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/

June 29, 2009

Mr. Steven Dodd Dorchester County Planning and Zoning County Office Building P.O. Box 307 Cambridge, Maryland 21613

Re: Pickin House BEA

Dear Mr. Dodd:

In addition to the variance requests which this office addressed on June 18, 2009, the applicant requires Buffer Exempt Area (BEA) site plan approval for the above referenced project. The applicant is proposing to redevelop a residentially zoned property which was formerly used for commercial crab processing. As the information you supplied indicates, the applicant proposes to raze the existing building, remove impervious surfaces and other commercial refuse, and construct a hunting lodge for personal use. Critical Area Commission staff has met with the County staff and the applicant (including his engineer and attorney) and has had multiple conversations regarding this property over the last year or so. Staff from this office has provided multiple comment letters requesting a decrease in the size of the structure, removal of impervious coverage, and provision of plantings in the Buffer area forward of the structure. These comments were requested with the understanding that this is a constrained site.

The applicant is proposing redevelopment of this site which includes bringing the subject property into conformance with lot coverage limits of 15% through the removal of 15, 535 square feet of impervious surfaces on this site, and the removal of debris and other defunct structures left by the previous owner. This office supports this level of improvement. However, based on the size and scale of the proposed development features on the site, this office cannot support this BEA request. I have detailed the specific reasons for our opposition below.

During the course of conversations with the applicant and his attorney, this office has repeatedly indicated that the intrusion into the 100-foot Buffer(s) and the BEA on this lot could and should be decreased. For example, the applicant is proposing a residential structure with a footprint of nearly 3,000 square feet (9,000 square feet of enclosed area), a 1,500 square feet garage, a nearly 1,000 square foot deck to the side and forward of the structure right up to the bulkhead in the BEA, and several thousand square feet of gravel driveway, walkways, and a ramp. The total area of lot coverage in the Buffer/BEA is 7,906 square feet. Regardless of the level of constraint on these lots, this office cannot support dimensions of this size proposed in conjunction with new development in the Buffer or in the BEA. Despite our multiple reviews of the site plan, and numerous requests to further minimize the

footprint of development, the applicant has not altered the footprint of the residential structure. The applicant has used the primary structure as the setback, although he is proposing close to 1,000 square feet of decking forward of the proposed structure.

There are BEA criteria which must be addressed in order for an approval to be made. The applicant has not met these standards in their entirety. Therefore, just as in the applicant's variance request, we cannot support the request for the proposed residential structure and amenities, as the applicant has not met the criteria laid out in Section 155-38.J.5.c.1 and 2:

[1] "New development or redevelopment activities, including structures..., will not be permitted in the BEA unless the applicant can demonstrate and the Planning Commission finds that there is no feasible alternative. Such findings shall document the intrusion is the least necessary."

It can be demonstrated that there is no feasible alternative but to impact the three Buffers and the BEA in order to redevelop this lot. However, as has been stated previously, given the size of this structure, it is the position of this office that the footprint of this proposed hunting lodge can and should be reduced. Therefore, the proposal does not represent the "least necessary," nor have findings have been provided that indicate that the intrusion is the least necessary. This criterion has not been met.

[2] "New development or redevelopment shall minimize the shoreward extent of intrusion into the BEA and shall not exceed the shoreward extent of existing structures on the property."

The residential structure is proposed to be located the same distance from Mean High Water (MHW) of 18 feet as the currently existing crab house. The applicant proposes to replace a concrete slab that extends to the bulk head with the large deck, as was previously indicated. As we have indicated, the applicant proposes extensive redevelopment of this site. It is our position that the proposal be scaled down considerably to satisfy the requirements of the County program.

As it does not appear that the applicant has met all the BEA criteria, that the proposed redevelopment is the least necessary, nor does it represent minimization, this office cannot support this BEA.

Thank you for the opportunity to provide comments. If you have any questions, please contact me at 410-260-3476.

Sincerely,

Julie Roberts

Natural Resources Planner

Cc: DC 566-08

Martin O'Malley
Governor

Anthony G. Brown Lt. Governor



Margaret G. McHale

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/

June 18, 2009

Mr. Steven Dodd
Dorchester County Planning and Zoning
County Office Building
P.O. Box 307
Cambridge, Maryland 21613

Re: Local Case No. 2364 -- Picken House, Variance

Dear Mr. Dodd:

Thank you for forwarding the above referenced request for variance to the 100-foot Buffer. The applicant is proposing to redevelop a residentially zoned property which was formerly used for commercial crab processing. In addition to the need for variance for the three overlapping 100-foot Buffers, the applicant will require a setback variance and Buffer Exempt Area (BEA) site plan approval. As the information you supplied indicates, the applicant proposes to raze the existing building, remove impervious surfaces and other commercial refuse, and construct a hunting lodge for personal use. Critical Area Commission staff has met with the County staff and the applicant (including his engineer and attorney) and has had multiple conversations regarding this property over the last year or so. Staff from this office has provided multiple comment letters requesting a decrease in the size of the dwelling, removal of impervious coverage, and provision of plantings in the Buffer area forward of the dwelling. These comments were requested with the understanding that this is a constrained site.

The applicant is proposing redevelopment of this site which includes bringing the subject property into conformance with lot coverage limits of 15% through the removal of 15, 535 square feet of impervious surfaces on this site, and the removal of debris and other defunct structures left by the previous owner. This office supports this level of improvement. However, based on the size and scale of the proposed development features on the site, this office cannot support this variance request. I have detailed the specific reasons for our opposition below.

During the course of conversations with the applicant and his attorney, this office has repeatedly indicated that the intrusion into the 100-foot Buffer(s) on this lot could and should be decreased. For example, the applicant is proposing a residential structure with a footprint of nearly 3,000 square feet (9,000 square feet of enclosed area), a 1,500 square feet garage, a nearly 1,000 square foot deck to the side and forward of the dwelling right up to the bulkhead, and several thousand square feet of gravel driveway, walkways, and a ramp. The total area of lot coverage in the Buffer is 7,906 square feet. Regardless of the level of constraint on these lots, this office cannot support dimensions of this size proposed in conjunction with new development in the Buffer. Despite our multiple reviews of the site plan, and numerous requests to

Mr. Steve Dodd 6/18/2009 Page 2 of 2

further minimize the footprint of development, the applicant has not altered the footprint of the residential structure.

In addition, Commission staff has repeatedly indicated the importance of plantings on this site, in support of a functional Buffer area. The applicant has shown a planting area of 2,508 square feet to the south side of the dwelling and grass for the remainder of the site area not proposed in deck or gravel (a 434 square foot area between the deck is labeled as "grass/plantings"). In order to meet the 3:1 mitigation ratio for the impacts to the Buffer, the applicant would be responsible for almost 24,000 square feet of mitigation on site, roughly 10 times more than is being offered. Although this office recognizes that this would be very difficult or impossible to place the entirety of these plantings on site, the applicant has not made an acceptable effort to re-establish a functioning Buffer and minimize adverse impacts to water quality.

We note that in requesting a variance, it is the burden of the applicant to demonstrate that the application and request is the minimum necessary to afford relief and that denial of the variance would result in an unwarranted hardship. We do not believe the applicant has met this burden. In this case, further minimization of the overall footprint is clearly possible and redevelopment of a much smaller scale could easily be accommodated to provide the applicant with reasonable and significant use of the site. Further, the scale and extent of new development proposed within the Buffer creates unnecessary adverse impacts to water quality and habitat and is not in keeping with the spirit and intent of the Critical Area Law and Criteria. Where each and every one of the County's variance standards has not been met, the Board is obligated to deny the variance.

Thank you for the opportunity to provide comments. Please notify the Commission of the decision made in this case. If you have any questions, please contact me at 410-260-3476.

Sincerely,

Julie Roberts

Natural Resources Planner

Cc: DC 555-08

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/

November 19, 2008

Mr. Steven Dodd Dorchester County Planning and Zoning County Office Building P.O. Box 307 Cambridge, Maryland 21613

Re: Picken House

Dear Mr. Dodd:

On October, 28, 2008, Mr. Mike Bonsteel sent an email response to several of our comments from a letter dated August 28, 2008. We have been asked by your office to provide additional comments in response to this email. The last site plan was received by this office on August 22, 2008 and it is my understanding that although additional information has been provided, no adjustments have been made to this plan. Therefore, the majority of our comments remain the same:

- 1. Although P.2 is almost entirely covered by gravel, concrete pads, structures, and other miscellaneous debris, COMAR requires the applicant to bring the property into conformance to the extent possible in the context of redevelopment. As submitted, the applicant is proposing to reduce the total lot coverage on the property from 44.5% to 26.3%.
  - a. In the context of meeting the County's BEA criteria for redevelopment, if the applicant cannot bring the lot into compliance with a maximum of 15% impervious coverage, it appears that an impervious surface coverage variance must be obtained per Dorchester County Zoning Ordinance § 155-38.M.1 from the Board of Zoning Appeals.
  - b. The County's BEA criteria require that redevelopment minimize the shoreward extent of intrusion into the BEA and shall not exceed the shoreward extent of existing structures. In this case, the applicant has previously stated that the BEA setback can be determined by the location of the existing concrete pad at the shoreline. However, we question whether the existing structures can be considered legally nonconforming for any purpose based the amount of time they have been abandoned and based on the proposed change in use of the property. The applicant should provide a full history of this parcel, including when it was abandoned and the County should make a determination regarding the nonconforming status of the structures on the property for the purpose of determining the BEA setback and applying the BEA criteria consistently. In addition, the minimum BEA setback should be determined based on the location of any legal primary structures, and not an accessory

Mr. Steve Dodd 11/19/2008 Page 2 of 2

concrete pad. Use of an accessory concrete pad in defining the BEA setback is not consistent with the Commission's policies on redevelopment in the BEA, nor with the spirit and intent of the Critical Area Law and Criteria.

- c. Regardless of the outcome of (b) above, the County's BEA criteria also state that in no case shall intrusion into the BEA encroach into a required yard under the terms of the underlying zoning unless a variance has first been granted. In this case, we understand the (side) yard setback from the shore to be 20 feet, which is not being met by the applicant.
- d. The factors in (a-d) above result in staff's conclusion that the applicant has not provided enough information to fully evaluate the redevelopment proposal. Based solely on the materials received to date, it is our position that the County's BEA criteria for redevelopment have not been met.
- 2. Should the applicant choose to pursue the variances required under the County's BEA provisions, we note that the burden to meet each and every one of the County and State variance standards falls on the applicant. In this regard, we recommend that the applicant give particular consideration to demonstrating that the variance is the minimum necessary to provide relief and in demonstrating that adverse impacts to water quality and fish and wildlife habitat have been minimized to the extent possible. Currently, opportunities to further reduce the proposed footprint and redesign the layout appear ample.

In general, this office does not oppose the redevelopment of this constrained site. However, it is the burden of the applicant to provide enough information for this office, the County Planning and Zoning office, the Planning Commission, and the Board of Appeals to make useful and informed comments, recommendations, and decisions. To date, the applicant has not met this burden. Additionally, it does not appear that minimization has been demonstrated for the proposed redevelopment of this property consistent with the County's provisions for redevelopment in the BEA. Finally, there are areas of this property that are proposed to be redeveloped which could be further brought into compliance, such as the concrete pad at the bulkhead. The applicant has indicated that it would be difficult to remove this pad, but no supporting information has been provided. In general, further attempts at minimization must be made by the applicant and further site plan information is necessary.

