

QC 593-05 Angler's Restaurant
Site Plan 05-05-08-0019

MSA-S-1829-5129

HC 9/16/05
HC 2/24/06



Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor

Margaret G. McHale
Chair

Ren Serey
Executive Director

**STATE OF MARYLAND
CRITICAL AREA COMMISSION
CHESAPEAKE AND ATLANTIC COASTAL BAYS**

1804 West Street, Suite 100, Annapolis, Maryland 21401
(410) 260-3460 Fax: (410) 974-5338
www.dnr.state.md.us/criticalarea/

March 28, 2011

Ms. Holly Tompkins
Queen Anne's County
Department of Land Use, Growth Management
and Environment
160 Coursevall Drive
Centreville, Maryland 21617

Re: Schulz Development LLC; Variance

Dear Ms. Tompkins:

Thank you for forwarding the above referenced application for review and comment. The applicant proposes to do a combination of filling and excavating of tidal wetlands and excavating of upland area to create open water. The variance requested is for relief from regulations governing fill in the 100 year floodplain. The site is mapped as an Intense Development Area (IDA) and is a mapped Buffer Exemption Area (BEA). Based on the information provided, I have the following comments:

1. Because the proposal includes excavation of the setback area of the BEA, the applicant should also be requesting a variance for impacts to that setback. It is our interpretation that the most immediate waterfront setback area of the BEA is protected under Section 14:1-53 of the County Code.
2. Should the Board of Appeals grant a variance, the variance should include a condition requiring a Buffer Management Plan that includes establishment of the setback in native vegetation, as is required in Section 14:1-53.E.
3. Because redevelopment plans for the filled area are unknown at this time, it is difficult to implement IDA regulations. If a variance is granted the Board should condition the approval on compliance with the 10% Rule Guidance Manual and Section 14:1-53 of the County Code, at the time of redevelopment.

TTY for the Deaf

Annapolis: (410) 974-2609 D.C. Metro: (301) 586-0450



Ms. Tompkins
March 28, 2011
Page Two

4. The proposed excavation and fill, if approved will result in a number of changes to the County's official Critical Area Map. The County should consider amending the maps to include the new area of BEA. In addition the County should also consider the impacts on existing structures in the area of the mouth of the basin, which will now be in the Buffer.
5. The supplied plans do not indicate where the dredge material will be staged or stockpiled for dewatering and or removal. These plans and any impacts to the Buffer should be supplied.

As you are aware, in order to grant a variance, the applicants need to demonstrate and the Board of Appeals needs to find that every one of the County's variance standards has been met, including the standards of unwarranted hardship and that the variance request is the minimum necessary to provide relief.

Thank you for the opportunity to provide comments. Please include this letter in your file and submit it as part of the record for this variance. Also, please notify the Commission in writing of the decision made in this case. If you have any questions, please contact me at (410) 260-3468.

Sincerely,



Roby Hurley
Natural Resources Planner

RH/jjd

cc: QC 94-11
QC 593-05

Robert L. Ehrlich, Jr.
Governor



Martin G. Madden
Chairman

Michael S. Steele
Lt. Governor

Ren Serey
Executive Director

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www.dnr.state.md.us/criticalarea/

February 24, 2006

Ms. Helen Spinelli
Queen Anne's County
160 Coursevall Drive
Centreville, MD 21617

RE: Minor Site Plan, Angler's Restaurant
MISP #05-05-08-0019-C – Revision #1

Dear Ms. Spinelli:

Thank you for providing information on the above referenced minor site plan. The applicant proposes to tear down an existing fire-damaged restaurant and re-build it at a different location on the site. The property is approximately 1.305 acres in size, is designated IDA and Buffer Exempt. Commission staff has reviewed the information provided and we have the following comments:

1. Compliance with the 10% requirement depends upon the ability to remove impervious surface from an area not owned by the applicant. Some guarantees that it will remain pervious in perpetuity should be required in order to ensure compliance. Alternatively, the calculations could be based strictly on the property boundaries. It seems that any required pollutant removal could be addressed by using additional sand filters.
2. We continue to be concerned about the lack of any Buffers along the waterfront. The existing restaurant, as well as the minimum setback from Tidal Wetlands within the WVC, is 15 feet. While wooden walkways (with spaces between the boards) are considered pervious (provided proper removal of impervious beneath), there are no plans for plantings between development and the water. According to the County's Buffer Exemption provisions, the area of the setback should be established in vegetation. Redevelopment of the site should be accomplished with an overall environmental improvement.

Thank you for the opportunity to comment on this proposal. If you have any questions or concerns, please contact me at (410) 260-3477.

Sincerely,

A handwritten signature in cursive script that reads "LeeAnne Chandler".

LeeAnne Chandler
Science Advisor

Robert L. Ehrlich, Jr.
Governor

Michael S. Steele
Lt. Governor



Martin G. Madden
Chairman

Ren Serey
Executive Director

**STATE OF MARYLAND
CRITICAL AREA COMMISSION
CHESAPEAKE AND ATLANTIC COASTAL BAYS**

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www.dnr.state.md.us/criticalarea/

September 16, 2005

Ms. Helen Spinelli
Queen Anne's County
160 Coursevall Drive
Centreville, MD 21617

RE: Minor Site Plan, Angler's Restaurant
MISP #05-05-08-0019-C

Dear Ms. Spinelli:

Thank you for providing information on the above referenced minor site plan. The applicant proposes to tear down an existing fire-damaged restaurant and re-build it at a different location on the site. The property is approximately 1.44 acres in size, is designated IDA and Buffer Exempt. Commission staff has reviewed the information provided and we have the following comments:

1. The Environmental Assessment Report indicates that there is no shoreline buffer or resource protection restrictions within the IDA. This is incorrect. While the site is within a Buffer Exemption Area, there is still a Buffer that must be considered in redevelopment of the site. Similarly, if there are any nearby Habitat Protection Areas, they require the same protection as if the site were RCA.
2. We are opposed to the reduction of the shore buffer to zero feet. Existing structures associated with the restaurant, as well as the minimum setback from Tidal Wetlands within the WVC, is 15 feet.
3. Please provide a copy of the response from DNR on the Environmental Review when it is received.
4. The 10% calculations are required and have not been provided. For 10% purposes, the calculations should be based on the area of the property itself.

Ms. Helen Spinelli
September 16, 2005
Page 2 of 2

5. The triangular piece of land across the canal from the restaurant is shown as existing lawn on the existing conditions plan and as existing gravel on the proposed site plan. It appeared to be grass in the field.
6. We recommend that substantially more plantings be provided on site, especially between the development and the water. While we understand that the walkway will be pervious, the area of the setback is supposed to be established in vegetation according to the County's Buffer Exemption provisions. Also, there should be an obvious environmental improvement with redevelopment of the site. The areas along the shoreline currently contain grass on top of the gravel in many places and the grass does serve to slow runoff and help filter some pollutants. The areas that cause specific concern are those that extend from parking, to boardwalk to water, without any plantings whatsoever.

Thank you for the opportunity to comment on this proposal. If you have any questions or concerns, please contact me at (410) 260-3477.

Sincerely,



LeeAnne Chandler
Science Advisor

cc: QC593-05



MARYLAND
DEPARTMENT OF
NATURAL RESOURCES

Robert L. Ehrlich, Jr., Governor

Michael S. Steele, Lt. Governor

C. Ronald Franks, Secretary

September 26, 2005

Ms. Jan Reese
Environmental Regulations Consultant, Inc.
P.O. Box 298
St. Michaels, MD 21663

RE: Environmental Review for Property of Droters Marina, Inc. at Kent Narrows, Tax Map 57, Block 12, Parcels 329, Fifth Election District, Queen Anne's Co., MD.

Dear Ms. Reese:

The Wildlife and Heritage Service has determined that there are no State or Federal records for rare, threatened or endangered species within the boundaries of the project site as delineated. As a result, we have no specific comments or requirements pertaining to protection measures at this time. This statement should not be interpreted however as meaning that rare, threatened or endangered species are not in fact present. If appropriate habitat is available, certain species could be present without documentation because adequate surveys have not been conducted. It is also important to note that the utilization of state funds, or the need to obtain a state authorized permit may warrant additional evaluations that could lead to protection or survey recommendations by the Wildlife and Heritage Service. If this project falls into one of these categories, please contact us for further coordination.

Thank you for allowing us the opportunity to review this project. If you should have any further questions regarding this information, please contact me at (410) 260-8573.

Sincerely,

Lori A. Byrne,
Environmental Review Coordinator
Wildlife and Heritage Service
MD Dept. of Natural Resources

ER #2005.1849.qa

RECEIVED

FEB 02 2006

CRITICAL AREA COMMISSION

ENVIRONMENTAL REGULATIONS CONSULTANT, INC.

Jan Reese, P.O. Box 298,
St. Michaels, Maryland 21663
410-745-2875

25 August 2005

**CHESAPEAKE BAY CRITICAL AREA ENVIRONMENTAL ASSESSMENT
PROPERTY OF DROTTER'S MARINA, INC.**

1.44 ACRES ± ON EAST SIDE OF KENT NARROWS, QUEEN ANNE'S COUNTY,
FIFTH ELECTION DISTRICT, TAX MAP 57, BLOCK 12, PARCEL 329

INTRODUCTION

The property is located on the south side of MD Route 18 at the east side of Kent Narrows, Queen Anne's County. The property location and configuration is depicted in Figure 1, while it can be located on Queen Anne's County ADC Map 23, K3.

