# Kent County Planning Commission

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Kent County Government Center 400 High Street Chestertown, Maryland 21620

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# County Commissioners Hearing Room MEETING TO BE HELD VIRTUALLY via CONFERENCE CALL

#### **AGENDA**

May 7, 2020 1:30 p.m.

#### COVID-19 Special Announcement Regarding Meeting Attendance

In response to the State of Emergency, individuals must refrain from attending meetings. Planning Commission meetings are live streamed, and citizens may call in with questions when the Chair opens the floor for comment. To access the Kent County conference bridge service off site:

- 1. Call 410-810-2213.
- 2. Enter PIN number **55266** when prompted.
- 3. Announce yourself to the group. Please <u>mute</u> your phone / device until the Chair opens the floor for comment.

Visit the County's website at <a href="https://www.kentcounty.com">https://www.kentcounty.com</a> for the most up to date information regarding County Government operations.

#### **MINUTES**

April 2, 2020

#### **PUBLIC HEARING**

#### 20-17 Richard Carter – Zoning Text Amendment - Microbreweries

AN ACT to amend Article V, Section 10 of the Crossroads Commercial District, 10.2 Permitted Principal Uses and Structures, by adding 10.2.21, to address Microbrewery as defined by the State of Maryland and by adding 10.2.22, Class D Alcohol retail business as defined by the State of Maryland.

#### APPLICATIONS FOR REVIEW

#### 20-17 Richard Carter – Zoning Text Amendment – Microbreweries

**19-30** The Animal Care Shelter of Kent County (The Humane Society and Kennedyville Properties, LLC) Preliminary Site Plan – 25546 Mary Morris Road – Third Election District – Zoned Industrial "I" .......PC Decision

#### **STAFF REPORTS**

#### GENERAL DISCUSSION

#### ADJOURN

Meetings are conducted in Open Session unless otherwise indicated. All or part of the Planning Commission meetings can be held in closed session under the authority of the MD Open Meetings Law by vote of the members. Breaks are at the call of the Chairman. Meetings are subject to audio and video recordings.

Projects will not be reviewed prior to their scheduled time. All applications will be given the time necessary to assure full public participation and a fair and complete review of all projects. Therefore, the time each application is heard may be later than the time indicated on the agenda. Agenda items are subject to change due to cancellations.

Other business without assigned times may be discussed during the course of the meeting.



**POSTED ONLINE: May 1, 2020** 

#### **MINUTES**

The Kent County Planning Commission met in regular session on Thursday, April 2, 2020, virtually in the County Commissioners' Hearing Room at 400 High Street, Chestertown, Maryland, with the following members attending via conference call bridge: Elizabeth Morris, Chairman; William Sutton, Vice Chairman; F. Joseph Hickman; Kim Kohl; Commissioner P. Thomas Mason; B. Douglas Megargee; Cynthia L. McCann, Esq.; Staff in attendance were Carla Gerber, GIS Specialist; William Mackey, Director; Robert Tracey, Community Planner; Sandy Adams, Clerk; Beth Grieb, Clerk; and Brian Jones, Clerk.

The following attended and participated in the meeting: Mr. Kevin Shearon of DMS & Associates, LLC; Mr. Jack Kirby of Kirby and Associates, Inc.; and Mr. Martin Holden, Chief of Kent County Environmental Operations.

Ms. Morris called the meeting to order at 1:30 p.m.

#### **MINUTES**

The minutes of the meeting on February 6, 2020, were approved as corrected. The minutes of the meeting on March 5, 2020, were approved as written and distributed.

#### **PUBLIC HEARING**

Ms. Morris closed the meeting at 1:34 pm and opened the public hearing.

# 20-13 County Commissioners of Kent County – Zoning Text Amendment – Directional Signs

Mr. Tracey, describing the proposal, said the Board of Commissioners of Kent County have proposed an amendment to the Kent County Land Use Ordinance Article VI. Special Provisions, Section 2. Signs, 2.4 Exemptions, by adding a new sub-section to address tourism related signs erected by Kent County within the public-rights-of-way to assist the motoring public in locating tourism, heritage development, and marine uses situated within Kent County, Maryland.

Testimony was not offered by the audience; therefore, Ms. Morris closed the public hearing and re-opened the meeting at 1:38 p.m.

#### **APPLICATIONS FOR REVIEW:**

#### APD 19-08 – Wayne H. Thieme – E/S of Massey, 258.57 acres

Wayne Thieme wishes to create an Agricultural Preservation District on his 258.572-acre farm located on Galena Road south of Massey in the first Election District. The farm consists of 253 acres of crop land and 4.5 acres of woodland. Approximately 94% of the soils are considered Class I, II or III. There are no dwellings on the property. The farm is zoned "AZD," Agricultural Zoning District. It is outside the 10-year water and sewer plan.

Mr. Tracey provided background information and the applicable laws as outlined in the staff report. He further noted the farm is located within the Priority Preservation Area. Mr. Tracey advised that the Agricultural Preservation Advisory Board has reviewed the application and recommends approval of the district.

Ms. Morris asked for public comment and there was none.

Ms. Morris asked if any correspondence has been received. Mr. Tracey said no correspondence has been received.

Mr. Sutton made a motion to send a favorable recommendation to the County Commissioners with the following findings:

- At least 50% of the land consists of Soil Capability Classes I, II, or III, or Woodland Groups 1 or 2.
- The land is outside of the 10-year water and sewer service area.
- The property consists of land which is either used primarily for production of food or fiber or is of such open space character and productive capability that continued agricultural production is feasible.
- The Agricultural Preservation Board reviewed this application and unanimously submitted a favorable recommendation.

  The property meets or exceeds the criteria for creating an Agricultural Land Preservation

District, complies with the goal of the Comprehensive Plan to preserve large blocks of contiguous prime agricultural land, and is located within the County's PPA.

Mr. Hickman seconded the motion, and the motion passed unanimously.

#### APD 19-09 – Wayne H. Thieme – N/S of Walnut Tree Road, 70.124 acres

Wayne Thieme wishes to create a 70.124-acre Agricultural Preservation District on a portion of his 185-acre farm, as the remaining part of this farm has already been protected by a MALPF easement. The property is located between Maryland Line Road and Walnut Tree Road east of Massey in the First Election District. The proposed district consists entirely of crop land. Approximately 98% of the soils are considered Class I, II or III. There are no dwellings on the property. The farm is zoned "AZD," Agricultural Zoning District. It is outside the 10-year water and sewer plan.

Mr. Tracey provided background information and the applicable laws as outlined in the staff report. He further noted that the farm is located within the Priority Preservation Area. Mr. Tracey advised that the Agricultural Preservation Advisory Board has reviewed the application and recommends approval of the district.

Ms. Morris asked for public comment and there was none.

Ms. Morris asked if any correspondence has been received. Mr. Tracey said no correspondence has been received.

Mr. Sutton made a motion to send a favorable recommendation to the County Commissioners with the following findings:

• The application meets the same criteria as the previous application.

Mr. Hickman seconded the motion, and the motion passed unanimously.

#### APD 19-10 – Wayne H. Thieme – S of Walnut Tree Road, 295.897 acres

Wayne Thieme wishes to create an Agricultural Preservation District on his 295.897-acre farm located on Walnut Tree Road south of Massey in the First Election District. The farm consists of 252 acres of crop land and 21 acres of wetlands. Approximately 85% of the soils are considered Class I, II or III or Woodland Group 2. There are no dwellings on the property. The farm is zoned "AZD," Agricultural Zoning District. It is outside the 10-year water and sewer plan.

Mr. Tracey provided background information and the applicable laws as outlined in the staff report. He further noted that this property is located within the Priority Preservation Area. Mr. Tracey advised that the Agricultural Preservation Advisory Board has reviewed the application and recommends approval of the district.

Ms. Morris asked for public comment and there was none.

Ms. Morris asked if any correspondence has been received. Mr. Tracey said no correspondence has been received.

Mr. Sutton made a motion to send a favorable recommendation to the County Commissioners with the following findings:

• The application meets the same criteria as the previous applications.

Mr. Hickman seconded the motion, and the motion passed unanimously.

#### APD 20-01 - Robin May and Jonathan Reed - Flatland Road, 94 acres

Robin Reed May and Jonathan F. Reed wish to create an Agricultural Preservation District on their 94-acre farm located on Flatland Road outside Chestertown in the Third Election District. The farm consists of 87 acres of crop land and five acres of woodland. Approximately 92.5% of the soils are considered Class I, II or III or Woodland Group 2. There are no dwellings on the property. The farm is zoned "AZD," Agricultural Zoning District. It is outside the 10-year water and sewer plan.

Mr. Tracey provided background information and the applicable laws as outlined in the staff report. He further noted that this property is located within the Priority Preservation Area. Mr. Tracey advised that the Agricultural Preservation Advisory Board has reviewed the application and recommends approval of the district.

Ms. Morris asked for public comment and there was none.

Ms. Morris asked if any correspondence has been received. Mr. Tracey said no correspondence has been received.

Mr. Sutton made a motion to send a favorable recommendation to the County Commissioners with the following findings:

• The application meets the same criteria as the previous applications.

Mr. Hickman seconded the motion, and the motion passed unanimously.

#### APD 20-02 - Robin May and Jonathan Reed - 9600 Worton Road, 250.79 acres

Robin Reed May and Jonathan F. Reed wish to create an Agricultural Preservation District on their 250.794-acre farm located at 9600 Worton Road outside Chestertown in the Third Election District. The farm consists of 228 acres of crop land and 10 acres of woodland. Approximately 74% of the soils are considered Class I, II or III or Woodland Group 2. There is one dwelling on the property. An approximately 3-acre gravel pit is located on the south east portion of the farm. Because MALPF regulations prohibit this use, it is being excluded from the ag preservation district. If the farm were to receive an easement offer, MALPF would require the gravel pit to be surveyed so the acreage could be withheld from the easement. The farm is zoned "AZD," Agricultural Zoning District. It is outside the 10-year water and sewer plan.

Mr. Tracey provided background information and the applicable laws as outlined in the staff report. He further noted that this property is located within the Priority Preservation Area. Mr. Tracey advised that the Agricultural Preservation Advisory Board has reviewed the application and recommends approval of the district.

Ms. Morris asked for public comment and there was none.

Ms. Morris asked if any correspondence has been received. Mr. Tracey said no correspondence has been received.

Mr. Sutton made a motion to send a favorable recommendation to the County Commissioners with the following findings:

- The approximately 3-acre gravel pit is being excluded from the ag preservation district.
- The Agricultural Preservation Board reviewed this application and unanimously submitted a favorable recommendation.
- The property meets or exceeds the criteria for creating an Agricultural Land Preservation District, complies with the goal of the Comprehensive Plan to preserve large blocks of contiguous prime agricultural land, and is located within the County's PPA.

Mr. Hickman seconded the motion, and the motion passed unanimously.

#### APD 20-03 – Jonathan and Jane Reed – 24913 Chestertown Road, 233.52 acres

Jonathan and Jane Reed wish to create an Agricultural Preservation District on their 233.52-acre farm located at 24913 Chestertown Road outside Chestertown in the Seventh Election District. The farm consists of 217 acres of crop land and 10 acres of woodland. Approximately 77% of the soils are considered Class I, II or III or Woodland Group 2. There is one dwelling on the property. The farm is zoned "AZD," Agricultural Zoning District. It is outside the 10-year water and sewer plan.

Mr. Tracey provided background information and the applicable laws as outlined in the staff report. He further noted that this property is located within the Priority Preservation Area. Mr. Tracey advised that the Agricultural Preservation Advisory Board has reviewed the application and recommends approval of the district.

Ms. Morris asked for public comment and there was none.

Ms. Morris asked if any correspondence has been received. Mr. Tracey said no correspondence has been received.

Mr. Sutton made a motion to send a favorable recommendation to the County Commissioners with the following findings:

• The application meets the same criteria as the previous applications.

Mr. Hickman seconded the motion, and the motion passed unanimously.

#### APD 20-04 – Frank & Janet Lewis – 30475 River Road, 322 acres

Frank R. Lewis, Jr., and Janet C. Lewis wish to create an Agricultural Preservation District on their 322-acre farm located at 30475 River Road near Millington in the First Election District. The farm consists of 236 acres of crop land, 15 acres of pasture, and 52 acres of woodlands. Approximately 89% of the soils are considered Class I, II or III or Woodland Group 2. There is one dwelling on the property. The farm is zoned "AZD," Agricultural Zoning District and "RCD," Resource Conservation District. It is outside the 10-year water and sewer plan.

Mr. Tracey provided background information and the applicable laws as outlined in the staff report. He further noted that this property is located within the Priority Preservation Area. Mr. Tracey advised that the Agricultural Preservation Advisory Board has reviewed the application and recommends approval of the district.

Ms. Morris asked for public comment and there was none.

Ms. Morris asked if any correspondence has been received. Mr. Tracey said no correspondence has been received.

Mr. Sutton made a motion to send a favorable recommendation to the County Commissioners with the following findings:

• The application meets the same criteria as the previous applications.

Mr. Hickman seconded the motion, and the motion passed unanimously.

#### APD 20-05 - Timothy and Mary Catherine Redman – 7939 Bakers Lane, 137.23 acres

Prior to review of this application, Mr. Hickman disclosed that he has a business relationship with the applicants, but he believes he can make a fair and impartial decision.

Timothy and Mary Catherine Redman wish to create an Agricultural Preservation District on their 137-acre farm located at 7939 Bakers Lane outside Chestertown in the Sixth Election District. The farm consists of 131 acres of crop land and four acres of wood lands. Approximately 73% of the soils are considered Class I, II or III or Woodland Group 2. There is one dwelling on the property. The farm is zoned "AZD," Agricultural Zoning District. It is outside the 10-year water and sewer plan.

Mr. Tracey provided background information and the applicable laws as outlined in the staff report. He further noted that this property is located within the Priority Preservation Area. Mr. Tracey advised that the Agricultural Preservation Advisory Board has reviewed the application and recommends approval of the district.

Ms. Morris asked for public comment and there was none.

Ms. Morris asked if any correspondence has been received. Mr. Tracey said no correspondence has been received.

Mr. Sutton made a motion to send a favorable recommendation to the County Commissioners with the following findings:

• The application meets the same criteria as the previous applications.

Mr. Hickman seconded the motion, and the motion passed unanimously.

#### 20-11 Chester River Yacht and Country Club – Buffer Variance

Present and duly sworn in were Kevin Shearon and Jim Gillespie representing the Chester River Yacht and Country Club.

Ms. Gerber gave a brief overview of the proposal, citing relevant issues, the applicable laws and staff and TAC comments. The applicants wish to increase their onsite parking for an existing

Private Club and Golf Course. In addition to site plan review, the applicants request a variance to allow 828 square feet of lot coverage within the 100-foot Critical Area Buffer. The expanded parking lot will provide 37 additional spaces. The 175-acre property is located on Quaker Neck Road in the Seventh Election District. Ms. Gerber noted the surrounding area is characterized by single-family residential development and the property is zoned Critical Area Residential, "CAR", Community Residential, "CR" and Rural Residential "RR". Ms. Gerber further noted the parking lot expansion is entirely within the CAR district.

Ms. Gerber said it is staff's opinion that granting a variance will not cause a substantial detriment to neighboring properties or change the character of the neighborhood or district. The existing property configuration already has some buffer encroachment, and the existing building is located in such a manner that any other parking lot arrangement would require much more lot coverage in the form of long drives. Additionally, due to the property being split by a State highway, the current parking scenario requires some individuals to cross the State highway in order to access the primary use on the property. This was not due to any action by the applicant, but a peculiar condition of the property, thereby creating a practical difficulty; the test for a variance of the Critical Area buffer is an unwarranted hardship.

Mr. Shearon shared with the Commission the history of the Chester River Yacht and Country Club with regards to past projects and expansions. He said the marina side has seen more expansion in recent years and for safety reasons, it is necessary for the club to expand its parking area.

Ms. Morris asked if any correspondence has been received. Ms. Gerber said no correspondence has been received.

Mr. Hickman wanted to know why the parking could not be located in another area, especially if the Critical Area Commission were to ask the question.

Mr. Shearon stated that they picked the most efficient place to add parking. He said the club is trying to keep large trees and reduce surfacing. Mr. Shearon stated that he is of the opinion that the new parking area should be considered a water-dependent use and therefore exempt from complying with the 100-foot buffer requirements.

Ms. Gerber stated that she did not believe that the request met the standard for a water dependent use and would need to verify with the Critical Area Commission if marina parking is considered a water-dependent use. Lacking that information, she opined that the project does not meet the letter of the law, and she would still have a hard time making a favorable recommendation.

After further discussion and additional questions, Mr. Hickman made a motion to send a favorable recommendation for the variance to the Board of Appeals to allow 828 square feet of lot coverage in the 100-foot Critical Area buffer to expand the parking area based on the following findings:

- Granting a variance will not cause a substantial detriment to neighboring properties nor will it change the character of the neighborhood and district.
- The granting of the variance will not adversely affect water quality or adversely impact fish, wildlife, or plant habitat.

- The use of pervious pavers will minimize impervious surfaces and the design protects mature trees.
- Based on the information received to date, the application is in harmony with the Critical Area Law and general spirit and intent of the Land Use Ordinance.
- The granting of the variance does not confer any special privileges that would be denied to other similar lands and uses.
- The reasonable use of the entire property was considered.