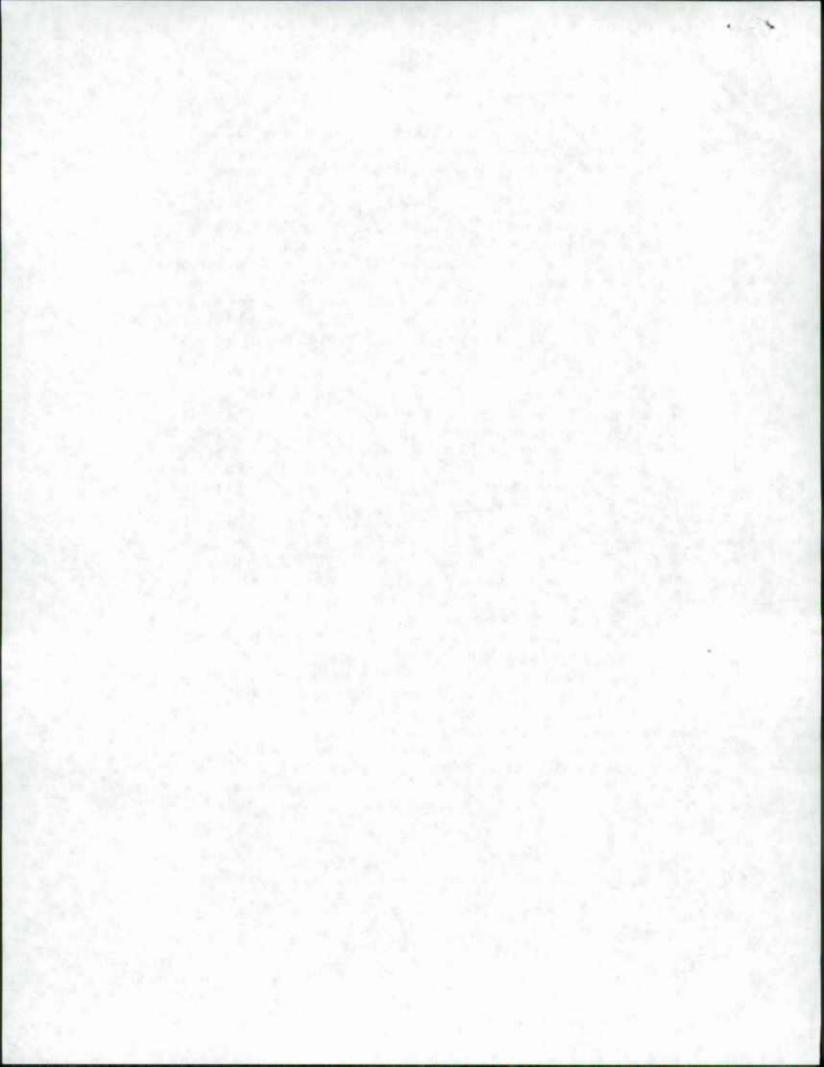
In several of the meeting and conversations we have had with the applicant, the County, and the applicant's attorney, alternative design options were being considered to bring this redevelopment further into compliance. To date, we have not seen a revised site plan. Please have the applicant forward a revised site plan as it becomes available. If you have any questions, please contact me at 410-260-3476.

Sincerely,

Julie Roberts

Natural Resources Planner

Cc: DC 484-08



Martin O'Malley

Governor

Anthony G. Brown
Lt. Governor



Margaret G. McHale

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/

November 13, 2008

Mr. Steven Dodd
Dorchester County Planning and Zoning
County Office Building
P.O. Box 307
Cambridge, Maryland 21613

Re: Picken House

Dear Mr. Dodd:

On October, 28, 2008, Mr. Mike Bonsteel sent an email response to several of our comments from a letter dated August 28, 2008. We have been asked by your office to provide additional comments in response to this email. The last site plan was received by this office on August 22, 2008 and it is my understanding that although additional information has been provided, no adjustments have been made to this plan. Therefore, the majority of our comments remain the same:

- 1. Although P.2 is almost entirely covered by gravel, concrete pads, structures, and other miscellaneous debris, COMAR requires the applicant to bring the property into conformance to the extent possible in the context of redevelopment. As submitted, the applicant is proposing to reduce the total lot coverage on the property from 44.5% to 26.3%.
  - a. In the context of meeting the County's BEA criteria for redevelopment, if the applicant cannot bring the lot into compliance with a maximum of 15% impervious coverage, it appears that an impervious surface coverage variance must be obtained per Dorchester County Zoning Ordinance § 155-38.M.1 from the Board of Zoning Appeals.
  - b. The County's BEA criteria require that redevelopment minimize the shoreward extent of intrusion into the BEA and shall not exceed the shoreward extent of existing structures. In this case, the applicant has previously stated that the BEA setback can be determined by the location of the existing concrete pad at the shoreline. However, we question whether the existing structures can be considered legally nonconforming for any purpose based the amount of time they have been abandoned and based on the proposed change in use of the property. The applicant should provide a full history of this parcel, including when it was abandoned and the County should make a determination regarding the nonconforming status of the structures on the property for the purpose of determining the BEA setback and applying the BEA criteria consistently. In addition, the minimum BEA setback should be determined based on the location of any legal primary structures, and not an accessory

concrete pad. Use of an accessory concrete pad in defining the BEA setback is not consistent with the Commission's policies on redevelopment in the BEA, nor with the spirit and intent of the Critical Area Law and Criteria.

- c. Regardless of the outcome of (b) above, the County's BEA criteria also state that in no case shall intrusion into the BEA encroach into a required yard under the terms of the underlying zoning unless a variance has first been granted. In this case, we understand the yard setback from the shore to be 40 feet, which is not being met by the applicant.
- d. The factors in (a-d) above result in staff's conclusion that the applicant has not provided enough information to fully evaluate the redevelopment proposal. Based solely on the materials received to date, it is our position that the County's BEA criteria for redevelopment have not been met.
- 2. Should the applicant chose to pursue the variances required under the County's BEA provisions, we note that the burden to meet each and every one of the County and State variance standards falls on the applicant. In this regard, we recommend that the applicant give particular consideration to demonstrating that the variance is the minimum necessary to provide relief and in demonstrating that adverse impacts to water quality and fish and wildlife habitat have been minimized to the extent possible. Currently, opportunities to further reduce the proposed footprint and redesign the layout appear ample.

In general, this office does not oppose the redevelopment of this constrained site. However, it is the burden of the applicant to provide enough information for this office, the County Planning and Zoning office, the Planning Commission, and the Board of Appeals to make useful and informed comments, recommendations, and decisions. To date, the applicant has not met this burden. Additionally, it does not appear that minimization has been demonstrated for the proposed redevelopment of this property consistent with the County's provisions for redevelopment in the BEA. Finally, there are areas of this property that are proposed to be redeveloped which could be further brought into compliance, such as the concrete pad at the bulkhead. The applicant has indicated that it would be difficult to remove this pad, but no supporting information has been provided. In general, further attempts at minimization must be made by the applicant and further site plan information is necessary.

In several of the meeting and conversations we have had with the applicant, the County, and the applicant's attorney, alternative design options were being considered to bring this redevelopment further into compliance. To date, we have not seen a revised site plan. Please have the applicant forward a revised site plan as it becomes available. If you have any questions, please contact me at 410-260-3476.

Sincerely,

Julie Roberts

Natural Resources Planner

Cc: DC 484-08

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor



Margaret G. McHale

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/

August 28, 2008

Mr. Steven Dodd Dorchester County Planning and Zoning County Office Building P.O. Box 307 Cambridge, Maryland 21613

Re: Picken House

Dear Mr. Dodd:

We have received information regarding the redevelopment of the above referenced property. There are two lots in question that the applicant has included in the submitted information, Deed Parcel 1 (0.62 acres) and Deed Parcel 2 (0.59 acres). These lots are located in the Resource Conservation Area. Deed Parcel 1 appears to be entirely encumbered with tidal wetlands and Deed Parcel 2 is encumbered by the 100-foot Buffers to tidal wetlands on three sides. The shoreward portion of the property is mapped as a Buffer Exempt Area (BEA), necessitating multiple variances and a BEA hearing in the context of redevelopment. This property was previously used as part of the crabbing industry and appears to have been abandoned with no remediation of the site. We have these comments and questions:

- 1. The applicant has submitted this project proposal showing the lot coverage area in relation to the total area of the two lots, which is 1.21 acres.
  - a. The applicant has not stated that these lots are legally merged as one, showing two separate parcels on the plan. However, it appears that areas of existing lot coverage and/or structures are located such that they straddle the parcel lines. In this case, it seems that the two lots are merged by order of law and should be treated as such. Further clarification from the County and applicant is necessary on this point.
- 2. Please provide parcel history which indicates that this property is an existing parcel of record in the Critical Area and that its configuration predates the date of adoption of the County's Critical Area Program.
- 3. Although P.2 is almost entirely covered by gravel, concrete pads, structures, and other miscellaneous debris, it is the responsibility of the applicant to bring the property into

conformance to the extent possible in the context of redevelopment. As submitted, the applicant is proposing to reduce the total lot coverage on the property from 44.5% to 26.3%.

- a. In the context of meeting the County's BEA criteria for redevelopment, if the applicant cannot bring the lot into compliance with a maximum of 15% impervious coverage, an impervious surface coverage variance must be obtained per Dorchester County Zoning Ordinance § 155-38.M.1 from the Board of Zoning Appeals.
- b. The County's BEA criteria require that redevelopment minimize the shoreward extent of intrusion into the BEA and shall not exceed the shoreward extent of existing structures. In this case, the applicant has previously stated that the BEA setback can be determined by the location of the existing concrete pad at the shoreline. However, we question whether the existing structures can be considered legally nonconforming for any purpose based the amount of time they have been abandoned and based on the proposed change in use of the property. The applicant should provide a full history of this parcel, including when it was abandoned and the County should make a determination regarding the nonconforming status of the structures on the property for the purpose of determining the BEA setback and applying the BEA criteria consistently.
- c. Regardless of the outcome of (b) above, the County's BEA criteria also state that in no case shall intrusion into the BEA encroach into a required yard under the terms of the underlying zoning unless a variance has first been granted. In this case, we understand the yard setback from the shore to be 40 feet, which is not being met by the applicant.
- d. The factors in (a-d) above result in staff's conclusion that the applicant has not provided enough information to fully evaluate the redevelopment proposal. Based solely on the materials received to date, it is our position that the County's BEA criteria for redevelopment have not been met.
- 4. Please clarify whether the Health Department approved the proposed holding tanks on this property proposed in conjunction with the redevelopment.
- 5. Should the applicant chose to pursue the variances required under the County's BEA provisions, we note that the burden to meet each and every one of the County and State variance standards falls on the applicant. In this regard, we recommend that the applicant give particular consideration to demonstrating that the variance is the minimum necessary to provide relief and in demonstrating that adverse impacts to water quality and fish and wildlife habitat have been minimized to the extent possible. Currently, opportunities to further reduce the proposed footprint and redesign the layout are abundant and would not be supported by this office.

Mr. Steve Dodd 8/28/2008 Page 3 of 3

In general, this office does not oppose the redevelopment of this constrained site. However, it is the burden of the applicant to provide enough information for this office, the County Planning and Zoning office, the Planning Commission, and the Board of Appeals to make useful and informed comments, recommendations, and decisions. To date, the applicant has not met this burden. For example, in a meeting with the applicants and the County (via conference call) on July 31, 2008, and in a follow up email from the County dated August 1, 2008, additional information was requested. The applicant briefly addressed the concerns of the County but did not provide the level of detail useful for further review.

Additionally, it does not appear that minimization has been demonstrated for the proposed redevelopment of this property consistent with the County's provisions for redevelopment in the BEA, nor has the information provided to this office show that the mitigation requirements been fully addressed. Finally, there are areas of this property that are proposed to be redeveloped without being brought into compliance, such as the concrete pad at the bulkhead. The applicant has indicated that it would be difficult to remove this pad, but no supporting information has been provided. In general, further attempts at minimization must be made by the applicant and further site plan information is necessary.