The property is shaped like an ax with the top of the head bounding Kent Narrows tidewater with the portion where the handle fits into the head being a boat basin. The entire property above tidewater is bulk-headed and almost entirely covered by impervious surfaces of buildings, sheds, trailers, and vehicle roadways. Additionally, off the south-central portion of the property is a 150-foot long pier into Kent Narrows with mooring slips leading to a platform containing a small commercial building. The MD Route 18 dike ramp leading to the Old Kent Narrows Bridge bounds the property on the north, developed commercial property on the east, tidewater of Kent Narrows and Kent Narrows Way Road on the south, and tidewater of Kent Narrows on the west.

The entire property is within the Chesapeake Bay Critical Area designated Intense Development Area (IDA), exempt from a shoreline buffer, resource protection, impervious surface restrictions, and zoned Waterfront Village Center (WVC) by the Queen Anne's County Department of Planning & Zoning. I visited the property on 27 June 2005 to collect information for this Chesapeake Bay Critical Area Environmental Assessment.

PROPOSED DEVELOPMENT

The property is proposed for removal of the recently burned Angler's Restaurant and construction of a new restaurant in a different location within the property. There is no shoreline buffer, resource protection, or impervious surface restrictions within the Critical Area designated Intense Development Area (IDA). Existing impervious surfaces cover 1.18 acres of the property while it is anticipated to be less after completion of the proposed development. The proposed development will continue to be accessed directly from Kent Narrows Way, receive potable water from an on-site well, and provided disposal of sewage effluent by an existing public system. There is no forest protection provision within the Critical Area designated IDA, while landscape plantings are required for buffer exempt mitigation. Stormwater run-off is to be managed by surface and underground sand filters.



EXISTING NATURAL FEATURES

AQUATIC RESOURCES

Shoreline Erosion Rate

The property has close to 1000 linear feet boundary exposure to tidewater of Kent Narrows. Approximately 600-feet are within a protected boat basin with remainder of the shoreline directly exposed to turbid water of Kent Narrows. A modified U.S. Department of the Interior, FWS, 1982 National Wetland Inventory, Kent Island, MD Map in the Queen Anne's County Department of Planning and Zoning indicates accretion to slight natural shoreline erosion in this portion of Kent Narrows. The entire property shoreline is bulk-headed, thus artificially protected from erosion forces of wind, wave, and tidal turbidity.

Submerged Aquatic Vegetation

The U.S. Environmental Protection Agency, Chesapeake Bay Program, (<http://www.vims.edu/bio/sav/sav01/quads/qe033.ht>) 2001 and 1998 Distribution of Submerged Aquatic Vegetation in the Chesapeake Bay and Tributaries and the Coastal Bays aerial and volunteer ground censuses report no submerged aquatic vegetation in Kent Narrows near the property. Conversely, I found Common Elodea, Eurasian Watermilfoil, Horned Pondweed, Red-head Grass, and Widgeon Grass (*Elodea Canadensis*, *Myriophyllum spicatum*, *Zannichellia palustris*, *Potamogeton perfoliatus*, *Ruppia maritime*) growing in the boat basin and/or in flotsam on a small beach at the southeast corner of the property.

Fish Spawning

The Queen Anne's County, Department of Planning & Zoning, 1995 Queen Anne's County, Natural Resources Map, the Chesapeake Bay Program, Living Resources Subcommittee, 1991 Habitat Requirements for Chesapeake Bay Living Resources, and the University of Maryland, Natural Resources Institute, 1973 The Chesapeake Bay in Maryland: An Atlas of Natural Resources indicates no species of anadromous fish are known to spawn in Kent Narrows tidewater adjacent to the property, but Bay Anchovy and Hogchoker (*Anchoa mitchilli*, *Trinectes maculatus*) may spawn in nearby less turbid water.

Shellfish

The Queen Anne's County, Department of Planning & Zoning, 1995 Queen Anne's County, Natural Resources Map, the Chesapeake Bay Program, Living Resources Subcommittee, 1991 Habitat Requirements for Chesapeake Bay Living Resources, and the University of Maryland, Natural Resources Institute, 1973 The Chesapeake Bay in Maryland: An Atlas of Natural Resources indicate shellfish beds of Soft-shell Clam and American Oyster (*Crassostrea virginica*, *Mya arenaria*) could occur in Kent Narrows offshore from the property.

Fin Fish

The Chesapeake Bay Program, Living Resources Subcommittee, 1991 Habitat Requirements for Chesapeake Bay Living Resources, and the University of Maryland, Natural Resources Institute, 1973 The Chesapeake Bay in Maryland: An Atlas of Natural Resources note American Shad, Hickory Shad, Alewife, Blue-backed Herring, Atlantic Menhaden, American Eel, White Perch, Striped Bass, Spot, Atlantic Silverside, Bay Anchovy, and Hogchoker may frequent tidewater offshore from the property.

Waterfowl Concentration Areas

The Queen Anne's County, Department of Planning & Zoning, 1995 Queen Anne's County, Natural Resources Map, and the University of Maryland, Natural Resources Institute, 1973 The Chesapeake Bay in Maryland: An Atlas of Natural Resources plot waters of Kent Narrows just south of the property as a concentration area for thousands of wintering Canada Geese and hundreds of surface-feeding ducks. A flock of Mallards frequented the small sand beach beside Kent Narrows Way on the property during the site visit.

TERRESTRIAL RESOURCES

Topography

The U.S. Geological Survey, 1986 (Photo-revised) Queenstown, MD Topographic Quadrangle Map (Figure 1) plots no elevation contours in the region suggesting the property is level, while the nearest elevation given is a benchmark of five feet above sea level near the center of the property. Historically the property was level marshland, but deposition of dredge materials and/or oyster shells decades ago created made-land raised slightly above sea level. Topographic contours plotted on contract drawings of Davis, Moore, Shearon & Associates, LLC, 2005 Contract Drawings For Proposed Angler's Restaurant on lands of Droter's Marina, Inc. give survey located spot elevations on the property ranging 4.27-5.48 feet above sea level.

Soils

Figure 2A is taken from the U.S. Department of Agriculture, NRCS/SCS, 2002 Soil Survey of Queen Anne's County, MD, Sheet 32 and maps the entire property as Urban Land (Ur). Marine dredge spoils from the Kent Narrows area (marinas, channels, bulk-heading) and/or oyster shells from the historic shucking houses located in the area were deposited on historic tidal marsh in the past 50 years creating the Urban Land mapped on the property today. Urban Land substrate is noted on contract drawings of Davis, Moore, Shearon & Associates, LLC, 2005 Contract Drawings For Proposed Angler's Restaurant on lands of Droter's Marina, Inc. Urban Land has severe limitations for almost all development uses, however efficient surface drainage, capping with a layer of stable materials, pillar foundations, public sources of potable water and disposal of sewage effluent, and other technological innovations permit development on Urban Land substrates today.

100-Year Flood Plain

The Federal Emergency Management Agency, 1986 Queen Anne's County, MD, Unincorporated Areas, Flood Insurance Rate Map, Panels 240054 0046C shows the entire property is in Flood Hazard Zone "A", within limits of the 100-year tidal flood. This fact is noted on the Davis, Moore, Shearon & Associates, LLC, 2005 Contract Drawings For Proposed Angler's Restaurant on lands of Droter's Marina, Inc.

Wetlands

Figure 2B is taken from the U.S. Department of the Interior, FWS, 1982 National Wetland Inventory, Queenstown, MD Map which indicates there are no wetlands on the property, but adjoining tidewater of Kent Narrows is plotted as Estuarine, sub-tidal, open water, sub-tidal wetlands (E1OWL). A note of no wetlands on the property is made on the contract drawings of Davis, Moore, Shearon & Associates, LLC, 2005 Contract Drawings For Proposed Angler's Restaurant on lands of Droter's Marina, Inc.

Hydrology and Streams

The site visit found no surface hydrology on the property landward of tidewater. The U.S. Geological Survey, 1986 (Photo-revised) Queenstown, MD Topographic Quadrangle Map (Figure 1) indicates there are no bodies of water (pond, impoundment, lake) or streams on the property and that is confirmed by the site visit.

Vegetative Cover

The marine dredged materials and oyster shells comprising the property today are largely further covered with impervious surfaces of buildings and vehicle roadways. There is a small area of mowed lawn beside Kent Narrows tidewater at the northwest corner of the property. There are no natural plant communities on the property.

Wildlife

Urban Land in a highly developed area largely covered with impervious surfaces, and a bulk-headed shoreline offer no cover, fresh water, and little foods for any form of wildlife. I found during the site visit Diamondback Terrapin (laying eggs), Mallard, Killdeer (nesting), Mourning Dove, Song Sparrow, Common Grackle, and European House Sparrow on the property; American Robin and American Crow flying over; and Sea Lettuce, Bay Barnacle, and Blue Crab in tidewater adjoining the property

Rare and Endangered Species or Habitats

No rare, threatened or endangered habitat or species of plant or animal listed in MD COMAR 08.03.08 were observed on the property during the site visit. An Environmental Review for rare and endangered habitats and species was requested from the MD Department of Natural Resources, Wildlife & Heritage Division, on 12 August 2005. A copy of that request is included herein, and a copy of the DNR response will be made a part of this report when received.

The Queen Anne's County, Department of Planning and Zoning, 1995 Queen Anne's County, Natural Resources Map plots the nearest nesting of protected Bald Eagle about 1.2 straight-line miles southwest of the property. The nearest protected colonial waterbird nesting sites are mapped about 0.8 miles south and southeast of the subject property. The U.S. Department of the Interior, FWS, Chesapeake Bay Field office, 2004 Delmarva Fox Squirrel Occurrence in Queen Anne's County, MD plots the nearest squirrel occurrence about 2.5 miles east of the property.