Mr. Megargee seconded the motion, and the motion passed unanimously.

#### 20-12 Chester River Yacht and Country Club – Major Site Plan (Concept)

Ms. Gerber provided an overview of the concept site plan. Article VI, Section 5.3 of the Kent County Land Use Ordinance establishes site plan review procedures. Concept review is an opportunity for the Planning Commission to comment on the proposal. No votes are taken.

Ms. Gerber reminded the applicants that they need to make every effort to integrate the proposed parking area into the existing landscape by providing an adequate vegetative buffer, roadside plantings, and landscaping within the proposed parking area. The applicant will need to present landscaping plans before final site plan review.

The applicants also need to submit storm-water management and sediment control plans before final site plan review.

Mr. Shearon briefly discussed with the Commission the landscaping plans which include adding plantings and more trees and shrubs.

# 19-35 Remus S. Butler, Jr., and Franklin C. and Wynee D. Butler – Variances (Side Yards and Minimum Lot Size)

Present and duly sworn in representing the applicant was Jack Kirby, Kirby and Associates, Inc.

Ms. Gerber gave a brief overview of the proposal, citing relevant issues, and staff and TAC comments. She said in order to complete an adjustment of lot lines, Remus S. Butler, Jr., is requesting a 4-foot and 0.3-foot variance from the minimum 8-foot side yard setback requirement for a dwelling and a 2,530.4 square foot variance from the 9,500 square foot minimum lot size requirement that will help minimize existing nonconformities on two parcels. Ms. Gerber also noted as part of the same application, Franklin C. and Wynee D. Butler are requesting a 3-foot variance from the minimum 8-foot side yard setback requirement for an accessory structure. She said the properties are located at 8600 and 8610 Caulks Field Road in the Sixth Election District and are zoned Village.

Ms. Gerber said the variance will not cause a substantial detriment to adjacent or neighboring properties and will not change the character of the neighborhood. The Comprehensive Plan is neutral on this application. Ms. Gerber stated there was no correspondence received.

Mr. Hickman wanted to know if the property was on public water and sewer. Ms. Gerber confirmed that the property is on public water and sewer.

After further discussion, Mr. Hickman made a motion to send a favorable recommendation to the Board of Appeals based on the following findings:

- Granting a variance will not cause a substantial detriment to neighboring properties nor will it change the character of the neighborhood and district.
- The Comprehensive Plan is neutral on this issue and the proposal is consistent with the general intent of the Land Use Ordinance.
- The practical difficulty is caused by the unusual size and shape of the property.
- The reasonable use of the entire property was considered.

The motion was seconded by Mr. Megargee, and the motion passed unanimously.

# 20-13 County Commissioners of Kent County - Zoning Text Amendment - Directional Signs

Mr. Tracey, describing the Zoning Text Amendment, said that on March 3, 2020, the Kent County Commissioners adopted a resolution to consider a Zoning Text Amendment to add a provision for tourism-related signs. The signs would be located within the public rights-of -way and erected by Kent County. The desire is to assist the motoring public in locating tourism, heritage development and marine uses that are not readily visible from the road. The signs would be approved by the Kent County Commissioners and general guidelines would be developed by appropriate County departments. This would be an act to amend Article VI, Special Provisions, Section 2, Signs, 2.4. The proposal is consistent with numerous goals of the Kent County Comprehensive Plan such as supporting businesses, maintaining and strengthening working lands-based industries, and enhancing and expanding locally based tourism.

Mr. Tracey said no correspondence has been received.

Mr. Hickman asked if the signs will have business names on them.

Ms. Gerber commented that she believes the signs will have individual business names on them. She said they will not be like your standard state issued tourism-based signs. Ms. Gerber also discussed the design process and guidelines.

Mr. Megargee said he believes there will be an objection to business specific signs, and he thinks the signs should be kept generic.

There were questions as to whether the signs would only be for permanent businesses or also for special events.

Mr. Mackey said the signs could be used for special events, but the intention is for the signs to be wayfinding signs to direct people to uses not visible from the roadway. Mr. Mackey further stated that the businesses would work with the County to develop the signs, and they would be

responsible for all costs. He said after the sign is completed, the County would place the sign on a County right-of-way, and it would be a County owned sign.

After further discussion and additional concerns expressed by the Commission, Mr. Hickman made a motion to send an unfavorable recommendation for the proposed Zoning Text Amendment to the County Commissioners based on the following findings:

- The definitions of tourism, heritage development and marine uses are not clearly defined;
- Motoring public from state highways is not clearly defined, as the County right-of-way does not define what happens in the State right-of-way;
- The government would be controlling who gets the signs;
- Petitions could be from private or non-profits describing what their efforts are and what their standards are to get a sign;
- Understands this is meant for all good intentions, not debating that, but the amendment is a little wide open and could see it not being very well handled; and
- Recommends staff to craft a better amendment to the Article in the future.

Mr. Megargee seconded the motion, and the motion passed unanimously.

#### Office Building Recycling (OBR) Plan for Kent County – Senate Bill 370

Mr. Tracey described the proposal which outlines the County's plan to require recycling in office buildings larger than 150,000 square feet. The County must amend the 10-year Solid Waste/Recycling Management Plan to include the subject of Office Building Recycling (OBR) as required by Senate Bill 370. Before adoption of the amendment to the County's Solid Waste/Recycling Management Plan, the County is required to submit the plan to the County's planning department for its certification of the OBR plan. Mr. Tracey further noted the proposal is consistent with the Kent County Comprehensive Plan which encourages household and business recycling. Staff recommends approval.

Ms. Morris wanted to know if any correspondence has been received. Mr. Tracey said no correspondence has been received.

Marty Holden, Chief of Environmental Operations, commented that the OBR plan is very similar to the Apartment Building Recycling Program, and as of right now, Kent County does not have any office buildings that would be required to comply with the requirements.

Ms. Morris asked for public comment and there was none.

Ms. Morris said the Commission approves of the OBR Plan as written.

#### STAFF REPORTS

Ms. Morris acknowledged the planning staff for their hard work.

Kent County Planning Commission April 2, 2020 Page 11 of 11

#### Carla Gerber:

• Ms. Gerber reminded everyone of the 2020 Census. She said events scheduled by the Complete Count Committee promoting the 2020 Census have been canceled, but they will be hosting Facebook live events. Ms. Gerber said tablets will be used at some of the food distribution sites to encourage everyone to participate by filling out their census forms.

#### Rob Tracey:

• Mr. Tracey informed the Commission that he is continuing to work on projects and permit reviews.

#### Cynthia McCann:

• Ms. McCann said she is excited to serve the County and to work with the Planning Commission.

#### **GENERAL DISCUSSION**

- Ms. Kohl suggested the Commission explore video conferencing options for future meetings.
- Ms. Morris encouraged everyone to stay safe and to utilize safety precautions during the State of Emergency.

#### **ADJOURN**

There being no	further business	for the go	od of the org	ganization, the	e meeting wa	as adjourned a
3:19 p.m.						
				<b>V</b>		
Elizabeth Morri	s, Chairman			Brian Jone	es, Clerk	

#### PRELIMINARY STAFF REPORT

**TO:** Kent County Planning Commission

**SUBJECT:** Zoning Text Amendment – Microbreweries in Crossroads Commercial

**DATE:** April 24, 2020

#### **DESCRIPTION OF PROPOSAL**

The applicant, Richard Carter, proposes to amend Article V, Section 10 of the Crossroads Commercial District, by adding 10.2.21, Microbreweries as defined by the State of Maryland, and by adding 10.2.22, Class D Alcohol retail business as defined by the State of Maryland. Microbreweries are a permitted use, subject to site plan review, in the Commercial zoning district; this amendment would permit microbreweries in the Crossroads Commercial zoning district, subject to site plan review. The Class D Alcohol retail business, as defined by the State of Maryland, would allow the applicant to sell beer, wine, and liquor to adults 21 or older for consumption on-premise.

#### APPLICABLE LAW

Article XII, Section 6 of the Kent County Land Use Ordinance establishes the standards for the review and approval of a zoning text amendment as follows.

- 1. The County Commissioners may amend, supplement, or change the boundaries of the districts or the regulations of this Ordinance. Any amendment may be initiated by a resolution of the County Commissioners, the motion of the Planning Commission, or petition of any property owner using forms specified by the Planning Commission.
- 2. The application for an amendment to the text of the Ordinance shall, at a minimum, state in particular the article section, and paragraph sought to be amended. The application shall contain the language of the proposed amendment and shall recite the reasons for the proposed change in text.
- 4. Before taking any action on any proposed amendment, supplement, or change, the County Commissioners shall submit the proposal to the Planning Commission for review and recommendation. The Planning Commission may hold a hearing on any proposed amendment, supplement, or change before submitting its recommendation to the County Commissioners.

The Planning Commission may request any pertinent data and information as it deems necessary. In its recommendation, the Planning Commission shall address:

- a) The public need for the proposed amendment; and
- b) The extent to which the proposed amendment complies with or deviates from the Comprehensive Plan and the Critical Area Law.
- c) When reviewing an amendment to the zoning map, the Planning Commission shall address the suitability of the property in question for the uses permitted under the proposed zoning. The Planning Commission shall not recommend the adoption of the amendment unless it finds that the adoption of the amendment is in the public interest and not solely for the interest of the applicant. Failure of the Planning Commission to report to the County Commissioners within 60 days after its first meeting after the proposal was referred to them, shall be deemed approval.

#### **COMPREHENSIVE PLAN**

The proposed text amendment is consistent with the Kent County Comprehensive Plan's strategies to promote the development of small, locally owned businesses; recruit new businesses that are desirable to the community and encourage more young people to live and work in Kent County.

#### STAFF COMMENTS

Microbreweries are a permitted use in the Commercial zoning district; the proposed amendment would expand this use to the Crossroads Commercial District. The Crossroads Commercial District currently allows restaurants, without drive-through service, and retail businesses as permitted uses. Under State law, a microbrewery has limits on the amount of beer that can be produced each year, as well as on the amount that can be sold for consumption on-premises. The first proposed new use in the zoning text amendment would allow for the brewing and tasting of beer produced on-site. The second proposed use, Class D Alcohol retail business, as defined by the State of Maryland, would allow a license holder to sell alcoholic beverages, not produced on-premises, to adults over the age of 21. The applicant's narrative related to the proposed zoning text amendment states that selling other locally crafted beverages from a microbrewery tasting room could help promote and market the microbrewery industry on the eastern shore.

Microbreweries allow for the development of small, locally owned businesses, and tasting rooms potentially support tourism by creating another activity to draw visitors to the community. The use adds additional flexibility to the Crossroads Commercial District.

Staff recommends sending a favorable recommendation to the Kent County Commissioners.

## APPLICATION FOR TEXT AMENDMENT TO THE KENT COUNTY LAND USE ORDINANCE KENT COUNTY, MARYLAND

Kent County Department of Planning, Housing and Zoning

Kent County Government Center 400 High Street • Chestertown, MD 21620 410-778-7475 (phone) • 410-810-2932 (fax)

Pursuant to Article XII, "Administrative Proceed	dures" Section 6. "Amendments" of the Kent
County Land Use Ordinance, I/We Richard	-arter
of 5914 Ruck Hall Road, Rock Hall, MD Address	21661 443-370-7926
	1 elephone Number
hereby petition the Kent County Commissioners to	amend the Land Use Ordinance of Vont Court
Maryland, as follows: UPdate Section 10,2,	rossmade Commondal Diede tas
follows: 10,2.21. Microbrenerya	s defined by the State of Man 1
10,2,22. Class D Alcohol Retail	business - dod - 11- dia sid
of many land.	by the stall
It should be noted that these uses at	2000 1000 1000 1000 1000 1000 1000 1000
The purpose of the proposed amendment is to permit:	operation of a microbrewery and
9 Class D Tavern at 5914 Rock N	all Road Rock Hall MD 21601 This
Is part of a plan to promote cra	It beer tourismond examine
development in Kent County.	1 - GONOMIC
	$\Lambda$
	Kicharl Q (
	Applicant's Signature
	March 17, 2020
	Date
Please Note: The application for an amendment to the text of this Or Section, and paragraph sought to be amended. The application sha	rdinance shall, at a minimum state in particular, the Article,

Instructions: The Land Use Ordinance requires that five (5) copies for Zoning Text Amendment be submitted to the Executive Assistant to the County Commissioners accompanied by \$500.00 filing fee, payable to the County Commissioners of Kent

File Number	For Office Use Only:	
Date Filed		
Date Referred t	o Planning Commission	
Date Recomme	end. Rec'd from Plan. Comm.	
County Comm.	Public Hearing Date	_
County Commi	ssioners Action	
Date of Action		
Property Posted		

County.

#### SECTION 10 CROSSROADS COMMERCIAL DISTRICT

#### **10.1 STATEMENT OF INTENT**

The purpose of this district is to provide appropriate locations for a broad range of commercial activities such as retail, wholesale, and contracting activities serving the local community. These activities are primarily oriented to highway uses rather than central business locations. Crossroads Commercial districts are generally located at the intersection of major highways. Because these uses are located subject to public view, which is a concern of the whole community, they should provide an appropriate appearance, controlled traffic movement, ample landscaping, and protect adjacent properties from the traffic and visual impacts associated with the commercial use. It is the intent that a Crossroads Commercial District shall have a minimum frontage of 150 feet on a single primary road. Whenever possible, frontage of the district shall not exceed depth.

#### 10.2 PERMITTED PRINCIPAL USES AND STRUCTURES

A building or land may be used only for the following purposes, in all cases subject to site plan review by the Planning Commission, or where applicable the Planning Director.

- 1. Agriculture, excluding the raising of livestock and fowl, including horticulture, hydroponics, and truck farming, general farming, cultivation of field crops, and raising of orchards, groves, and nurseries.
- 2. Automobile repair
- 3. Automobile service stations
- 4. Car wash provided the waste water is recycled
- 5. Circus or carnival, midways and amusement parks, temporary, for a period of time not to exceed one week per year
- 6. Country inn
- 7. Financial institutions
- 8. Fire and rescue squad stations
- 9. Home and business services such as grounds care, cleaning, exterminators, landscaping, and other repair and maintenance services
- 10. Hotels and motels
- 11. Machinery and equipment sales
- 12. Modular building sales not including the storage of modular buildings
- 13. Motor vehicle sales, service, and rental
- 14. Personal wireless facilities collocated on existing towers, water towers, electrical transmission towers, fire towers, silos, grain dryers, or other structures provided the height of the existing structure is not above that permitted by this Ordinance.

- 15. Public uses, buildings and utilities. Public buildings and uses include but are not limited to schools, offices, parks, playgrounds, and roads funded and owned and operated by the local, state, or federal agencies, but not including major sports facilities. Public utilities are water, sewer, electric, gas, oil, and communication facilities owned and operated by the Kent County Department of Water and Wastewater or other public utility. Public utilities include substations, poles, lines, transformers, pipes, meters, treatment facilities, pumping stations and appurtenances but not including transmission towers. Power plants and the like are not permitted.
- 16. Restaurant without drive through facilities
- 17. Retail businesses, supplying on the premises, household goods, new automotive parts, agricultural supplies and commodities, sporting goods, and the like, including department, outlet and discount stores provided: a. All retail sales and/or storage shall be conducted entirely within a building except where otherwise approved by the Planning Commission. b. The building size does not exceed 20,000 square feet.
- 18. Retail nurseries and greenhouses
- 19. Veterinary hospitals and offices
- 20. Wayside stands vegetable and agricultural produce
- 21. Microbrewery as defined by the State of Maryland\*\*
- 22. Class D Alcohol retail business as defined by the State of Maryland
- \* Amended 9/6/11; \*\* Amended 4/3/18



#### Proposed Amendment to Kent County Land Use Ordinance for Section 10.2 Crossroads Commercial District.

I, Richard Carter, respectfully request the amendments I have listed in the application herein attached. We have been working closely with breweries, wineries, distilleries and other artisans / small businesses throughout the Upper Eastern Shore of Maryland to initiate economic development via craft beverage tourism.

In the past 40 years this industry has grown at tremendous rates nationwide. Breweries have increased from 89 to over 7,000. Wineries have increased from 3,000 to over 10,000. Distilleries have increased from less than 100 to over 2,000. The vast majority of these establishments have little, or zero, outside distribution. They are destinations. Throughout the USA and beyond, these companies have created jobs, revitalized small towns and helped spark renewal in urban neighborhoods. They have proven to be effective economic development engines.

These establishments have proven especially attractive to people in the age 21 - 45 demographic. They attract young singles, couples and even family groups. We believe that Kent County will see increased tourism by the opening of facilities such as those I am proposing

I am not seeking uses that will deviate in any significant way from the County Comprehensive Plan. I do not seek to build new structures or create new paved surfaces. I propose to re-purpose an existing commercial structure in a way that I believe will increase economic activity in Kent County with virtually zero environmental impact or disruption to the community. In fact, we have received overwhelming support from local Rock Hall residents.

I propose to renovate my property at 5914 Rock Hall Road, in Rock Hall, Kent County, Maryland, to house a Microbrewery and a Class D Tavern, per the definitions of the State of Maryland. The purpose of these businesses is to attract craft beverage tourism by manufacturing quality Kent County beers and selling beers, wines and distilled spirits created by manufacturers on the Upper Eastern Shore of Maryland. In addition to this, we are planning to provide bus tours to local craft beverage companies, as well as historic sites, agricultural sites and other artisan venues.

