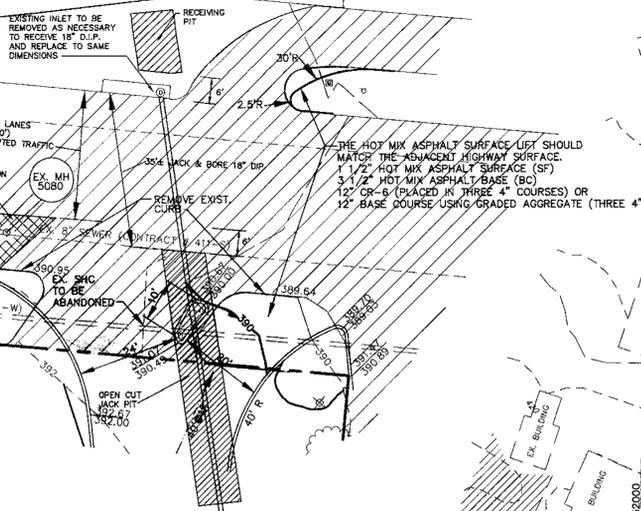
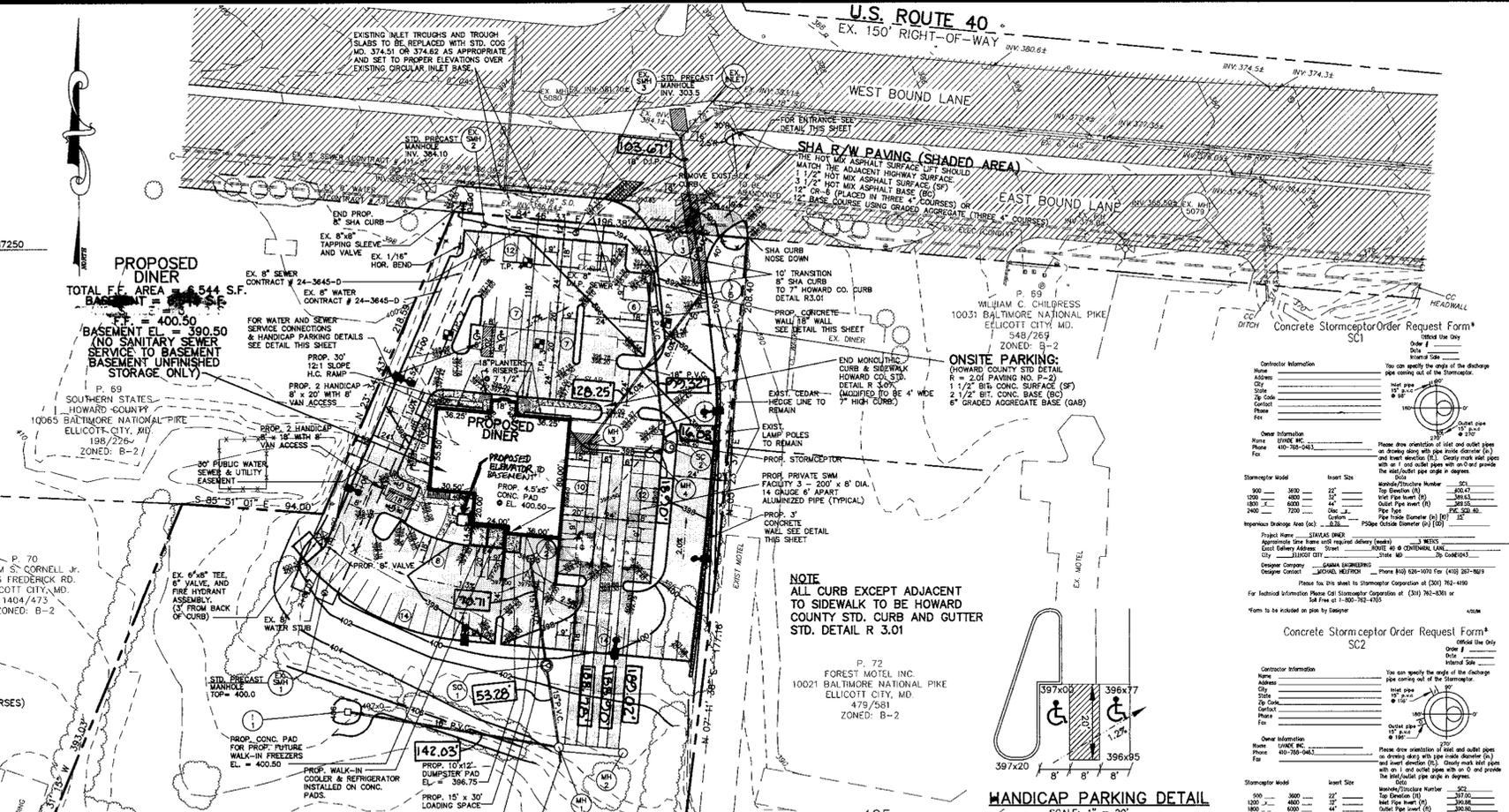
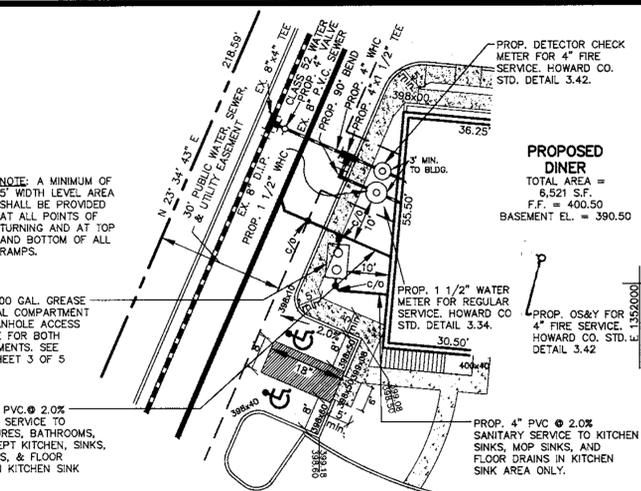
NO.	DESCRIPTION
1	LANDSCAPE PLAN, NOTES AND DETAILS
2	SITE DEVELOPMENT PLAN
3	STORM DRAIN PROFILES AND DETAILS
4	GRADING, SEDIMENT AND EROSION CONTROL
5	SOILS AND DRAINAGE AREA MAP

BUILDING	STREET ADDRESS
	10055 BALTIMORE NATIONAL PIKE

DEED	BLOCK #	ZONING	TAX MAP NO.	SECT. DIST.	PARCEL	OWNER TRACT
4075/612		B-2	24	2nd	68	



WEST BUILDING ELEVATION  
 SCALE: 1" = 10'



BY THE DEVELOPER:  
I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER: *Michael H. Helfrich* DATE: 11/21/97

BY THE ENGINEER:  
I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION.

ENGINEER: *Michael H. Helfrich* DATE: 11/21/97

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

NATURAL RESOURCES CONSERVATION SERVICE DATE: \_\_\_\_\_

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT DATE: \_\_\_\_\_

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

*Joyce M. Boyd MD, PhD* DATE: 11-26-97  
COUNTY HEALTH OFFICER MR

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

*Joseph J. Ranta* DATE: 12/3/97  
DIRECTOR

*Cindy Kaminata* DATE: 12/3/97  
CHIEF, DIVISION OF LAND DEVELOPMENT

*Michael H. Helfrich* DATE: 11/25/97  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

DATE	NO.	REVISION

OWNER / DEVELOPER  
**LIVADE INC.**  
1726 DORSEY ROAD  
HANOVER, MD. 21076

PROJECT  
**STAVLAS - ROUTE 40 DINER**

AREA  
TAX MAP 24 PARCEL 68  
2nd ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

TITLE  
**SITE DEVELOPMENT PLAN**

**GAMMA ENGINEERING**  
844 WEST STREET  
ANNAPOLIS, MD 21401  
(410) 626-1070

DATE: 11/21/97

DESIGNED BY: MHH  
DRAWN BY: APF  
PROJECT NO.:  
DATE: AUG. 1997  
SCALE: 1" = 50'  
DRAWING NO. 2 OF 5

STATE OF MARYLAND  
MICHAEL H. HELFRICH  
PROFESSIONAL ENGINEER  
NO. 15542



**DETAILS & SPECIFICATIONS VEGETATIVE ESTABLISHMENT**

FOLLOWING INITIAL SOIL DISTURANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN SEVEN CALENDAR DAYS FOR THE SURFACE OF ALL PERIMETER CONTROL STRUCTURES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (S1) AND FOURTEEN DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