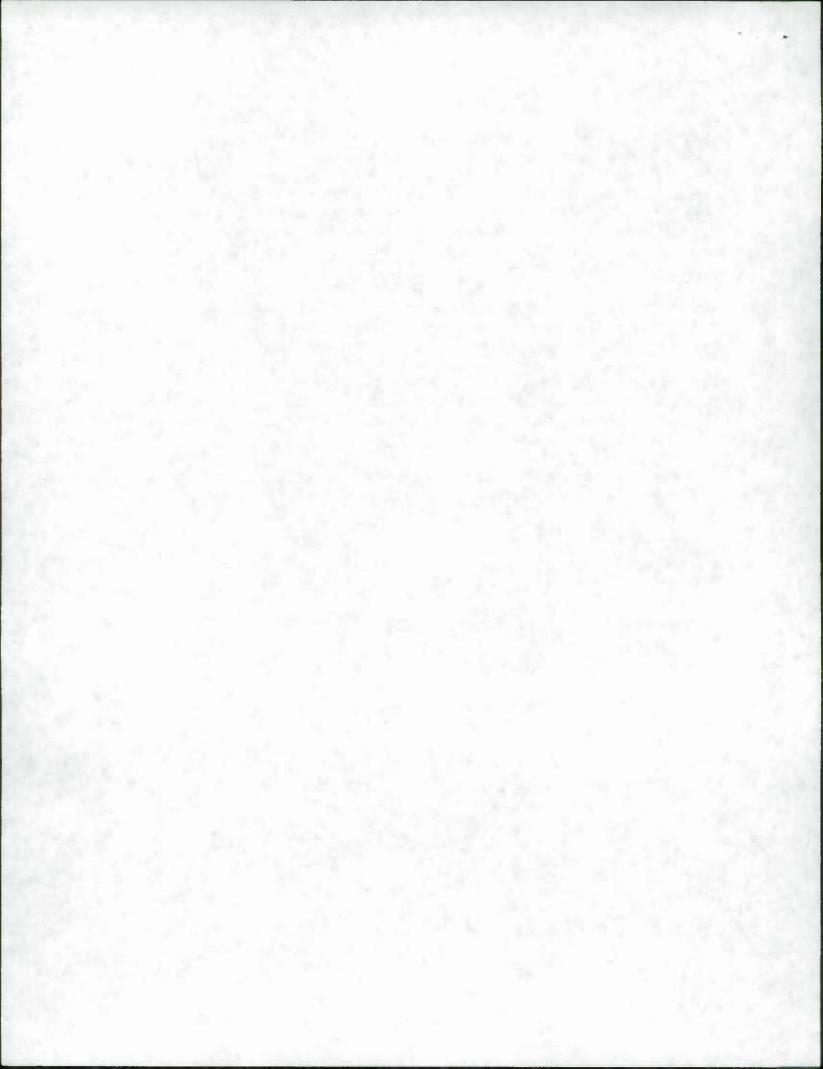
Please have the applicant provide the additional information requested in this letter and forward this information as it becomes available. If you have any questions, please contact me at 410-260-3476.

Sincerely,

Julie Roberts

Natural Resources Planner

Cc: DC 484-08



# DORCHESTER COUNTY BOARD OF APPEALS June 25, 2009

ounc 25, 2009

Staff Report: Case # 2364

Applicants: Mike Novak, Pickin House LLC Location: 2340 Asquith Island Road, Crapo

Tax Map 101 Block 18 Parcel 8 Lot N/A

Size of Property: 1.21 acres Zoning of Property: RC, Resource Conservation

Critical Area Overlay: RCA, Resource Conservation Area

#### Facts

- The applicant is requesting a variance from three overlapping tidewater buffers to replace an existing commercial structure with a single family dwelling. As proposed, the single family dwelling will be constructed within 31' of tidal wetlands.
- The applicant is also requesting a 26' variance from the required 40' front yard setback to allow the proposed single family dwelling to be built on the existing foundation of a prezoning structure used for seafood processing.
- The lot is comprised of two deed parcels which must be combined by deed to grant the applicant enough lot coverage for the proposed project.
- There will be a decrease in lot coverage resulting from removal of gravel and debris. Total lot coverage will be reduced from 23,441 to 7,906 square feet. This will bring the property into compliance with the Critical Area lot coverage limitation of 15% of the area of the (combined) lot.

- 6. Bowed sections of pipe will be unacceptable and installation of pipe that has bowed, whether or not the bow has been corrected, will not be allowed.
- B. Ductile Iron Pipe (DIP) Ductile iron pipe shall be manufactured in accordance with ANSI A21.51, latest edition, and shall be Class 52 unless otherwise approved by the engineer.
  - 1. The pipe shall be double cement lined per AWWA C104 and have the manufacturers internal bitumastic coating system. The pipe intended for buried installation shall receive an external standard bituminous foundry coating in accordance with ANSI A21.4.
  - 2. Gravity sewer mains installed at depths exceeding approximately 18 feet shall be required to be ductile iron pipe as noted on the drawing.
  - 3. All fittings used to connect ductile iron sewer main pip shall be made of ductile iron in accordance with ANSI 21.10 and be Class 52.
    - a. The Contractor shall furnish mechanical joints conforming to ANSI A21-11, latest edition.
    - b. Ductile iron pipe shall use mechanical joint or push-on joints such as "Tyton" joint ends. Provide mechanical joints where called fro on the drawings.
    - c. Mechanical joints shall be assembled using either Ford Uni-Flange series 1400 Wedge Action Retainer Glands, Mueller Aqua Grips, or EBBA Iron Mega Lug Series 110 Mechanical Joint Retainer glands
  - 4. All fittings shall be coated on the exterior and interior in the same manner as ductile iron pipe, as describe above.
- C. High Density Polyethylene (HDPE) Pipe HDPE Pipe used for gravity sewer construction, shall be PE3408 high density polyethylene meeting cell classification 34544C or 34544E per the requirements of ASTM D-3350 and shall be listed in the name of the pipe and fitting manufacturer in the Plastics Pipe Institute TR-4, Recommended Hydrostatic Strengths and Design Stresses for Thermoplastic Pipe and Fittings Compounds, with a standard HDB rating of 1600 psi at 73 F. Pipe and fittings shall be from the same manufacturer. Pipe shall be manufactured in accordance with ASTM F714 or ASTM D 335 and shall be so marked. The pipe shall have a minimum Standard Dimension Ration (SDR) of 11.0 unless otherwise approved by the Town Engineer.
- D. Pipeline Detection Tape Pipeline detection tape shall be Lineguard Type II Detectable Tape as manufactured by Lineguard, Inc., of Wheaton, Illinois, or equal. The tape shall be minimum of two inches wide, green in color, imprinted with the words "CAUTION -- SEWER LINE BELOW", and be capable of being detected with inductive methods.

#### Law

#### Critical Area:

- The 100' tidewater buffer setback requirements are found in § 155-38 J. 1 through 4. In § 155-38.J.7 an eligible applicant may request a variance from the Board of Appeals as per §155-38.M
- "In considering an application for a variance, the county shall <u>presume</u> that the specific development activity in the Critical Area that is subject to the application and for which a variance is required <u>does not conform</u> with the general purpose and intent of Natural Resources Article, Title 8, Subtitle 18 COMAR Title 27, and the requirements of the County's Critical Area Program." (italics and underlining added)
- "An applicant has the burden of proof and the burden of persuasion to overcome the presumption of nonconformance established... above." §155-38.M(3)
- Unwarranted Hardship is defined: "...that without a variance, an applicant would be denied reasonable and significant use of the entire parcel or lot for which the variance is requested." §155-13
- "With due regard for the person's experience, technical competence and specialized knowledge, the written findings may be based on evidence introduced and testimony presented by:
  - (a) The applicant;
  - (b) The County or any other government agency; or
  - (c) Any other person deemed appropriate by the County. §155-38.M(5)
- "A variance to these regulations may not be granted unless where, owing due to special
  features of a site or specific conditions or other circumstances peculiar to the applicant's
  land or structure, implementation of the provisions of this section or of the Dorchester
  County Critical Area Protection Program would result in unwarranted hardship to the
  applicant." §155-38.M(6)
- This request is also subject to all the other Critical Area variance criteria.

### Zoning:

- The front yard setback requirements are found in § 155 Attachment 2. An eligible applicant may request a variance from the Board of Appeals as per §155-20.D.1:
- "A variance from the terms of this chapter may be granted, provided that all four of the following criteria have been met and the variance is not contrary to public interest:
  - (a) Special conditions and circumstances exist which are peculiar to the land, structure or building involved.
  - (b) Literal interpretation of the provisions of this chapter would deprive the applicant of rights commonly enjoyed by other properties in the same district under the

## DIVISION 2 – SITE WORK SECTION 02561 – SANITARY SEWER

## 1.01 Description

A. This item shall consist of sanitary gravity sewers and house connections of polyvinyl chloride (PVC), ductile iron (DI), and high-density polyethylene (HDPE) pipe of the diameters shown on the contract drawings, laid on a firm bed true to line and grade in accordance with these specifications.

#### 1.02 Materials

- A. Polyvinyl Chloride (PVC) Pipe Polyvinyl chloride (PVC) pipe used for sewer construction up to 15-inch diameter pipe shall equal or exceed the requirements of ASTM D-3034. Polyvinyl chloride (PVC) pipe used for sewer construction of 18-thru 24-inch diameter pipe shall equal or exceed the requirements of ASTM F-679. Pipe shall have a minimum Standard Dimension Ratio (SDR) of 35 and the minimum pipe stiffness, as tested in accordance with ASTM D-2412, shall be 45 psi when measured under 5 percent deflection at 73 degrees Fahrenheit. Pipe shall be manufactured with integral wall bell and spigot joints in standard lengths not exceeding twenty (20) feet.
  - 1. Each length of pipe and each fitting shall be marked with the schedule and shall have the pressure rating indicated on them.
  - 2. Polyvinyl chloride (PVC) pipe fittings shall utilize an elastometric O-ring gasketed joint assembled in accordance with the manufacturer's recommendations.
  - 3. Polyvinyl chloride wye branches, T-wye branches, plugs, pipe stoppers and other fittings shall be manufactured in accordance with the same specifications and shall have the same thickness, depth of socket, and annular space as the pipe. Wye and T-wye branches shall be complete pipe sections. Saddles will not be permitted for use in new construction unless expressly permitted by the Town on a case-by-case basis.
  - 4. During the progress of the work or before installation, the Engineer may require that a sufficient number of pipe samples be tested to ascertain the quality of the various sizes of pipe. The cost of such samples and testing shall be included in the unit price bid of the item by the contractor.
  - 5. Polyvinyl chloride pipe shall be delivered and stockpiled in unit pallets. No stacking of pallets above 5 feet in height will be allowed. If pipe is stockpiled for more than 30 days prior to installation, it must be suitably covered with reflective material to protect the pipe from ultra-violet rays emanating from sunlight. Do not use plastic sheets. Allowance for air circulation under covering shall be provided.

- terms of this chapter.
- (c) The special conditions or circumstances did not result from actions of the applicant.
- (d) Granting the variance requested will not confer upon the applicant any special privilege that is denied by this chapter to other lands, structures or buildings in the same district."

#### Application of Law to Fact

Of the five Critical Area variance criteria, all have been met:

§155-38.M.6.a: Findings must be made that demonstrate that special conditions or circumstances exist which are peculiar to the land or structure involved, and that literal enforcement of the provisions of the Critical Area Protection Program would result in unwarranted hardship.

This criterion has been met and unwarranted hardship can be claimed in this case. Due to the nature of tidal wetlands surrounding the property, the applicant cannot redevelop the property without a variance from the tidewater buffer.

§155-38.M.6.b: A literal interpretation of the Critical Area Protection Program and related ordinances will deprive the applicant of rights commonly enjoyed by other properties in similar parts of the Critical Area.

This criterion has been met. The applicant would be prohibited from any redevelopment of the property without a variance.

§155-38.M.6.c: The granting of a variance will not confer upon the applicant any special privilege that would be denied to other land or structures within the Critical Area.

This criterion has been met. The Board may grant a variance where the applicant can prove unwarranted hardship.

§155-38.M.6.d: The variance request is not based upon conditions or circumstances which are the result of actions by the applicant, nor does the request arise from any condition relating to land or building use, either permitted or nonconforming on any neighboring property.

This criterion has been met. The applicant's request for a variance is based on the fact that there are overlapping tidewater buffers which would otherwise preclude redevelopment of the property.

§155-38.M.6.e: The granting of a variance will not adversely affect water quality or adversely impact fish, wildlife, or plant habitat within the Critical Area, and will be in harmony with the general spirit and intent of the Critical Area Law.

### DIVISION 2 – SITE WORK SECTION 02540 – STORM DRAINS AND DRAINAGE STRUCTURES

## 1.01 Description

- A. This work shall consist of replacing existing storm drain and drainage structure facilities on a firm bed to the existing line and grade if the Contractor does not elect to support and protect these facilities to allow for the prosecution of the work of this project or if the Contractor damages these facilities during the prosecution of the work.
- B. The Materials, Construction Methods for the work as described herein shall be as set forth in Section 303 and 305 of the Standard Specifications for Construction and Materials for the Maryland Department of Transportation State Highway Administration 2001 edition or as later amended, unless otherwise noted below.
- C. Support existing facilities and protect them from damage during the prosecution of the work. Replace existing storm drain and drainage structures in kind to the existing lines and grades with new materials if existing facilities are damaged during the construction process or if the Contractor elects to remove and replace the existing facilities in kind with new materials.
- D. The Contractor shall maintain the full function of existing drainage pipes and drainage structures with the installation of temporary facilities serving the intended purpose in the case where the Contractor elects to remove these existing facilities to avoid the need for support and protection of these facilities. New replacement facilities will be constructed by the Contractor as soon as sewer or water main construction passes the area. See drawings for additional information.