A portion of the interior of our property will be converted into a tasting room and bottle shop. Another portion of the building will be converted into a microbrewery. These will be separate businesses with unique ownerships to comply with Maryland's three-tier alcohol distribution rules.

I will not be making structural changes to the building or creating any additions. I will remodel the interior to accommodate the proposed businesses and to ensure that all electrical and mechanical systems meet current building codes. I plan no construction that will create sediment or run-off issues.

Based on county parking requirements I currently have 13 parking spaces that are asphalt and 6 that are gravel, with ample room on our 1.18 acres to create additional spaces. I have approximately 165 feet of frontage on State Route 20.

The building encloses 3254 square feet. It is 71 years old and was used as a gas station and auto repair shop. The fuel tanks have been removed and the soil tested and approved as not contaminated by the State of Maryland.

The brewery operation will consist of not more than two 1-barrel brewhouses. I will be brewing for sale in the tavern located on-site, with potential sales to local restaurants in Rock Hall and Chestertown. There are no plans to expand beyond that. My mission is to attract tourists.



I anticipate that permitting this text amendment will allow us to operate businesses that will create 4 - 6 Full-Time jobs and 4 - 6 Part Time jobs.

In addition to this property and bus tours, I have developed a mobile app for craft beverages, artisans, marinas, inns, restaurants and activities. I have also launched a digital magazine to promote Eastern Shore businesses. As previously stated, the microbrewery and tavern are part of a broader mission to promote tourism and economic development in our community. I look forward to working with Kent County to make these goals a reality.



# Kent County Department of Planning, Housing, and Zoning

To: Kent County Planning Commission From: Rob Tracey, Community Planner

Meeting: April 29, 2020

Subject: Animal Care Shelter for Kent County/The Humane Society of Kent County, Inc.

Preliminary Site Plan

#### **EXECUTIVE SUMMARY**

#### Request by Applicant

The Animal Care Shelter for Kent County (The Humane Society of Kent County, Inc.) is requesting preliminary approval to construct a 10,648 square-foot facility for the care and boarding of domestic animals. The facility will include an animal enrichment training center as well as a veterinary office. The property is located on Route 297 in the Third Election District.

#### **Public Process**

Per Maryland State Law and Article VI, Section 5 of the Kent County Land Use Ordinance the Planning Commission shall review and approve Major Site Plans.

#### **Summary of Staff Report**

The property is zoned Industrial (I) and the parcel is comprised of an open field with a hedgerow along the edge of Route 297. The surrounding area is agricultural land and housing. The minor subdivision which created the five-acre parcel, was recorded on April 4, 2020. Conceptual site plan comments were provided by the Planning Commission on February 6<sup>th</sup>.

The applicant has sufficiently addressed all the preliminary site plan and all industrial zoning standards as prescribed by the Kent County Land Use Ordinance.

#### Recommendation

Staff recommends granting preliminary site plan approval.

Please note that the following will need to be addressed, in order to receive preliminary site plan approval:

- Stormwater management and sediment control plans must be approved, and any required sureties must be submitted.
- The Forest Conservation Plan and Forest Conservation Deed Restrictions must be approved, and any required sureties much be submitted.
- The final landscaping plan and any required sureties must be submitted.

#### PRELIMINARY STAFF REPORT

TO: Kent County Planning Commission

SUBJECT: Animal Care Shelter for Kent County/The Humane Society of Kent County, Inc.

Preliminary Site Plan

DATE: April 29, 2020

#### **DESCRIPTION OF PROPOSAL**

The Animal Care Shelter for Kent County (The Humane Society of Kent County, Inc.) is requesting preliminary approval to construct a 10,648 square-foot facility for the care and boarding of domestic animals. The minor subdivision which created the five-acre parcel, was recorded on April 4, 2020. The facility will include an animal enrichment training center as well as a veterinary office. The property is located on Worton Road between Worton and Chestertown in the Third Election District and is zoned Industrial (I). The parcel is comprised of an open field with a hedgerow along the edge of Route 297. The surrounding area is agricultural land and housing.

#### **GENERAL STANDARDS**

- I. Permitted and Accessory Uses
  - A. Comprehensive Plan: "Retain and promote existing businesses and assist in their growth." (Page 8)
  - B. Applicable Law: Article V, Section 15.2 of the Kent County Land Use Ordinance establishes a site plan review requirement for all permitted principal uses and structures in the Industrial District. Animal shelters are a permitted use in the Industrial zoning district
  - C. Staff and TAC Comments: The proposed 10,648 square foot facility for the care and boarding of domestic animals is proposed on a newly subdivided 5-acre parcel. The facility will include an animal enrichment training center as well as a veterinary office.
- II. Density, Height, Width, Bulk, and Fence Requirements
  - A. Applicable Law: Article V, Section 15.5 of the Kent County Land Use Ordinance establishes the Density, Height, Width, Bulk, and Fence Requirements as follows for this industrial project:

Minimum would	<u>Standard</u>
Minimum yard	
- Front	
- Existing Primary road	100 feet
- Side and Rear	
- Adjacent to EC, I, ICA-LDA, & ICA	15 feet

B. Staff and TAC Comments: The proposed animal shelter facility meets all required setbacks.

#### III. Industrial Performance Standards

- A. Comprehensive Plan: "Insure that future development, redevelopment, and infill is completed in an environmentally and context sensitive manner." (Page 31)
- B. Applicable Law: Article V, Section 15.6 of the Kent County Land Use Ordinance establishes the Industrial Performance Standards. These performance standards address noise, vibration, glare, air pollution, water pollution, radioactivity, electrical interference, smoke and particulate matter, toxic matter, and odor with compliance certified in an engineer's report. Section 11 requires that each future occupant as a part of final site plan review submit a certified engineer's report describing the proposed operation, processes, byproducts, and emissions.

C. Staff and TAC Comments: The applicant has adequately addressed the performance standards in the submitted narrative, as well as the certified engineer's report. The engineer's report and affiliated narrative notes that animal shelters and kennels inherently produce noise; however, the project has been designed to aid in the reduction of sound through the selection of building materials.

#### IV. Industrial General Standards

- A. Applicable Law: Article V, Section 15.7 of the Kent County Land Use Ordinance establishes the Industrial General Standards (applicable standards noted as follows):
  - 1. As a part of the site plan review, the applicant shall submit a statement that includes an explanation of the following:
    - a. The type of raw materials, waste products, and other by-products associated with the process.
    - b. The identity of all chemicals and solids to be discharged into the sewage system.
    - c. The type and amount of traffic expected to be generated by the operation.
    - d. The proposed hours of operation.
    - e. The proposed architectural design (graphic or narrative) of all structures.
  - 4. Central water and sewer systems may be required by the Planning Commission in an Industrial District. If a public system is available, use of such system shall be mandatory.
  - 5. Signs in industrial areas shall be permitted in accordance with the regulations contained in Article VI, Section 2 of the *Land Use Ordinance*.
  - 6. Minimum off-street parking and loading spaces shall be required of each use in an Industrial District in accordance with the regulations contained in Article VI, Section 1 of the Land Use Ordinance.
  - 7. In so far as possible, all uses shall be conducted within a completely enclosed structure or be completely screened. Finished or semi-finished products manufactured on the premises may be stored in the open if screened from the street and adjacent uses.

#### B. Staff and TAC Comments:

- The performance standards narrative addresses raw materials, waste products, and other by-products. All solid waste, including toys, are collected both inside and outside the facility, bagged and placed in the trash. The applicant's narrative on Industrial Performance Standards explains that odorous matter will not be detectable from the property boundary or beyond.
- With respect to traffic, only one point of access to a primary road is proposed at this time.
- The applicant's narrative states that the site will employ ten full-time employees and ten volunteers. The hours of operation for staff will be from 7:30 am to 7:30 pm while the visitor hours will fluctuate but will typically include 5-6 hours per day, seven days a week.
- The applicant's narrative states that the site is intended to be served by public water and public sewer. A 30-foot wide utility easement has been added along the property frontage for the benefit of extending the sewer and water lines to serve the balance of the Kennedyville Properties, LLC, parcel. The applicant acknowledges that a Public Works Agreement is required for the installation of water and sewer improvements. Additionally, the applicant is developing a property access easement for the grinder pump unit.
- The narrative states that insofar as possible, all uses will be conducted within a completely enclosed structure or be screened.

#### V. Industrial Environmental Standards

A. Applicable Law. Article V, Section 15.8 of the Kent County Land Use Ordinance establishes the Industrial Environmental Standards, which include the forest conservation and stormwater management standards. The purpose of these standards is to provide for the proper stewardship of the County's natural

resources. Specifically, it is the overall goal of the County to maintain the quality of the County's ecosystem in the face of continuing activity, growth and change.

B. Staff and TAC Comments: No existing forest currently exists on the parcel. The applicant has proposed to set aside and plant 0.75 acres of trees for Forest Conservation. A Forest Conservation Plan has been submitted and identifies the area of the proposed afforestation.

Though the Forest Conservation Plan has been submitted, the applicant still needs to provide a Forest Conservation Declaration (Deed Restrictions) addressing the long-term protection of the afforestation area before final approval. In addition, appropriate sureties must be submitted prior to final site plan approval.

Sediment and Erosion Control and Stormwater Management Plans have been submitted. The applicant's narrative states that stormwater management will be provided for the site to meet the current standards. Both plans must be approved prior to final site plan approval. Appropriate sureties must be submitted prior to final plan approval.

#### VI. Industrial District General Design Standards

- A. Applicable Law: Article V, Section 15.9 of the Kent County Land Use Ordinance establishes the Industrial District General Design Standards which address site access, landscaping, screening, and lighting. Screening is required to protect adjoining properties and roadways from noise, glare, and uses which are visually incompatible with neighboring land uses. Screening is also required where exterior storage areas are visible from roadways, sidewalks, or nearby residential properties, or where the Planning Commission determines that additional screening is necessary to protect properties in the area. When required, the screen shall be capable of providing year-round screening and consist of coniferous and deciduous trees and plants, species and sizes of which will be chosen to best accomplish an adequate screen (i.e. evergreens used for visual screening, deciduous trees for seasonal screening). Screening may include masonry, or wooden fencing used with or without berms. Screening and fencing shall be maintained in at least the same quality and quantity as initially approved.
- B. Staff and TAC Comments: The applicant is proposing one access from Route 297. Landscaping, screening, and lighting plans have submitted. An existing hedgerow along route 297 is proposed to be removed to increase visibility of the proposed site sign and for access to the property from Route 297. A mix of canopy and understory trees, as well as conifers are proposed along the south property line, in different locations along the walking path, and around the facility. The proposed screening will adequately protect adjoining properties and roadways from noise and glare. Biorention areas, comprised of perennials and shrubs, are proposed in the middle of the parking lot and behind the cat silo. Dark sky compatible lighting is proposed in different locations along the walking path and on the fences of the outside dog yards.

#### VII. Parking and Loading

- A. Applicable Law: Article VI, Section 1.3 of the Kent County Land Use Ordinance establishes the parking standards for kennels based on 1 parking space per 400 square feet of gross floor area, but not less than 4 spaces.
- B. *Staff and TAC Comments*: The applicant is required to provide a minimum of 27 spaces. According to the narrative, the Humane Society plans to provide 40 parking spaces.

#### VIII. Signage

A. Article VI, Section 2.5 of the Kent County Land Use Ordinance establishes permitted signs for the Industrial zoning district. This section states that parcels zoned Industrial are permitted to have "one

- detached sign per parcel limited to 25 square feet and a height of 25 feet." Directional signs, limited to 4 square feet, are considered incidental signs and are permitted in any district as needed.
- B. According to the signage and lighting plan, the applicants propose two detached signs and two directional signs attached to the building. Plans submitted by the applicant included detached ground lighting. Currently, as proposed, the signs do not comply with the County regulations; however, Staff is working with the applicant to resolve this issue.

#### SITE PLAN REVIEW

- A. Comprehensive Plan: "Insure that all new development or redevelopment meets high standards of planning, workmanship, and design." (Page 31)
  - "Require developers to engage and inform citizens during the development review process through the incorporation of a participation program." (Page 27)
- B. Applicable Law: Article VI, Section 5 of the Kent County Land Use Ordinance establishes the procedures and requirements for site plan review. At each stage of review the Planning Commission shall review the site plan and supporting documents taking into consideration the reasonable fulfillment of the following objectives:
  - a. Conformance with the Comprehensive Plan and, where applicable, the Village Master Plan.
  - b. Conformance with the provisions of all applicable rules and regulations of county, state, and federal agencies.
  - c. Convenience and safety of both vehicular and pedestrian movement within the site and in relationship to adjoining ways and properties.
  - d. Provisions for the off-street loading and unloading of vehicles incidental to the normal operation of the establishment, adequate lighting, and internal traffic control.
  - e. Reasonable demands placed on public services and infrastructure.
  - f. Adequacy of methods for sewage and refuse disposal, and the protection from pollution of both surface waters and groundwater. This includes minimizing soil erosion both during and after construction.
  - g. Protection of abutting properties and County amenities from any undue disturbance caused by excessive or unreasonable noise, smoke, vapors, fumes, dust, odors, glare, stormwater runoff, etc.
  - h. Minimizing the area over which existing vegetation is to be removed. Where tree removal is required, special attention shall be given to planting of replacement trees.
  - i. The applicant's efforts to integrate the proposed development into the existing landscape through design features such as vegetative buffers, roadside plantings, and the retention of open space and agricultural land.
  - j. The building setbacks, area, and location of parking, architectural compatibility, signage, and landscaping of the development, and how these features harmonize with the surrounding townscape and the natural landscape.

In addition, the applicant is to provide a narrative that addresses a Citizen Participation Plan and a report with the results.

#### C. Staff and TAC Comments:

- The proposal is consistent with many strategies of the Comprehensive Plan and conforms with applicable regulations.
- The applicant has proposed one access point from Route 297. The parking lot has been located to

- the side of the building and includes a landscape biorention island and walkways for both the convenience and safety of vehicular and pedestrian movement. The provided off-street parking meets the requirements.
- An area for off-street loading and unloading has been provided and adequate dark sky compatible lighting has been proposed within the parking area, along the perimeter of the dog yard areas, and in different locations along the walking path.
- The facility will place reasonable demands on public water and sewer. The proposed use should not require excessive use of other public infrastructure such as police and emergency services.
- The applicant has proposed adequate methods of solid waste disposal. Stormwater management will be implemented to protect surface waters and groundwater. Sediment control will minimize soil erosion during and after construction.
- The building has been designed and the materials have been carefully selected to aid in the reduction of sound to protect abutting properties. The proposed colors and design of the buildings, and signage will harmonize with the surrounding area and natural landscape.
- The applicant's Citizen Participation Plan consisted of a public meeting that was held on January 9, 2020. A letter detailing the citizen participation meeting was submitted on January 14<sup>th</sup>.

#### STAFF RECOMMENDATION

Staff recommends granting preliminary site plan approval.

Please note that the following will need to be addressed, in order to receive final site plan approval:

- Stormwater management and sediment control plans must be approved, and any required sureties must be submitted.
- The Forest Conservation Plan and Forest Conservation Deed Restrictions must be approved, and any required sureties much be submitted.
- The final landscaping plan and any required sureties must be submitted.

Animal Care Shelter for Kent County/Humane Society of Kent County, Inc.



Source: Kent County Department of Planning, Housing, and Zoning. Aerial taken Spring 2019. Map prepared May 2020.

Kent County Department of Planning, Housing and Zoning
Kent County Government Center
400 High Street • Chestertown, MD 21620 410-778-7475 (phone) • 410-810-2932 (fax)

# SITE PLAN APPLICATION

File Number:		_	Amount	Paid:		Date:		
Project Name: An								
District: 3 <sup>rd</sup> Map	28 Parcel:	120	Lot Size:	81.325	_ Deed Ref:	952/86	_ Zoning:	Industrial
LOCATION: 255	46 Mary Morr	is Road	, Worton,	MD 2167	8			
PROPOSED USE	: Animal Shelt	er					-	
OWNER OF LAN	ID:							
Name: Kennedyvi	lle Properties,	LLC_			Telephon	e: 410-34	8-5899	
Address: 11653 Au	ıgustine Herm	an Hwy	, Kennedy	ville, MD	21645 Ema	il: dmcher	ırybp@yal	noo.com
APPLICANT:								
Name: Animal Ca	re Shelter for F	Kent Co	ounty	Tele	phone: 410-	778-3648_		
Address: 10720 Au	ıgustine Herm	an Hwy	, Chesterto	wn, MD	21620 Emai	l: rdkeave	ney@gma	il.com
AGENT/ATTOR								
Name:	4 - W - W - W				Telephon	e:		
Address:				Email:				
REGISTERED EN	NGINEER OR	SURV	EYOR:					
Name: DMS & As	ssociates, LLC				Telephon	e: 443-262	2-9130	
Address: P.O. Box 80 Centreville, MD 21617			_ Email: kjs@dmsandassociates.com					
Water Supply:	X Public Sy	stem	☐ On lot	system				
Sewerage:	X Public Sy	stem	☐ On lot	system				
TELEPHONE SE	RVICED BY:	Veriz	on					
ELECTRIC SERV	ICED BY:	Delm	arva Powe		7			
			1	1/8	~			3/25/2
			Signatur	e of Appli	cant			Date
☐ Concept Plan	Approving A	Authori	ty:				_ Date	
X Preliminary	Approving A	Authori	ty:				_ Date	
☐ Final	Approving A	Authori	ty:				_Date	

#### **PROJECT NARRATIVE**

## **Animal Care Shelter for Kent County**

In accordance with Article VI, Section 5.4.B of the Kent County Zoning Ordinance, we offer the following:

The Animal Care Shelter for Kent County is proposing to construct a new facility on a portion of the property currently owned by Kennedyville Properties, LLC. The physical address of the overall property is 25546 Mary Morris Road, Worton, Maryland, however, the proposed 5.0 acre site for the new facility would be located in the northeast corner of the property and will take access from Worton Road (Maryland Route 297). The overall property is identified as Tax Map 28 Parcel 120 and is zoned Industrial (I).