- PERMANENT SEEDING
  - SOIL TESTS: LIME AND FERTILIZER WILL BE APPLIED PER SOIL TESTS RESULTS FOR SITES GREATER THAN 3 ACRES. SOIL TESTS WILL BE DONE AT COMPLETION OF ROUGH GRADING. RATES AND ANALYSES WILL BE PROVIDED TO THE GRADING INSPECTOR AS WELL AS THE CONTRACTOR.
  - OCCURRENCE OF ACID SULFATE SOILS (GRAYISH BLACK COLOR) WILL REQUIRE COVERING WITH A MINIMUM OF 12 INCHES OF CLEAN SOIL WITH 6 INCHES MINIMUM CAPPING OF TOP SOIL. NO STOCKPILING OF MATERIAL IS ALLOWED. IF NEEDED, SOIL TESTS SHOULD BE DONE BEFORE AND AFTER A 6 WEEK INCUBATION PERIOD TO ALLOW OXIDATION OF SULFATES.
  - SEEDING PREPARATION: AREA TO BE SEEDING SHALL BE LOOSE AND FRAGILE TO A DEPTH OF AT LEAST 3 INCHES. THE TOP LAYER SHALL BE LOOSENEED BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING OCCURS. FOR SITES LESS THAN 5 ACRES, APPLY 100 POUNDS OF DOLOMITIC LIMESTONE AND 20 POUNDS OF 10-20-20 FERTILIZER PER 1,000 SQUARE FEET. HARROW OR DISK LIME AND FERTILIZER INTO THE SOIL TO A DEPTH OF AT LEAST 3 INCHES ON SLOPES FLATTER THAN 3:1.
  - SEEDING: APPLY 5-6 POUNDS PER 1,000 SQUARE FEET OF TALL FESCUE BETWEEN FEBRUARY 1 AND APRIL 30 OR BETWEEN AUGUST 15 AND OCTOBER 31. APPLY SEED UNIFORMLY ON A MOST FIRM SEEDBED WITH A CYCLONE SEEDER DRILL, CULTRIPACER SEEDER OR HYDROSEEDER (SLURRY INCLUDES SEEDS AND FERTILIZER, RECOMMENDED ON STEEP SLOPES ONLY). MAXIMUM SEED DEPTH SHOULD BE 1/4 INCH IN CLAYEY SOILS AND 1/2 INCH IN SANDY SOILS WHEN USING OTHER THAN THE HYDROSEEDER METHOD. IRRIGATION OF SOIL MOISTURE IS ESSENTIAL TO SUPPORT ADEQUATE GROWTH UNTIL VEGETATION IS FIRMLY ESTABLISHED. IF OTHER SEED MIXES ARE TO BE USED, SELECT FROM TABLE 25, ENTITLED "PERMANENT SEEDING FOR LOW MAINTENANCE AREAS" FROM THE 1994 STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. MIXES SUITABLE FOR THIS AREA ARE 1,3 AND 5-7, MIXES 5-7 ARE SUITABLE IN NON-MOVABLE SITUATIONS.
  - MULCHING: MULCH SHALL BE APPLIED TO ALL SEEDING AREAS IMMEDIATELY AFTER SEEDING DURING THE TIME PERIODS DURING WHICH SEEDING IS PERMITTED. MULCH SHALL BE APPLIED IMMEDIATELY AFTER GRADING.
    - MULCH SHALL BE UNROTATED, UNCHOPPED, SMALL GRASS STRAW APPLIED AT A RATE OF 2 TONS PER 1,000 SQUARE FEET. IF A MULCH ANCHORING TOOL IS USED, APPLY 2.5 TONS PER ACRE. MULCH MATERIALS SHALL BE THE RELATIVELY FREE OF ALL KINDS OF WEEDS AND SHALL BE PROHIBITED FROM WEEDS. SPREAD MULCH UNIFORMLY, MECHANICALLY OR BY HAND, TO A DEPTH OF 1-2 INCHES.
    - SECURING STRAW MULCH: STRAW MULCH SHALL BE SECURED IMMEDIATELY FOLLOWING MULCH APPLICATION TO MINIMIZE MOVEMENT BY THE WIND OR THE WATER. THE FOLLOWING METHODS ARE PERMITTED:
      - USE A MULCH ANCHORING TOOL WHICH IS DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE TO A MINIMUM DEPTH OF 2 INCHES. THIS IS THE MOST EFFECTIVE METHOD FOR SECURING MULCH. HOWEVER, IT IS LIMITED TO RELATIVELY FLAT AREAS WHERE EQUIPMENT CAN OPERATE SAFELY.
      - WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DRY WEIGHT OF 750 POUNDS PER ACRE. IF MIXED WITH WATER, USE 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.
      - LIQUID BINDERS MAY BE USED AND APPLIED HEAVY AT THE EDGES WHERE WIND CATCHES. SUCH AS IN VALLEYS AND CRESTS OF SLOPES. THE REMAINDER OF THE AREA SHOULD APPLY UNIFORM AFTER BINDER APPLICATION. BINDERS LISTED IN THE 1994 STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL OR APPROVED EQUAL SHALL BE APPLIED AT RATES RECOMMENDED BY THE MANUFACTURER.
      - LIGHTWEIGHT PLASTIC NETTING MAY BE USED TO SECURE MULCH. THE NETTING WILL BE STAPLED TO THE GROUND ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

**SILT TRAP**  
 SILT TRAP TYP. ST1 - STONE OULET  
 DRAINAGE AREA: PHASE 1A 1.00 AC, PHASE 1B 1.99 AC.  
 STORAGE REQUIRED: 7,200 CU.FT.  
 WEIR LENGTH = 6' (2 AC. DRAINAGE AREA) CREST EL. = 394.00  
 EXCAVATED DEPTH = 2' (ELEV. 392 WEIR STORAGE)  
 STORAGE ABOVE OULET ELEV. 2' (DRY STORAGE)  
 TRAP BOTTOM ELEV. = 390.00  
 CREST ELEV. = 394.00  
 CLEANOUT ELEV. = 391.00

**TEMPORARY SEEDING:**  
 LIME: 100 POUNDS OF DOLOMITIC LIMESTONE PER 1,000 SQUARE FEET.  
 FERTILIZER: 15 POUNDS OF 10-10-10 PER 1,000 SQUARE FEET.  
 SEED: PERENNIAL RYE - 0.92 POUNDS PER 1,000 SQUARE FEET (FEBRUARY 1 THROUGH APRIL 30 OR AUGUST 15 THROUGH NOVEMBER 1)  
 MULLET - 0.92 POUNDS PER 1,000 SQUARE FEET (MAY 1 THROUGH AUGUST 15)  
 MULCH: SAME AS 1 D AND E ABOVE.  
 NO FILLS MAY BE PLACED ON FROZEN GROUND. ALL FILL TO BE PLACED IN APPROXIMATELY HORIZONTAL LAYERS, EACH LAYER HAVING A LOOSE THICKNESS OF NOT MORE THAN 6 INCHES. ALL FILL IN ROADWAYS AND PARKING AREAS IS TO BE CLASSIFIED TYPE 2 AND COMPACTED TO 80% DENSITY. COMPACTION TO BE DETERMINED BY ASTM D-1557-65T (MODIFIED PROCTOR). ANY FILL WITHIN THE BUILDING AREA IS TO BE COMPACTED TO A MINIMUM OF 95% AS DETERMINED BY METHODS PREVIOUSLY MENTIONED. FILLS FOR POND EMBANKMENTS SHALL BE COMPACTED AS PER MD-378 CONSTRUCTION SPECIFICATIONS. ALL OTHER FILLS SHALL BE COMPACTED SUFFICIENTLY SO AS TO BE STABLE AND PREVENT EROSION AND SLIPPAGE.

**PERMANENT SOIL:**  
 INSTALLATION OF SOIL SHOULD FOLLOW PERMANENT SEEDING DATES. PERMANENT SOIL IS TO BE TALL FESCUE, STATE APPROVED SOIL LIME AND FERTILIZER PER PERMANENT SEEDING SPECIFICATIONS AND LIGHTLY IRRIGATE SOIL PRIOR TO LAYING SOIL. SOIL IS TO BE LAD ON THE CONTOUR WITH ALL ENDS THOROUGHLY ABUTTING. JOINTS ARE TO BE STAGGERED BETWEEN ROWS. WATER AND ROLL OR TAMP SOIL TO INSURE ROOT CONTACT WITH THE SOIL. ALL SLOPES STEEPER THAN 3:1, AS SHOWN, ARE TO BE PERMANENTLY SODDED OR PROTECTED WITH AN APPROVED EROSION CONTROL NETTING. ADDITIONAL WATERING FOR ESTABLISHMENT MAY BE REQUIRED. SOIL IS NOT TO BE APPLIED ON FROZEN GROUND. SOIL SHALL NOT BE HARVESTED OR TRANSPORTED WHEN MOISTURE CONTENT (DPT OR WET) AND/OR EXTREME TEMPERATURES MAY AFFECT ITS SURVIVAL. IN THE ABSENCE OF ADEQUATE RAINFALL, IRRIGATION SHOULD BE PERFORMED TO INSURE ESTABLISHED SOIL.

**TOPSOIL:**  
 1. 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 TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARILAND AGRICULTURAL EXPERIMENTAL STATION.  
 2. TOPSOIL SPECIFICATIONS - SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:  
 a. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, AND LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY.  
 b. REGARDLESS, TOPSOIL SHALL NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 2% BY VOLUME OF CONCRETE, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1 1/2" IN DIAMETER.  
 c. TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSONGRASS, NUTSEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.  
 d. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 4-6 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.  
 3. FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES:  
 a. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 2.0.0. VEGETATIVE STABILIZATION - SECTION 1  
 b. VEGETATIVE STABILIZATION METHODS AND MATERIALS  
 NOTE: USE OF THIS INFORMATION DOES NOT PRECLUDE MEETING ALL OF THE REQUIREMENTS OF THE 1994 STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

**SEQUENCE OF CONSTRUCTION PHASE 1A**

1A1. INITIAL GRADING PERMIT.	1 DAY
1A2. INSTALL TEMPORARY SEDIMENT CONTROL WITHIN PHASE 1A L.O.D. (SEE SILT TRAP, EARTH DIKE ALONG EAST SIDE PROPERTY LINE, SOUTH END OF SITE, AND TEMPORARY EARTH DIKE).	7 DAYS
1A3. CONSTRUCTION OF STORM DRAIN SYSTEM 1-1 TO MH 1-4 TO 1-5 TO EX-INLET (INCLUDING 3" - 200' Ø DIA. PIPES) WITH 1-1 TO BE BLOCKED AND SURROUNDING WORK AREA STABILIZED WITH SOIL.	21 DAYS
1A4. WITH INSPECTOR'S APPROVAL: 1) REMOVAL OF BLOCKAGE AT 1-1 2) START PHASE B.	1 DAY