## 1.02 Method of Measurement & Basis of Payment

Storm Sewer and Drainage Structure replacement will be measured for payment and shall be paid based on Unit Price which shall include excavation, backfilling, compaction, and all other incidentals necessary to complete the work.

END OF SECTION

This criterion has been met. The applicant is proposing to significantly reduce the amount of lot coverage and plant vegetation around the proposed dwelling.

With respect to the variance criteria relative to the front yard setback, two have been met:

§155-20.D.1.a: Special conditions and circumstances exist which are peculiar to the land, structure or building involved.

This criterion has been met. The existing pre-zoning structure was built only 14' from Cannon Road.

§155-20.D.1.b: Literal interpretation of the provisions of this chapter would deprive the applicant of rights commonly enjoyed by other properties in the same district under the terms of this chapter.

This criterion has not been met. The applicant may construct a dwelling on the property which meets the front yard setback requirement. In this case, the applicant is arguing that the reuse of the existing foundation will yield less disturbance from the redevelopment process.

§155-20.D.1.c: The special conditions or circumstances did not result from actions of the applicant.

This criterion has been met. The applicant has not altered the property since its previous, nonconforming use.

§155-20.D.1.d: Granting the variance requested will not confer upon the applicant any special privilege that is denied by this chapter to other lands, structures or buildings in the same district.

This criterion has not been met. The applicant has the opportunity to construct the proposed dwelling in conformance with the front yard setback requirement.

- F. The boring method consists of pushing the pipe into the earth with a boring auger rotating within the pipe to remove the spoil.
- G. The boring operation shall be progressed on a 24-hour basis without stoppage (except for adding lengths of pipe) until the leading edge of the pipe has reached the receiving pit. However special arrangements and approvals will be needed from both the Town and Maryland State Highway Administration before the Contractor is permitted to work outside of the normal work hours specified in the Contract Documents.
- H. The front of the pipe shall be provided with mechanical arrangements or devices that will positively prevent the auger from leading the pipe so that there will be no unsupported excavation ahead of the pipe.
- I. The auger and cutting head shall not exceed the outside diameter of the pipe by more than one half inch. If voids should develop or if the bored diameter is greater than approximately 1 inch, grouting or other methods approved by the Engineer shall be employed to fill such voids.
- J. The cover-cut by the cutting head shall not exceed the outside diameter of the pipe by more than one half inch. If voids should develop or if the bored hole diameter is greater than the outside diameter of the pipe (plus coating) by more than approximately l inch, grouting or other methods approved by the Engineer shall be employed to fill such voids.
- K. The face of the cutting head shall be arranged to provide a reasonable obstruction to the free flow of soft or poor material.
- L. Plans and description of the arrangement to be used shall be submitted to the Engineer for approval and no work shall proceed until such approval is obtained.
- M. Any method which employs simultaneous boring and jacking for pipes over 8 inches in diameter which does not have the above approved arrangement will not be permitted.
- 1.04 Method of Measurement & Basis of Payment

Refer to Section 01027, Applications for Payment.

**END OF SECTION** 

#### In summary:

- Every applicable criterion must be met in order to grant the variance.
- All Critical Area criteria have been met. Two of the four Zoning criteria have been met.

#### Staff Recommendations:

Staff recommends that the Board <u>approve</u> the Critical Area variance with the condition that the applicant combine the two subject deed parcels. No building permit will be issued for the property until the deed parcels are combined by deed.

Staff recommends that the Board <u>deny</u> the front yard setback variance. However, if the Board decides to grant the front yard setback, staff recommends:

1. That the existing foundation be used as the foundation of the applicant's dwelling. The Code Official must determine if the existing foundation is in compliance with the County's Building Code, and is therefore structurally adequate to serve as the foundation for the applicant's proposed dwelling.

The Board may wish to seek legal counsel in making its decision regarding this variance.

## DIVISION 2 – SITE WORK SECTION 02445 – TUNNELING

## 1.01 Description

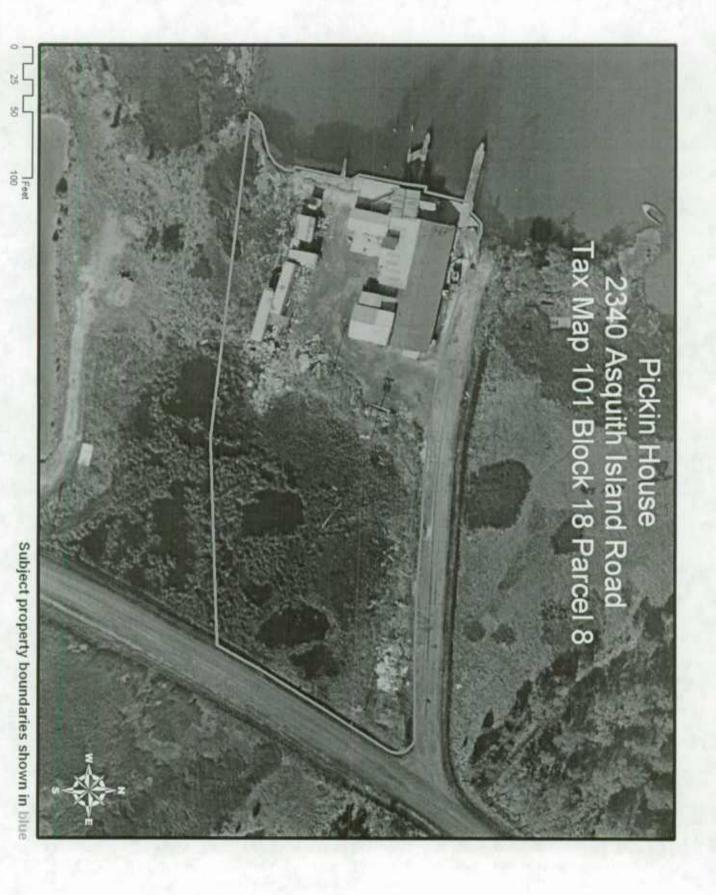
A. This work shall consist of the providing and installing of tunnels of steel, spacers, dewatering, flow able fill, end seals, receiving and vacating pits, filling pits and restoration of affected areas to the grades and at the location shown on the Plans, or as directed by the Engineer in accordance with these specifications. Contractor shall submit a detailed work plan, material specifications, brochures etc., at least two week prior to start of jack and bore work to Engineer.

#### 1.02 Material

- A. Casing Spacers should be installed in accordance with the manufacturers instructions. Special care should be taken to ensure that all component parts are correctly assembled and evenly tightened, and that no damage occurs during tightening of the spacers or the carrier pipe insertion. The annulus between the carrier pipe and the casing should be sealed at each end of the casing to prevent water from entering.
- B. Carrier Pipe-Refer to drawing.
- C. Steel casing pipe-size as shown on plans, in accordance with ASTM A-53, 3/8" wall thickness, class B.
- D. Standard Pull-on type end seals must have stainless steel bands and clamps.

#### 1.03 Construction Methods

- A. Line and Grade It is of essential importance that all tunnels be driven to the line and grade specified on the plans. Contractor shall establish initial control information in the tunnel shaft prior to the initiation of work. The Contractor shall make use of this information to project the alignment ahead until subsequent references can be set.
- B. Sewer Main shall be bored under US Route 40 according to the MD SHA Permit and details shown on the plans and according to the following construction methods.
- C. Bore installation shall have a bore hole essentially the same as the outside diameter of the pipe plus the thickness of the protective coating.
- D. The use of water or other liquids to facilitate casing emplacements and spoil removal is prohibited.
- E. If during installation an obstruction is encountered which prevents installation of the pipe in accordance with this specification, the pipe shall be abandoned in place and immediately filled with grout.

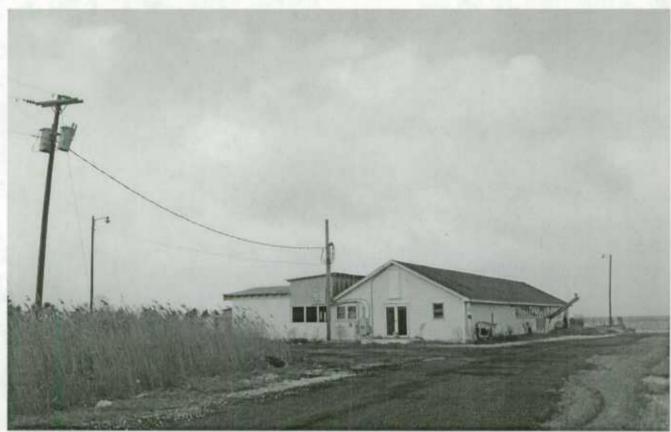


- 2. Any erosion and sediment control measures damaged during construction shall be repaired before the end of each working day or as soon as possible thereafter. Where trench excavation is to be spoiled, the applicable local, county, or state permit shall prevail. The spoil materials shall be graded in accordance with the grading plan and protective vegetation shall be established as soon as possible. Before, during and after construction, the Contractor shall utilize procedures that will minimize the deposition of sediment in the waterways and bodies of water of the County and State.
- 3. No disturbance shall be permitted within the 100-year flood plain limits. Should a change order occur approving permitted work within the 100 year flood plain limits, certain main points must be considered while exercising sediment control in the following areas:
  - a. Streams, Channels or Waterways No spoil shall be wasted in the waterway or adjacent bank areas. Buffer strips shall be used, whenever possible, to protect the stream.
  - b. Crossings, whether of access ways or utility lines, shall be as required in the MDE Letter of Authorization and as shown on the drawings. Obstructions shall not be left in the stream beyond the period of project construction. Stream channels shall be protected from storm drain discharges by using energy dissipators, riprap, etc., when erodible velocities exist. Storm drains shall also have outlets in a location and direction so as not to disrupt a natural channel.
  - c. Any necessary channel improvement work shall be done in accordance with the requirements of the Maryland Department of the Environment so as to preserve as much of the natural ecological value of the stream as possible. Consideration shall be given to using materials and techniques best suited for stream channel stabilization and protection. Any channel improvement work shall be done so as to minimize the disturbance to the natural stream channel alignment, and to prevent excessive increases in velocity of water flow.

## 1.04 Method of Measurement & Basis of Payment

Erosion and Sediment Control will not be measured for payment but will be considered incidental to the installation of the sewer and water main specified in these documents for which the contractor has provided Unit Bid Prices. No additional compensation beyond the overall Unit Bid Prices will be paid for Erosion and Sediment Control. The payment of the unit bid price items will be considered full compensation for all material, labor, equipment, tools, and incidentals necessary to complete the work.

**END OF SECTION** 



View of Pickin House from Cannon Road

#### B. Erosion Control:

- 1. The Contractor shall shape the graded area in such a manner as to permit the runoff of rainwater.
- 2. The seeding and mulching of slopes shall be performed immediately following the suspension of grading operations. Fill slopes shall be dressed and mulched as the embankment proceeds to the extent considered desirable and practicable. The Engineer will limit the area of excavation and embankment operations in progress commensurate with the Contractor's capability and progress in assuring that the finish grading, mulching, seeding and other such permanent pollution control measures are current in accordance with the accepted schedule. Should seasonal limitations make such coordination unrealistic, temporary erosion control measures shall be taken as required. The Contractor shall establish temporary cover by seeding and/or mulching the graded areas that will be exposed more than 30 days before permanent stabilization can be completed. All construction shall be confined to the minimum area necessary to accommodate the Contractor, equipment and work force engaged in this project. See drawings for special mulching restrictions.
- 3. Strip and stockpile topsoil for later use on areas to be stabilized by permanent vegetation. Protect the stockpiled material with mulch or temporary vegetation.
- 4. The Contractor shall be required to incorporate all permanent erosion control features into the project at the earliest practicable time as outlined in his accepted schedule. Temporary pollution control measures shall be used to correct conditions that develop during construction and that were unforeseen during the design stage. Pollution control measures are also needed to temporarily control erosion that develops during normal construction practices, but these measures are not associated with permanent control features on the project.
- 5. Where erosion is likely to be a problem, clearing and grubbing operations shall be scheduled and performed so that grading operations and permanent erosion control features can follow immediately thereafter if the project conditions permit; otherwise temporary erosion control measures may be required between successive construction stages.
- 6. A temporary stabilized construction entrance shall be constructed to minimize or eliminate the transport of mud from the construction site or storage area onto the public right-of-way by motor vehicles or runoff. Locate storage area where erosion and sediment hazards are slight. If this is not possible, apply necessary paving and erosion control practices.

#### C. Sediment Control:

1. All construction procedures shall be performed in accordance with the rules and regulations of the Maryland Department of the Environment.