The Animal Care Shelter is proposing to construct a 10,876-sf facility for the care and boarding of domestic animals. The facility will also include an animal enrichment training center as well as a medical veterinary office. Indoor dog runs will be grouped in a dormitory type setting with each section accessing an outdoor, fenced in play area.

A parking lot will be accessed directly from Worton Road (Maryland Route 297) and will include approximately 40 parking spaces. Stormwater management will be provided for the site to meet the current ESD standards. Afforestation will be provided to meet the 15% requirement. A series of walking paths will be installed on the property to provide exercise areas for the animals and visitors. The site is intended to be served by public water and public sewer.

It is anticipated that there will be 10 full-time employees and 10 volunteers on a maximum shift. Hours of operation for staff will be from 7:30am to 7:30pm. Visitor hours will fluctuate but will typically include 5-6 hours per day, seven days a week.

Once subdivided and purchased, the property is intended to remain under the ownership and maintenance of The Animal Care Shelter for Kent County.



#### INDUSTRIAL PERFORMANCE STANDARDS

## Animal Care Shelter for Kent County Worton Road, Chestertown, MD

In accordance with Article V, Section 15.6 of the Kent County Zoning Ordinance, we offer the following:

- 1. NOISE Animal shelters and kennels inherently produce noise. However, the architect of this project has designed the facility to aid in reducing noise. The layout of the kennels has been divided into four "dormitories" with only eight dog runs per dorm. Building materials have also been selected to reduce noise such as insulated walls, ceiling materials, and a center hallway with glass doors into the dorms, thus reducing dog barking when visitors observe.
- 2. VIBRATION There is no earthborn vibration associated with this project.
- 3. GLARE There is no glare associated with this project.
- 4. AIR POLLUTION There is no air pollution associated with this project.
- 5. WATER POLLUTION There is no water pollution associated with this project. All solid waste, including toys, are collected both inside and outside the facility, bagged and placed in the trash.
- 6. RADIOACTIVITY No radioactive materials will be used.
- 7. ELECTRICAL INTERFERENCE There are no exceptional electrical demands that should cause any interference.
- 8. SMOKE AND PARTICULATE MATTER There are no smoke or particulate matter emissions associated with this project.
- 9. TOXIC MATTER No toxic materials are used.
- 10.ODOROUS MATTER The only odorous matter will be the solid waste which will be collected both inside and outside the facility, bagged and placed in the trash. Odorous matter will not be detectable from the property boundary or beyond.

Davis, Moore, Shearon & Associates, LLC



Davis, Moore, Shearon & Associates, LLC

April 28, 2020

Mr. Rob W. Tracey, Community Planner Kent County Department of Planning & Zoning 400 High Street Chestertown, Maryland 21620

RE: PRELIMINARY SITE PLAN FOR THE ANIMAL CARE SHELTER FOR KENT COUNTY ON THE LANDS OF KENNEDYVILLE PROPERTIES, LLC KENT COUNTY TAX MAP 28, PARCEL 120 DMS & ASSOCIATES JOB #2019112

Dear Mr. Tracey,

Attached please find revised Preliminary Site Plans for the proposed Animal Care Shelter for Kent County. The revisions are in response to the TAC comments dated April 2, 2020 and comments from the Department of Public Works dated April 13, 2020. We offer the following:

#### TAC letter - April 2, 2020

- 1. We acknowledge that the Health Department has approved this application.
- We acknowledge that the State Highway Administration has no issues or concerns with County approval. We will continue to work with SHA on the entrance design and permitting.
- 3. See responses to the Kent County DPW comments below.
- 4. We acknowledge that there are 40 parking spaces proposed.
- 5. Landscaping and lighting plans area included in this submittal.
- 6. There is only one point of access to the site.
- 7. In so far as possible, site activities will be conducted within an enclosed structure.
- 8. The building has shifted 2.5' away from Worton Road so that the roof overhang does not cross the building restriction line.
- 9. Attached are architectural plans that include details for the proposed signs.
- 10. Plans and stormwater management computations have been submitted to the Kent Soil and Water Conservation District for review.
- 11. Forest Conservation Plan planting materials have been added to the Afforestation Plan.
- 12. Forest Deed Restrictions will be provided for your review under a separate cover.

#### DPW letter - April 13, 2020

- 1. The signature block has been revised to Kent County Department of Public Works.
- 2. Sheet C-2:
  - a. The width of the State right-of-way has been added to the plan.
  - b. The proposed site sign has been moved outside of the proposed utility easement.

#### 3. Sheet C-8:

- Notations have been added indicating a minimum separation of 10' between water and sewer lines.
- b. A detail of the connections to the existing manhole will be provided prior to final site plan review.
- c. The 3" line size reference has been corrected to 4".
- d. A shut off valve has been added at the termination of the 4" force main.
- e. The sewer force main has been indicated to maintain 4' of cover from proposed grades.
- f. The buttress detail has been referenced in the plan notes.
- g. A flushing connection with valve and valve box has been added to the grinder pump line at the edge of the utility easement.
- h. A flushing connection has been added at the grinder pump pit.
- The sewer service lateral has been indicated to maintain 3' of cover from proposed grades.
- j. A trench detail has been added on Sheet C-9. Note #8 on the detail was added directing multiple pipes of the same utility to be laid in the same trench.
- k. A note has been added indicating that the County's responsibility for maintenance of the grinder pump service line ends at the easement line.
- The grinder pump location has been revised to be closer to the end of the parking lot for ease of maintenance. The loading / unloading striping has been extended to the opposite curb and a "no parking" sign has been added.
- m. A grinder pump detail has been added to Sheet C-9.
- A gasketed blind flange fitting has been called out at the termination of the proposed water main.
- o. Meter pit piping detail will be provided prior to final site plan review.
- p. A note has been added stating that the sizing of the domestic and fire water lines are the responsibility of the owner. A water meter size has been specified.
- q. A note has been added stating that the water meter installation shall meet the requirements of Kent County Department of Public Works.
- A note has been added stating that a pre-construction meeting is required before beginning sewer and water construction.

#### 4. Sheet C-9:

a. The details have been revised to be Kent County's where possible.

- b. The details referenced on Sheet C-8 have been added to this sheet.
- c. A disinfection and testing note has been added to the sheet.
- 5. We will coordinate with the Maryland State Highway Administration regarding a utility permit within their right-of-way.
- Attached is computation of the anticipated water and sewer demands for the building.
   Upon your review and acceptance, we will formally request the water and sewer allocations.
- 7. We acknowledge that a Public Works Agreement will be required for the installation of the water and sewer improvements. Please let us know if Kent County DPW will provide the initial draft copy for review.
- 8. The utility easement along the front of the property has been recorded along with the transfer of the 5.0 acres. We will develop a property access easement for the grinder pump. Please let us know if Kent County DPW has a draft easement agreement for review.

We ask that you review this information at your earliest convenience. If you have questions please call me at 443-262-9130.

Sincerely,

DMS & Associates, LLC

Kevin J. Shearon, P.E., LEED AP

Enclosures

pc: Mr. Richard Keaveney, Animal Care Shelter for Kent County (via email)

Mr. Mike Moulds, Kent County Department of Public Works

# SITE PLAN FOR

# IHE ANIMAL CARE SHELIR

# THIRD ELECTION DISTRICT, KENT COUNTY, MARYLAND

PREPARED FOR: THE ANIMAL CARE SHELTER FOR KENT COUNTY

# SITE STATISTICS

CURRENT USE - AGRICULTURAL PROPOSED USE - HUMANE SOCIETY

GROSS AREA = 5.000 ac. $\pm$  (217,800 sq. ft. $\pm$ )  $= 0.000 \text{ ac.} \pm$ CRITICAL AREA AREA IN BUFFERYARDS  $= 0.000 \text{ ac.} \pm$ AREA WITHIN 100 Yr. FLOODPLAIN  $= 0.000 \text{ ac.} \pm$ FLOOR AREA (EXISTING) ( 0.0%) = 0.000 ac. $\pm$  ( 0,000 sq. ft. $\pm$ ) FLOOR AREA (PROPOSED) ( 5.5%)  $= 0.275 \text{ ac.} \pm (11,994 \text{ sq. ft.} \pm)$ MAIN BUILDING  $= 0.254 \text{ ac.} \pm (11,079 \text{ sq. ft.} \pm)$ ENRICHMENT BUILDING  $= 0.021 \text{ ac.} \pm (915 \text{ sq. ft.} \pm)$ IMPERVIOUS AREA (PERMITTED) (75%) = 3.750 ac.± IMPERVIOUS AREA (EXISTING) ( 0.0%)  $= 0.000 \text{ ac.} \pm$ IMPERVIOUS AREA (RESULTING) (17.5%) =  $0.877 \text{ ac.} \pm$ 

# PARKING REQUIREMENTS

1 space/400 sq. ft. FLOOR AREA X 11,994 sq. ft. = 29 SPACES

PARKING (REQUIRED) = 30 SPACES PARKING (PROPOSED) = 40 SPACES (2 ACCESSIBLE)

# STATEMENT OF PURPOSE AND INTENT

THIS SITE IS LOCATED ON THE WEST SIDE OF MARYLAND ROUTE 297 NEAR THF VILLAGE OF WORTON. THE PROPERTY HAS BEEN PREVIOUSLY SUBDIVIDED TO CREATE 4 COMMERCIAL LOTS WITH THE REMAINDER HAVING AN EXISTING DWELLING AND AGRICULTURAL USE. THE PURPOSE OF THIS SITE PLAN IS TO CONSTRUCT A NEW BUILDING, ITS ASSOCIATED PARKING AND RECREATION AREAS.

THE INTENT OF THIS SITE PLAN IS TO RECEIVE APPROVAL FROM THE KENT PLANNING COMMISSION ON THE PROPOSED PLAN.

# REVIEWED FOR THE KENT SOIL AND WATER CONSERVATION DISTRICT AND MEET TECHNICAL REQUIREMENTS APPROVED: KENT SOIL AND WATER CONSERVATION DISTRICT KENT SOIL AND WATER CONSERVATION DISTRICT RESERVES THE RIGHT TO ADD, DELETE, MODIFY OR OTHERWISE ALTER THE EROSION CONTROL PROVISIONS OF THIS PLAN IN THE EVENT ADDITIONAL PROTECTION BECOMES NECESSARY. DEVELOPERS CERTIFICATION I (WE) CERTIFY THAT: A. ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE IN ACCORDANCE WITH THIS SEDIMENT AND EROSION CONTROL PLAN AND/OR STORMWATER MANAGEMENT PLAN, AND FURTHER, AUTHORIZED THE RIGHT OF ENTRY FOR PERIODIC ONSITE EVALUATION BY THE KENT SOIL AND WATER CONSERVATION DISTRICT SEDIMENT CONTROL INSPECTOR OR MARYLAND DEPARTMENT OF THE ENVIRONMENT. B. ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATION OF ATTENDANCE AT THE DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF EROSION AND SEDIMENT BEFORE BEGINNING THE PROJECT. C. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR OR SUBCONTRACTOR TO NOTIFY THE ENGINEER OF ANY DEVIATION FROM THIS PLAN. ANY CHANGE MADE IN THIS PLAN WITHOUT WRITTEN AUTHORIZATION FROM THE ENGINEER WILL PLACE RESPONSIBILITY FOR SAID CHANGE ON THE CONTRACTOR OR SUBCONTRACTOR.

- 1. PROPERTY LINE INFORMATION SHOWN HEREON IS TAKEN FROM A PLAT ENTITLED "SUBDIVISION PLAT OF THE LANDS OF KENNEDYVILLE PROPERTIES, LLC" IN FEBRUARY, 2020.
- 2. FOR DEED REFERENCE, SEE LIBER M.L.M. 952, FOLIO 86.
- 3. CURRENT ZONING CLASSIFICATION (I) INDUSTRIAL
- 4. THE PROPERTY IS NOT LOCATED WITHIN THE CHESAPEAKE BAY CRITICAL AREA.
- 5. SITE IS NOT LOCATED WITHIN 100 YEAR FLOODPLAIN AS SCALED FROM FLOOD INSURANCE RATE MAP COMMUNITY PANEL No. 24029C0165D. (ZONE "X")
- 6. SOILS ONSITE CONSIST OF "MnB" MATAPEAKE SILT LOAM AS SCALED FROM http://websoilsurvey.nrcs.usda.gov FOR KENT COUNTY, MARYLAND.
- EXISTING IMPROVEMENTS SHOWN SHOWN HEREON ARE THE RESULT OF A FIELD RUN SURVEY BY MICHAEL A. SCOTT. INC. IN OCTOBER, 2019.
- 8. FOREST CONSERVATION WILL BE ADDRESSED ON SITE. (15% OF 5.00 ACRES = 0.75 ACRES)
- 9. PUBLIC SEWER AND PUBLIC WATER WILL BE UTILIZED FOR SEWAGE DISPOSAL AND POTABLE WATER SUPPLY.
- 10. STORMWATER MANAGEMENT FOR THE SITE HAS BEEN ADDRESSED VIA THE IMPLEMENTATION OF ENVIRONMENTAL SITE DESIGN (ESD) TO THE MAXIMUM EXTENT PRACTICABLE (MEP).
- 11. LIGHTS MOUNTED ON THE BUILDING SHALL BE DARK SKY COMPATIBLE
- 12. SIGNAGE WILL BE LIMITED TO ONE (1) FLAT SIGN PER ESTABLISHMENT LIMITED TO 0.5 sq. ft. PER LINEAR FOOT OF BUILDING FRONTAGE, NOT TO EXCEED 100 sq. ft., PROVIDED THE SIGN USES COLORS APPROVED BY THE PLANNING COMMISSION AND IS ILLUMINATED WITH STEADY EXTERNAL LIGHTING PER ARTICLE VI, SECTION 2 OF THE KENT COUNTY ZONING ORDINANCE.
- 13. <u>SETBACK AND HEIGHT REQUIREMENTS:</u> MARYLAND ROUTE 297 50' FRONT YARD SIDE YARD REAR YARD

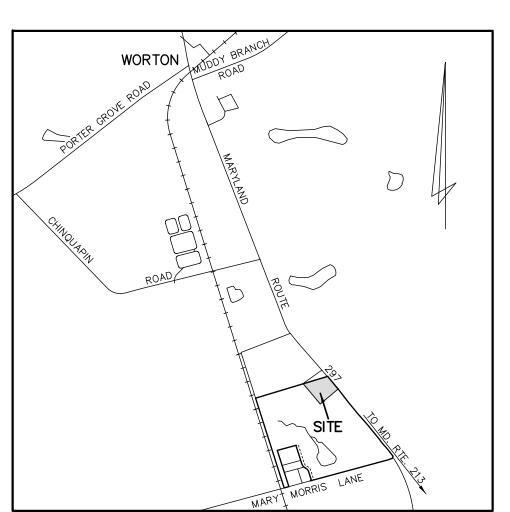
MAXIMUM BUILDING HEIGHT

# OWNER/DEVELOPER:

THE HUMANE SOCIETY OF KENT COUNTY, MD., INC. 10720 AUGUSTINE HERMAN HIGHWAY CHESTERTOWN, MARYLAND 21620 PHONE No. 1-410-778-3648

# **ENGINEER**

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



VICINITY MAP SCALE 1" = 2000'

# TABLE OF CONTENTS

SHEET C-1 - TITLE SHEET SHEET C-2 - SITE PLAN

SHEET C-3 - SITE AND GRADING PLAN

SHEET C-4 - STORMWATER MANAGEMENT AND SEDIMENT & EROSION CONTROL PLAN

SHEET C-5 - STORMWATER MANAGEMENT DETAILS AND SPECIFICATIONS

SHEET C-6 - STORMWATER MANAGEMENT PROFILES

SHEET C-7 - STORMWATER MANAGEMENT PROFILES

SHEET C-8 - UTILITY PLAN SHEET C-9 - UTILITY DETAILS

SHEET C-10 - SITE DETAILS

SHEET C-11 - SEDIMENT & EROSION CONTROL

DETAILS AND SPECIFICATIONS

SHEET L-1 - LANDSCAPE PLAN

SHEET L-2 - LANDSCAPE DETAILS AND SPECIFICATIONS

<u>LEGEND</u> DEPICTS DEED POINT (UNLESS OTHERWISE NOTED) EXISTING SPOT ELEVATION PROPOSED SPOT ELEVATION PROPOSED TOP OF CURB ELEVATION TC=69.76 EXISTING CONTOUR ELEVATION PROPOSED CONTOUR — X — EXISTING FENCE EXISTING TREES/HEDGEROW EXISTING SEWER LINE EXISTING SEWER MANHOLE ----- W ----- EXISTING WATER LINE EXISTING FIRE HYDRANT PROPOSED FIRE HYDRANT EXISTING WATER VALVE PROPOSED WATER VALVE AT GRADE INLET PROTECTION RIPRAP INFLOW/OUTFALL PAD PERIMETER SILT FENCE

LIMITS OF DISTURBANCE

STABILIZED CONSTRUCTION ENTRANCE

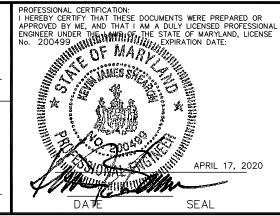
ALL SEDIMENT AND EROSION CONTROL WILL BE STRICTLY ENFORCED

- 1. These drawings show information obtained from the best available records regarding pipes, conduits, telephone lines, and other structures and conditions which exist along the lines of the work both at and below the surface of the ground. The owner and engineer disclaim any responsibilities for the accuracy or completeness of said information being shown only for the convenience of the contractor, who must verify the information to his own satisfaction. If the contractor relies on said information, he does so at his own risk. The giving of the information on the contract drawings will not relieve the contractor of his obligations to support and protect all pipes, conduits, telephone lines,
- 2. The contractor shall notify the following two (2) weeks prior to the start of construction and shall coordinate construction with the utility companies involved:

and other structures.