PRECAUTIONS FOR POTENTIAL ENVIRONMENTAL IMPACTS

Queen Anne's County Critical Area Zoning maps this portion of the Kent Narrows area as Buffer Exempt and absence of protected steep slopes, hydric soil, wetlands, and streams on the property are all noted on the contract drawings of Davis, Moore, Shearon & Associates, LLC, 2005 Contract Drawings For Proposed Angler's Restaurant on lands of Droter's Marina, Inc. Bulk heading secures the property shoreline from erosion, while precautions may have to be taken to protect submerged aquatic vegetation, shellfish beds, and wintering waterfowl noted as occurring in Kent Narrows offshore from the property. Erosion and sediment control during clearing, grading and construction will be addressed in a plan developed in accordance with the Queen Anne's County, Soil Conservation standards to minimize the quantity and improve the quality of stormwater reaching Kent Narrows. Surface and underground sand filters will manage storm water run-off from the completed development that will be accessed directly from existing Kent Narrows Way. An existing water



well, and a public system will continue to provide potable water and disposal of sewage effluent eliminating the need for constructing wells or disposal areas on site.

SUMMARY

The entire buffer exempt property is within the Chesapeake Bay Critical Area designated Intense Development Area (IDA) and proposed for clearing and replacement of the existing restaurant that will continue to be accessed from Kent Narrows Way and served potable water and sewage disposal by existing on-site and public systems. Bulk heading secures the existing shoreline, while submerged aquatic vegetation, mollusk beds, fin fish, and wintering waterfowl concentrations are noted as occurring in Kent Narrows offshore from the property. The level property is 4-5 feet above sea level, comprised of dredged materials and/or oyster shells, entirely within the 100-year tidal flood plain, contain no wetlands, bodies of surface water, streams, natural vegetative communities, wildlife, or rare or endangered species.

WORKSHEET A: Standard Application Process

Calculate Pollutant Removal Requirements

Project Name: Angler's Restaurant

Date: Jan-06

Step 1: Calculate Existing and Proposed Site Impervious

A: Calculate Percent Imperviousness

- 1) Site Area within the Critical Area IDA A= 1.44 acres
- 2) Site Impervious Surface Area, Existing and Proposed
(See table 4.1 for details)

	(a) Existing (acres)	(b) Proposed (acres)
Roads	_____	_____
Parking lots	_____	_____
Driveways	_____	_____
Sidewalks/paths	_____	_____
Rooftops	_____	_____
Decks	_____	_____
Swimming pools/ponds	_____	_____
Other	<u>1.18</u>	<u>1.029</u>
Impervious Surface Area	<u>1.18</u>	<u>1.029</u>

Channel Credit Area = 0
 Total Prop. Impervious = 1.029

3) Imperviousness (I)

Existing Imperviousness, I pre
 = Impervious Surface area / Site Area
 = (Step 2a) / (Step 1)
 = 1.18 / 1.44
 = 81.94 %

Proposed Imperviousness, I post
 = Impervious Surface area / Site Area
 = (Step 2a) / (Step 1)
 = 1.029 / 1.44
 = 71.46 %

B: Define Development Category (circle)

- 1) New Development: Existing impervious less than 15% I (Go to step 2A)
- 2) ReDevelopment: Existing impervious of 15% I or more (Go to step 2B)
- 3) Single Lot residential Development: Single lots being developed or improved; single family residential development; and more than 250 sf of impervious area and associated disturbance (Go to Section 5, Residential Approach, for detailed criteria and requirements)

Note: All acrages used in this worksheet refers to areas within the IDA of the Critical Area only

Step2: Calculate the Predevelopment Load (Lpre)

A: New Development

$$L_{pre} = (0.5) (A)$$
$$= (0.5) \times \frac{0}{0} \text{ lbs/year of total phosphorus}$$

Where:

- L_{pre} = Average annual load of total phosphorus exported from the site prior to development (lbs/year)
- 0.5 = Annual total phosphorus load from undeveloped lands (lbs/acre/yr)
- A = Area of the site within the Critical Area IDA (acres)

B: ReDevelopment:

$$L_{pre} = (Rv) (C.) (A) (8.16)$$
$$Rv = 0.05 + 0.009(I_{pre})$$
$$= 0.05 + 0.009 \times 81.94 = 0.79$$
$$L_{pre} = \underline{2.78} \text{ lbs/year of total phosphorus}$$

- L_{pre} = Average annual load of total phosphorus exported from the site prior to development (lbs/year)
- Rv = Run off coefficient, which expresses the fraction of rainfall which is converted to runoff
- I_{pre} = Pre-development (existing) site impervious (i.e., I=75 if the site is 75% impervious)
- C = Flow-weighted mean concentration of the pollutant (total phosphorus) in urban runoff (mg/l) = 0.30 mg/l
- A = Area of the site within the Critical Area IDA (acres)
- 8.16 = Includes regional constants and unit conversion factors

Step3: Calculate the Post-Development Load (Lpost)

A: New Development and Redevelopment:

$$L_{post} = (R_v)(C)(A)(8.16)$$

$$R_v = 0.50 + 0.009(I_{post})$$

$$= 0.05 + 0.009 \underline{71.46} = 0.69$$

$$L_{post} = 0.69 \times 0.30 \times 1.44 \times 8.16 =$$

$$= \underline{2.443} \text{ lbs/year of total phosphorus}$$

Where:

L_{post} = Average annual load of total phosphorus exported from the site post-development (lbs/year)

R_v = Run off coefficient, which expresses the fraction of rainfall which is converted to runoff

I_{post} = Post-development (proposed) site impervious (i.e., $I=75$ if the site is 75% impervious)

C = Flow-weighted mean concentration of the pollutant (total phosphorus) in urban runoff (mg/l) = 0.30 mg/l

A = Area of the site within the Critical Area IDA (acres)

8.16 = Includes regional constants and unit conversion factors

Step4: Calculate the Pollutant Removal Requirement (RR)

$$RR = L_{post} - (0.90)(L_{pre})$$

$$= 2.44 - 0.90 \times 2.78 =$$

$$= \underline{-0.06} \text{ lbs/year of total phosphorus}$$

Where:

RR = Pollutant removal requirement (lbs/year)

L_{post} = Average annual load of total phosphorus exported from the site prior to development (lbs/year)

L_{pre} = Average annual load of total phosphorus exported from the site prior to development (lbs/year)

Step5: Identify Feasible BMP's

Select BMP Options using the screening matrices provided in the chapter 4 of the 2000 Maryland Stormwater Design Manual. Calculate the load removed for each option.

BMP Type	(Lpost)	<input checked="" type="checkbox"/> (BMP re)	<input checked="" type="checkbox"/> (% DA Served)	=	
				=	(lbs/year)
				=	(lbs/year)
				=	(lbs/year)
				=	(lbs/year)
Load Removed, LR (total)				=	(lbs/year)
Pollutant Removal Required, RR (from step 4)				=	(lbs/year)

Where:

- Load removed, LR = Annual total phosphorus removed By the Proposed BMP's (lbs/year)
- L post = Average annual load of total phosphorus exported from the site prior to development (lbs/year)
- BMP re = BMP removal efficiency for total phosphorus Table 4.8 (%)
- % DA Served = Fraction of the site area with in the critical area IDA served by the BMP(%)
- RR = Pollutant removal requirement (lbs/year)

If the Load Removed is equal to or greater than the Pollutant Removal Required Computed in step 4, then the on-site BMP complies with the 10% Rule.

Has the RR (pollutant removal requirment) been met? Yes No

CONTRACT DRAWINGS

FOR A

PROPOSED ANGLER'S RESTAURANT

ON THE LANDS OF

DROTTERS MARINA, INC.

FIFTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND

PREPARED FOR : TORCHIO ARCHITECTS, INC.

RECEIVED
FEB 02 2006
CRITICAL AREA COMMISSION

IMPERVIOUS SURFACE IN THE BUFFER EXEMPT AREA

TOTAL SITE AREA	= 1,443 AC.±
TOTAL AREA WITHIN THE 0'-100' CRITICAL AREA BUFFER (BUFFER EXEMPT AREA)	= 1,187 AC.±
TOTAL EXISTING IMPERVIOUS SURFACE IN THE 0'-100' CRITICAL AREA BUFFER	= 0,966 AC.±
EXISTING IMPERVIOUS SURFACE IN THE 0'-100' CRITICAL AREA BUFFER TO BE REMOVED	= 0,148 AC.±
NEW IMPERVIOUS AREA PROPOSED IN THE 0'-100' CRITICAL AREA BUFFER	= 0,000 AC.±
TOTAL PROPOSED & EXISTING IMPERVIOUS SURFACE IN THE 0'-100' CRITICAL AREA BUFFER	= 0,818 AC.±
NET DECREASE OF IMPERVIOUS SURFACE IN THE 0'-100' CRITICAL AREA BUFFER	= 0,148 AC.±
TOTAL AREA WITHIN THE 0'-50' CRITICAL AREA BUFFER (BUFFER EXEMPT AREA)	= 0,947 AC.±
TOTAL EXISTING IMPERVIOUS SURFACE IN THE 0'-50' CRITICAL AREA BUFFER	= 0,744 AC.±
EXISTING IMPERVIOUS SURFACE IN THE 0'-50' CRITICAL AREA BUFFER TO BE REMOVED	= 0,148 AC.±
NEW IMPERVIOUS AREA PROPOSED WITHIN THE 0'-50' CRITICAL AREA BUFFER	= 0,000 AC.±
TOTAL PROPOSED & EXISTING IMPERVIOUS SURFACE IN THE 0'-50' CRITICAL AREA BUFFER	= 0,596 AC.±
NET DECREASE OF IMPERVIOUS SURFACE IN THE 0'-50' CRITICAL AREA BUFFER	= 0,148 AC.±