View of Pickin House from neighboring property

## DIVISION 2 – SITE WORK SECTION 02370 – EROSION AND SEDIMENTATION CONTROL

#### 1.01 Description

- A. This work shall consist of the application of temporary and permanent measures throughout the life of the project in order to control erosion and to minimize the siltation of off-site drainage courses. Such measures shall include, but are not limited to, the use of silt fence, stabilized construction entrances, berms, mulch, grasses, slope drains and other methods. Temporary erosion and siltation control measures as described herein shall be applied to erodible material exposed by any activity on the project.
- B. It will be the responsibility of the Contractor to obtain approvals from the appropriate Governmental agency for any offsite work, which includes offsite, borrow pits, waste or spoils areas and the treatment of these during and after the completion of the grading. A copy of the permits or approvals must be furnished to the Engineer prior to starting any work covering the said permits of approval. In the event of conflict between these requirements and pollution control laws, rules or regulations of other Federal, State or local agencies, the more restrictive laws, rules or regulations will apply.
- C. The erosion control features installed by the Contractor shall be acceptably maintained by the Contractor for the duration of the Contract. The Engineer reserves the right to inspect erosion control measures in offsite borrow pits and waste or spoils areas and to report violations of Permit requirements to the appropriate agencies.

#### 1.02 Materials

All materials used for straw bales, silt fence, stabilized construction entrances, and all other erosion and sediment control measures shall conform to the applicable requirements of the Cecil Soil Conservation District (CSCD) and the Maryland Department of the Environment (MDE). Special requirements for this project appear on the drawings and in the Contract Documents.

#### 1.03 Construction Methods

#### A. General:

At the pre-construction meeting, the Contractor shall submit for acceptance his schedules for accomplishment of temporary and permanent erosion control work. Schedules shall be submitted for each of the following procedures: clearing and grubbing, grading, removal and stockpiling of topsoil and paving. No construction shall be started until the erosion control schedules and methods of operations have been accepted by the Engineer.

#### DORCHESTER COUNTY BOARD OF APPEALS

Date: October 23, 2009

Reference: BOA Case #2364 - To request variance(s) from the tidewater buffer and front yard setback to allow

construction of dwelling

RC, Resource Conservation District

Pickin House, LLC 2361 Vandermast Lane Baltimore, MD 21221

Dear Mr. Novak,

For the reasons and findings set forth on the record by the members of the Dorchester County Board of Appeals on Thursday, October 22, 2009, the application in the above noted case has been:

\_\_\_\_ Approved.

X Approved with the following stipulations/conditions:

- 1) The two deeded parcels must be combined by deer prior to start of construction;
- 2) applicant must use the existing foundation as the foundation of the proposed dwelling; 3) mitigation for area of development and re-development as depicted on plats.

## PLEASE BE SURE TO OBTAIN YOUR BUILDING PERMIT OR CERTIFICATE OF USE

Before you start construction and/or operation you will need to obtain the following:

## Building, electrical and plumbing permits.

- 1. If you should fail to use or start construction of your Special Exception within two (2) years of approval, the approval shall become void. (Note: This time limit does not apply to variances.)
- 2. Any person or party allegedly aggrieved by any decision of the Board of Appeals may appeal the same to the Circuit Court of Dorchester County within thirty (30) days of the notification of the decision. You are prohibited from obtaining a permit or starting the use of the property in accordance with the variance until the 30 day appeal period has expired.
- 3. The Department of Planning and Zoning will be responsible for the enforcement of any stipulations/conditions that the Board of Appeals has placed on this approval.

If you have any questions regarding the above, please contact this office immediately and speak with the undersigned.

Sincerely,

DORCHESTER COUNTY BOARD OF APPEALS

Steve Dodd Executive Secretary

#### A-2. Permeable Pavements

Permeable pavements are alternatives that may be used to reduce imperviousness. While there are many different materials commercially available, permeable pavements may be divided into three basic types: porous bituminous asphalt, porous concrete, and interlocking concrete paving blocks or grid pavers. Permeable pavements typically consist of a porous surface course and uniformly graded stone or sand drainage system. Stormwater drains through the surface course, is captured in the drainage system, and infiltrates into the surrounding soils. Permeable pavements significantly reduce the amount of impervious cover, provide water quality and groundwater recharge benefits, and may help mitigate temperature increases.

#### **Applications:**

Permeable pavements are effective for reducing imperviousness in parking lots, driveways, plazas, and access roads in both new and redevelopment applications in residential, commercial, and industrial projects. They are particularly useful in high-density areas where space is limited. Rainwater passes through the permeable surface, is temporarily stored in the subbase material, and slowly infiltrates into the underlying soils.

#### Performance:

When designed according to the guidance provided below, areas covered by permeable pavements will have runoff characteristics more closely resembling vegetated areas. The capacity of permeable pavements to capture and detain runoff is governed by the storage capacity, compaction of the subbase, and in-situ soil properties. Consequently, RCN's applied to these systems vary with individual design characteristics. The effective RCN's shown in Table 5.5 are used when addressing the ESD Sizing Criteria.

#### Constraints:

The following constraints are critical when considering the use of permeable pavements to capture and treat stormwater runoff:

- > Space: Permeable pavements work best when designed in a series of narrow strips. The size and distribution of paved surfaces within a project must be considered early during planning and design. Permeable pavements should not be used in areas where there are risks for foundation damage, basement flooding, interference with subsurface sewage disposal systems, or detrimental impacts to other underground structures.
- > Topography: Runoff should sheetflow across permeable pavements. Pavement surfaces should be gradual ( $\leq 5\%$ ) to prevent ponding of water on the surface and within the subbase.
- > Soils: Sandy and silty soils are critical to successful application of permeable pavements. The HSG should be A, B or C.



## DORCHESTER COUNTY BOARD OF APPEALS

## MEMORANDUM OF DECISION

CASE #2364 – PICKIN HOUSE, LLC

Variance Special Exception
C/AUARIANCE IN
The Appeals Board finds that the following conditions are reasonable, necessary and desirable and shall attach to the grant of the requested action:
The Two doesded parcels must be combined
by dad pura to start of construction
3. applicant must use the quoting fundation
as the foundation of the proposed dulling
mitigation to mean of development and
6. re-decognil as deputed on plate
(Approved) (Disapproved) by a 5 to o vote.  Date: 10 /22/09  Clin Arward Edwin Howard Dwight Cronwell
Wester
Elizabeth Hill
Catherine M Cut Oly
Catherine McCulley

Subsurface water conditions (e.g., water table) will help determine the stone reservoir thickness used. The probability of practice failure increases if the reservoir intercepts groundwater. Therefore, subbase inverts should be above local groundwater tables.



- > Drainage Area: Permeable pavements are an at-source practice for reducing the effects of impervious cover and addressing ESD criteria. As the impervious area draining to each practice increases, practice effectiveness weakens. Therefore, runoff from adjacent areas (or "run-on") should be limited.
- > Hotspot Runoff: Permeable pavements should not be used to treat hotspots that generate higher concentrations of hydrocarbons, trace metals, or toxicants than are found in typical stormwater runoff and may contaminate groundwater.
- > Structure: Most permeable alternatives have a lower load bearing capacity than conventional pavements. Therefore, applications should be limited to locations that do not receive heavy vehicle traffic and where sub soils are not compacted.
- > Operation: Permeable pavements are highly susceptible to clogging and subject to owner neglect. Individual owners need to be educated to ensure that proper maintenance and winter operation activities will allow the system to function properly.

#### Design Guidance:

The following conditions should be considered when designing permeable pavements:

> Conveyance: Runoff shall flow through and exit permeable pavements in a safe and nonerosive manner. Permeable pavements should be designed off-line whenever possible. Runoff from adjacent areas should be diverted to a stable conveyance system. If bypassing these areas is impractical, then runoff should sheetflow onto permeable pavements.

Pavement surfaces shall have a permeability of eight inches per hour or greater to convey water into the subbase rapidly. The slope of the permeable pavement shall be at least 1% but no greater than 5%. Any grade adjustments requiring fill should be accomplished using the subbase material. Permeable pavements may be placed in sloped areas by terracing levels along existing contours.

Pavement systems should include an alternate mode for runoff to enter the subbase reservoir. In curbless designs, this may consist of a two-foot wide stone edge drain. Raised inlets may be required in curbed applications.

The bottom of the subbase shall be level to enhance distribution and reduce ponding within the reservoir. A network of perforated pipes may be used to uniformly distribute runoff over the bed bottom. Perforated pipes may also be used to connect structures (e.g., cleanouts, inlets) located within the permeable pavement section.

## MEMORANDUM OF DECISION

**CASE #2364** 

APPLICANT: PICKIN HOUSE LLC DATE: 10-22-09

DECHI AD 8-	a segmental terms	WA DVA NOVE					
	1. The variance (will) will not be contrary to the public interest.						
		(convincing  Applicant testimony) Opponent					
		All work donan this project will improve Conditions in the area					
	a.	Special conditions and circumstances (do) (do not) exist which are peculiar to the land, structure or building involved and that there would be charged as a fine Critical Area Protection Program (around would not to subtransfer the land).					
		(convincing <u>Applicant</u> testimony) <u>Opponent</u>					
		Entère Preperty in in Critical area Inforcement would not allow any use					
	b.	Literal interpretation of the provisions of this ordinance and the Critical Area Protection Program (would) (would not) deprive the applicant of rights commonly enjoyed by other properties in the same district under the terms of the Dorchester County Zoning Ordinance.					
		(convincing <u>Applicant</u> testimony) <u>Opponent</u>					
		Thre are other homes of properties inthis area with Similar conditions					

All permeable pavements shall be designed to ensure that water surface elevations for the 10-year 24 hour design storm do not rise into the pavement to prevent freeze/thaw damage to the surface. Designs should include overflow structures like overdrains, inlets, edge drains, or similar devices that will convey excess runoff safely to a stable outfall.

#### **Treatment:** All permeable pavement systems shall meet the following conditions:

- o Applications that exceed 10,000 ft<sup>2</sup> shall be designed as infiltration practices using the design methods outlined in Appendix D.13 for infiltration trenches. A porosity (n) of 30% and an effective area of the trench  $(A_t)$  equal to 30% of the pavement surface area shall be used.
- A subbase layer of a clean, uniformly graded aggregate with a porosity (n) of 30% (1.5" to 2" stone is preferred) shall be used below the pavement surface. The subbase may be 6", 9" or 12" thick.
- Filter cloth shall not be used between the subbase and sub soils. If needed, a 12" layer of sand or pea gravel (1/8" to 3/8" stone) may be used to act as a bridging layer between the subbase reservoir and subsurface soils.

Table 5.5 Effective RCNs for Permeable Pavements

	Hydrologic Soil Group				
Subbase	A	В	C	D	
6"	76 <sup>1</sup>	841	932	_	
9"	62 <sup>3</sup>	65 <sup>3</sup>	773	-	
12"	40	55	70	_	

Design shall include 1 - 2" min. overdrain (inv. 2" below pavement base) per 750 s.f. of pavement area.

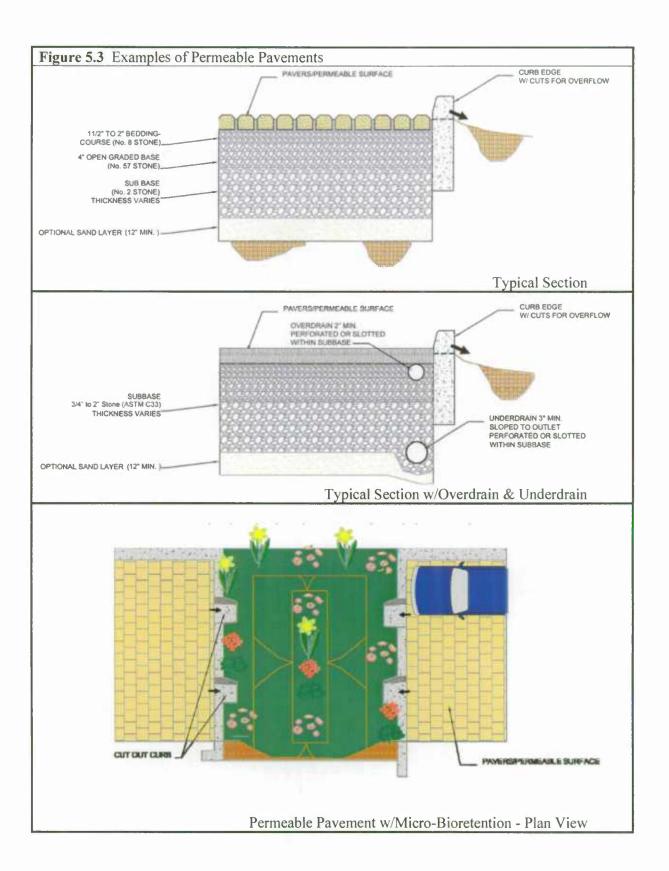
#### > Soils:

- Permeable pavements shall not be installed in HSG D or on areas of compacted fill, *Underlying soil types and condition shall be field-verified prior to final design.*
- o For applications that exceed 10,000 ft<sup>2</sup>, underlying soils shall have an infiltration rate (f) of 0.52 in/hr or greater. This rate may be initially determined from NRCS ( soil textural classification and subsequently confirmed by geotechnical tests in the field as required in Chapter 3.3.1.
- o The invert of the subbase reservoir shall be at least four feet above (two feet on the lower Eastern Shore) the seasonal high water table.