- Delmarva Power & Light Company ----- 1-800-375-7117 Miss Utility ----- 1-800-441-8355 DMS & Associates, LLC ----- 1-443-262-9130 Kent County Dept. Public Works ----- 1-410-778-7439 Kent Co. Sediment & Erosion Control Inspector - 1-410-778-7437 Kent Co. Dept. of Public Works----1-410-778-3287 Maryland Department of the Environment----1-410-631-3510
- 3. All construction shall be marked for traffic and pedestri
- 4. The Contractor shall provide all equipment, labor, and materials for any miscellaneous or test pit excavations required by the Engineer.
- 5. The owner is responsible for the acquisition of all easements, both permanent and temporary.
- 6. The Contractor assumes all responsibility for any deviations from these plans unless said deviation is approved by the Engineer. Contractor shall receive written permission from the Engineer if a deviation of the plans is necessary.
- 7. All disturbed areas shall be smoothly graded to provide positive drainage in the direction of flow arrows herein and stabilized with topsoil, seed, and mulch. If settlement occurs, topsoil, seeding, and mulching shall be repeated until settlement subsides (See Erosion and Sediment Control
- 8. All trash, trees, and underbrush are to be cleared and removed off site to an approved dump site by the contractor.
- 9. Any excess excavated material shall be removed off site by the contractor or material shall be placed on site as directed by the Engineer and/or Owner.
- 10. Any existing survey monumentation that is disturbed during construction shall be replaced by a registered surveyor at the contractor's expense.
- 11. The Contractor shall conduct his work in easements so that there will be a minimum of disturbance of the properties crossed. Any disturbed areas shall be restored to its
- 12. All materials and methods of construction shall conform to the drawings, specifications, local building codes, and the standard specifications and details of Kent County.
- 13. All drainage structures and swales shall remain functional during construction unless otherwise indicated on the plans.
- All water valves, boxes and hydrants shall be set and adjusted to finish grade.
- 15. Wherever sewer or water mains or services run parallel to each other, a minimum horizontal separation of 10' shall
- 16. Minimum cover over the sewer main shall be 42".
- 17. All concrete used for utility work shall be in accordance
- with MD SHA Standards and Specifications for Mix No. 2. unless otherwise specified.
- All paving materials and methods shall be in accordance with the latest MD SHA Standards and Specifications and be supplied by a State Certified plant.
- 19. Trenches shall not remain open overnight. If it is necessary for trenches to remain open, steel plates capable of bearing traffic shall be used to completely cover the trench opening
- 20. Erosion and Sediment Control will be strictly enforced by the Kent County Sediment and Erosion Control Inspector.

KENT COUNTY PLANNING AND ZONING	KENT COUNTY DEPARTMENT OF PUBLIC WORKS
KENT COUNTY HEALTH DEPARTMENT	KENT SOIL AND WATER CONSERVATION DISTRICT



Davis, Moore, Shearon & ASSOCIATES, LLC ENGINEERING, DRAFTING/DESIGN,

P.O. BOX 80

FAX: 1-443-262-9148

CENTREVILLE, MARYLAND 21617 PHONE: 1-443-262-9130

ENVIRONMENTAL SERVICES & SURVEYING

PER COMMENTS

THE ANIMAL CARE SHELTER FOR KENT COUNTY

ON THE LANDS OF

TAX MAP - 28, GRID - 4C, PARCEL - 120

TITLE SHEET

THE HUMANE SOCIETY OF KENT COUNTY, INC.

SHEET No. - C-1 CADD FILE - 19112C01

AS SHOWN

ESIGNED BY

KJS

RAWN BY

MARCH

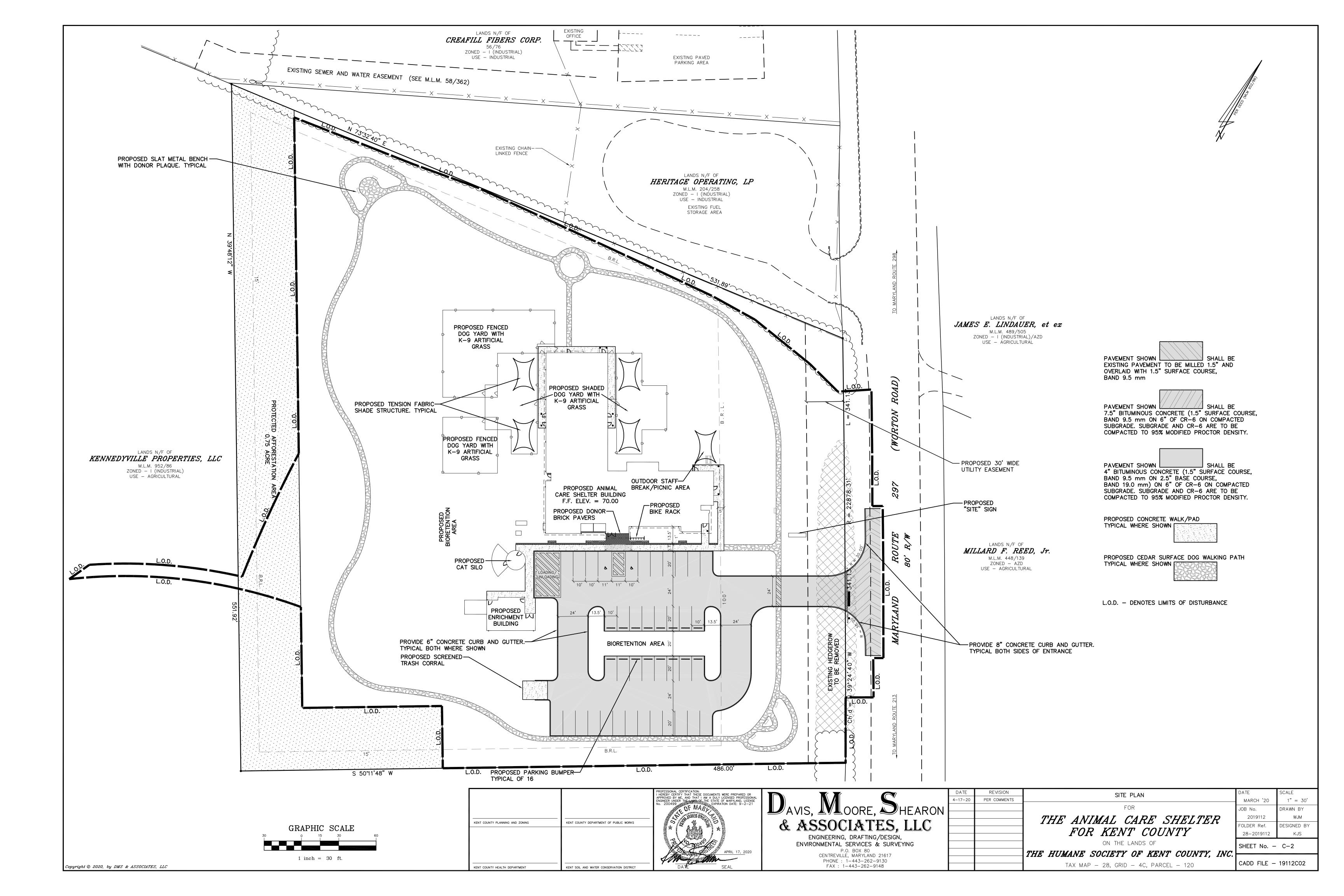
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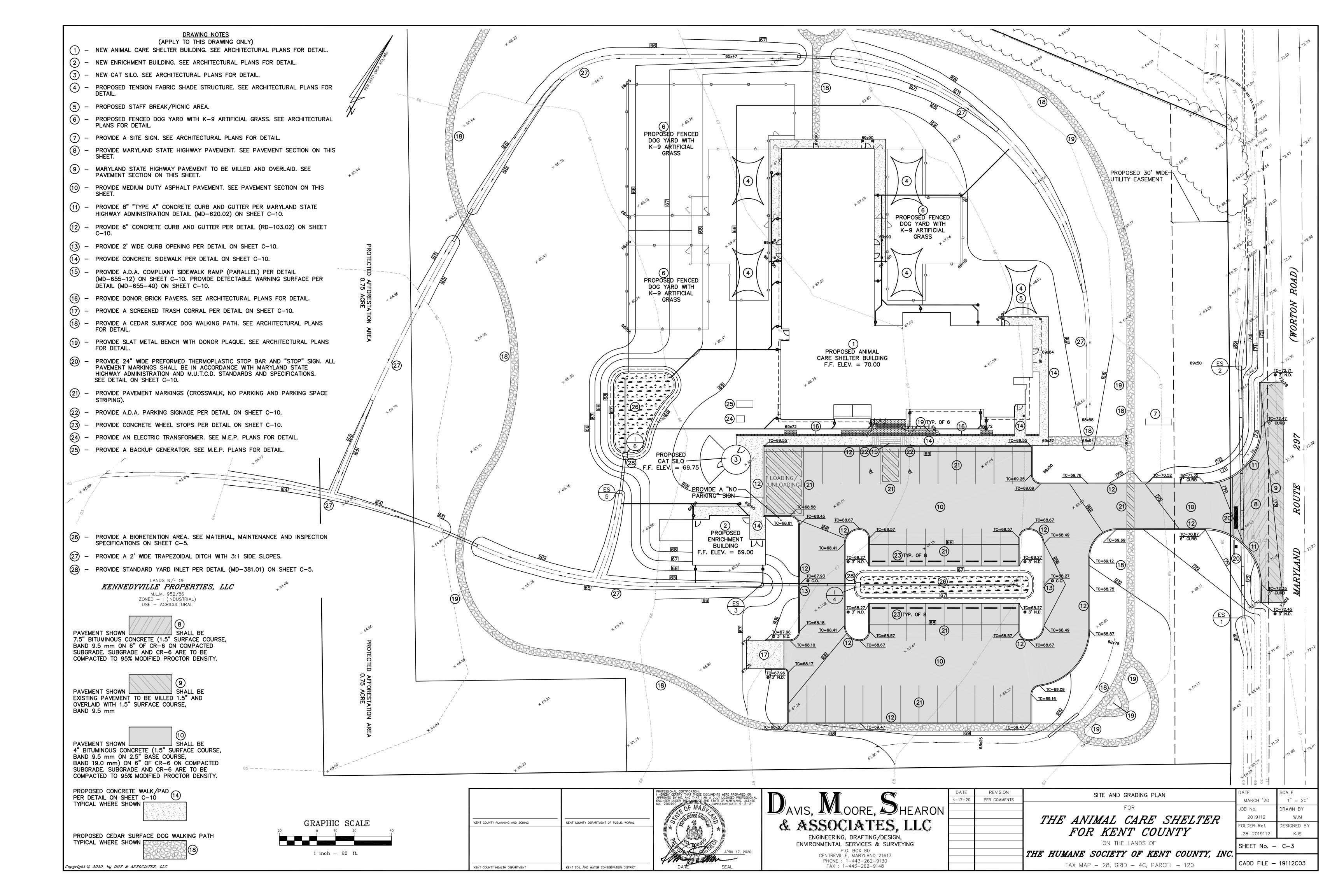
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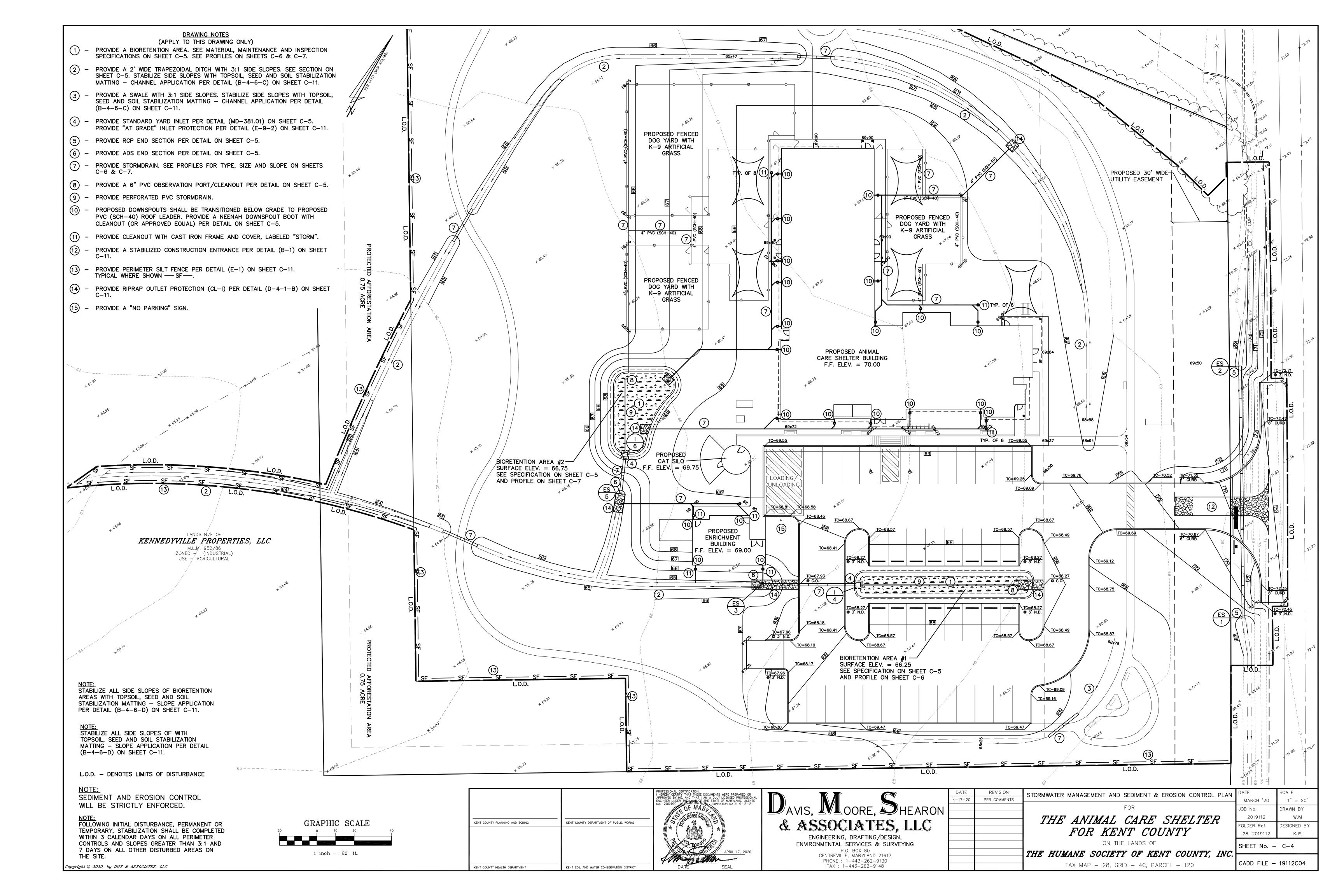
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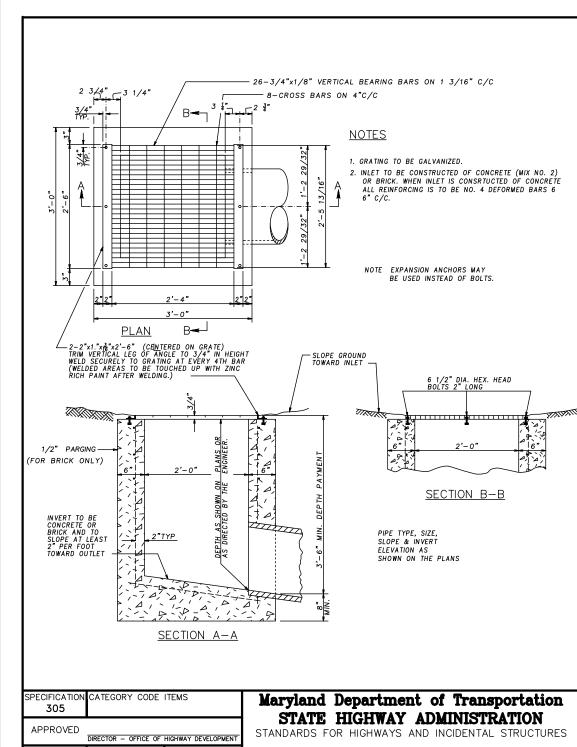
JOB No.