STATEMENT OF PURPOSE AND INTENT

THIS 1,305 ACRE SITE LIES AT THE END OF MD. RT. 18 ON THE EAST SIDE OF KENT NARROWS, SOUTH OF U.S. ROUTE 50/301. IT IS THE SITE OF DROTTER'S MARINA AND THE FORMER ANGLER'S RESTAURANT WHICH WAS DESTROYED BY FIRE IN 2004. THE EXISTING RESTAURANT SHELL IS PROPOSED TO BE RAZED AND A NEW 6977 SQ. FT. RESTAURANT IS PROPOSED TO BE CONSTRUCTED JUST WEST OF ITS FORMER LOCATION AND THE PARKING IS TO BE RECONFIGURED TO PROVIDE A PARKING LOT EASIER TO ACCESS. THE EXISTING DROTTER'S MARINA IS TO REMAIN IN SERVICE. A 50-SLIP MARINA CURRENTLY EXISTS ON THE SITE WITH A 196 SQ. FT. BAR (SHANTY) AT THE END OF THE PIER. THE BAR IS USED SEASONALLY AS WEATHER PERMITS. EXISTING TRAILERS ON THE SITE PROVIDE BATHROOM FACILITIES FOR THE MARINA PATRONS. AN EXISTING 715 SQ. FT. BUILDING ON THE SITE IS CURRENTLY SERVING AS AN OFFICE FOR THE OWNERS AND WILL BE CONVERTED TO STORAGE SPACE FOR THE RESTAURANT'S USE ONCE THE NEW RESTAURANT IS CONSTRUCTED. IT IS THE PURPOSE OF THIS SITE PLAN TO:

- RECEIVE A SHORE BUFFER REDUCTION FROM THE PLANNING COMMISSION
- ACQUIRE 0.138 ACRES AT THE END OF KENT NARROWS WAY SOUTH (OLD MD. RT. 18) FROM THE COUNTY COMMISSIONERS FOR THE PURPOSE OF JOINING THE DROTTER'S SITE THAT IS CURRENTLY SEPARATED BY THE MD. RT. 18 RIGHT-OF-WAY.
- RECEIVE MINOR SITE PLAN APPROVAL FROM THE QUEEN ANNE'S COUNTY PLANNING DIRECTOR FOR THE PROPOSED RESTAURANT.
- FOR THE PLANNING DIRECTOR TO FIND THERE IS NO FEASIBLE ALTERNATIVE TO THE PROPOSED REDEVELOPMENT ACTIVITIES IN THE BUFFER EXEMPTION AREA (BEA) AND THE INTRUSION IN THE BEA IS THE LEAST NECESSARY.

SITE NOTES

- PROPERTY LINES SHOWN HEREON ARE BASED ON THE RESULTS OF A FIELD RUN SURVEY BY THE DELMARVA SURVEY COMPANY DATED, JULY, 2005.
- FOR DEED REFERENCE, SEE LIBER M.W.M. 168, FOLIO 272.
- CURRENT ZONING CLASSIFICATION IS "WVC" (WATERFRONT VILLAGE CENTER).
- THE SITE IS ENTIRELY LOCATED WITHIN THE CRITICAL AREA DESIGNATION - IDA.
- SITE IS LOCATED ENTIRELY WITHIN 100 YEAR FLOODPLAIN AS SCALED FROM FLOOD INSURANCE RATE MAP COMMUNITY PANEL No. 240054 0046 C. (ZONE "AB").
- PUBLIC SEWER WILL BE UTILIZED FOR SEWAGE DISPOSAL. SUB-SERVICE AREA 'H' OF THE SANITARY DISTRICT PROVIDES SANITARY SEWER TO THE SITE. AN EXISTING WELL ON SITE WILL PROVIDE POTABLE WATER SUPPLY.
- THE ENTIRE SITE HAS BEEN DISTURBED WITH PREVIOUS USES. THE CURRENT SOIL CLASSIFICATION IS UR (URBAN LAND) AS TAKEN FROM THE 1994 EDITION OF THE SOIL SURVEY OF QUEEN ANNE'S COUNTY.
- THE NATIONAL WETLANDS INVENTORY MAP "QUEENSTOWN, MARYLAND 1988" DOES NOT SHOW THE PRESENCE OF NONTIDAL WETLANDS.
- BUILDING HEIGHT PERMITTED: 45' HEIGHT OF PROPOSED BUILDING: 28'-6" (FROM ELEVATION 8')
- STORMWATER MANAGEMENT FOR WATER QUALITY IS MET BY AN 18% REDUCTION OF IMPERVIOUS AREA ON THE SITE AND BY A SAND FILTER TO TREAT ROOF TOP RUNOFF.

PARKING CALCULATIONS

RESTAURANT: (Chapter 18-1-83B(10)(a)&(b))	
THE GREATER OF:	
7,088 sq. ft./200 sq. ft. or 1 SPACE/3 SEATS X 135 SEATS:	= 45 SPACES
Plus: 1 SPACE/EMPLOYEE X 10 EMPLOYEES	= 10 SPACES
MARINA: (Chapter 18-1-83D(3)(a)(b)&(c))	
50 SLIPS X 1 SPACE/2 SLIPS	= 25 SPACES
0 TRAILER LAUNCH PLACES X 8 SPACES/LAUNCH SPACES	= 0 SPACES
0 EMPLOYEES X 1 SPACE/EMPLOYEE	= 0 SPACES
SPACES REQUIRED	= 80 SPACES
SPACES PROVIDED	= 80 SPACES

LOADING ZONE CALCULATIONS

(CHAPTER 18-1-84 C)	
7,088 sq. ft. PROPOSED FLOOR AREA	= 1 BERTHS REQUIRED

BASE SITE AREA

GROSS SITE AREA	= 1,443 acres
NONCONTIGUOUS LAND	= 0,000 acres
LAND IN OTHER ZONING DISTRICTS OR CHESAPEAKE BAY CRITICAL AREA	= 1,443 acres
BASE SITE AREA	= 1,443 acres

RESOURCE	OPEN SPACE RATIO	RESOURCE LAND	RESOURCE PROTECTION LAND
SHORE BUFFER	1.00	1.19 acres	1.19 acres
MATURE HARDWOODS	0.60	0.00 acres	0.00 acres
TOTAL LAND IN RESOURCE		1.19 acres	
TOTAL RESOURCE PROTECTION LAND			1.19 acres *

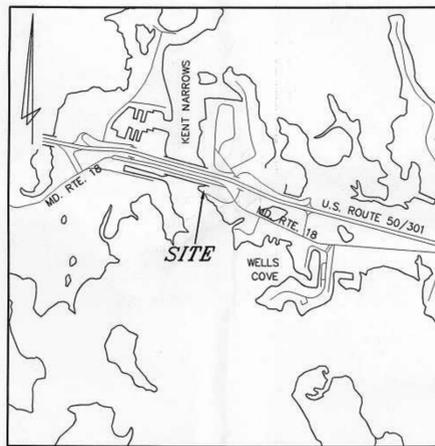
DETERMINATION OF SITE CAPACITY

BASE SITE AREA	= 1,443 acres
LANDSCAPE SURFACE RATIO (LSR)	X 0.0
REQUIRED LANDSCAPE SURFACE AREA	= 0.0 acres
TOTAL RESOURCE PROTECTION LAND OR REQUIRED LANDSCAPE SURFACE AREA whichever is greater	= 0.000 acres *
MINIMUM LANDSCAPE SURFACE AREA	= 0.0 acres
BASE SITE AREA	= 1,443 acres
FLOOR AREA RATIO (FAR)	X 0.30
MAXIMUM FLOOR AREA ALLOWED	= 0.433 acres (18,852 sq. ft.)
BASE SITE AREA	= 1,443 acres
MINIMUM LANDSCAPE SURFACE AREA	= 0.000 acres
MAXIMUM IMPERVIOUS AREA ALLOWED	= 1,443 acres

* - NOTE : STANDARD SHOREBUFFER REDUCTION REQUESTED TO ALLOW IMPROVEMENTS AS SHOWN ON THE SITE PLAN.

SITE STATISTICS

CURRENT USE - COMMERCIAL	
PROPOSED USE - COMMERCIAL - RESTAURANT	
GROSS SITE AREA	= 1,443 AC.± (62,841 sq. ft.±)
DROTTER'S MARINA AREA:	= 1,305 AC.± (56,848 sq. ft.±)
MD. RT. 18 ACQUISITION:	= 0.138 AC.± (5,993 sq. ft.±)
AREA IN CRITICAL AREA (DA)	= 1,443 AC.± (62,841 sq. ft.±)
AREA WITHIN FLOOD PLAIN	= 1,443 AC.± (62,841 sq. ft.±)
AREA IN BUFFERYARDS	= 0.000 AC.±
BASE SITE AREA	= 1,443 AC.± (62,841 sq. ft.±)
FLOOR AREA (ALLOWED) (30% FAR):	= 0.433 AC.± (18,852 sq. ft.±)
FLOOR AREA (EXISTING)	= 0.130 AC.± (5,663 sq. ft.±)
FLOOR AREA (TO BE REMOVED)	= 0.000 AC.± (0.0 sq. ft.±)
NEW FLOOR AREA (PROPOSED)	= 0.052 AC.± (2,251 sq. ft.±)
FLOOR AREA (TOTAL)	= 0.182 AC.± (8,134 sq. ft.±)
RESTAURANT (1st & 2nd Floor):	7,088 sq. ft.
STORAGE BLDG. (1 Story):	715 sq. ft.
BAR/SHANTY (Enclosed area only):	331 sq. ft.
IMPERVIOUS AREA (ALLOWED)	= 1,443 AC.± (62,841 sq. ft.±)
IMPERVIOUS AREA (EXISTING)	= 1,180 AC.± (51,401 sq. ft.±)
IMPERVIOUS AREA (TO BE REMOVED)	= 0.151 AC.± (6,587 sq. ft.±)
ADDITIONAL IMPERVIOUS AREA PROPOSED	= 0.000 AC.±
IMPERVIOUS AREA (TOTAL)	= 1,029 AC.± (44,814 sq. ft.±)
LANDSCAPE AREA (REQUIRED)	= 0.000 AC.±
LANDSCAPE AREA (EXISTING)	= 0.263 AC.± (11,440 sq. ft.±)
LANDSCAPE AREA (PROPOSED)	= 0.414 AC.± (18,027 sq. ft.±)