<sup>&</sup>lt;sup>2</sup> Design shall include 1 - 2" min. overdrain (inv. 2" below pavement base) per 600 s.f. of pavement area

<sup>3.</sup> Design shall include 1 - 3" min. overdrain (inv. 3" below pavement base) and a ½" underdrain at subbase invert.

c.	Granting the variance requested (will) will not confer upon the applicant any special privilege that is denied by the Dorchester County Zoning Ordinance to other land, structure or buildings in the same district or within the Critical Area.
	FACTUAL BASIS  There are after propartie with similar and times
d.	The special conditions or circumstances (did) (did not) result from actions of the applicant, (including the commencement of development activity before an application for a variance or building permit has been filed) and the request ideas (does not arise from any condition relating to land or building use, either permitted of in beometiming on any holphborage busperty.  (convincing
	Applicant testimony) Opponent  The Sphound day Cause thise and this
e.	The granting of a pariance (will be with not) adversely infect water negligy or adversely infect water negligy or adversely infect water negligy or adversely infect that will be will not be in named will the centeral spirit and intent of the Cribe of Area fact.  (convincing  Applicant) testimony) Opponent
	Exacting will improve this property and in turn will improve anddian affecting the evaluation wildlife in this area will be in humory



f. applicant (has thus not) met the burden of proof and persuasion sufficient to everce me the presumption of perconformity based on all of the abure print criterio.

Board Member

#### Setbacks:

- Permeable pavements shall be located down gradient of building structures and be setback at least 10 feet from buildings, 50 feet from confined water supply wells, 100 feet from unconfined water supply wells, and 25 feet from septic systems.
- o Permeable pavements should also be sized and located to meet minimum local requirements for underground utility clearance.
- > Structure: All permeable pavement systems shall be capable of bearing the anticipated vehicle and traffic loads. Pavement systems conforming to the specifications found in Appendix B.4 should be structurally stable for typical (e.g., light duty) applications.
- > Landscaping: Permeable pavement shall be identified on landscaping plans. Trees and shrubs should not be located adjacent to asphalt and concrete where damage by root penetration and clogging from leaves are a concern.

#### Construction Criteria:

The following items should be addressed during construction of projects with permeable pavement:

- > Erosion and Sediment Control: Final grading for installation shall not take place until the surrounding site is stabilized. If this cannot be accomplished, runoff from disturbed areas shall be diverted around proposed pavement locations.
- > Soil Compaction: Sub soils shall not be compacted. Construction should be performed with lightweight, wide tracked equipment to minimize compaction. Excavated materials should be placed in a contained area.
- Distribution Systems: Overdrain, underdrain, and distribution pipes shall be checked to ensure that both the material and perforations meet specifications (see Appendix B.4). The upstream ends of pipes should be capped prior to installation. All underdrain or distribution pipes used should be installed flat along the bed bottom.
- Subbase Installation: Subbase aggregate shall be clean, washed, and free of fines. The subbase shall be placed in lifts and lightly rolled according to the specifications (see Appendix B.4).

pervious Pauliaus Sechaus Ne Grant Ne Grant

# MEMORANDUM OF DECISION

APPLICANT:	PICKI	N HOUSE LLC	DAT	Е: 10-22-09		CASE #2364
REGULAR &	ntingle.	AL AREA VARIANCE	1			
1.	The va	ariance (will) (will n	ot) be contrary	to the public	interest.	
		FACTUAL BAS This ste orset & and we	with	· the	neighto	local
	a.	Special conditions structure or buildin Area Protection Pro	g involved and	that Interal en	forcement of the t	re peculiar to the land, only islons of the Curical adhardship.
				Applicant	(convincing testimony)	Opponent
		FACTUAL BAS	SIS			
		where a		- 1		force?
	b.	Literal interpretation Program (would) (value)	would not) dep	rive the applic	cant of rights com	ritical Area Protection monly enjoyed by other ounty Zoning
				Applicant	(convincing testimony)	Opponent
		FACTUAL BAS	least	- trans	of nat	[]
		allowed	to 7	and -	ougthe	3

## Inspection:

- Regular inspections shall be made during the following stages of construction:
  - o During excavation to subgrade.
  - During placement and backfill of any drainage or distribution system(s).
  - o During placement of the subbase material.
  - o During placement of the surface material.
  - Upon completion of final grading and establishment of permanent stabilization.

#### Maintenance Criteria:

The following procedures should be considered essential for maintaining permeable pavement systems:

- > Pavements should be used only where regular maintenance can be performed. Maintenance agreements should clearly specify how to conduct routine tasks to ensure long-term performance.
- > Pavement surfaces should be swept and vacuumed to reduce sediment accumulation and ensure continued surface porosity. Sweeping should be performed at least twice annually with a commercial cleaning unit. Washing systems and compressed air units should not be used to perform surface cleaning.
- > Drainage pipes, inlets, stone edge drains, and other structures within or draining to the subbase should be cleaned out at regular intervals.
- > Trucks and other heavy vehicles can grind dirt and grit into the porous surfaces, leading to clogging and premature failure. These vehicles should be prevented from tracking and spilling material onto the pavement.
- > Deicers should be used in moderation. When used, deicers should be non-toxic and organic and can be applied either as blended magnesium chloride-based liquid products, or as pretreated salt. Snow plowing should be done carefully with blades set one-inch higher than normal. Plowed snow piles and snowmelt should not be directed to permeable pavement.

c.	Granting the variance requested (will) (will not) confer upon the applicant any special privilege that is denied by the Dorchester County Zoning Ordinance to other land, structure or buildings in the same district or within the Critical Area.
	(convincing  Applicant testimony) Opponent
	Applicant testimony) Opponent
	FACTUAL BASIS
	Samuela varione Trong Tream
	St. In ly this for I worken
	Of smiles circuites
d.	The special conditions or circumstances (did) (did not) result from actions of the
	applicant, (including the commencement of development activity before an application for
	a variance or building permit has been filed) and the desp(does)(does not) prise from
	neighboring property.
	(convincing  Applicant testimony) Opponent
	FACTUAL BASIS
	This per parcel of land was
	Leaded many years ago price
	to the isoladment of ch low,
	The state of the s
e.	The granting of a variance (will pull not) give selve the tay nelson boy or adversely impact to be enable overland tabling within the Critical Area and (will not) be in
	unmony with the peneral spirit and literary free Critical Area Lan.
	(convincing
	Applicant testimony) Opponent
	FACTUAL BASIS
	The reconfiguration
	of the proposal live actualy
	region the offerts on both
	Fralis + will left
	be a second of the second of t

c.

#### A-3. Reinforced Turf

Reinforced turf consists of interlocking structural units with interstitial areas for placing gravel or growing grass. These systems are suitable for light traffic loads and are commonly used for emergency vehicle access roads and overflow or occasionally used parking.

## **Applications:**

Reinforced turf is effective for reducing imperviousness in parking lots, driveways, plazas, and access roads in both new and redevelopment applications in residential, commercial, and industrial projects. It is particularly useful in high-density areas where space is limited. Because reinforced turf is an open load-bearing matrix within a vegetated or gravel surface, runoff characteristics are similar to open space in good condition or gravel.

#### Performance:

When designed according to the guidance provided below, reinforced turf areas are considered as permeable surfaces. Post development RCN's for reinforced turf applications may be assumed to be "open space in good condition" or "gravel" depending on the surfacing material used.

## Constraints:

The following constraints are critical when considering the use of reinforced turf to capture and treat stormwater runoff:

- > Space: Reinforced turf works best when designed as small areas or in a series of narrow strips. The size and distribution of these surfaces within a project must be considered early during planning and design.
- > Topography: Runoff should sheetflow onto and across reinforced turf. Contributing drainage slopes should be moderate ( $\leq 5\%$ ). If slopes are too steep, then level-spreading devices may be needed to redistribute flow. Turf surfaces should be gradual ( $\leq 4\%$ ) to prevent ponding of water within the subbase.
- **Soils:** Reinforced turf may be used in all soils but works best in sandy soils.
- > Drainage Area: Reinforced turf is an at source practice for reducing impervious cover. As the impervious area draining to each application increases, effectiveness weakens. Therefore, runoff from adjacent areas should be limited.
- > Hotspot Runoff: Reinforced turf should not be used to treat hotspots that generate higher concentrations of hydrocarbons, trace metals, or toxicants than are found in typical stormwater runoff and may contaminate groundwater.

f. apple on this charge not the the bard not profund prise son sufferent covercome the production of parties of all the abstraction of the Board Member

Conditions.

O Two deeds parels be Consoledates

What we exite foundate

Must we exite foundate

Mutyular requires.

- > Structure: Most reinforced turf has a lower load bearing capacity than conventional pavements. Therefore, applications should be limited to locations that do not receive heavy vehicle traffic and where sub soils are not compacted.
- > Operation: Reinforced turf is susceptible to owner neglect. Individual owners need to be educated to ensure that proper maintenance and winter operation activities will allow the system to function properly.

## Design Guidance:

The following conditions should be considered when designing reinforced turf:

> Conveyance: Runoff shall enter, flow through, and exit reinforced turf in a safe and nonerosive manner. Reinforced turf should be designed off-line whenever possible.

The slope of reinforced turf shall be at least 1% but no greater than 5%. Reinforced turf applications may be placed in sloped areas by terracing levels along existing contours.

- > Treatment: All reinforced turf systems shall meet the following conditions:
  - A subbase layer of clean, uniformly graded stone or sand with a porosity (n) of 30% (1.5" to 2" stone is preferred) shall be used below the turf surface. The subbase may be 6" to 12" thick.

#### Soils:

- o Reinforced turf shall not be placed on areas of compacted fill.
- Reinforced turf should be installed in HSG A. B, or C for maximum efficitiveness.

#### Setbacks:

- o Reinforced turf should be sized and located to meet minimum local requirements for underground utility clearance.
- > Structure: Reinforced turf shall be capable of bearing the anticipated vehicle and traffic loads. Systems conforming to the specifications found in Appendix B.4 should be structurally stable for typical (e.g., light duty) applications.
- > Landscaping: Reinforced turf shall be identified on landscaping plans. Trees and shrubs should not be located adjacent to reinforced turf where damage by root penetration is a concern.

# MEMORANDUM OF DECISION

APPLICANT: PICKIN HOUSE LLC

a.

DATE: 10-22-09

**CASE #2364** 

REGULAR &	BEAUDION VINABLADA	VARIANCE
-----------	--------------------	----------

1	The variance (will) (will not) be contrary to the public interest.
I.	I DE VARIANCE (WILL) WILL HOLD be contrary to the public interest
	Contrary to the public interest.

		(convincing	
	Applicant	testimony)	Opponent
FACTUAL BASIS	el he	In in	Xan s ment
and the existe	3 0	Selens	
Special conditions and circumstance structure or building involved and the Aca Projection Program (Avoud Avoud Avo	at meral en	orcement of the	provisions of the Critic
		(convincing	
	Applicant	testimony)	Opponent
FACTUAL BASIS	I.	e the	enlera
pacel is w	nesa	bler	

b. <u>Literal interpretation</u> of the provisions of this ordinance and the Critical Area Protection Program (would) would not) deprive the applicant of rights commonly enjoyed by other properties in the same district under the terms of the Dorchester County Zoning Ordinance.