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STANDARD YARD INLET

Ousingipe

R-4927 style

Adapts square rainlead

MD-381.01

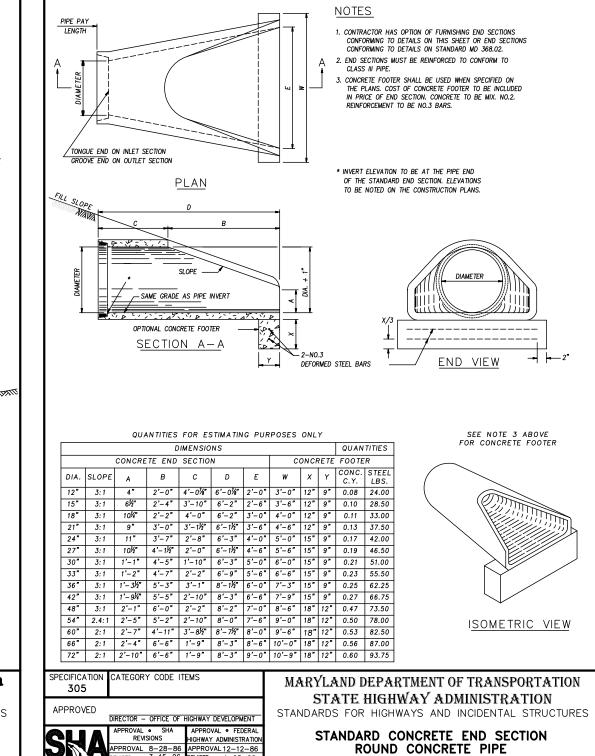
R-4926 Offset

STANDARD NO.

R-4926-29 Series

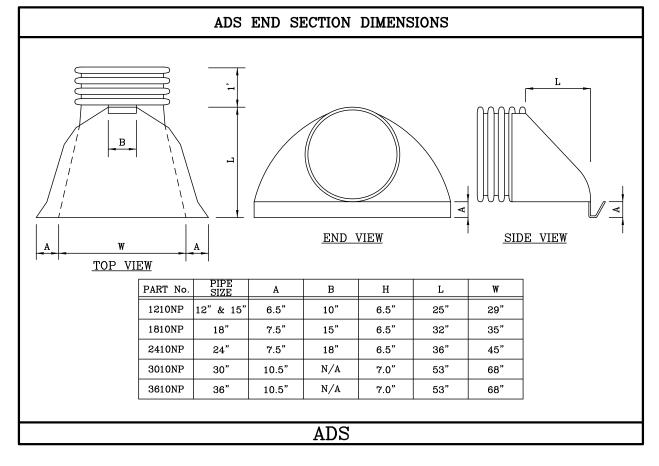
Downspout with optional Extension

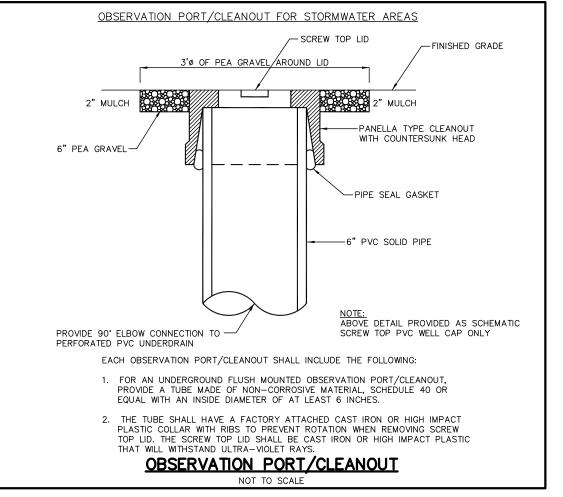
Downspout Shoes (Rainwater Leaders) continued...

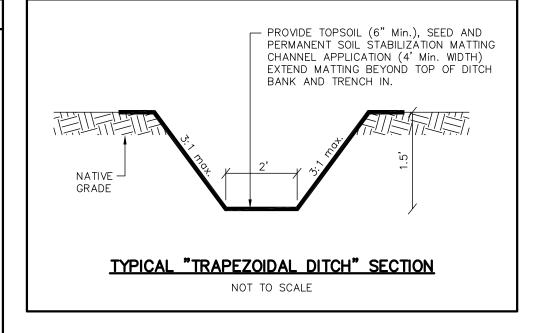


STANDARD NO.

MD-368.01







# STORMWATER MANAGEMENT SUMMARY TABLE

REQUIREMENT	VOLUME REQ.	VOLUME PRO.	NOTES
ESDv	5,793 cubic ft.	5,886 cubic ft.	BIORETENTION AREAS, PERMEABLE SURFACES, NON-ROOFTOP DISCONNECTION
RECHARGE (Rev)	N/A	N/A	BIORETENTION AREAS, PERMEABLE SURFACES, NON-ROOFTOP DISCONNECTION
CHANNEL PROTECTION (Cpv)	N/A	N/A	ESD TO THE MEP MET, THUS SITE IS CONSIDERED WOODS IN GOOD CONDITION
EXTREME FLOOD (Qf)	N/A	N/A	ESD TO THE MEP MET, THUS SITE IS CONSIDERED WOODS IN GOOD CONDITION

#### BIORETENTION MAINTENANCE SCHEDULE

DESCRIPTION	METHOD	FREQUENCY	TIME OF THE YEAR
SOIL			
INSPECT AND REPAIR EROSION, RESEED	VISUAL	MONTHLY	MONTHLY
ORGANIC LAYER			
TOPSOIL MEDIA SHALL BE REMOVED AND REPLACED WHEN PONDING DRAWDOWN EXCEEDS 48 HOURS	VISUAL	AFTER MAJOR STORM EVENTS	WHENEVER NEEDED
PLANTS			
REMOVAL AND REPLACEMENT OF ALL DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT	SEE PLANTING SPECS.	TWICE A YEAR	3/15 to 4/30 AND 10/1 to 11/30
INSPECT FOR DISEASE/PEST PROBLEMS	VISUAL	ONCE A MONTH (AVERAGE)	INSPECT MORE FREQUENTLY IN WARMER MONTHS
DETERMINE IF TREATMENT IS WARRANTED. USE LEAST TOXIC TREATMENT APPROACH	BY HAND	N/A	VARIES, DEPENDS ON DISEASE OR INSECT INFESTATION
WATERING OF PLANT MATERIAL SHALL TAKE PLACE FOR FOURTEEN CONSECUTIVE DAYS AFTER PLANTING HAS BEEN COMPLETED UNLESS THERE IS SUFFICIENT NATURAL RAINFALL	BY HAND	IMMEDIATELY AFTER COMPLETION OF PROJECT	N/A

# MATERIAL CRECIPICATIONS FOR DIORFTENITION

***			
MATERIAL	SPECIFICATION	SIZE	NOTES
PLANTINGS	SEE LANDSCAPE PLANS	SEE PLAN	PLANTINGS ARE SITE-SPECIFIC - SEE LANDSCAPE PLAN
PLANTINGS SOILS (2' to 4' DEEP)			USDA SOIL TYPES LOAMY SAND OR SANDY LOAM; CLAY CONTENT < 5%
ORGANIC CONTENT	Min. 10% BY DRY WEIGHT (ASTM D 2974)		
PEA GRAVEL DIAPHRAGM	PEA GRAVEL; ASTM-D-448	No. 8 or No. 9 (1/8" to 3/8")	
CURRENT DRAIN	ORNAMENTAL STONE; WASHED COBBLES	STONE: 2" to 5"	
GEOTEXTILE	SEE APPENDIX A, TABLE A.4	N/A	PE TYPE 1 NONWOVEN
GRAVEL (UNDERDRAINS AND INFILTRATION BERMS)	AASHTO M-43	No. 57 or No. 6 AGGREGATE (3/8" to 3/4")	
UNDERDRAIN PIPING	F 758, TYPE PS 28 or AASHTO M-278	4" to 6" RIGID (SCH-40) PVC or SDR-35	SLOTTED OR PERFORATED PIPE; 3/8" PERF. @ 6" ON CENTER, 4 HOLES PER ROW; MINIMUM OF 3" OF GRAVEL OVER PIPES; NOT NECESSARY UNDERNEATH PIPES. PERFORATED PIPE SHALL BE WRAPPED WITH 1/4" GALVANIZED HARDWARE CLOTH
POURED IN PLACE CONCRETE (IF REQUIRED)	MSHA MIX No. 3; f <sub>C</sub> = 3500 psi © 28 DAYS, NORMAL WEIGHT, AIR-ENTRAINED; REINFORCING TO MEET ASTM-615-60	9-2-21 N/A	ON-SITE TESTING OF POURED-IN-PLACE CONCRETE REQUIRED:  28 DAY STRENGTH AND SLUMP TEST; ALL CONCRETE DESIGN (CAST-IN-PLACE OR PRE-CAST) NOT USING PREVIOUSLY APPROVED STATE OR LOCAL STANDARDS REQUIRES DESIGN DRAWNGS SEALED AND APPROVED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF MAYLAND - DESIGN TO INCLUDE MEETING ACI CODE 350.R/89; VERTICAL LOADING [H-10 OR H-20]; ALLOWABLE HORIZONTAL LOADING (BASED ON SOIL PRESSURES); AND ANALYSIS OF POTENTIAL CRACKING
SAND	AASHTO M-6 or ASTM-C-33	0.02" to 0.04"	SAND SUBSTITUTIONS SUCH AS DIABASE AND GRAYSTONE (AASHTO) #10 ARE NOT ACCEPTABLE. NO CALCIUM CARBONATED OR DOLOMITIC SAND SUBSTITUTION ARE ACCEPTABLE. NO "ROCK DUST" CAN BE USED FOR SAND

INSPECTION REQUIREMENT DURING CONSTRUCTION THE CONTRACTOR SHALL NOTIFY THE DAVIS, MOORE, SHEARON & ASSOC. AT 443-262-9130 THREE (3) DAYS IN ADVANCE OF BEGINNING CONSTRUCTION FOR THE FOLLOWING:

(1) INSTALLATION OF CLOSED STORM DRAIN SYSTEMS;

(a) DURING EXCAVATION TO SUBGRADE (b) DURING PLACEMENT OF PIPES

(c) DURING CONSTRUCTION OF ANY APPURTENANT CONVEYANCE SYSTEMS (d) DURING COMPLETION OF FINAL GRADING AND ESTABLISHMENT OF PERMANENT

(2) LOCATION, EXCAVATION, CONSTRUCTION AND PLANTING OF STORMWATER MANAGEMENT AREAS (a) DURING EXCAVATION TO SUBGRADE;

DURING PLACEMENT OF BACKFILL AND PLACEMENT OF UNDERDRAIN SYSTEMS; DURING PLACEMENT OF PEA GRAVEL AND ALL FILTER MEDIA; d) DURING CONSTRUCTION OF APPURTENANT CONVEYANCE SYSTEMS SUCH AS

FLOW DIVERSION STRUCTURES, PRE-FILTERS AND FILTERS, INLETS, OUTLETS, ORIFICES, AND FLOW DISTRIBUTION STRUCTURES; AND

(e) UPON COMPLETION OF FINAL GRADING AND ESTABLISHMENT OF PERMANENT STABILIZATION:

(3) FINAL LOT GRADING.

#### **B.4.C Specifications for Bioretention**

#### Materials Specifications

The allowable materials to be used in bioretention area are detailed in Table B.4.1

#### Filtering Media or Planting Soil

for each location where the topsoil was excavated.

The soil shall be a uniform mix, free of stones, stumps, roots or other similar objects larger than two inches. No other materials or substances shall be mixed or dumped within the bioretention area that may be harmful to plant growth, or prove a hindrance to the planting or maintenance operations. The planting soil shall be free of Bermuda grass, Quackgrass, Johnson grass, or other noxious weeds as specified under COMAR 15.08.01.05.

The planting soil shall be tested and shall meet following criteria:

-Soil Component - Loamy Sand or Sandy Loam (USDA Soil Textural Classification) -Organic Content - Minimum 10% by dry weight (ASTM D 2974). In general, this can be met with a mixture of loamy sand (60%-65%) and compost (35% to 40%) or sandy loam (30%), coarse sand (30%), and compost (40%). -Clay Content - Media shall have a clay content of less than 5%.

may be mixed into the soil to increase or decrease pH. There shall be at least one soil test per project. Each test shall consist of both the standard soil test for pH, and additional tests of organic matter, and soluble salts. A textural analysis is required from the site stockpiled topsoil. If topsoil is imported, then a texture analysis shall be performed

-pH Range - Should be between 5.5 - 7.0. Amendments (e.g., lime, iron sulfate plus sulfur)

### Compaction

It is very important to minimize compaction of both the base of bioretention practices and the required backfill. When possible, use excavation hoes to remove original soil. If practices are excavated using a loader, the contractor should use wide track or marsh track equipment, or light equipment with turf type tires. Use of equipment with narrow tracks or narrow tires, rubber tires with large lugs, or high pressure tires will cause excessive compaction resulting in reduced infiltration rates and is not acceptable. Compaction will significantly contribute to design failure.

Compaction can be alleviated at the base of the bioretention facility by using a primary tilling operation such as a chisel plow, ripper, or subsoiler. These tilling operations are to refracture the soil profile through the 12 inch compaction zone. Substitute methods must be approved by the engineer. Rototillers typically do not till deep enough to reduce the effects of compaction from

Rototill 2 to 3 inches of sand into the base of the bioretention facility before backfilling the optional sand layer. Pump any ponded water before preparing (rototilling) base.

When backfilling the topsoil over the sand layer, first place 3 to 4 inches of topsoil over the sand, then rototill the sand/topsoil to create a gradation zone. Backfill the remainder of the topsoil to final grade.

When backfilling the bioretention facility, place soil in lifts 12" to 18". Do not use heavy equipment within the bioretention basin. Heavy equipment can be used around the perimeter of the basin to supply soils and sand. Grade bioretention materials with light equipment such as a compact loader or a dozer/loader with marsh tracks.

#### Plant Material

#### See Landscape Plans.

# Plant Installation

Compost is a better organic material source, is less likely to float, and should be placed in the invert and other low areas. Mulch should be placed in surrounding to a uniform thickness of 2" to 3". 3?. Shredded or chipped hardwood mulch is the only accepted mulch. Pine mulch and wood chips will float and move to the perimeter of the bioretention area during a storm event and are not acceptable. Shredded mulch must be well aged (6 to 12 months) for acceptance.

Rootstock of the plant materials shall be kept moist during transport and on—site storage. The plant root ball should be planted so 1/8th of the ball is above final grade surface. The diameter of the planting pit shall be at least six inches larger than the diameter of the planting ball. Set and maintain the plant straight during the entire planting process. Thoroughly water ground bed cover after installation.

Trees shall be braced using 2" by 2" stakes only as necessary and for the first growing season only. Stakes are to be equally spaced on the outside of the tree ball.

Grasses and legume seed should be drilled into the soil to a depth of at least one inch. Grass and legume plugs shall be planted following the non-grass ground cover planting specifications.

The topsoil specifications provide enough organic material to adequately supply nutrients from natural cycling. The primary function of the bioretention structure is to improve water quality. Adding fertilizers defeats, or at a minimum, impedes this goal. only add fertilizer if wood chips or mulch are used to amend the soil. Rototill urea fertilizer at a rate of 2 pounds per 1000 square

# Underdrains

Underdrains should meet the following criteria (See profiles for modifications to specifications below):

-Pipe-Should be 4" to 6" diameter, slotted or perforated rigid plastic pipe (ASTMF 758, Type PS 28, or AASHTO-M-278) in a gravel layer. The preferred material is slotted, 4" rigid pipe (e.g., PVC or HDPE).

-Perforations-If perforated pipe is used, perforations should be ?? diameter located 6" on center with a minimum of four holes per row. Pipe shall be wrapped with a 1/4? (No. 4 or 4x4) galvanized hardware cloth. -Gravel-The gravel layer (No. 57 stone preferred) shall be at least 3" thick above and below the underdrain.

-The main collector pipe shall be at a minimum 0.5% slope. -A rigid, non-perforated observation well must be provided (one per every 1,0000 square feet) to provide a clean—out port and monitor performance of the filter. -A 4" layer of pea gravel (1/8" to 3/8" stone) shall be located between the filter media and

underdrain to prevent migration of fines into the underdrain. This layer may be considered part of the filter bed when bed thickness exceeds 24". The main collector pipe for underdrain systems shall be constructed at a minimum slope of 0.5%. Observation wells and/or clean—out pipes must be provided (one minimum per every 1000 square

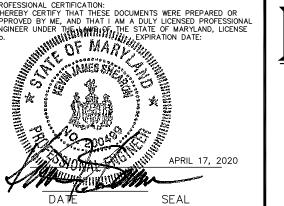
# Miscellaneous

feet of surface area).