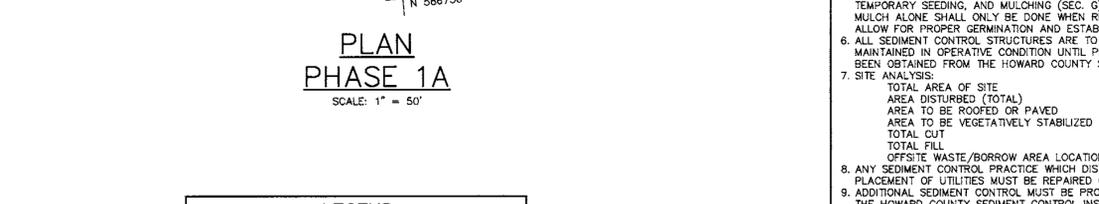
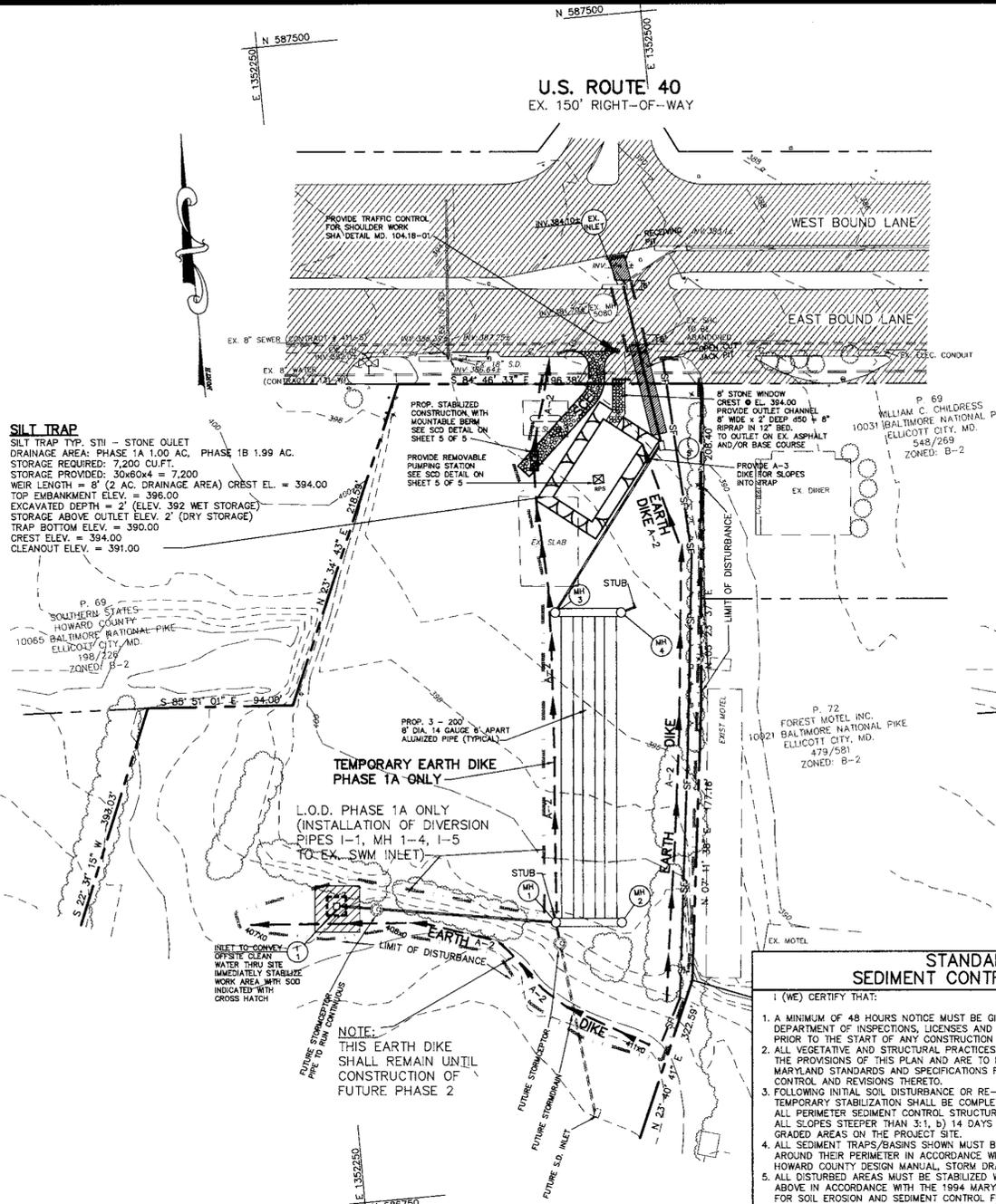
**PHASE 1B**

1B1. REMOVE TEMPORARY PHASE 1A DIKE AND INSTALL DIKE ALONG ROUTE 40. AND INSTALL DIKE ALONG SOUTHWESTERN LIMIT OF WORK.	3 DAYS
1B2. ROUGH GRADING OF SITE FOR PARKING LOT, BUILDING, & ETC.	5 DAYS
1B3. CONSTRUCTION OF BUILDING.	180 DAYS
1B4. INSTALLATION OF REMAINING UTILITIES. (STORM DRAIN FROM MH-1 TO SC-2 TO 1-2 AND FROM MH-4 TO SC-2 TO 1-3, WATER, AND SEWER).	30 DAYS
1B5. FINAL GRADING, INSTALLATION OF WALKS, CURB & GUTTER, & PAVEMENT.	10 DAYS
1B6. FINAL VEGETATIVE STABILIZATION.	5 DAYS
1B7. REMOVAL OF TEMPORARY SEDIMENT CONTROL MEASURES INCLUDING SILT TRAP WITH INSPECTOR'S APPROVAL.	1 DAY

**LEGEND**

EXISTING ELEVATION	102.45
PROPOSED ELEVATION	102x45
EXISTING CONTOUR	102
PROPOSED CONTOUR	102
SILT FENCE	SF
LIMITS OF DISTURBANCE	[Symbol]
LIMITS OF DISTURBANCE (PHASE A ONLY)	[Symbol]
EXISTING TREE	[Symbol]
EXISTING TREE (TO BE REMOVED)	[Symbol]
STABILIZED CONSTRUCTION ENTRANCE	[Symbol]

SCALE: 1" = 50'

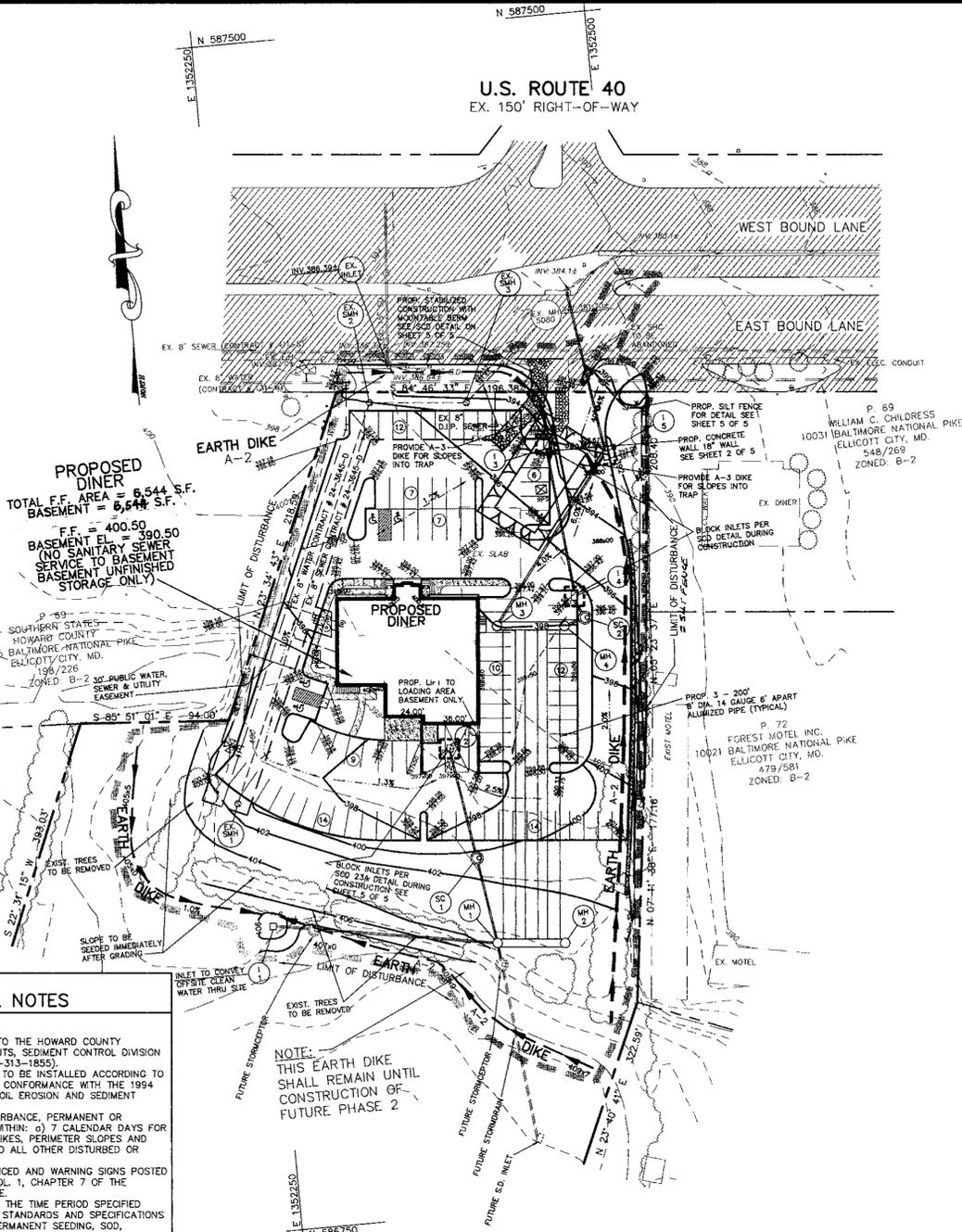


**STANDARD SEDIMENT CONTROL NOTES**

1. (WE) CERTIFY THAT:

- 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 (410-313-1855).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1994 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 STEEPER 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 7 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, SOIL TEMPORARY SEEDING, AND MULCHING (SEC. 0). TEMPORARY STABILIZATION WITH MULCH ALONE SHALL 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 OPERATING CONDITION UNTIL THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
7. SITE ANALYSIS:
 

TOTAL AREA OF SITE	=	5,006 ACRES
AREA DISTURBED (TOTAL)	=	2.39 ACRES
AREA TO BE ROOFED OR PAVED	=	1.57 ACRES
AREA TO BE VEGETATIVELY STABILIZED	=	0.82 ACRES
TOTAL CUT	=	3,000 CU.YDS.
TOTAL FILL	=	2,000 CU.YDS.
OFFSITE WASTE/BORROW AREA LOCATION	=	1,000 CU.YDS.
- ANY SEDIMENT CONTROL PRACTICE WHICH 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 CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE 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 OF 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. RESPONSIBLE PERSON ON SITE: MICHAEL H. HELFRICH
- THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS, RIGHT-OF-WAYS(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-WAYS(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 PRACTICES IDENTIFIED AS PROPOSED WORK.
- 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.



**GENERAL NOTES**

- THE PREDOMINATE SOIL TYPES ARE MIB2 & CUB
- FIELD RUN TOPOGRAPHIC SURVEY CONDUCTED ON JUNE 1997 BY DESIGN
- ALL SPOIL SHALL BE HAULED TO AN APPROVED SPOIL SITE WITH APPROVED SEDIMENT CONTROL MEASURES.
- THE CONTRACTOR SHALL NOTIFY MISS UTILITY 48 HOURS PRIOR TO INITIATING CONSTRUCTION.
- FLASH BLOCKS SHALL BE PROVIDED AT ALL DOWN SPOUTS. ALL SPLASH BLOCKS SHALL BE OUTLETTED TO FLAT AREAS.
- THE PROPOSED WORK IS NOT LOCATED WITHIN THE 100-YR. FLOOD PLAIN.

**AS BUILT CERTIFICATE**

MICHAEL H. HELFRICH	DATE
---------------------	------

SCALE: 1" = 50'

BY THE DEVELOPER:  
 I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

*Michael H. Helfrich* 11/5/97  
 DEVELOPER DATE

BY THE ENGINEER:  
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION.

*Michael Helfrich* 11/5/97  
 ENGINEER DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

*Charles K. Jennings* 11-12-97  
 NATURAL RESOURCES CONSERVATION SERVICE DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

*Joseph M. B... S.E.* 11-26-97  
 COUNTY HEALTH OFFICER DATE

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

*Joseph M. B... S.E.* 11-26-97  
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

*Angela S. B...* 12/3/97  
 DIRECTOR DATE

*Cindy Hamilton* 12/3/97  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*Michael Helfrich* 11/25/97  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

OWNER / DEVELOPER  
 LIVADE INC.  
 1726 DORSEY ROAD  
 HANOVER, MD. 21076

PROJECT  
 STAVLAS - ROUTE 40  
 DINER

AREA  
 TAX MAP 24 PARCEL 68  
 2nd ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

TITLE  
 EROSION & SEDIMENT CONTROL  
 PLAN

**GAMMA ENGINEERING**  
 844 WEST STREET  
 ANNAPOLIS, MD 21401  
 (410) 826-1070

DESIGNED BY: MHH  
 DRAWN BY: APF  
 PROJECT NO.  
 DATE: AUG. 1997  
 SCALE: 1" = 50'  
 DRAWING NO. 4 OF 5

AREA AND "C" FACTOR TABULATION

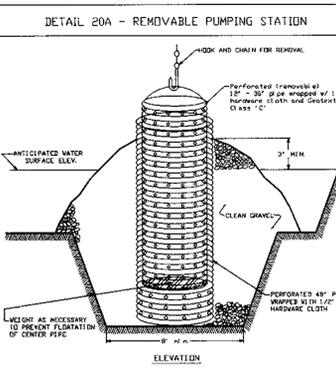
INLET#	AREA (ac) (A)	"C" FACTOR (C)	% IMPERVIOUS (P)
1	3.21	0.64	64
2	1.15	0.87	94
3	0.39	0.80	86
4	0.08	0.91	91
5	0.17		

VEGETATIVE ANALYSIS

AREAS INCLUDE A COMBINATION OF:

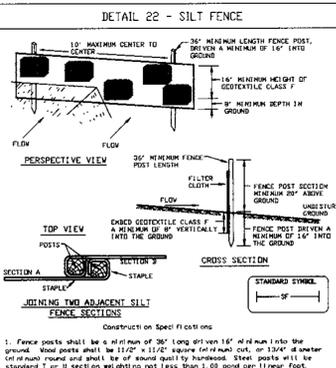
1. WILD BLACK CHERRY
2. RED MAPLE & SILVER MAPLE
3. BLACK LOCUST, GOLDEN ROD
4. BOXELDER, ASPEN
5. SMOOTH SUMAC, SASSAFRAS
6. MULTIFLORA ROSE
7. JAPANESE HONEYSUCKLE
8. RED MULBERRY, GRASSES
9. WHITE CEDAR

— ALL OTHER AREAS ARE EITHER MOWED LAWN OR BARE GROUND/GRAVEL.



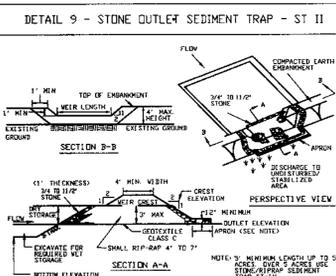
**Construction on Specifications**

1. The outer pipe shall be a minimum of 36" long 8" inner diameter 16" outer diameter 1/2" thick galvanized steel pipe. The outer pipe shall be wrapped with 1/2" polyethylene to prevent moisture from entering the geotextile class "C".
2. After installing the outer pipe, backfill around outer pipe with 2" aggregate or clean gravel.
3. The inner pipe (center pipe) shall be constructed by perforating a 48" diameter pipe with 1/2" holes spaced 1/2" apart. The perforated pipe shall be wrapped with 1/2" polyethylene to prevent moisture from entering the geotextile class "C".
4. The center pipe shall extend 10" to 15" above the anticipated water surface elevation on 1/2" pipe crest or on an inverted siphon.



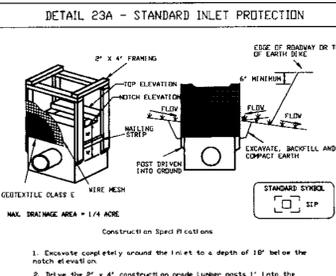
**Construction on Specifications**

1. Fence posts shall be a minimum of 36" long 8" inner diameter 16" outer diameter 1/2" thick galvanized steel pipe. The outer pipe shall be wrapped with 1/2" polyethylene to prevent moisture from entering the geotextile class "C".
2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and bottom and shall meet the following requirements for Geotextile Class "C":  
 Tensile Strength: 28 lbf/in (min.) Test: MHM 559  
 Tensile Modulus: 28 lbf/in (min.) Test: MHM 559  
 Flow Rate: 1.0 gal/17 minute (max.) Test: MHM 330  
 Filtering Efficiency: 75% (min.) Test: MHM 330
3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent soil loss.
4. Silt fence shall be inspected after each rainfall event and maintained when full gaps occur or when sediment accumulates on reached side of the fabric or height.



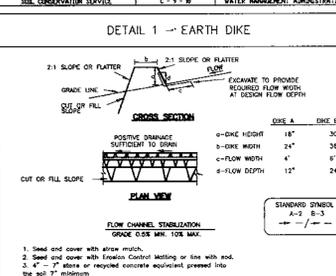
**Construction on Specifications**

1. Areas under embankment shall be cleared, grubbed and stripped of any vegetation and root mats. The soil area shall be cleared.
2. The fill material for the embankment shall be free of roots and other woody vegetation as well as over-ripened stones, rocks, organic material or other objectionable material. The embankment shall be compacted by tamping with equipment while it is being constructed.
3. All cut and fill slopes shall be 2:1 or flatter.
4. The stone used in the outlet shall be small rip-rap 4" to 7" in size or 1/4" to 1/2" layer of 3/4" to 1 1/2" washed aggregate placed on the upstream face of the outlet. Stone facing shall be as necessary to prevent clogging. Geotextile Class "C" may be substituted for stone facing by placing it on the inside face of the stone outlet.
5. Sediment shall be removed and trap restored to its original condition when the sediment has accumulated to one half of the earth storage depth of the trap. Removed sediment shall be deposited in a suitable area and in a manner that it will not erode.