VICINITY MAP

SCALE 1" = 2000'

TABLE OF CONTENTS

SHEET 1	- TITLE SHEET
SHEET 2	- EXISTING CONDITIONS/DEMOLITION PLAN
SHEET 3	- SITE PLAN
SHEET 4	- UTILITY PLAN
SHEET 5	- MISCELLANEOUS DETAILS
SHEET 6	- LANDSCAPE PLAN
SHEET 7	- LANDSCAPE DETAILS AND SCHEDULE

ASBUILT CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THE "ASBUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

SIGNATURE _____ P.E. No. _____

DATE _____

MAINTENANCE SCHEDULE

THE OWNER OF THE PROPERTY WILL ESTABLISH AN INSPECTION AND MAINTENANCE LOG UPON COMPLETION OF THE STORMWATER MANAGEMENT FACILITIES. THE LOG WILL BE UPDATED QUARTERLY OR AFTER ANY MAJOR STORM. THE LOG WILL BE MADE AVAILABLE FOR REVIEW UPON REQUEST BY THE QUEEN ANNE'S COUNTY DEPARTMENT OF PUBLIC WORKS INSPECTION DIVISION.

SAND FILTERS:

THE INSPECTION WILL CONSIST OF, BUT NOT BE LIMITED TO, TRASH AND DEBRIS REMOVAL OR BLOCKING THE HEADWALL STRUCTURE. THE HEADWALL STRUCTURE WILL BE INSPECTED FOR ANY SIGNS OF DAMAGE OR DEBRIS. THE RIPRAP PAD WILL HAVE ALL WEEDS AND UNSIGHTLY VEGETATION REMOVED WHEN NECESSARY.

ENGINEER

DMS & ASSOCIATES, LLC
P.O. BOX 80
CENTREVILLE, MARYLAND 21617
PHONE No. 1-443-262-9130

ARCHITECT:

TORCHIO ARCHITECTS, INC.
c/o GREG TORCHIO, AIA
354 PENNSYLVANIA AVENUE
CENTREVILLE, MARYLAND 21617
PHONE No. 1-410-827-8717



DAVIS, MOORE, SHEARON & ASSOCIATES, LLC
ENGINEERING, DRAFTING/DESIGN,
ENVIRONMENTAL SERVICES & SURVEYING
P.O. BOX 80
CENTREVILLE, MARYLAND 21617
PHONE : 1-443-262-9130
FAX : 1-443-262-9148

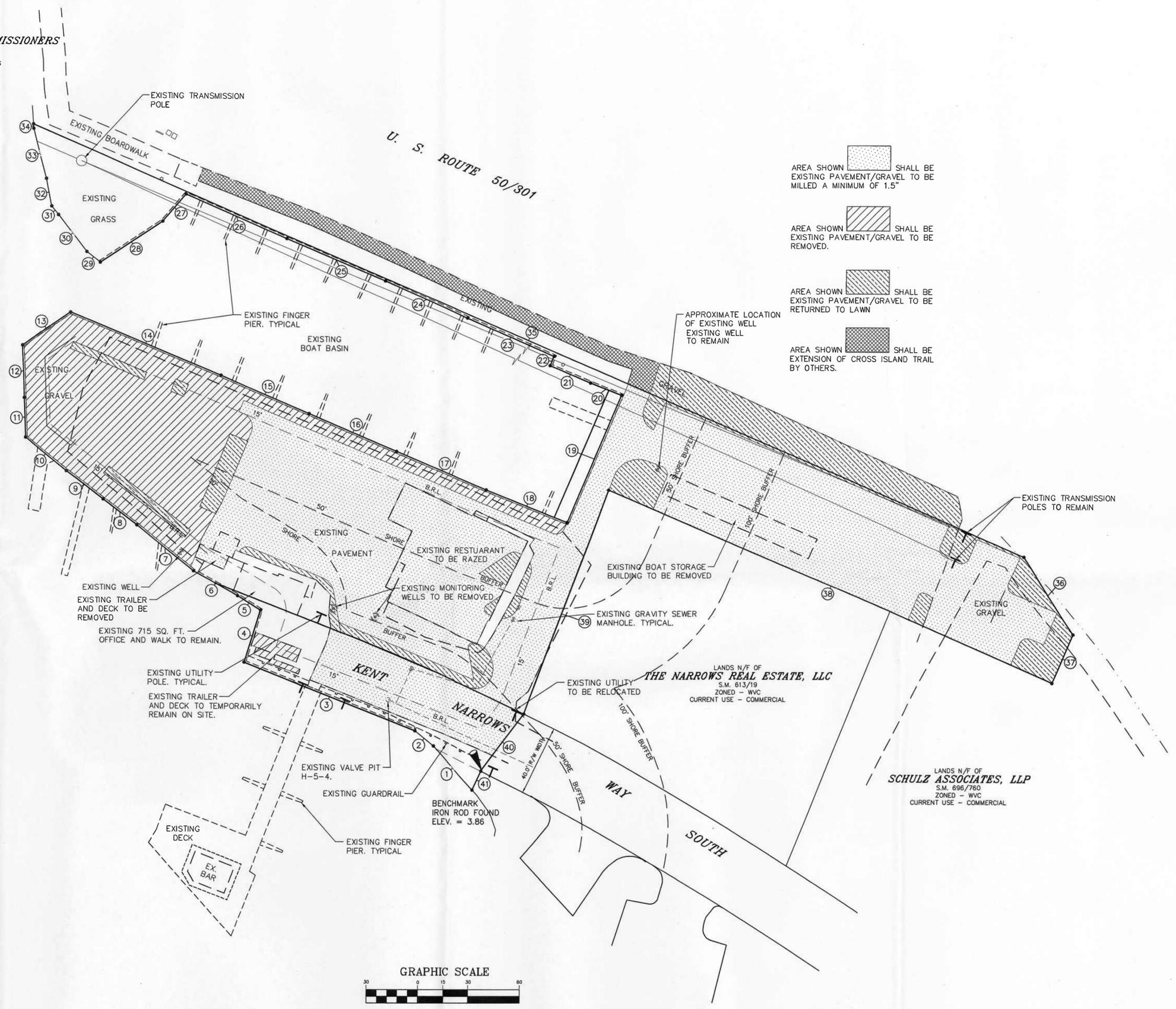
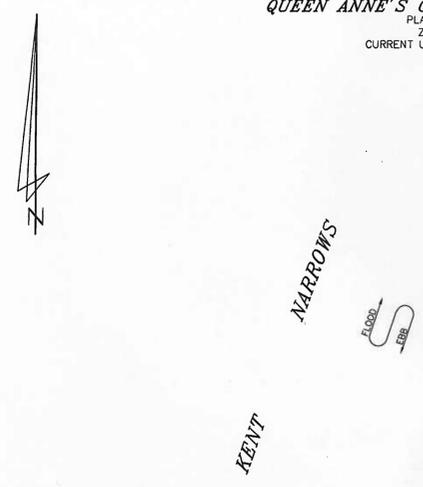
DATE	REVISION
9-27-05	REVISED PER 9-21-05 STAR COMMENTS
1-27-06	REVISED PER FINAL COMMENTS

TITLE SHEET	DATE	SCALE
PROPOSED ANGLER'S RESTAURANT ON THE LANDS OF DROTTERS MARINA, INC TAX MAP - 57, BLOCK - 12, PARCELS - 329 FIFTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND PREPARED FOR : TORCHIO ARCHITECTS, INC.	AUG. '05	AS SHOWN

JOB No.	DRAWN BY
2003078	WJM
FOLDER Ref.	DESIGNED BY
57-2003078	WTD, Jr.
SHEET No.	OF
C-1	C-1
CADD FILE	NO.
03078-C1	

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CRITICAL AREA COMMISSION

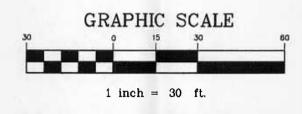
LANDS N/F OF
QUEEN ANNE'S COUNTY COMMISSIONERS
 PLAT REF.: 24/80
 ZONED - WVC
 CURRENT USE - PUBLIC LANDING



- AREA SHOWN [stippled] SHALL BE EXISTING PAVEMENT/GRAVEL TO BE MILLED A MINIMUM OF 1.5"
- AREA SHOWN [diagonal lines] SHALL BE EXISTING PAVEMENT/GRAVEL TO BE REMOVED.
- AREA SHOWN [cross-hatched] SHALL BE EXISTING PAVEMENT/GRAVEL TO BE RETURNED TO LAWN
- AREA SHOWN [grid pattern] SHALL BE EXTENSION OF CROSS ISLAND TRAIL BY OTHERS.