PER COMMENTS

The bioretention facility may not be constructed until all contributing drainage area has been stabilized.

KENT COUNTY PLANNING AND ZONING KENT COUNTY DEPARTMENT OF PUBLIC WORKS KENT COUNTY HEALTH DEPARTMENT KENT SOIL AND WATER CONSERVATION DISTRICT





FAX: 1-443-262-9148

ENGINEERING, DRAFTING/DESIGN, ENVIRONMENTAL SERVICES & SURVEYING P.O. BOX 80 CENTREVILLE, MARYLAND 21617 PHONE: 1-443-262-9130

TAX MAP - 28, GRID - 4C, PARCEL - 120

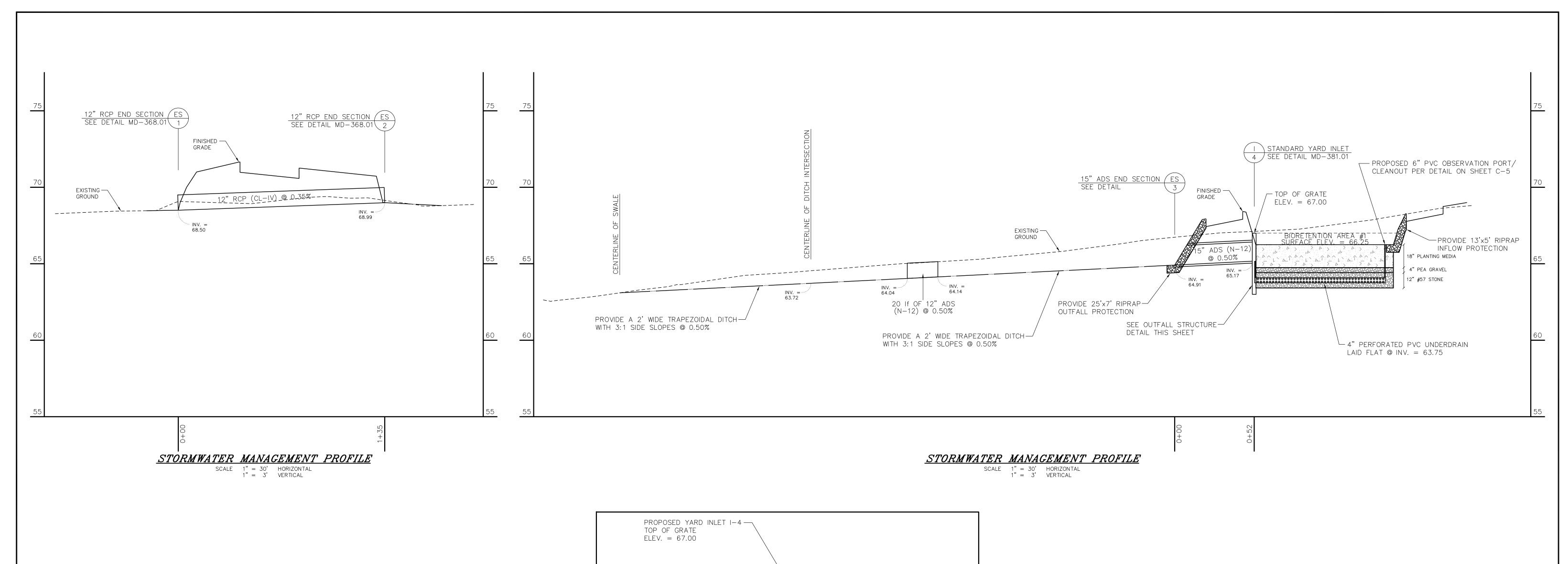
STORMWATER MANAGEMENT DETAILS AND SPECIFICATIONS

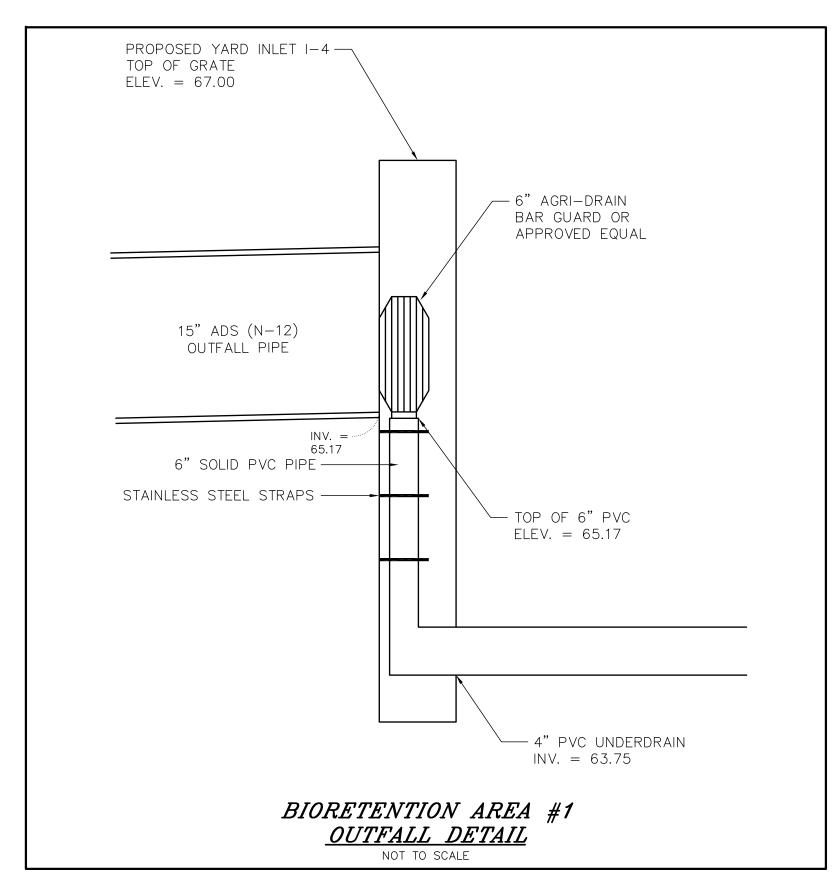
THE ANIMAL CARE SHELTER FOR KENT COUNTY

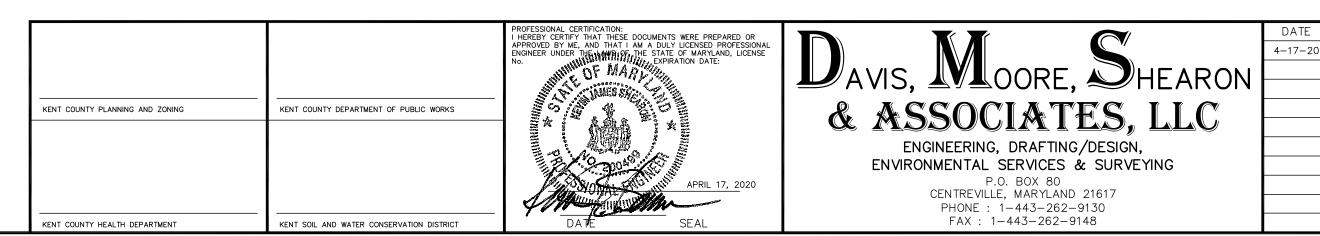
ON THE LANDS OF THE HUMANE SOCIETY OF KENT COUNTY, INC.

MARCH '20 AS SHOWN JOB No. RAWN BY 2019112 OLDER Ref. ESIGNED BY 28-2019112 KJS SHEET No. - C-5

CADD FILE - 19112C05







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REVISION
PER COMMENTS

FOR

THE ANIMAL CARE SHELTER
FOR KENT COUNTY

ON THE LANDS OF

THE HUMANE SOCIETY OF KENT COUNTY, INC.

TAX MAP — 28, GRID — 4C, PARCEL — 120

SHEET No. - C-6

CADD FILE - 19112C06

AS SHOWN

DESIGNED BY

KJS

DRAWN BY

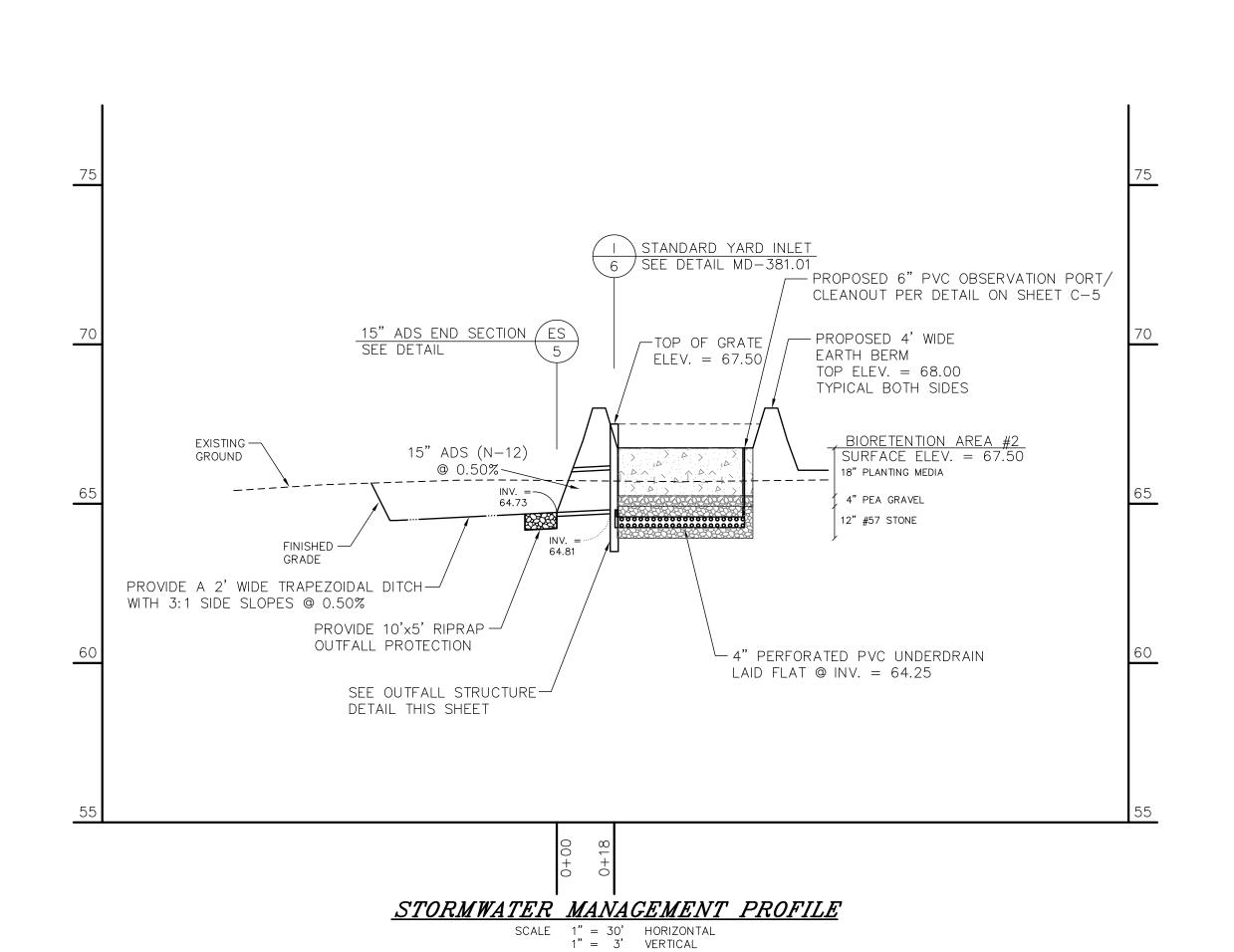
MARCH '20

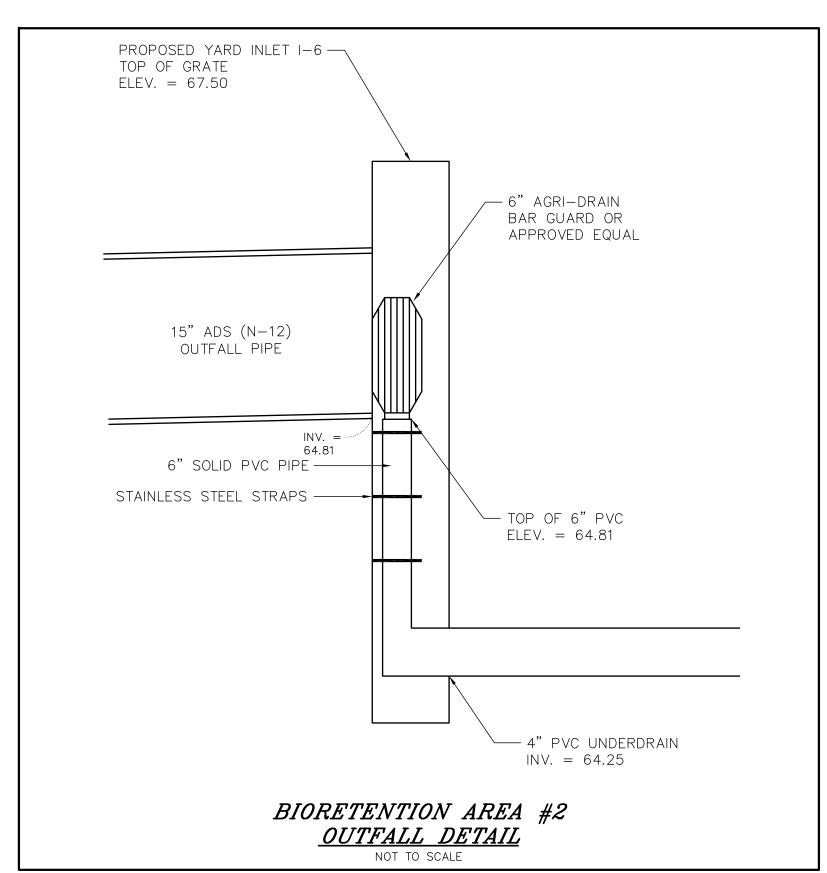
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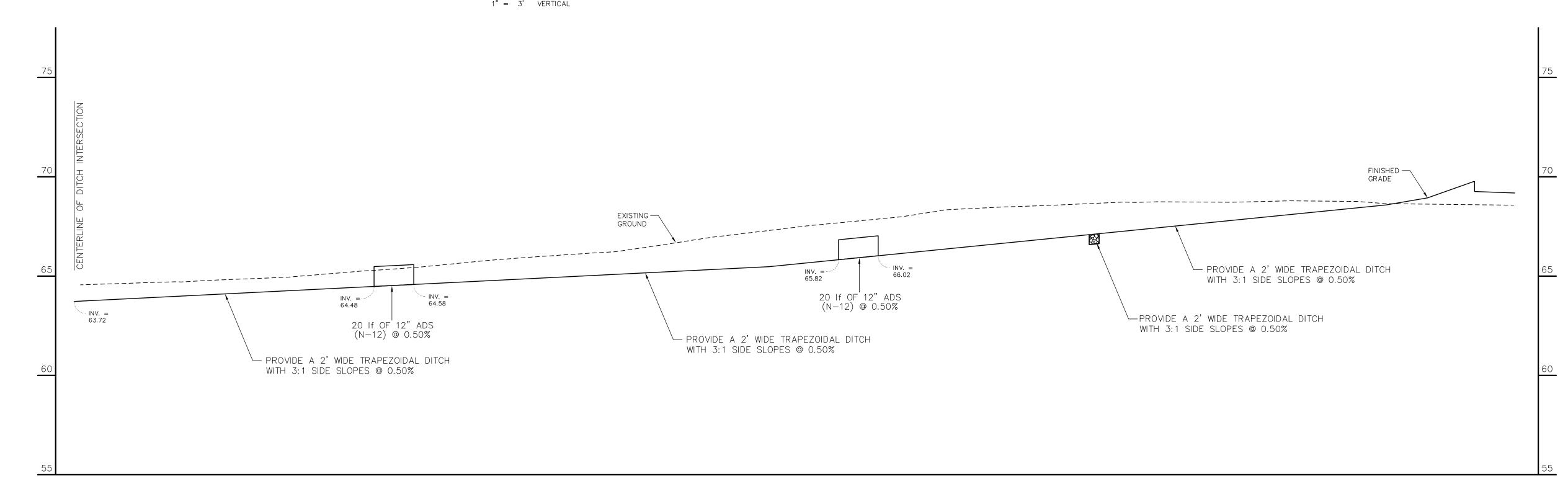
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FOLDER Ref.

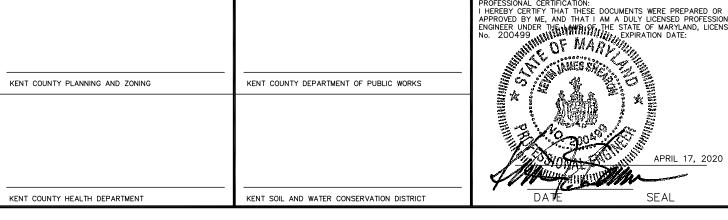
JOB No.