	(convincing	
	Applicant / testimony)	Opponent
FACTUAL BASIS	<b>U</b> ,	
Coppliant of	not reques	The story
special stand	e. Glandla	threed lot of
record is enjoyed	By others in	the RC Jone.
08	8	

#### **Construction Criteria:**

The following items should be addressed during construction of projects with reinforced turf:

- Erosion and Sediment Control: Final grading for installation shall not take place until the surrounding site is stabilized. If this cannot be accomplished, runoff from disturbed areas should be diverted around proposed locations.
- > Soil Compaction: Sub soils shall not be compacted. Construction should be performed with lightweight, wide tracked equipment to minimize compaction. Excavated materials should be placed in a contained area.
- Filter Cloth: Filter cloth shall not be used between the subbase and sub soils.
- > Subbase Installation: The subbase shall be placed in lifts and lightly rolled according to the specifications (see Appendix B.4). Subbase aggregate should be clean, washed, and free of fines.

## Inspection:

- Regular inspections shall be made during the following stages of construction:
  - During excavation to sub grade.
  - o During placement of the subbase material.
  - o During placement of the surface material.
  - Upon completion of final grading and establishment of permanent stabilization.

#### Maintenance Criteria:

The following procedures should be considered essential for maintaining reinforced turf:

- > Reinforced turf should be used only where regular maintenance can be performed. Maintenance agreements should clearly specify how to conduct routine tasks to ensure longterm performance of these systems.
- > Drainage pipes, inlets, stone edge drains, and other structures within or draining to the subbase should be cleaned out at regular intervals.
- > Trucks and other heavy vehicles can damage the interlocking matrix, leading to premature failure. These vehicles should be prevented from driving onto the turf.
- > Reinforced turf should be mown regularly and clippings removed from the application area.

Granting the variance requested (will) (will not) confer upon the applicant any special C. privilege that is denied by the Dorchester County Zoning Ordinance to other land, structure or buildings in the same district or within the Critical Area. (convincing testimony) Applicant Opponent FACTUAL BASIS d. The special conditions or circumstances (did) (did not) result from actions of the applicant, (including the commencement of development activity before an application for a variance or building permit has been filed) and the request those idnes not be my condition relating to limit or building uso, either proprietted or nepronfurnis (convincing testimony) Applicant Opponent **FACTUAL BASIS** he granting of a variance (will) will not a typically affect water or this er adverse! e. act fish withing mentan matrice within the entical area apaciwillia ill not) mony with the general spirit and intentocting Critical Agen Law (convincing testimony) Applicant Opponent

## Section 5.4 Treatment Using Nonstructural and Micro-Scale Practices

#### 5.4.1 Introduction

Disconnecting impervious cover and treating urban runoff closer to its source are the next steps in the design process for implementing ESD. Using nonstructural techniques (e.g., disconnection of rooftop runoff, sheetflow to conservation areas) and micro-scale practices (e.g., rain gardens, bio-swales) throughout a development is an effective way to accomplish this goal. Nonstructural practices may be used to disconnect impervious cover and direct runoff over vegetated areas to promote overland filtering and infiltration. Micro-scale practices are useful for capturing and treating runoff near the source. Whether runoff is directed over permeable areas or captured in small water quality treatment practices, there are reductions in both volume and pollutants delivered to receiving streams. Accordingly, these practices may be used to address the ESD sizing criteria when designed and implemented properly.

Nonstructural and micro-scale practices are an integral part of the ESD stormwater management plans. Therefore, the use of these practices shall be documented at the concept, site development, and final design stages and verified with "as-built" certification. If practices are not implemented as planned, then volumes used to design structural practices shall be increased appropriately to meet the ESD sizing criteria.

5.55 Supp.1

f. applicantitus that not met the burden of preof and personal factions of fiction for everyone the presumption of personal must based on all of the storagon factions.

Board Member

#### 5.4.2 Nonstructural Practices

Nonstructural practices combine relatively simple features, grading, and landscaping to divert runoff into vegetated areas and away from conventional storm drain systems. Runoff flows over these areas, filters through the vegetation, and soaks into the ground. Runoff should be conveyed as sheetflow into and through these areas. As depth and velocity of flow increase, runoff concentrates and the ability of vegetation to filter and detain runoff diminishes rapidly. Consequently, requirements and conditions for nonstructural practices reflect the need to maintain sheetflow conditions.

Nonstructural practices include:

- ➤ N-1. Disconnection of Rooftop Runoff
- ➤ N-2. Disconnection of Non-Rooftop Runoff
- ➤ N-3. Sheetflow to Conservation Areas

Supp. 1 5.56

## MEMORANDUM OF DECISION

APPLICANT:	PICKI	IN HOUSE LLC	DATE: 10-22-09	CASE #2364
REGULAR &	SR In le	ALAREA VARIA	NCE	
1.	The v	ariance (will) (wi	ll not be contrary to the public interest.	
		FACTUAL F A Dem	0 00	•
	a.	structure or bui	ons and circumstances (do) (do not) exist which involved and that the all of result in this	of the provisions of the Chic
	b.	Program (woul	ASIS  Applicant testimony  ASIS  ASIS  AND CONTROL  Applicant testimony  ASIS  AND CONTROL  AND	Opponent  Oppone
		FACTUAL E	ASIS  Legit to full on (convincing testimony)  ASIS  Legit to full on (convincing testimony)  Legit to full on (convincing testimony)	

## N-1. Disconnection of Rooftop Runoff

Rooftop disconnection involves directing flow from downspouts onto vegetated areas where it can soak into or filter over the ground. This disconnects the rooftop from the storm drain system and reduces both runoff volume and pollutants delivered to receiving waters. To function well, rooftop disconnection is dependent on several site conditions (e.g., flow path length, soils, slopes).

## **Applications:**

There are many opportunities for disconnecting rooftops in both new and redevelopment designs. Runoff may be directed to undisturbed natural areas (e.g., vegetated buffers) or landscaped areas (e.g., lawns, grass channels). Rooftop disconnection is possible in commercial, industrial, and residential settings given the constraints listed below.

#### Performance:

The P<sub>E</sub> values shown in Table 5.6 may be applied to the ESD sizing criteria when the contributing rooftop area is adequately disconnected. Re<sub>v</sub> requirements (see Chapter 2) are also addressed when the P<sub>E</sub> from Table 5.6 meets or exceeds the soil specific recharge factor listed in Section 2.2.

## Constraints:

The following constraints are critical when considering the use of rooftop disconnection to capture and treat stormwater runoff:

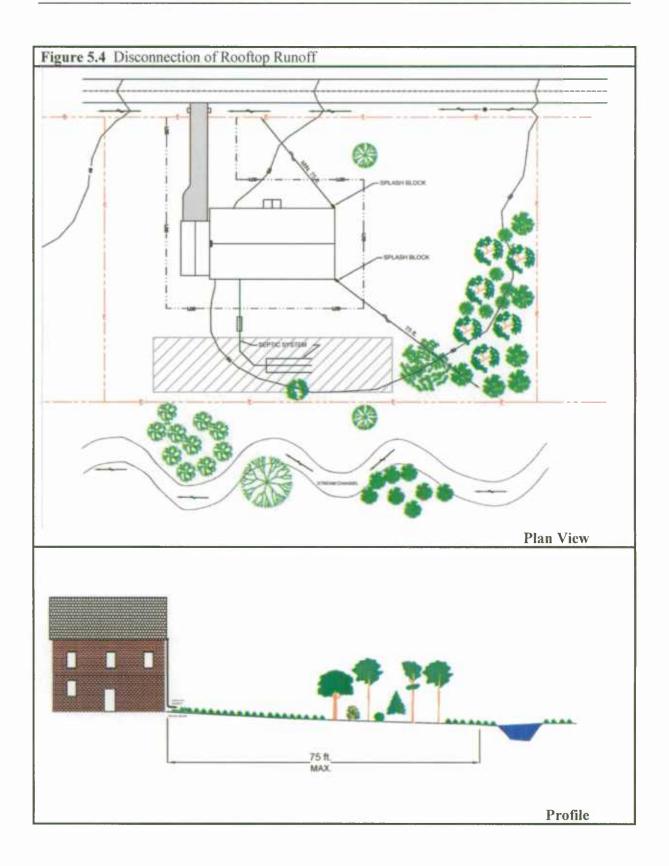
- > Space: A permeable, vegetated treatment area equal to the flow path length must be available down gradient from the downspout to effectively disconnect rooftop runoff. Additional treatment using micro-scale practices may be used to fully meet P<sub>E</sub> requirements.
- ➤ Topography: Runoff must be conveyed as sheetflow from the downspout and across open areas to maintain proper disconnection. Level spreaders may be needed at the downspout to dissipate flow. Additionally, disconnected downspouts should be located on gradual slopes (≤5%) and directed away from buildings to both maintain sheetflow and prevent water damage to basements and foundations. If slopes are too steep (> 5%), a series of terraces or berms may be required to maintain sheetflow. These terraces may be readily constructed of landscaping stones, timber, or earthen berms.
- > Soils: Downspout disconnections work best in undisturbed, sandy soils that allow runoff to infiltrate. Clayey soils or soils that have been compacted by construction equipment greatly reduce the effectiveness of this practice.

structure or buildings in the same district or within the Critical Area. (convincing testimony) **Applicant** Opponent FACTUAL BASIS The special conditions or circumstances (did) (did not) result from actions of the d. applicant, (including the commencement of development activity before an application for a variance or building permit has been filed) and the request (does) does not purse any condition relating figurant or autiding user either remained or now out soming. maliboring proneigy (convincing testimony) **Applicant** Opponent **FACTUAL BASIS** e. (convincing testimony) **Applicant** Opponent UAL BASIS

Granting the variance requested (will) (will not) confer upon the applicant any special

privilege that is denied by the Dorchester County Zoning Ordinance to other land,

C.



Supp. 1 5.58

f. applicary (has) that not men the builder of proof and persuasion sufficient to overcome the presundation of honconformacy based on all of the aforegoing criteria.

Wendell on Formell
Board Member

- > Drainage Area: The rooftop area to each downspout should be small enough to prevent concentration of flow within the permeable treatment area. Disconnections may not be feasible for large rooftops or those with a limited number of downspouts.
- > Reconnections: Disconnections are ineffective if runoff flows onto impervious areas located directly below the downspout. This practice may not be feasible if there are large areas of imperviousness close to downspouts.

## Design Guidance:

The following conditions should be considered when designing rooftop disconnections:

- **Conveyance:** Runoff from disconnected downspouts shall drain in a safe and non-erosive manner through vegetated areas to the property line or downstream BMP.
- > Treatment: Disconnections shall meet the following conditions:
  - A pervious area at least 15 feet long (12 feet for Eastern Shore projects) shall be available down gradient of disconnected downspouts. The length of the disconnection flow path may be increased up to 75 feet to address larger values of P<sub>E</sub> as shown in Table 5.6.
  - O Disconnections shall be located on an average slope of 5% or less. Terraces, berms, or similar grade controls may be used where average slopes exceed 5%.
  - o The drainage area to each disconnected downspout shall be 500 ft<sup>2</sup> or less.
  - Disconnected downspouts shall be at least 10 ft. from the nearest impervious surface of similar or lower elevation to prevent reconnection.

Table 5.6. ESD Sizing Factors for Rooftop Disconnection

Disconnection Flow Path Length (ft.)						
Western Shore	15	30	45	60	75	
Eastern Shore	12	24	36	48	60	
$P_{E}$ (in.) =	0.2	0.4	0.6	0.8	(1.0)	

Landscaping: Areas receiving disconnected rooftop runoff shall be identified and notations related to grading and construction operations included on the landscaping plans.

Disconnections should be directed over HSG A, B, or C (e.g., sands, sandy loams, loams). HSG D or soils that are compacted by construction equipment may need to be tilled and/or amended to increase permeability. Groundcover should be provided after any soil amendments are used. Turf grass is the most common groundcover in residential applications. However, trees and shrubs as well as other herbaceous plants will enhance infiltration and evapotranspiration of runoff.