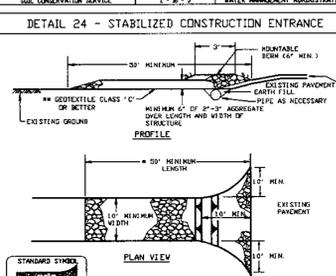
**Construction on Specifications**

1. Excavate completely around the inlet to a depth of 18" below the finish elevation.
2. Drive the 2" x 4" framing on grade lumber posts 1" into the ground at each corner of the inlet. Place nail strips between the posts on the ends of the inlet. Assemble the top portion of the 2" x 4" frame using the overlap joint shown on Detail 23A. The top of the frame (top rail) must be 6" below adjacent roadway where flooding and safety issues may arise.
3. Stretch the 3/2" x 1/2" wire mesh tightly across the frame and fasten securely. The ends must meet and overlap at a post.
4. Stretch the Geotextile Class "C" tightly over the wire mesh at the inlet notch elevation. Extend the top of the frame 18" below the inlet notch elevation. Fasten the geotextile firmly to the frame. The ends of the geotextile must meet at a post, be overlapped and folded, then fastened down.
5. Backfill around the inlet in compacted 6" layers until the top of earth is level with the notch elevation on the ends and top as shown on the site.
6. If the inlet is not in a ramp, construct a compacted earth dike across the dike line at least 6" above the top of the earth dike. The dike must be 6" higher than the top of the frame.
7. The structure must be inspected periodically and after each rain and the geotextile replaced when it becomes damaged.



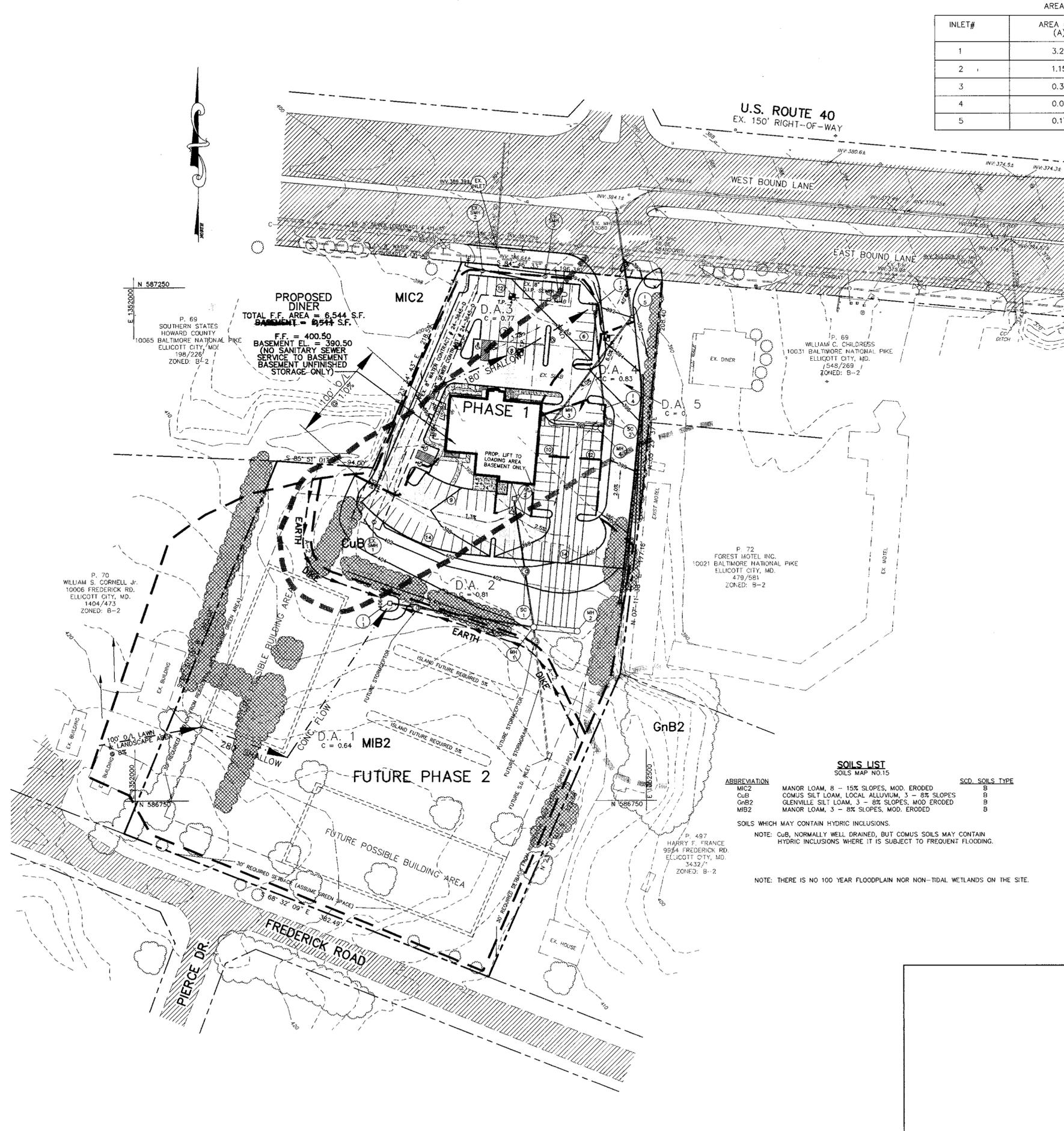
**Construction Specifications**

1. Seed and cover with straw mulch.
2. Seed and cover with Erosion Control Matting or fiber with seed.
3. 4" - 7" stone or recycled concrete aggregate pressed into the soil 10' minimum.
4. All trees, brush, stumps, obstructions, and other objectionable material shall be removed and disposed of so as not to interfere with the proper functioning of the dike.
5. The dike shall be constructed on a firm, grade and cross section as required to meet the criteria specified herein and in the case of bank projections or other irregularities which will require normal flow.
6. It shall be completed by earth moving equipment.
7. All earth removed and used for construction shall be placed so that it will not interfere with the functioning of the dike.
8. Inspection and maintenance must be provided periodically and after each rain event.



**Construction on Specifications**

1. Length - Minimum of 50' (60') for right-of-way entrance.
2. Width - 10' minimum, should be flared at the existing road to provide a turning radius.
3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. The filter cloth approval authority may not require a filter cloth membrane to use geotextile.
4. Stone - crushed aggregate (2" to 3") or recycled or recycled concrete material shall be placed at least 6" deep over the length and width of the entrance.
5. Surface Water - All surface water flowing to or diverted toward construction entrance shall be piped through the entrance, installed in a pipe to be installed in a trench through the stabilized construction entrance shall be protected as a minimum by a 6" of stone over the pipe. Pipe has to be at least 6" above the drainage. When the pipe is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be at least 6" above the drainage to convey a pipe will not be necessary. A 6" of stone will be required.
6. Location - A stabilized construction entrance shall be located at every point where construction or traffic enters or leaves a construction site. Where it is leaving the site it must extend over the entire length of the stabilized construction entrance.



**SOILS LIST**  
SOILS MAP NO. 15

ABBREVIATION	SOILS MAP NO. 15	SCD SOILS TYPE
MIC2	MANOR LOAM, 8 - 15% SLOPES, MOD. ERODED	B
GNB2	COMUS SILT LOAM, LOCAL ALLUVIUM, 3 - 8% SLOPES	B
GMB2	GLENVILLE SILT LOAM, 3 - 8% SLOPES, MOD. ERODED	B
MIB2	MANOR LOAM, 3 - 8% SLOPES, MOD. ERODED	B

NOTE: COMUS, GNB, NORMALLY WELL DRAINED, BUT COMUS SOILS MAY CONTAIN HYDRIC INCLUSIONS WHERE IT IS SUBJECT TO FREQUENT FLOODING.

NOTE: THERE IS NO 100 YEAR FLOODPLAIN NOR NON-TIDAL WETLANDS ON THE SITE.

AS BUILT CERTIFICATE

MICHAEL H. HELFRICH DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.  
 Joyce M. Boyd, M.D., H.R. 11-26-97  
 COUNTY HEALTH OFFICER H.R. DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.  
 Joseph P. Sotter, 12/3/97  
 DIRECTOR DATE

Candy Hanfta, 12/3/97  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Michael H. Helfrich, 11/26/97  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

DATE NO. REVISION

OWNER / DEVELOPER  
 LIVEDE INC.  
 1726 DORSEY ROAD  
 HANOVER, MD. 21076

PROJECT  
 STAVLAS - ROUTE 40  
 DINER

AREA  
 TAX MAP 24 PARCEL 68  
 2nd ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

TITLE  
 SOILS, DRAINAGE AREA MAP AND  
 ENVIRONMENTAL ANALYSIS

GAMMA ENGINEERING  
 844 WEST STREET  
 ANNAPOLIS, MD 21401  
 (410) 626-1070

4/4/97  
 DATE

DESIGNED BY: MHH  
 DRAWN BY: APF  
 PROJECT NO.  
 DATE: AUG. 1997  
 SCALE: 1" = 50'  
 DRAWING NO. 5 OF 5

1749 DEVELOPMENT PLAN FOR THE PROPOSED DINER FOR THE ENVIRONMENTAL CONTROL BY THE HOWARD COUNTY CONSERVATION DISTRICT.

Approved: *[Signature]* Date: 11/2/97  
 Howard County

Reviewed for: *[Signature]* S.C.D.  
 and people Technical Requirements  
 11/2/97  
 Signatures  
 USDA, NATURAL RESOURCES CONSERVATION SERVICE

U.S. ROUTE 40  
EX. 150' RIGHT-OF-WAY

BY THE DEVELOPER:  
I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS - BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER  
*Michael H. Helfrich* DATE

BY THE ENGINEER:  
I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS - BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION.