PROPERTY LINE COURSES AND DISTANCES

LINE	BEARING	DISTANCE
1	N 43°11'09" W	34.10'
2	N 51°22'12" W	13.89'
3	N 68°50'13" W	106.76'
4	N 17°12'58" E	31.58'
5	N 58°14'32" W	15.68'
6	N 60°22'31" W	29.30'
7	N 51°40'07" W	42.47'
8	N 53°33'23" W	24.55'
9	N 52°19'24" W	26.88'
10	N 51°17'18" W	30.86'
11	N 01°59'15" W	22.64'
12	N 01°35'07" W	29.79'
13	N 55°36'18" E	33.53'
14	S 67°52'28" E	94.65'
15	S 67°29'52" E	55.49'
16	S 67°06'18" E	55.12'
17	S 67°17'52" E	57.18'
18	S 68°07'58" E	50.58'
19	N 23°16'05" E	79.27'
20	N 68°32'51" W	19.31'
21	N 67°00'51" W	25.57'
22	N 22°44'46" E	5.72'
23	N 66°32'18" W	55.04'
24	N 66°02'26" W	52.78'
25	N 66°59'38" W	62.26'
26	N 66°44'09" W	63.80'
27	S 40°28'58" W	20.64'
28	S 56°32'58" W	43.62'
29	N 52°14'01" W	9.95'
30	N 37°40'17" W	26.88'
31	N 38°17'19" W	6.34'
32	N 11°17'46" W	16.24'
33	N 14°52'05" W	29.60'
34	N 04°35'17" W	2.54'
35	S 66°50'08" E	627.94'
36	S 32°52'01" E	53.62'
37	S 23°09'52" W	30.37'
38	N 66°50'08" W	281.45'
39	S 20°30'00" W	137.70'
40	S 37°21'17" W	40.13'
41	S 25°26'18" W	12.49'



<p>QUEEN ANNE'S COUNTY DEPARTMENT OF PUBLIC WORKS FOR SEDIMENT AND EROSION CONTROL REVIEW ONLY</p> <p><i>Paul Boy</i> 12/27/05</p> <p>MARYLAND NATURAL RESOURCES CONSERVATION SERVICE</p>	<p>QUEEN ANNE'S COUNTY DEPARTMENT OF PUBLIC WORKS</p> <p><i>GAJ</i> 12/29/05</p> <p>QUEEN ANNE'S SOIL CONSERVATION DISTRICT</p>	<p>DATE: 1-27-06 SEAL</p>	<p>DAVIS, MOORE, SHEARON & ASSOCIATES, LLC</p> <p>ENGINEERING, DRAFTING/DESIGN, ENVIRONMENTAL SERVICES & SURVEYING</p> <p>P.O. BOX 80 CENTREVILLE, MARYLAND 21617 PHONE : 1-443-262-9130 FAX : 1-443-262-9148</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>DATE</th> <th>REVISION</th> </tr> </thead> <tbody> <tr> <td>9-27-05</td> <td>REVISED PER 9-21-05 STAC COMMENTS</td> </tr> <tr> <td>1-27-06</td> <td>REVISED PER FINAL COMMENTS</td> </tr> </tbody> </table>	DATE	REVISION	9-27-05	REVISED PER 9-21-05 STAC COMMENTS	1-27-06	REVISED PER FINAL COMMENTS	<p>EXISTING CONDITIONS/DEMOLITION PLAN</p> <p>PROPOSED ANGLER'S RESTAURANT ON THE LANDS OF DROTHERS MARINA, INC.</p> <p>TAX MAP - 57, BLOCK - 12, PARCELS - 329 FIFTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND PREPARED FOR : TORCHIO ARCHITECTS, INC.</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>DATE</th> <th>SCALE</th> </tr> </thead> <tbody> <tr> <td>AUG. '05</td> <td>1" = 30'</td> </tr> <tr> <td>JOB No. 2003078</td> <td>DRAWN BY WJM</td> </tr> <tr> <td>FOLDER Ref. 57-2003078</td> <td>DESIGNED BY WTD, Jr.</td> </tr> <tr> <td colspan="2">SHEET No. - C-2</td> </tr> <tr> <td colspan="2">CADD FILE - 03078-C2</td> </tr> </tbody> </table>	DATE	SCALE	AUG. '05	1" = 30'	JOB No. 2003078	DRAWN BY WJM	FOLDER Ref. 57-2003078	DESIGNED BY WTD, Jr.	SHEET No. - C-2		CADD FILE - 03078-C2	
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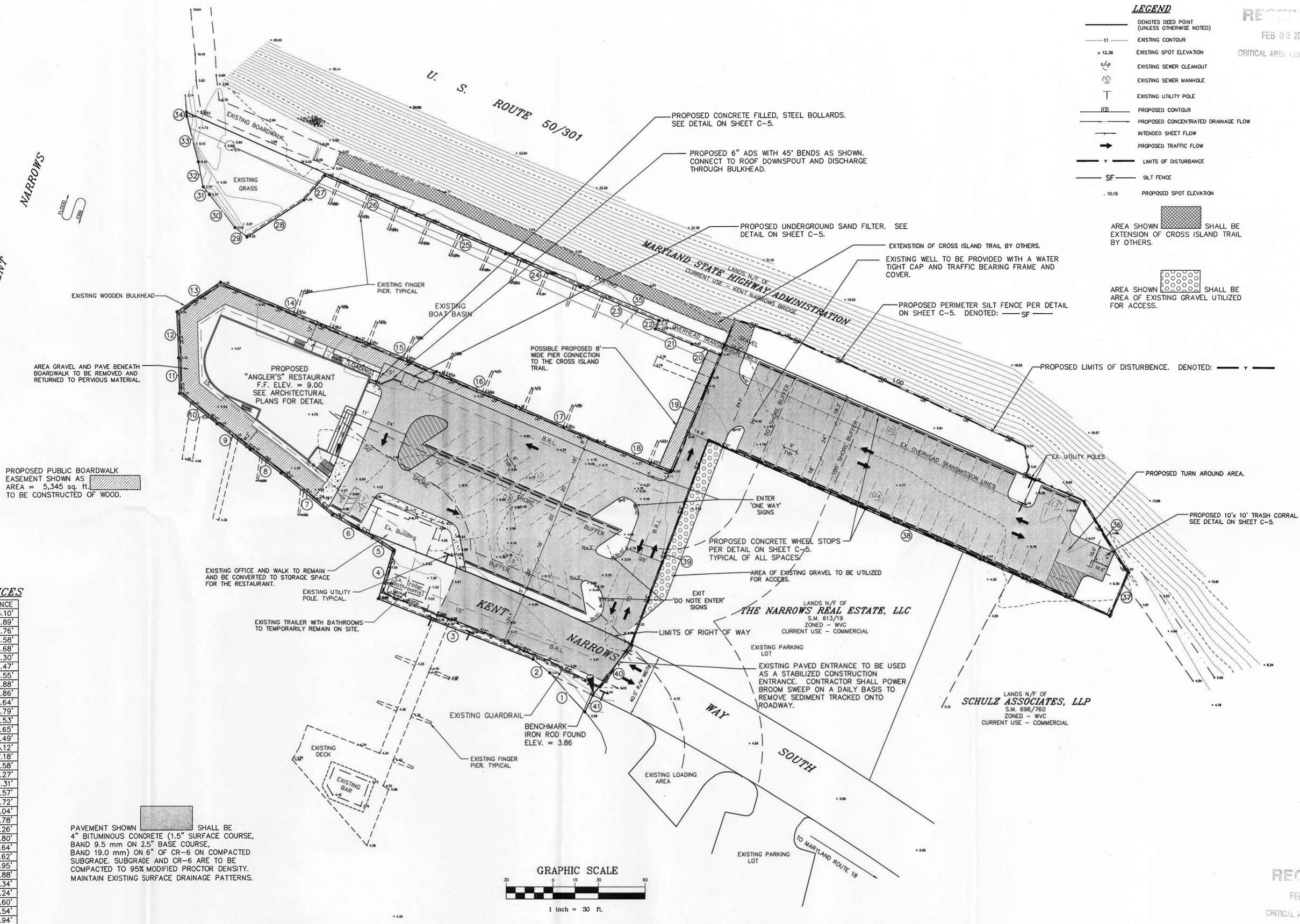
FEB 02 2006
CRITICAL AREA COMMISSION

LEGEND

- DENOTES DEED POINT (UNLESS OTHERWISE NOTED)
- EXISTING CONTOUR
- x 12.36 EXISTING SPOT ELEVATION
- ⊕ EXISTING SEWER CLEANOUT
- ⊙ EXISTING SEWER MANHOLE
- T EXISTING UTILITY POLE
- PROPOSED CONTOUR
- PROPOSED CONCENTRATED DRAINAGE FLOW
- INTENDED SHEET FLOW
- PROPOSED TRAFFIC FLOW
- LIMITS OF DISTURBANCE
- SF SILT FENCE
- 10.15 PROPOSED SPOT ELEVATION

AREA SHOWN [Hatched Box] SHALL BE EXTENSION OF CROSS ISLAND TRAIL BY OTHERS.

AREA SHOWN [Dotted Box] SHALL BE AREA OF EXISTING GRAVEL UTILIZED FOR ACCESS.

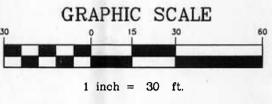


PROPOSED PUBLIC BOARDWALK EASEMENT SHOWN AS [Hatched Box] AREA = 5,345 sq. ft. TO BE CONSTRUCTED OF WOOD.

PROPERTY LINE COURSES AND DISTANCES

LINE	BEARING	DISTANCE
1	N 43°11'09" W	34.10'
2	N 51°22'12" W	13.89'
3	N 68°50'13" W	106.76'
4	N 17°12'58" E	31.58'
5	N 58°14'32" W	15.68'
6	N 60°22'31" W	29.30'
7	N 51°40'07" W	42.47'
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36	S 32°52'01" E	53.62'
37	S 23°09'52" W	30.37'
38	N 66°50'08" W	281.45'
39	S 20°30'00" W	137.70'
40	S 37°21'17" W	40.13'
41	S 25°26'18" W	12.49'

PAVEMENT SHOWN [Hatched Box] SHALL BE 4" BITUMINOUS CONCRETE (1.5" SURFACE COURSE, BAND 9.5 mm ON 2.5" BASE COURSE, BAND 19.0 mm) ON 6" OF CR-6 ON COMPACTED SUBGRADE. SUBGRADE AND CR-6 ARE TO BE COMPACTED TO 95% MODIFIED PROCTOR DENSITY. MAINTAIN EXISTING SURFACE DRAINAGE PATTERNS.