# MEMORANDUM OF DECISION

APPLICANT: PICKIN HOUSE LLC

DATE: 10-22-09

**CASE #2364** 

# REGULAR & ERFIGAL AREA VARIANCE

1. The variance (will) (will not) be contrary to the public interest.

	(convincing
	Applicant testimony) Opponent
	FACTUAL BASIS
	Variances will allow the applicant
	To improve a now delappedated propert
	into a new residence yest
	will be attractive.
a.	Special conditions and circumstances (do) do not) exist which are peculiar to the land,
	structure or building involved and that the structure of building involved and that the structure of the structu
	(convincing
	Applicant testimony) Opponent
	FACTUAL BASIS
	Property is constrained by buffer
	requirements on 3 sides, without
	variances applicant could not
	Me develop the site
).	Literal interpretation of the provisions of this ordinance and the Critical Area Protection
	Program (would) (would not) deprive the applicant of rights commonly enjoyed by other properties in the same district under the terms of the Dorchester County Zoning
	Ordinance.
	(convincing
	Applicant testimony) Opponent
	FACTUAL BASIS
	Applicant Others have received
	variances for properties with
	similar constraints

#### Construction Criteria:

The following items should be addressed during the construction of projects with planned rooftop disconnections:

- Erosion and Sediment Control: Erosion and sediment control practices (e.g., sediment traps) should not be located in vegetated areas receiving disconnected runoff.
- Site Disturbance: Construction vehicles and equipment shall avoid areas receiving disconnected runoff to minimize disturbance and compaction. Should areas receiving disconnected runoff become compacted, scarifying the surface or rototilling the soil to a depth of four to six inches shall be performed to ensure permeability. Additionally, amendments may be needed for tight, clayey soils.

## Inspection:

A final inspection shall be conducted before use and occupancy approval to ensure that sizing for treatment areas have been met and permanent stabilization has been established.

### Maintenance Criteria:

Maintenance of areas receiving disconnected runoff is generally no different than that required for other lawn or landscaped areas. The areas receiving runoff should be protected from future compaction (e.g., by planting trees or shrubs along the perimeter). In commercial areas, foot traffic should be discouraged as well.

C.	Granting the variance requested (will) (will not) confer upon the applicant any special privilege that is denied by the Dorchester County Zoning Ordinance to other land, structure or buildings in the same district or within the Critical Area.
	(convincing <u>Applicant</u> testimony) <u>Opponent</u>
	FACTUAL BASIS Others have rec. similar
	Warrances
đ.	The special conditions or circumstances (did) (did not) result from actions of the
	applicant, (including the commencement of development activity before an application for a variance or building permit has been filed) and the request (duest does not) as serion any condition relating to land or building uses a their permitted of possessifications on any neighboring property.
	(convincing <u>Applicant</u> testimony) <u>Opponent</u>
	Special conditions existing prior to applicants purchase of the property-
e.	The granting of a variance (will it without deversely offer) water quality of adversely indicated fish, within a point habita, without the Critical Area, and will will not be in burnous with the general spirit and intent of the Critical Area Land
	(convincing
	FACTUAL BASIS  The granian ces will allow applicant to reduce the under  Surface for from 44 1/2 1/0 to
	improve water quality

## N-2. Disconnection of Non-Rooftop Runoff

Non-rooftop disconnection involves directing flow from impervious surfaces onto vegetated areas where it can soak into or filter over the ground. This disconnects these surfaces from the storm drain system, reducing both runoff volume and pollutants delivered to receiving waters. Non-rooftop disconnection is commonly applied to smaller or narrower impervious areas like driveways, open section roads, and small parking lots and is dependent on several site conditions (e.g., permeable flow path length, soils, slopes, compaction) to function well.

## **Applications:**

There are many opportunities for disconnecting impervious surfaces in both new and redevelopment designs. Runoff may be directed as sheetflow to undisturbed natural areas (e.g., vegetated buffers) or landscaped areas (e.g., lawns, grass channels). Non-rooftop disconnection is possible in commercial, industrial, and residential settings given the constraints listed below.

#### Performance:

The  $P_E$  values shown in Table 5.7 below may be applied to the ESD sizing criteria when the contributing developed area is adequately disconnected. Re<sub>v</sub> requirements (see Chapter 2) are also met when the  $P_E$  from Table 5.7 meets or exceeds the soil specific recharge factor listed in Section 2.2.

#### Constraints:

The following constraints are critical when considering the use of non-rooftop disconnection to capture and treat stormwater runoff:

- > Space: A permeable, vegetated treatment area equal to the minimum flow path length needed for treatment must be available down gradient of the impervious cover to effectively disconnect runoff. If the flow path length is insufficient, additional treatment may be provided using micro-scale practices.
- ➤ Topography: Runoff must be conveyed as sheetflow onto and across open areas to maintain proper disconnection. Additionally, disconnections should be located on gradual slopes (≤ 5%) and directed away from buildings to both maintain sheetflow and prevent water damage to basements and foundations. If slopes are too steep (> 5%), a series of terraces or berms may be required to maintain sheetflow. These terraces may be readily constructed of landscaping stones or timber.
- > Soils: Non-rooftop disconnection works best in undisturbed, sandy soils that allow runoff to infiltrate. Clayey soils or soils that have been compacted by construction greatly reduce the effectiveness of this practice.

f. applicant that this network the burden of the of understand a sufficient acovergoing the presburbtion of appropriate based on all of the afore units of a content of the second of th

Board Member

- > Drainage Area: The impervious area to each discharge location should be small enough to prevent flow concentration onto permeable treatment areas. Disconnections may not be feasible for large blocks of impervious cover or areas with limited discharge points.
- ➤ Hotspot Runoff: Disconnections should not be used to treat hotspots that generate higher concentrations of hydrocarbons, trace metals, or toxicants than are found in typical stormwater runoff and may contaminate groundwater.

## Design Guidance:

The following conditions should be considered when designing non-rooftop disconnections:

> Conveyance: Runoff from disconnected areas shall drain in a safe and non-erosive manner through vegetated areas to the property line or downstream BMP.

A 1 to 2 foot wide gravel (typ. No. 67 stone) transition strip should be provided from the disconnected area to the vegetated area to assure that runoff will flow in a safe and non-erosive manner.

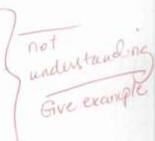
- > Treatment: Disconnections shall meet the following conditions:
  - The flow path or "disconnection" through vegetated areas shall be at least 10 feet and shall not exceed 75 feet. The flow path may be increased to address larger values of P<sub>E</sub> to a maximum of 1 inch as shown in Table 5.7.
  - The maximum contributing impervious flow path length shall be 75 feet, and the maximum contributing pervious flow path shall be 150 feet.
  - O Disconnections shall be located on an average slope of 5% or less. Terraces, berms, or similar grade controls may be used where average slopes exceed 5%.
  - The drainage area to each disconnection shall be 1,000 ft<sup>2</sup> or less.
  - O Disconnections shall be at least 10 ft. from the nearest impervious surface of similar or lower elevation to prevent reconnection.

Table 5.7. ESD Sizing Factors for Non-Rooftop Disconnection

R	atio of Contr	ibuting Leng	th to Disconr	nection Lengt	h
Impervious Ratio	0.2:1	0.4:1	0.6:1	0.8:1	1:1
Pervious Ratio	0.4:1	0.8:1	1.2:1	1.6:1	2:1
$P_{\rm E}$ (in.) =	0.2	0.4	0.6	0.8	1.0

Landseaping: Areas receiving disconnected runoff shall be identified and notations related to grading and construction operations included on the landscaping plans.

Disconnections should be directed over HSG A, B, or C (e.g., sands, sandy loams, loams). HSG D and soils that are compacted by construction equipment may need to be tilled and/or amended to increase permeability. Groundcover vegetation should be provided after any soil



## DORCHESTER COUNTY BOARD OF APPEALS

Date: June 30, 2009 Reference: BOA Case #2364 – Variance(s) from tidewater buffer setback and front yard setback requirements RC, Resource Conservation Zoning District

Pickin House, LLC 2361 Vandermast Lane Baltimore, MD 21221

Dear Mr. Novak,

The Dorchester County Board of Appeals, after a public hearing of your request on Thursday, June 25, 2009, is hereby notifying you of their action. The decision was to:

\_\_\_\_ Deny the request.

X Postpone hearing until structural engineer can determine condition of existing foundation.

If your request was denied, you may appeal the Board's decision to the Dorchester County Circuit Court within 30 days of the date of this notice. The Court is empowered to overturn or confirm the Board's decision.

If you have any questions, please do not hesitate to call this office at 410-228-3234.

Sincerely,

DORCHESTER COUNTY BOARD OF APPEALS

Steve Dodd

**Executive Secretary** 

cc: Sean Callahan Ray Simmons

	그 이 그리고 있다는 그렇게 되었다. 그 그리고 있는 그리고 있는 그 그리고 있는 것이 없었다.
	그 그 그 사이를 가게 되었다. 그 그 이 사람들이 없는 그리고 그리고 그리고 그리고 있다.
C. p. Para L. C.	
	요. 그 마이스 그 사람들은 아무리 아무리 있는 것 같아. 그리고 아이는 아무리 그 모든 아무리 없었다.
	시경기된 '시스(1975)
	The state of the s

# **BOARD OF APPEALS**

**Dorchester County, Maryland** 

Appeal Case No.

Date Filed: **May 26, 2009**Fee Paid: **\$250.00** 

To the Board of Appeals:

Pursuant to Article V, §155-21 of the Dorchester County Zoning Code, adopted November 24, 1998, effective January 1, 1999, a request is hereby made for:

(  ${\bf X}$  ) Variation from strict application of said ordinance

( ) Decision on allegation of error

() Special Exception

( ) Amend stipulations of previous appeal case

Purpose of Appeal: (Describe variance requested or alleged error. If Special Exception requested state fully the kind of exception desired and reasons therefore.) To request variances from the tidewater buffer setback requirement to allow the construction of a home (to replace an existing building), which at the closest point would be 31' from wetlands. Variance requested: 69'. Also requesting a variance from the front yard setback requirement for same. Dwelling to be 14' from front property line. Variance requested: 26'.

Applicable Section(s) of Code: Section 155-20; 155-20D; 155-38J(15); Bulk Regs Table

Zoned: RC, Resource Conservation Road Classification: local Tax ID # 05/069971

Property Located: 2340 Cannon Road

Containing: 1.21 acre(s)

Map: 101 Block: 18 Parcel: 8

Election District: 5

Owner of property: Pickin House LLC (Mike Novak)

Address of owner: 2361 Vandermast Lane, Balt., MD 21221 Telephone #410-458-1189 Applicant's name and address if different from above: Sean Callahan

15 Washington Street, Cambridge, MD

Telephone # 410-221-0818

Has property in question ever been subject of previous appeal: NO

FLOODPLAIN: YES 5'

CRITICAL AREAS: YES RCA BEA

Permission is hereby granted to conduct necessary inspections of these premises for which this appeal is requested.

No fees shall be refunded if an application is withdrawn after the publication of the public hearing notice.

Solely in the case of a Critical Area variance request, is the request in any way related to a disability of the applicant or anyone in the applicant's household? **N/A** 

Signature of Owner

Signature of Applicant

IMPORTANT: A sketch of the property with proposed buildings or uses must be submitted by the applicant. Applications on which all required information is not furnished will be returned for completion before processing.

# Applicant submission

# **BOARD OF APPEALS**

**Dorchester County, Maryland** 3-17-09

Appeal Case No. Date Filed: Fee Paid: \$250.00

To the Board of Appeals:
Pursuant to Article V, §155-21 of the Dorchester County Zoning Code, adopted November 24
1998, effective January 1, 1999, a request is hereby made for:
(x) Variation from strict application of said ordinance
( ) Decision on allegation of error
( ) Special Exception
( ) Amend stipulations of previous appeal case
Purpose of Appeal: (Describe variance requested or alleged error. If Special Exception
requested state fully the kind of exception desired and reasons therefore.)
Replacement of a nonconforming structure with a dwelling which will require variances as
required under Article VII and X of the Zoning Ordinance.
Applicable Section(s) of Code: Section 155-20 and 155-38.M
Zoned: RC Road Classification: Asquith Island – Local Road Tax ID # 05-069971
Property Located: 2340 Asquith Island Road Containing: 1.21 acre(s)
Map: 101 Block: 18 Parcel: 8 Lot: Election District: 5th
Owner of property: Pickin House LLC
Address of owner: Telephone # Mike Novak Authorized Member 410-458-1189
Applicant's name and address if different from above: 2361 Vandermast Lane
Baltimore Maryland 21221-3718 Telephone #410-458-1189
Has property in question ever been subject of previous appeal: # Date:
FLOODPLAIN: YES NO EXEMPT CRITICAL AREAS: YES NO
Permission is hereby granted to conduct necessary inspections of these premises for which this appeal is requested.
No fees shall be refunded if an application is withdrawn after the publication of the public hearing notice.
Solely in the case of a Critical Area variance request, is the request in any way related to a disability of the applicant or anyone in the applicant's household? YES NO
Signature of Owner Signature of Applicant

IMPORTANT: A sketch of the property with proposed buildings or uses must be submitted by the applicant. Applications on which all required information is not furnished will be returned for completion before processing.