ENGINEER  
*Michael Helfrich* DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

NATURAL RESOURCES CONSERVATION SERVICE DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT DATE

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

*Joyce M. Boyd MD per Ed.* DATE 11-26-97  
COUNTY HEALTH OFFICER MD

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

*Joseph R. Korte* DATE 12/3/97  
DIRECTOR

*Cindy Hamilton* DATE 10/3/97  
CHIEF, DIVISION OF LAND DEVELOPMENT

*William J. ...* DATE 11/25/97  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

DATE NO. REVISION

OWNER / DEVELOPER  
LIVADE INC.  
1726 DORSEY ROAD  
HANOVER, MD. 21076

PROJECT STAVLAS - ROUTE 40 DINER

AREA TAX MAP 24, PARCEL 68  
2ND ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

TITLE SITE DEVELOPMENT PLAN

GAMMA ENGINEERING  
844 WEST STREET  
ANNAPOLIS, MD 21401  
(410) 626-1070

DESIGNED BY: MHF  
DRAWN BY: APF  
PROJECT NO.  
DATE: AUG. 1997  
SCALE: 1" = 50'  
DRAWING NO. 2 OF 5

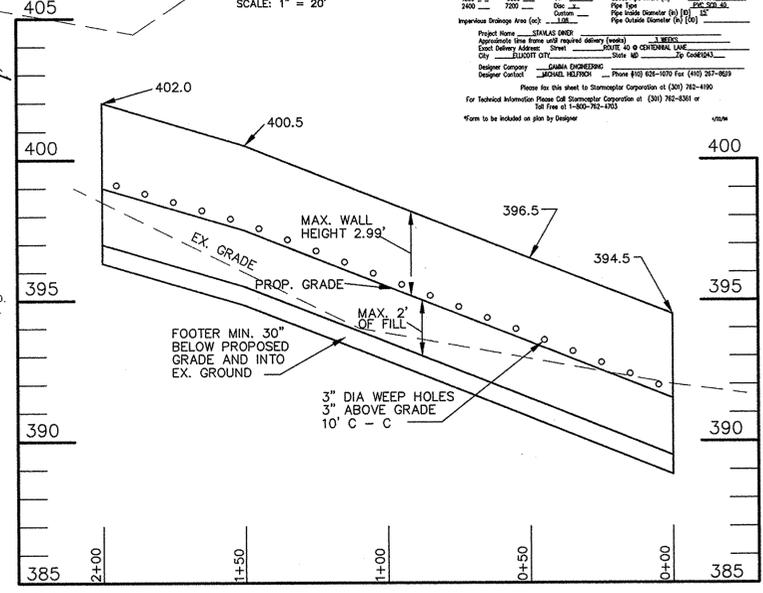


SHA R/W PAVING (SHADED AREA)  
WATER TIGHT ADJACENT HIGHWAY SURFACE  
1 1/2" HOT MIX ASPHALT SURFACE (SF)  
12" CR-6 (PLACED IN THREE 4" COURSES) OR  
12" BASE COURSE USING GRADED AGGREGATE (THREE 4" COURSES)

ONSITE PARKING:  
(HOWARD COUNTY STD DETAIL R 3.01)  
R = 2.01 PAVING (NO. P-2)  
1 1/2" B/B CONC. SURFACE (SF)  
2 1/2" ST. CONC. BASE (BC)  
6" GRADED AGGREGATE BASE (GAB)

NOTE  
ALL CURB EXCEPT ADJACENT TO SIDEWALK TO BE HOWARD COUNTY STD. CURB AND GUTTER STD. DETAIL R 3.01

HANDICAP PARKING DETAIL  
SCALE: 1" = 20'



WALL PROFILE  
SCALE: VERT: 1" = 3'  
HORIZ: 1" = 30'

NOTE: THE BASEMENT OF THE BUILDING INDICATED HEREON IS APPROVED FOR STORAGE USE ONLY (THIS CAN INCLUDE THE EMPLOYEE LOCKER ROOM STORAGE AS SHOWN ON THE ARCHITECTURAL PLANS). ANY CHANGE IN USE OR OCCUPANCY OF THE BASEMENT FOR OTHER PURPOSES, AS DEFINED IN THE ZONING REGULATIONS, WILL REQUIRE CONSIDERATION AND APPROVAL BY THE DEPARTMENT OF PLANNING AND ZONING PRIOR TO THE CHANGE IN USE OR OCCUPANCY.

AS BUILT CERTIFICATE  
*Michael H. Helfrich* DATE 10/15/97  
MICHAEL H. HELFRICH 101542

PROPOSED DINER  
TOTAL F.F. AREA = 6,544 S.F.  
BASEMENT EL. = 390.50  
F.F. = 400.50  
(NO SANITARY SEWER SERVICE TO BASEMENT UNFINISHED STORAGE ONLY)

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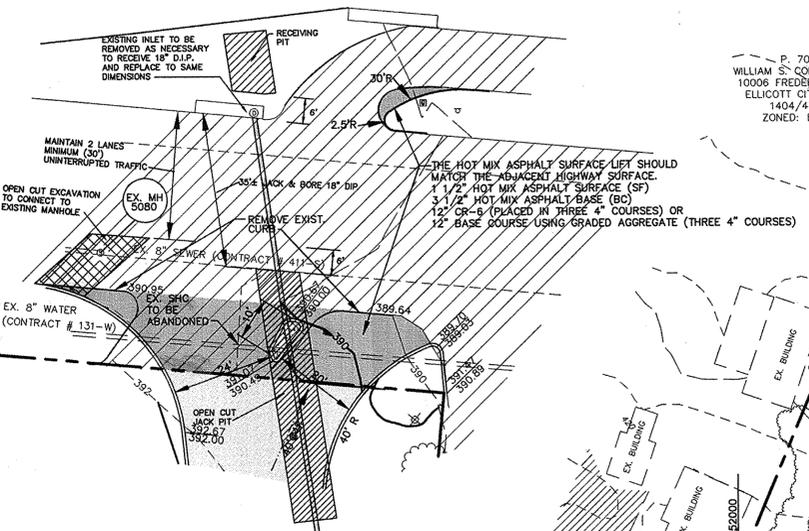
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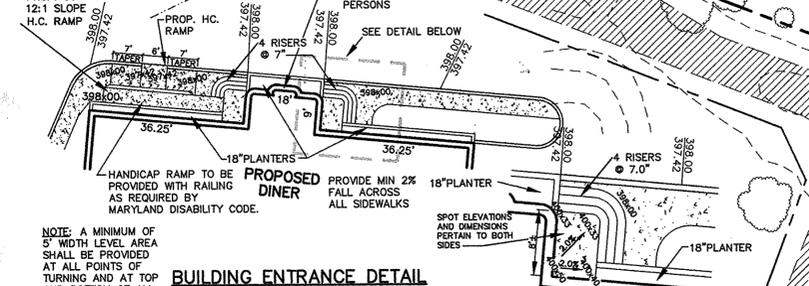
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NOTE: A MINIMUM OF 5' WIDTH LEVEL AREA SHALL BE PROVIDED AT ALL POINTS OF TURNING AND AT TOP AND BOTTOM OF ALL RAMPS.  
PROF. 2000 GAL. GREASE TRAP DUAL COMPARTMENT W/18" MANHOLE ACCESS TO GRADE FOR BOTH COMPARTMENTS. SEE DETAIL SHEET 3 OF 5  
PROF. 4" PVC @ 2.0% SANITARY SERVICE TO ALL FIXTURES, BATHROOMS, ETC. EXCEPT KITCHEN, SINKS, MOP SINKS, & FLOOR DRAINS IN KITCHEN SINK AREA.  
PROF. 1 1/2" WATER METER FOR REGULAR SERVICE. HOWARD CO. STD. DETAIL 3.34.  
PROF. OS&Y FOR 4" FIRE SERVICE. HOWARD CO. STD. DETAIL 3.42

WATER AND SEWER SERVICE CONNECTION DETAIL & HANDICAP PARKING DETAIL  
SCALE: 1" = 20'



PARKING LOT ENTRANCE DETAIL  
SCALE: 1" = 20'

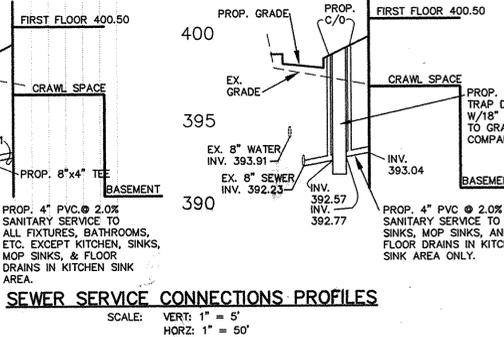


BUILDING ENTRANCE DETAIL  
SCALE: 1" = 20'

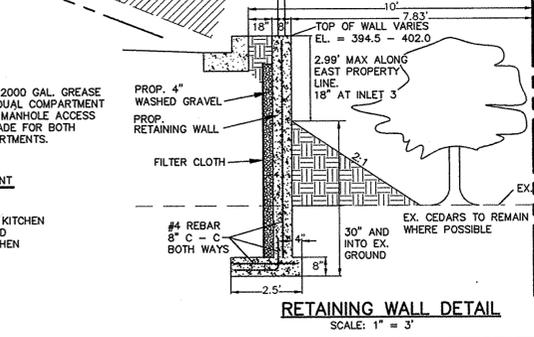
OPERATION AND MAINTENANCE SCHEDULE FOR UNDERGROUND SWM QUANTITY STORAGE PIPES AND STORMCEPTOR WATER QUALITY DEVICE