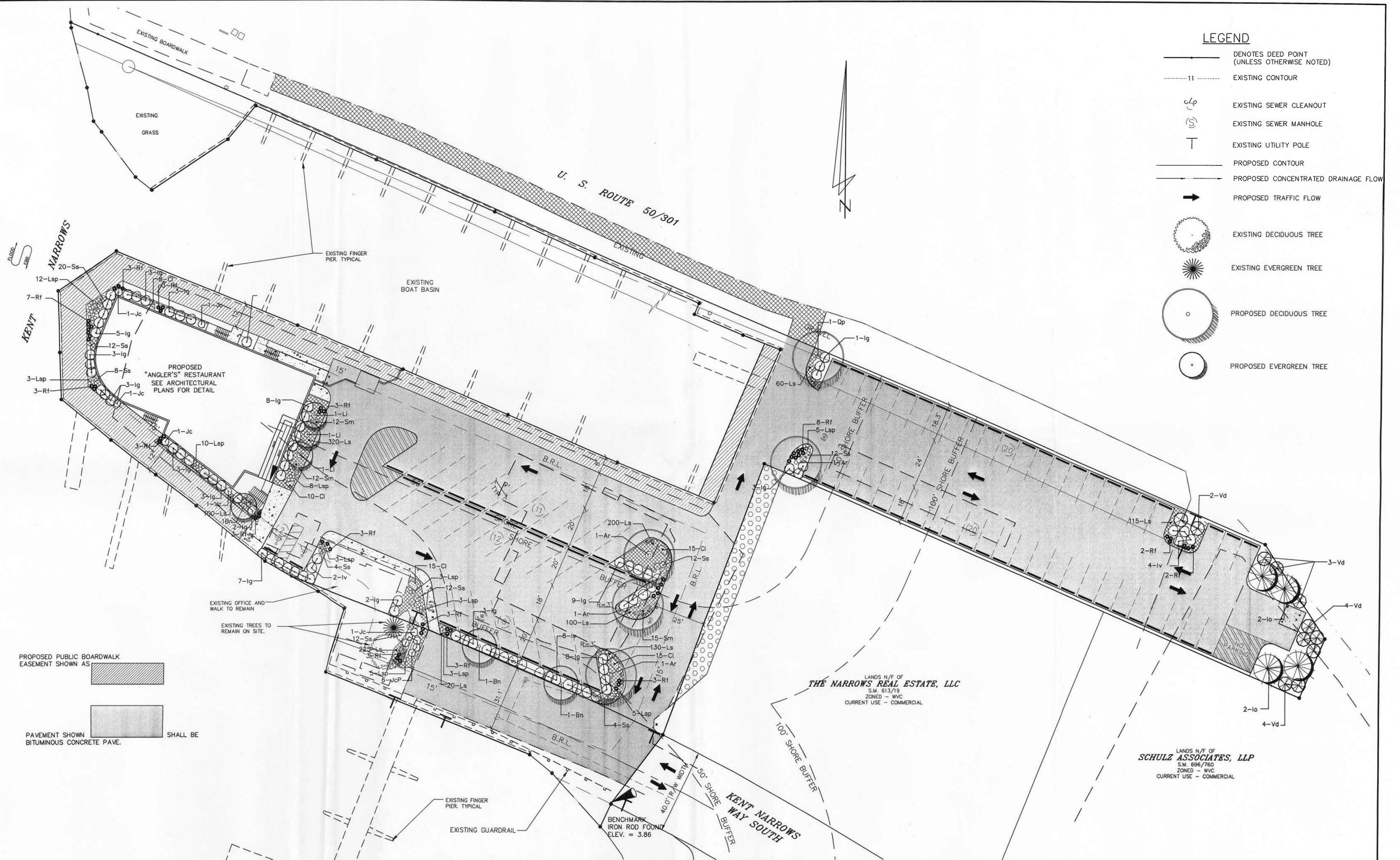
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CRITICAL AREA COMMISSION

QUEEN ANNE'S COUNTY DEPARTMENT OF PUBLIC WORKS FOR SEDIMENT AND EROSION CONTROL REVIEW ONLY <i>Per. Boy</i> 12/27/05 U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE	QUEEN ANNE'S COUNTY DEPARTMENT OF PUBLIC WORKS <i>W.D.</i> 12/27/05 QUEEN ANNE'S SOIL CONSERVATION DISTRICT		DAVIS, MOORE, SHEARON & ASSOCIATES, LLC ENGINEERING, DRAFTING/DESIGN, ENVIRONMENTAL SERVICES & SURVEYING P.O. BOX 80 CENTREVILLE, MARYLAND 21617 PHONE : 1-443-262-9130 FAX : 1-443-262-9148	DATE 9-27-05 1-27-06	REVISION REVISED PER 9-21-05 STAG COMMENTS REVISED PER FINAL COMMENTS	SITE, GRADING AND SEDIMENT & EROSION CONTROL PLAN PROPOSED ANGLER'S RESTAURANT ON THE LANDS OF DROTERS MARINA, INC. TAX MAP - 57, BLOCK - 12, PARCELS - 329 FIFTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND PREPARED FOR : TORCHIO ARCHITECTS, INC.	DATE AUG. '05	SCALE 1" = 30' JOB No. 2003078 FOLDER Ref. 57-2003078 SHEET No. - C-3 CADD FILE - 03078-C3
				DATE 1-26-06 DATE	SEAL	DRAWN BY WJM DESIGNED BY WTD, Jr.		

LEGEND

- DENOTES DEED POINT (UNLESS OTHERWISE NOTED)
- EXISTING CONTOUR
- ⊕ EXISTING SEWER CLEANOUT
- ⊙ EXISTING SEWER MANHOLE
- ⊥ EXISTING UTILITY POLE
- PROPOSED CONTOUR
- PROPOSED CONCENTRATED DRAINAGE FLOW
- PROPOSED TRAFFIC FLOW
- ⊙ EXISTING DECIDUOUS TREE
- ⊙ EXISTING EVERGREEN TREE
- ⊙ PROPOSED DECIDUOUS TREE
- ⊙ PROPOSED EVERGREEN TREE

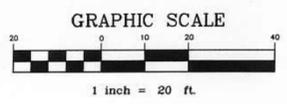


PROPOSED PUBLIC BOARDWALK EASEMENT SHOWN AS [Hatched Box]

PAVEMENT SHOWN [Solid Box] SHALL BE BITUMINOUS CONCRETE PAVE.

LANDS N/F OF
THE NARROWS REAL ESTATE, LLC
S.M. 613/19
ZONED - WVC
CURRENT USE - COMMERCIAL

LANDS N/F OF
SCHULZ ASSOCIATES, LLP
S.M. 696/760
ZONED - WVC
CURRENT USE - COMMERCIAL



QUEEN ANNE'S COUNTY DEPARTMENT OF PUBLIC WORKS FOR SEDIMENT AND EROSION CONTROL REVIEW ONLY		QUEEN ANNE'S COUNTY DEPARTMENT OF PUBLIC WORKS		DAVIS, MOORE, SHEARON & ASSOCIATES, LLC ENGINEERING, DRAFTING/DESIGN, ENVIRONMENTAL SERVICES & SURVEYING P.O. BOX 80 CENTREVILLE, MARYLAND 21617 PHONE: 1-443-262-9130 FAX: 1-443-262-9148	DATE 9-27-05 1-27-06	REVISION REVISED PER 9-21-05 STAC COMMENTS REVISED PER FINAL COMMENTS	LANDSCAPE PLAN PROPOSED ANGLER'S RESTAURANT ON THE LANDS OF DROTHERS MARINA, INC. TAX MAP - 57, BLOCK - 12, PARCELS - 329 FIFTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND PREPARED FOR: TORCHIO ARCHITECTS, INC.		DATE AUG. '05	SCALE 1" = 30'
U.S.A. NATURAL RESOURCES CONSERVATION SERVICE		QUEEN ANNE'S SOIL CONSERVATION DISTRICT			DATE _____	SEAL _____	SHEET No. - C-6 CADD FILE - 03078-C6			

PLANTING SPECIFICATIONS

A. MATERIALS
 (1) PLANTS SHALL BE NURSERY GROWN IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES, AND GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT. THEY SHALL HAVE BEEN ROOT PRUNED WITHIN THE LAST TWO YEARS. THEY SHALL BE SOUND, HEALTHY AND VIGOROUS, WELL BRANCHED AND DENSELY FOLIATED WHEN IN LEAF. THEY SHALL BE FREE OF DISEASE, PEST, EGGS OR LARVAE, AND SHALL HAVE A HEALTHY, DEVELOPED ROOT SYSTEM.

PLANTS SHALL NOT BE PRUNED BEFORE DELIVERY. TREES WITH A DAMAGED OR CROOKED LEADER OR MULTIPLE LEADERS, ABRASIONS ON THE BARK, SUNSCALD, DISFIGURING KNOTS OR FRESH CUTS OVER 1 1/2" WILL BE REJECTED.

NO CHANGE IN QUANTITY, SIZE, KIND OR QUALITY OF PLANT SPECIFIED WILL BE PERMITTED WITHOUT THE APPROVAL OF THE LANDSCAPE ARCHITECT/DESIGNER. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE PLANT COUNT AND IN ANY INSTANCE WHERE THERE IS A DISCREPANCY BETWEEN THE PLAN VIEW AND THE LANDSCAPE SCHEDULE, THE PLAN VIEW SHALL PRESEIDE.

(2) TOPSOIL SHALL BE FERTILE, FRIABLE AND TYPICAL OF THE LOCALITY. IT SHALL BE FREE OF STONES, LIMPS, PLANTS, ROOTS, STICKS AND SHALL NOT BE DELIVERED IN A FROZEN OR MUDDY CONDITION.