- 1. THE STORMCEPTOR WATER QUALITY STRUCTURES AND THE 96" DIA. STORMWATER STORAGE PIPE SHALL BE PERIODICALLY INSPECTED AND CLEANED TO MAINTAIN OPERATION AND FUNCTION. THE OWNER SHALL INSPECT THE STORMCEPTOR UNIT YEARLY AT A MINIMUM, UTILIZING THE STORMCEPTOR INSPECTION/MONITORING FORM. INSPECTIONS SHALL BE DONE BY USING PLEXIGLASS TUBE ("SLUDGE JUDGE") TO EXTRACT A WATER COLUMN SAMPLE. WHEN THE SEDIMENT DEPTHS EXCEED THE LEVEL SPECIFIED IN TABLE 6 OF THE STORMCEPTOR TECHNICAL MANUAL, THE UNIT MUST BE CLEANED.
- 2. THE STORMCEPTOR WATER QUALITY STRUCTURE AND STORMWATER PIPE STORAGE SHALL BE CHECKED AND CLEANED YEARLY AT A MINIMUM AND AFTER ESPECIALLY SEVERE STORMS. WHEN SEDIMENT ACCUMULATION OF MORE THAN 2" IS OBSERVED OR ANY DEBRIS THAT MIGHT OBSTRUCT THE OPENING, THE FACILITY MUST BE CLEANED. THE VALVE SHOULD ALSO BE CHECKED FOR OPERATION AT LEAST ANNUALLY.
- 3. CLEANED IMMEDIATELY AFTER PETROLEUM SPILLS. THE OWNER CONTACT THE APPROPRIATE REGULATORY AGENCIES.
- 4. THE MAINTENANCE OF THE STORMCEPTOR UNIT SHALL BE DONE USING A VACUUM TRUCK WHICH WILL REMOVE THE WATER, SEDIMENT, DEBRIS, FLOATING HYDROCARBONS AND OTHER MATERIALS IN THE UNIT. PROPER CLEANING AND DISPOSAL OF THE REMOVED MATERIALS AND LIQUID MUST BE FOLLOWED BY THE OWNER.
- 5. THE SEDIMENT DEBRIS SHALL BE REMOVED FROM THE 96" DIA. STORAGE PIPES BY VACUUM TRUCK OR OTHER MANUAL MEANS.
- 6. THE INLET AND OUTLET PIPES SHALL BE CHECKED FOR ANY OBSTRUCTIONS AT LEAST ONCE EVERY SIX MONTHS. IF OBSTRUCTIONS ARE FOUND THE OWNER SHALL HAVE THEM REMOVED. STRUCTURAL PARTS OF THE STORMCEPTOR UNIT SHALL BE REPAIRED AS NEEDED.
- 7. THE OWNER SHALL RETAIN AND MAKE THE STORMCEPTOR INSPECTION/MONITORING FORMS AVAILABLE TO THE HOWARD COUNTY OFFICIALS UPON THEIR REQUEST.

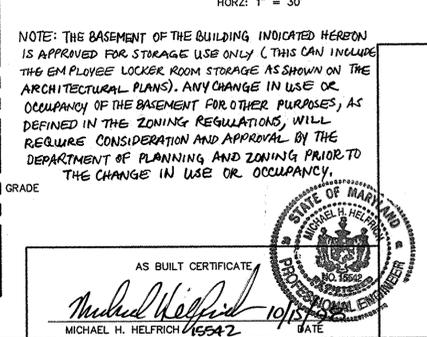
TYPICAL PLATFORM DETAIL  
SCALE: 1" = 10'



SEWER SERVICE CONNECTIONS PROFILES  
SCALE: VERT: 1" = 5'  
HORIZ: 1" = 30'

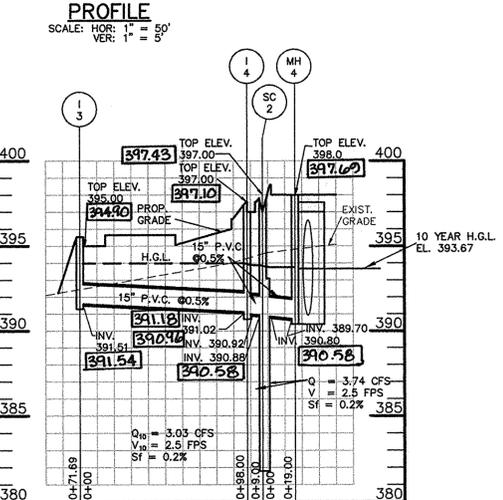
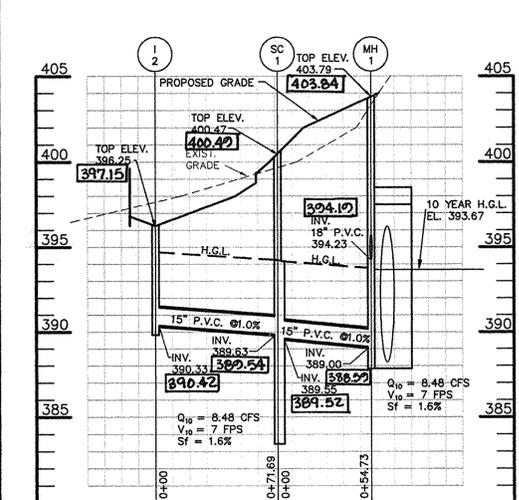
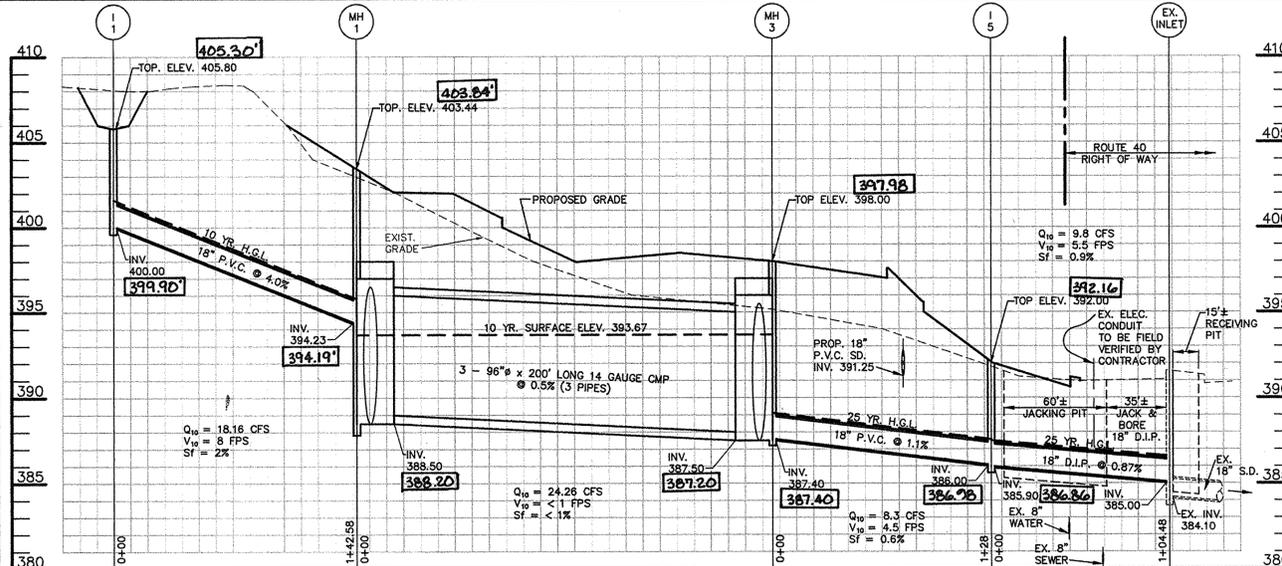
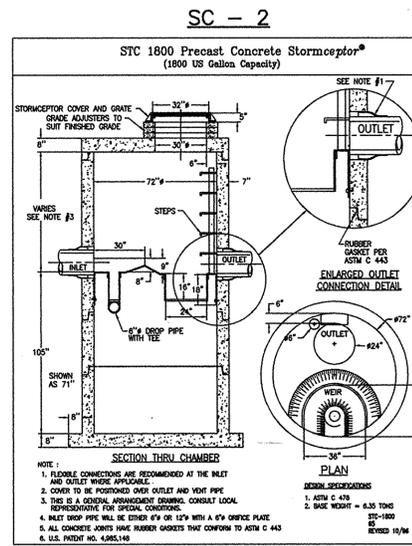
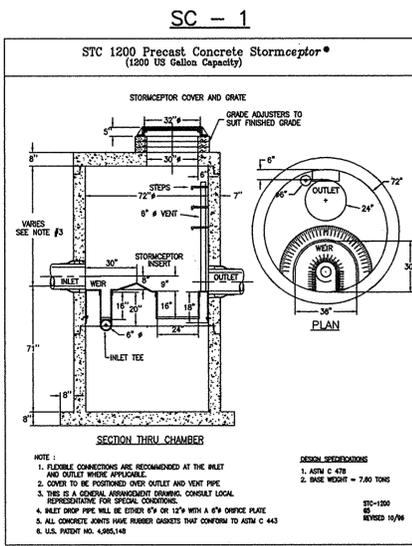


RETAINING WALL DETAIL  
SCALE: 1" = 3'



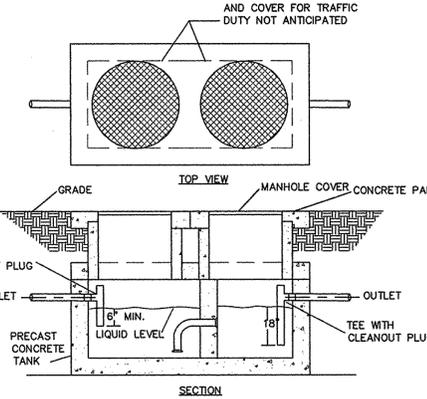
STRUCTURE SCHEDULE

NO.	TYPE	TOP INV.	INV. IN.	INV. OUT.	REMARKS
I-1	SINGLE "WR"	405.8	---	400.00	SD 4.37
I-2	SINGLE "WR"	396.25	---	390.30	SD 4.37
I-3	"S" COMB.	395.00	---	391.50	SD 4.32
I-4	"S" COMB.	397.00	391.00	390.90	SD 4.32
I-5	"S" COMB.	392.00	386.00	385.90	SD 4.32
MH-1		403.79	394.23 18" P.V.C. SD. 15" PVC	388.50	SEE DETAIL THIS SHEET
MH-2		401.79	---	388.50	SEE DETAIL THIS SHEET
MH-3		398.00	387.50	387.40	SEE DETAIL THIS SHEET
MH-4		398.00	389.70	389.60	SEE DETAIL THIS SHEET
SC 1	STC 1800	400.47	389.75	389.55	SEE DETAIL THIS SHEET
SC 2	STC 1200	398.00	391.00	390.90	SEE DETAIL THIS SHEET



HOWARD COUNTY EXTERIOR GREASE INTERCEPTOR NOTES AND SPECIFICATIONS

1. THE GREASE INTERCEPTOR SHALL BE DESIGNED AND SIZED FOR THE EFFICIENT REMOVAL OF GREASE AT THE MAXIMUM ANTICIPATED FLOW. THE MINIMUM GREASE INTERCEPTOR SIZE SHALL BE 750 GALLONS. 2000 GALLONS IS PROPOSED.
2. VENTING SHALL BE REQUIRED SO AS TO CONFORM WITH THE HOWARD COUNTY PLUMBING CODE.
3. CLEANOUTS SHALL BE PROVIDED ON THE INLET AND OUTLET FOR UNPLUGGING SEWER LINES AND "DIP PIPES" OF THE INTERCEPTOR.
4. ACCESS SHALL BE PROVIDED FOR CLEANING AND INSPECTION.
5. ACCESS COVERS SHALL BE GAS-TIGHT AND CONSTRUCTED TO WITHSTAND EXPECTED TRAFFIC WEIGHT. (NON VEHICULAR TRAFFIC IF LOCATED OUTSIDE PARKING LOT).
6. ALL DRAINS CONTAINING CONCENTRATIONS OF FATS, OILS, AND GREASES SHALL DISCHARGE TO THE GREASE INTERCEPTOR PRIOR TO ENTERING THE SANITARY SEWER SYSTEM.
7. WASTE FROM THE GARBAGE GRINDERS AND RESTROOMS SHALL BYPASS THE GREASE INTERCEPTOR.

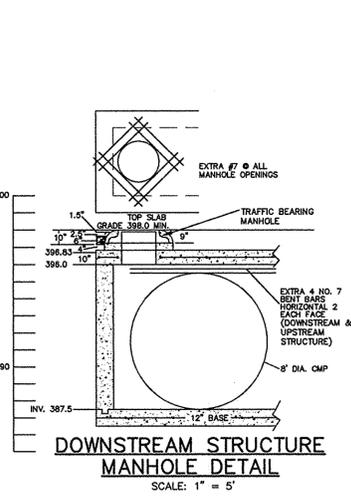
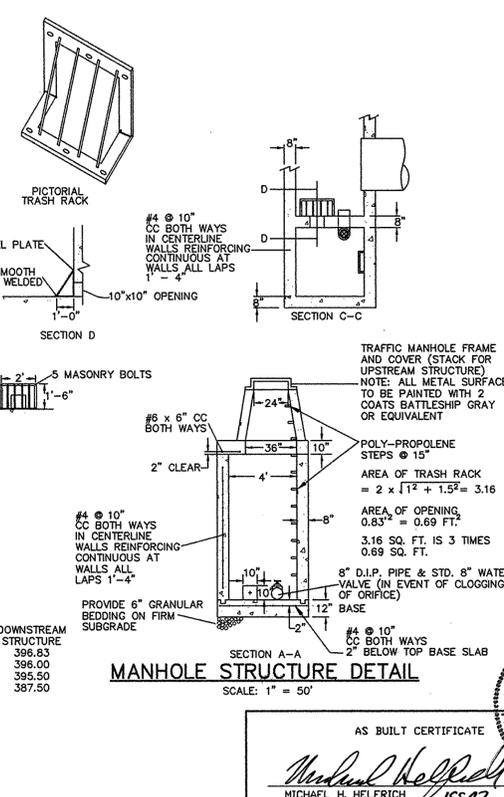
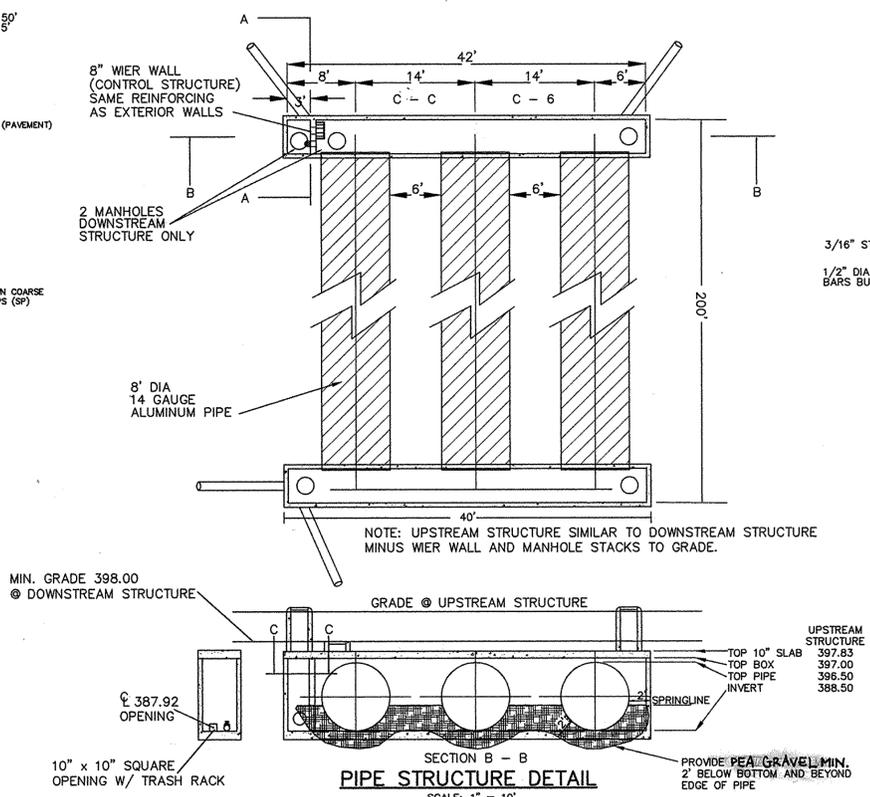


TEST PIT RESULTS

TEST PIT	TEST PIT 1	TEST PIT 2	TEST PIT 3	TEST PIT 4
0 - 1 CR-6 (PAVEMENT)	0 - 1 CR-6 (PAVEMENT)	0 - 1 CR-6 (PAVEMENT)	0 - 1 CR-6 (PAVEMENT)	0 - 1 CR-6 (PAVEMENT)
1 - 3 BROWN COARSE SAND (SW)	1 - 3 BROWN COARSE SAND (SW)	1 - 4 STONE RUBBLE TERMINATED @ 4" DUE TO NATIVE STONE	1 - 15 BROWN COARSE WITH MICA CHIPS (SP)	1 - 15.5 BROWN COARSE WITH MICA CHIPS (SP)
3 - 4 WHITE COARSE SAND WITH FRAGMENTS OF STONE (SW)	3 - 4 WHITE COARSE SAND WITH FRAGMENTS OF STONE (SW)			
4 - 15 BROWN COARSE SAND (SP)	4 - 15 BROWN COARSE SAND (SP)			

DESIGN SUMMARY

	PIPE STORAGE	STORMCEPTOR 1	STORMCEPTOR 2
FACILITY IDENTIFICATION:	PS1	SC 1	SC 2
FACILITY TYPE:	UNDERGROUND PIPES	"STORMCEPTOR"	"STORMCEPTOR"
INVERT ELEVATION:	387.5	389.55	390.80
WATER SURFACE ELEVATION 2yr/10yr/100yr	391.17/393.67/402.3	389.0/389.0/389.0	390.9/390.9/390.9
STORAGE VOLUME:	30,156 cu.ft. 0.70 ac.ft.	1,800 gal.	1,200 gal.
INFLOW 2yr/10yr/100yr	16.8/29.6/42.0	8.48	3.03
REQUIRED CONTROL 2yr/10yr/100yr	7.0/16.8/NONE	NONE	NONE
OUTFLOW 2yr/10yr/100yr	6.0/8.1/12.9	8.48	3.03
MAINTENANCE RESPONSIBILITY:	PRIVATE	PRIVATE	PRIVATE



BY THE DEVELOPER:

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Michael H. Helfrich 11/8/97  
DEVELOPER DATE

BY THE ENGINEER:

I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION.

Michael Helfrich 11/25/97  
ENGINEER DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

U.S. SOIL CONSERVATION SERVICE DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT DATE

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

Joyce M. Boyd 11-26-97  
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

12/5/97  
DIRECTOR DATE

12/3/97  
Cindy Hamilton DATE  
CHIEF, DIVISION OF LAND DEVELOPMENT  
PLANNING AND ZONING

1/25/97  
DATE  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

APPROVED FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

DIRECTOR DATE

CHIEF BUREAU OF ENGINEERING DATE

DATE NO. REVISION

OWNER / DEVELOPER

LIVADE INC.  
1726 DORSEY ROAD  
HANOVER, MD. 21076

PROJECT STAVLAS - ROUTE 40 DINER

AREA TAX MAP 24 PARCEL 68  
2nd ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

TITLE DETAILS AND STORM DRAIN PROFILES

GAMMA ENGINEERING  
844 WEST STREET  
ANNAPOLIS, MD 21401  
(410) 626-1070

11/18/97 DATE

DESIGNED BY: MHH  
DRAWN BY: APF  
PROJECT NO.  
DATE: AUG 1997  
SCALE: AS NOTED  
DRAWING NO. 3 OF 5

STATE OF MARYLAND  
MICHAEL H. HELFRICH  
PROFESSIONAL ENGINEER  
11/17/98  
AS BUILT CERTIFICATE  
MICHAEL H. HELFRICH 11/17/98 DATE