(3) PLANTING SOIL (BACKFILL MIX) SHALL BE FIVE PARTS TOPSOIL AND ONE PART WET LOOSE PEATMOSS.

(4) STAKING MATERIALS: GUY WIRE SHALL BE PLIABLE 12 GAUGE GALVANIZED TWISTED TWO STRAND WIRE. HOSE SHALL BE A SUITABLE LENGTH OF TWO-PLY, REINFORCED BLACK RUBBER HOSE 3/4" INCH IN DIAMETER; STAKES SHALL CONFORM TO THE DETAIL ON THIS SHEET.

B. APPLICABLE SPECIFICATIONS AND STANDARDS:

(1) "STANDARDIZED PLANT NAMES," LATEST EDITION AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE.

(2) "AMERICAN STANDARD FOR NURSERY STOCK," LATEST EDITION, AMERICAN ASSOCIATION OF NURSERYMEN.

C. DIGGING AND HANDLING OF PLANT MATERIALS:

(1) IMMEDIATELY BEFORE DIGGING, SPRAY ALL EVERGREEN OR DECIDUOUS PLANT MATERIAL IN FULL LEAF WITH ANTI-DESICCANT, APPLYING AN ADEQUATE FILM OVER TRUNKS, BRANCHES, TWIGS, AND/OR FOLIAGE.

(2) DIG BALL AND BURLAP (B&B) PLANTS WITH FIRM NATURAL BALLS OF EARTH, OF DIAMETER NOT LESS THAN THAT RECOMMENDED BY AMERICAN STANDARD FOR NURSERY STOCK, AND OF SUFFICIENT DEPTH TO INCLUDE THE FIBROUS AND FEEDING ROOTS. PLANTS MOVED WITH A BALL WILL NOT BE ACCEPTED IF THE BALL IS CRACKED OR BROKEN BEFORE OR DURING PLANTING OPERATIONS.

D. EXCAVATION OF PLANTING AREAS:

STAKE OUT ON THE GROUND LOCATIONS FOR PLANTS AND OUTLINES OF AREA TO BE PLANTED AND OBTAIN APPROVAL OF THE LANDSCAPE ARCHITECT/DESIGNER BEFORE EXCAVATION IS BEGUN.

E. PLANTING OPERATIONS:

SET PLANTS AT SAME RELATIONSHIP TO FINISHED GRADE AS THEY BORE TO THE GROUND FROM WHICH THEY WERE DUG. USE PLANTING SOIL TO BACKFILL APPROXIMATELY 2/3 FULL, WATER THOROUGHLY BEFORE INSTALLING REMAINDER OF THE PLANTING SOIL TO TOP OF PIT, ELIMINATING ALL AIR POCKETS.

SET PLANTING PLUMB AND BRACE RIGIDLY IN POSITION UNTIL THE PLANTING SOIL HAS BEEN STAMPED SOLIDLY AROUND THE BALL AND ROOTS. CUT ROPES OR STRINGS FROM TOP OF BALL AFTER PLANT HAS BEEN SET. LEAVE BURLAP OR CLOTH WRAPPING INTACT AROUND BALLS. TURN UNDER AND BURY PORTIONS OF BURLAP AT TOP OF BALL.

PROTECT PLANTS AT ALL TIMES FROM SUN OR DRYING WINDS. PLANTS THAT CANNOT BE PLANTED IMMEDIATELY ON DELIVERY SHALL BE KEPT IN THE SHADE, WELL PROTECTED WITH SOIL, WET MOSS OR OTHER ACCEPTABLE MATERIAL AND SHALL BE KEPT WELL WATERED. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN THREE DAYS AFTER DELIVERY.

PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES. PLANTS SHALL BE LIFTED AND HANDLED FROM THE BOTTOM OF THE BALL ONLY.

MULCH ALL PITS AND BEDS WITH A TWO INCH LAYER OF BARKMULCH IMMEDIATELY AFTER PLANTING AND WORK INTO THE TOP THREE INCHES OF THE PLANTING SOIL. FORM A 3" EARTH SAUCER AROUND EACH PLANT. WATER ALL PLANTS IMMEDIATELY AFTER PLANTING.

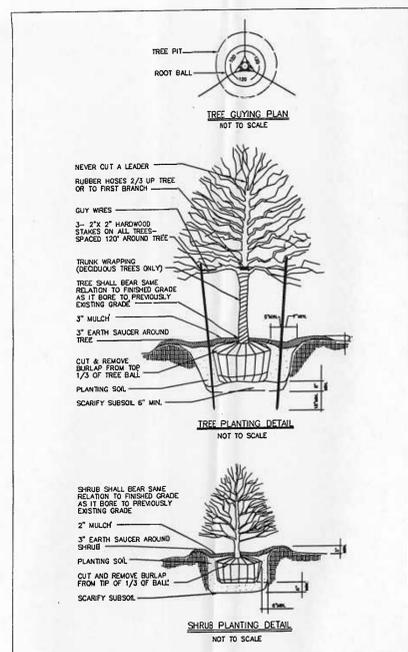
F. STAKING, WRAPPING AND PRUNING:

STAKING SHALL BE COMPLETED IMMEDIATELY AFTER PLANTING. PLANTS SHALL STAND PLUMB AFTER STAKING. STAKES AND GUY WIRES SHALL BE REMOVED AT THE END OF THE GUARANTEE PERIOD AND DEPOSITED OFF SITE BY THE CONTRACTOR.

PRUNE PLANTS AT THE TIME OF PLANTING AS DIRECTED BY THE LANDSCAPE ARCHITECT/DESIGNER TO REMOVE 1/5 TO 1/3 OF THE FOLIAGE. REMOVE ALL DEAD WOOD, SUCKERS, OR BROKEN BRANCHES AND PRESERVE THE NATURAL CHARACTER OF THE PLANT.

G. GUARANTEE:

ALL PLANT MATERIALS SHALL BE GUARANTEED FOR ONE (1) FULL YEAR FROM THE DATE THAT THE LANDSCAPE INSTALLATION IS ACCEPTED AS COMPLETE. PLANT MATERIAL NOT FOUND TO BE IN A HEALTHY, VIGOROUS CONDITION AT THE BEGINNING OF THE SECOND GROWING SEASON IS TO BE REPLACED.



LANDSCAPE SCHEDULE

	KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
CANOPY TREES	Ar	4	ACER RUBRUM	RED MAPLE	2"-2.5" CAL., B&B	
	Bn	3	BETULUS NIGRA 'HERITAGE'	HERITAGE BIRCH	8'-9' HIGH, B&B	
	Li	3	LAGERSTROEMIA INDICA 'APALACHEE'	APALACHEE CRAPE MYRTLE	7'-8' HIGH, B&B	
	Io	4	ILEX OPACA	AMERICAN HOLLY	6'-8' HIGH, B&B	
	Qp	1	QUERCUS PHELLOS	WILLOW OAK	2"-2.5" HIGH, B&B	
SHRUBS	Ig	69	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY HOLLY	18"-24" HIGH, B&B	
	Iv	14	ILEX VERTICILLATA 'CACAPON'	CACAPON INKBERRY HOLLY	2'-3' HIGH, B&B	(2 MALES REQUIRED FOR BERRY SET)
	Jc	6	JUNIPERUS CHINENSIS 'BLUE POINT'	BLUE POINT JUNIPER	4'-5' HIGH, B&B	
	JcP	6	JUNIPERUS CHINENSIS 'PFITZERIANA AUREA'	GOLDEN TIP PFITZER JUNIPER	15"-18" HIGH, CONT.	
	Vd	11	VIBURNUM DENTATUM	ARROWWOOD VIBURNUM	2'-3' HIGH, CONT.	
PERENNIALS/GROUND COVER	⊗ Ss	76	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUE STEM	1 GAL. CONTAINER	
	⊘ Cl	63	COREOPSIS LANCEOLATA 'STERNTALER'	STERNTALER CUTLEAF TICKSEED	1 QT. CONTAINER	
	○ Lsp	60	LIATRIS SPICATA	GAYFEATHER	1 QT. CONTAINER	
	▨ Sm	39	SEDUM 'MATRONA'	MATRONA STONECROP	1 GAL. CONTAINER	
	● Rf	57	RUDBECKIA FULGIDA 'GOLDSTRUM'	GOLDSTRUM BLACK-EYED SUSAN	1 QT. CONTAINER	
▩ Ls	1620	LIRIOPE SPICATA	LILYTURF	FLAT/2-1/4" POT		

QUEEN ANNE'S COUNTY DEPARTMENT OF PUBLIC WORKS FOR SEDIMENT AND EROSION CONTROL REVIEW ONLY	QUEEN ANNE'S COUNTY DEPARTMENT OF PUBLIC WORKS	DAVIS, MOORE, SHEARON & ASSOCIATES, LLC ENGINEERING, DRAFTING/DESIGN, ENVIRONMENTAL SERVICES & SURVEYING P.O. BOX 80 CENTREVILLE, MARYLAND 21617 PHONE : 1-443-262-9130 FAX : 1-443-262-9148	DATE: 9-27-05 REVISION: 9-27-05 REVISION: 1-27-06	LANDSCAPE PLAN PROPOSED ANGLER'S RESTAURANT ON THE LANDS OF DROTTERS MARINA, INC. TAX MAP - 57, BLOCK - 12, PARCELS - 329 FIFTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND PREPARED FOR : TORCHIO ARCHITECTS, INC.	DATE: AUG. '05 JOB No.: 2003078 FOLDER Ref.: 57-2003078 SHEET No. - C-7 CADD FILE - 03078-C7	SCALE: 1" = 30' DRAWN BY: WJM DESIGNED BY: WTD, Jr.
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