# STORMWATER MANAGEMENT PROFILE SCALE 1" = 30' HORIZONTAL 1" = 3' VERTICAL



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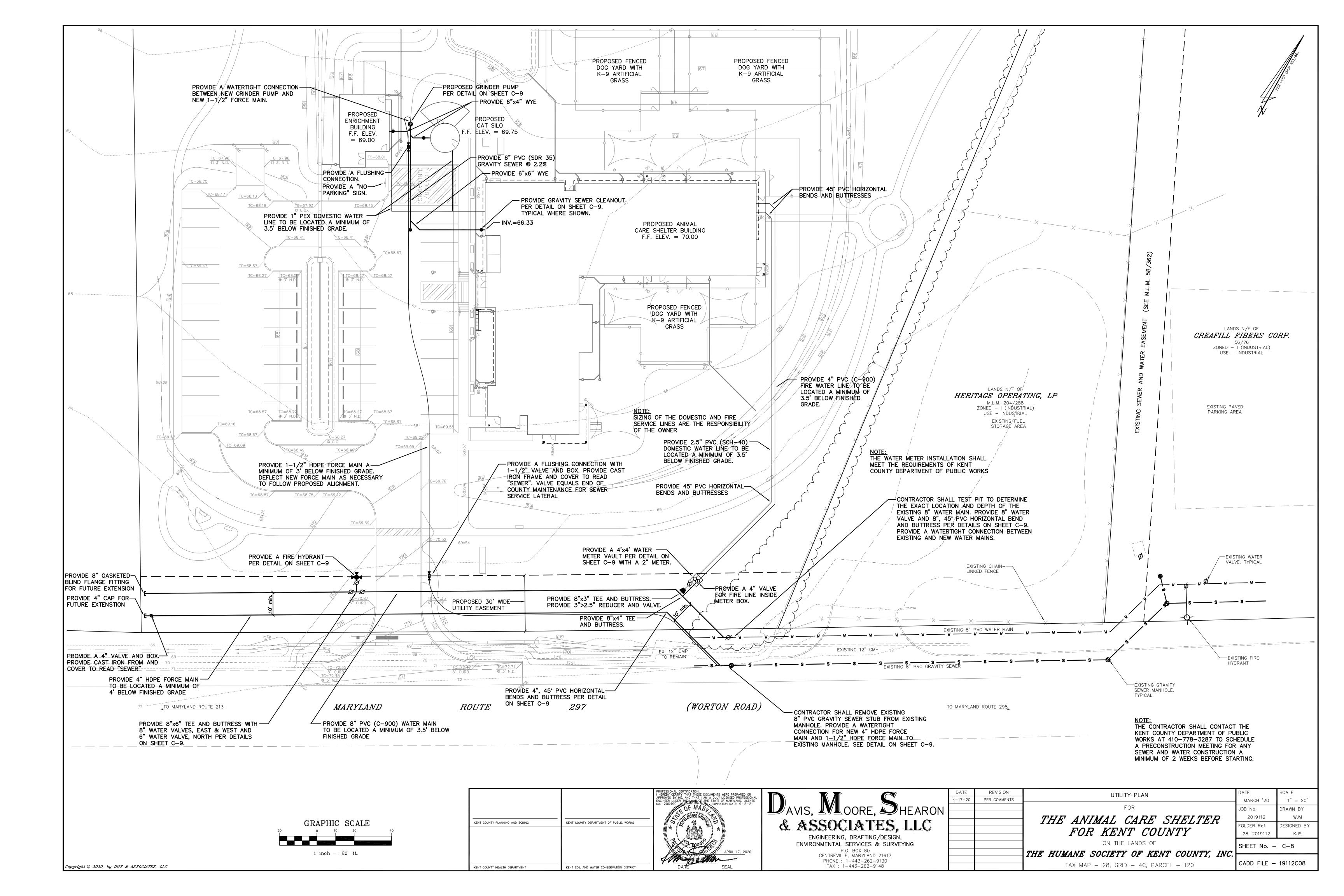
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	LAVIS, LACOORE, ACHEARON	
	& ASSOCIATES, LLC	
	ENGINEERING, DRAFTING/DESIGN,	
	ENVIRONMENTAL SERVICES & SURVEYING P.O. BOX 80	
	CENTREVILLE, MARYLAND 21617 PHONE: 1-443-262-9130	
	FAX : 1-443-262-9148	

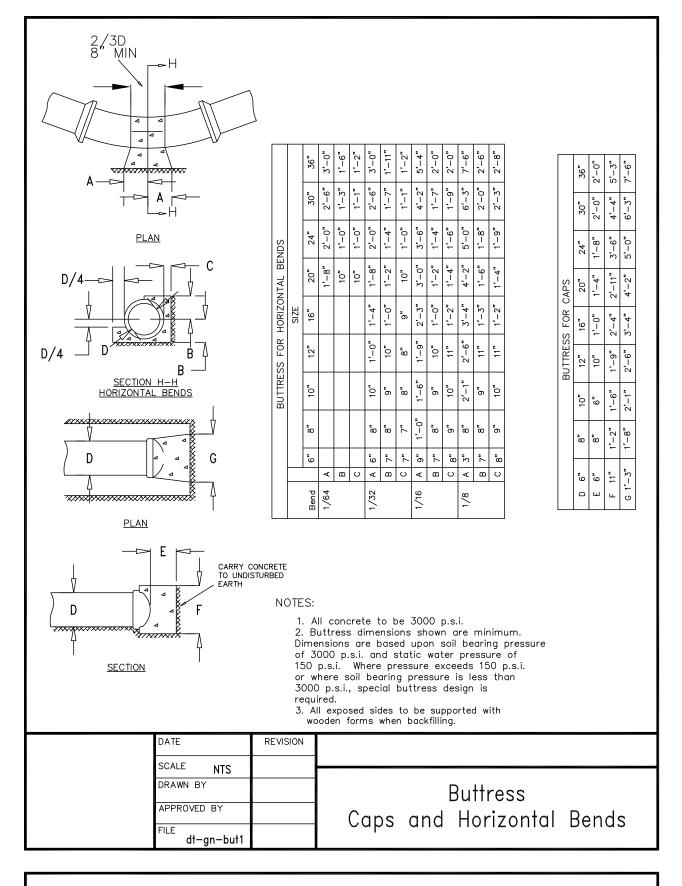
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	FOR KENT COUNTY
	ON THE LANDS OF

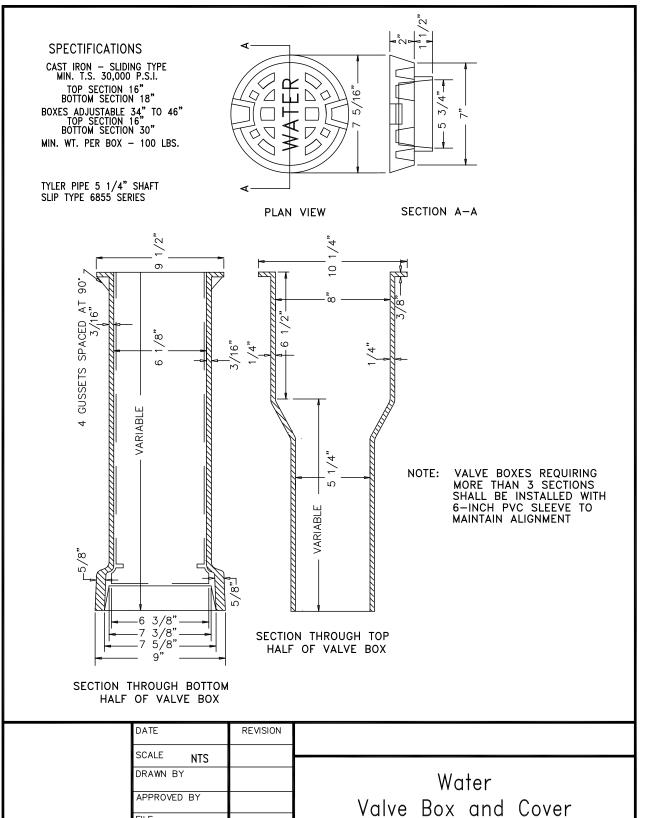
TAX MAP - 28, GRID - 4C, PARCEL - 120

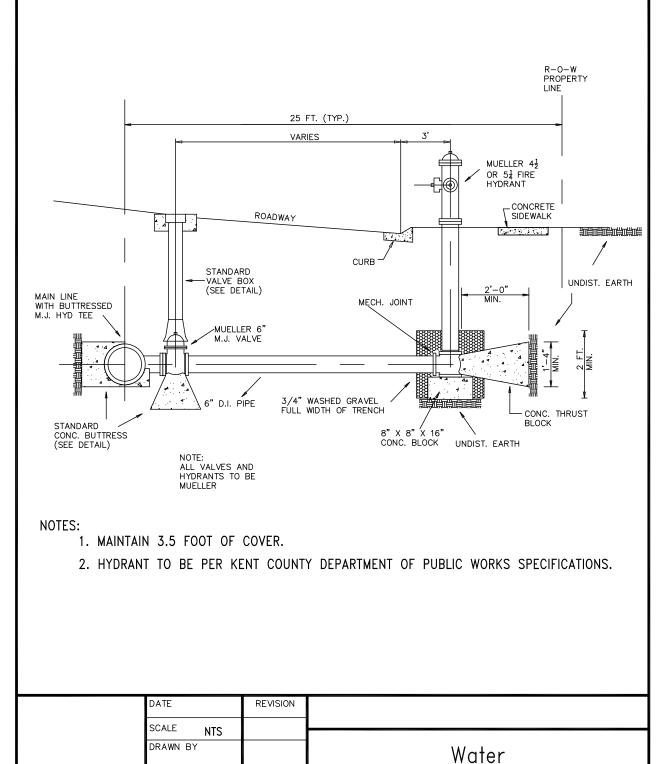
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MARCH '20	AS SHOWN
JOB No.	DRAWN BY
2019112	WJM
FOLDER Ref.	DESIGNED BY
28-2019112	KJS
 SHEET No	C-7

THE HUMANE SOCIETY OF KENT COUNTY, INC. CADD FILE - 19112C07



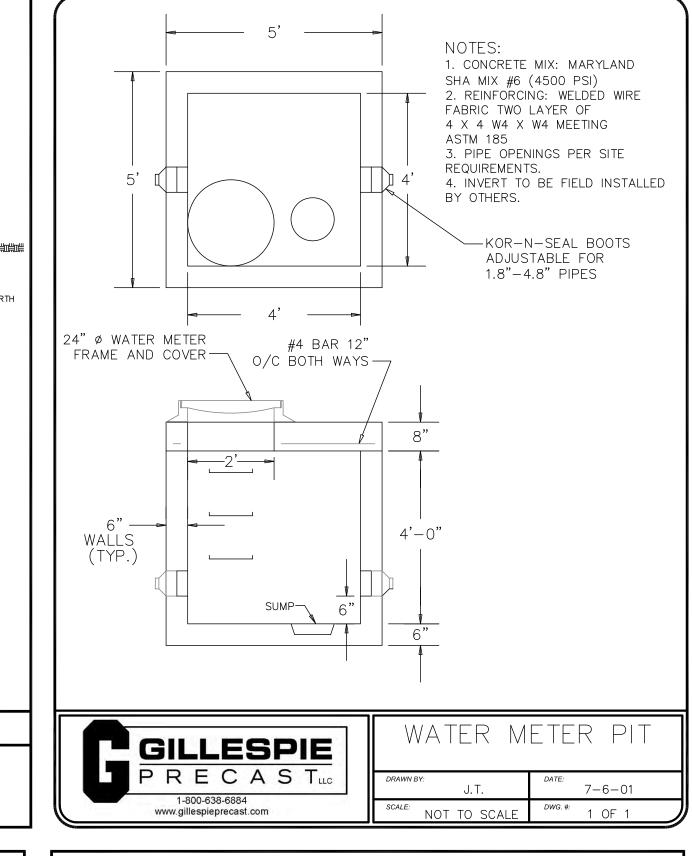


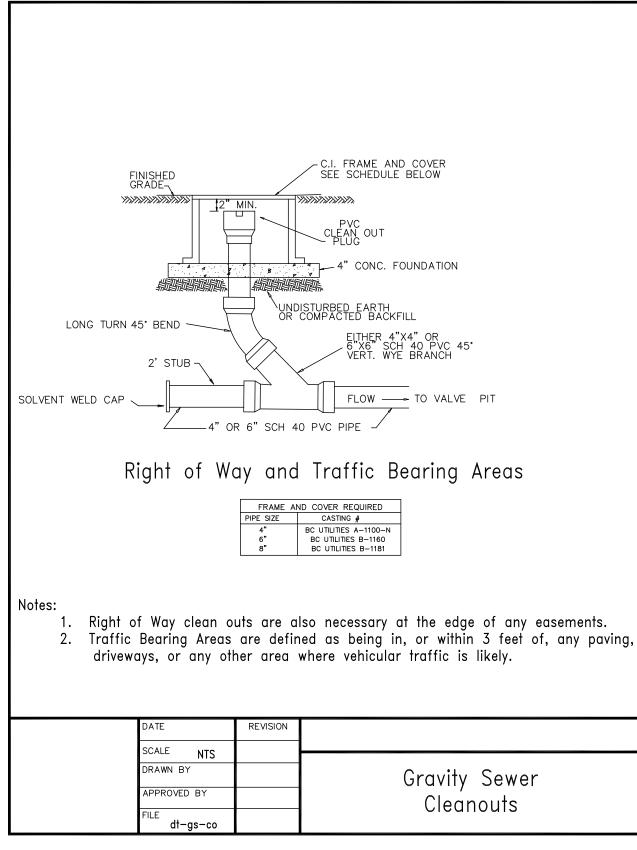


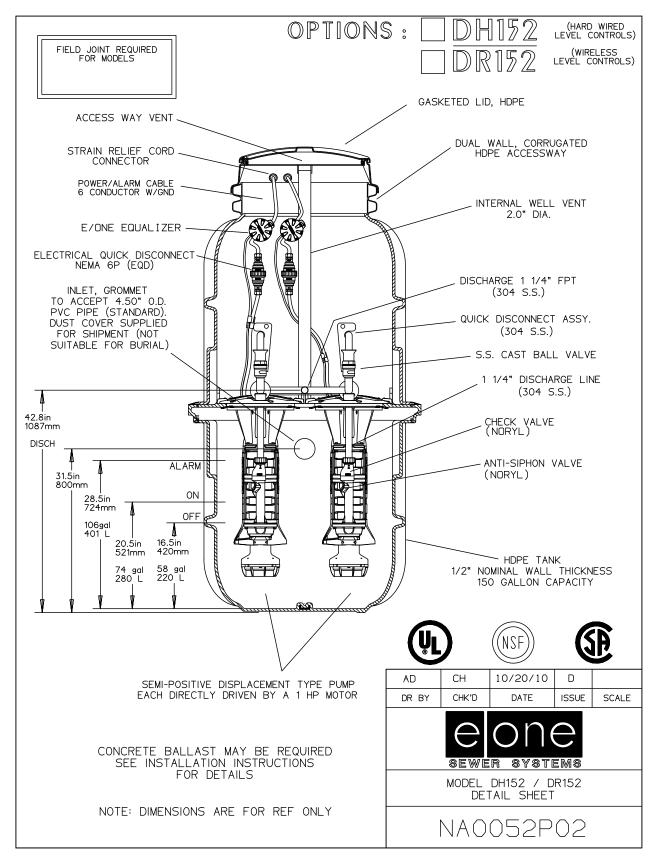


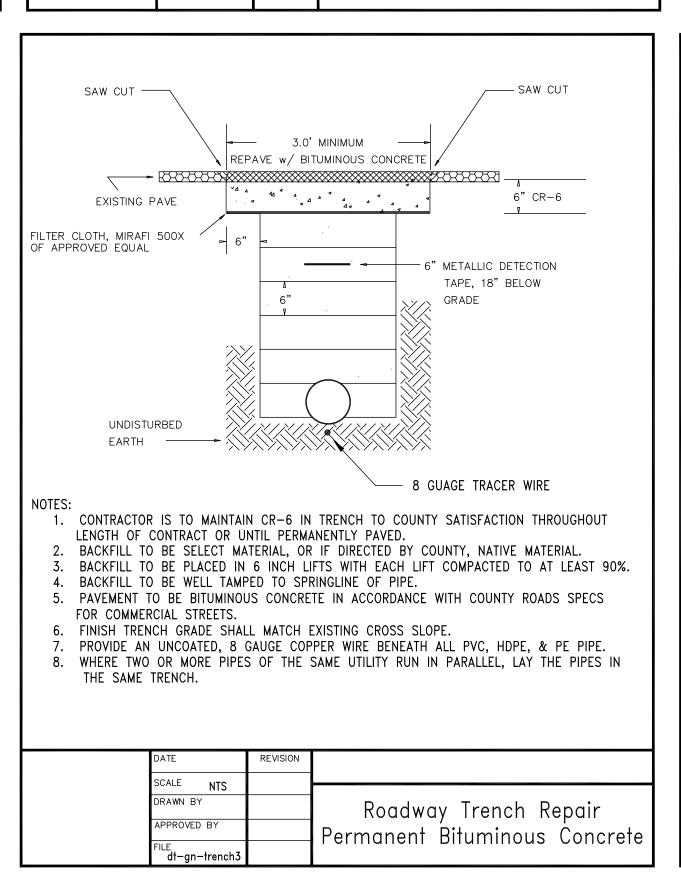
Fire Hydrant Setting

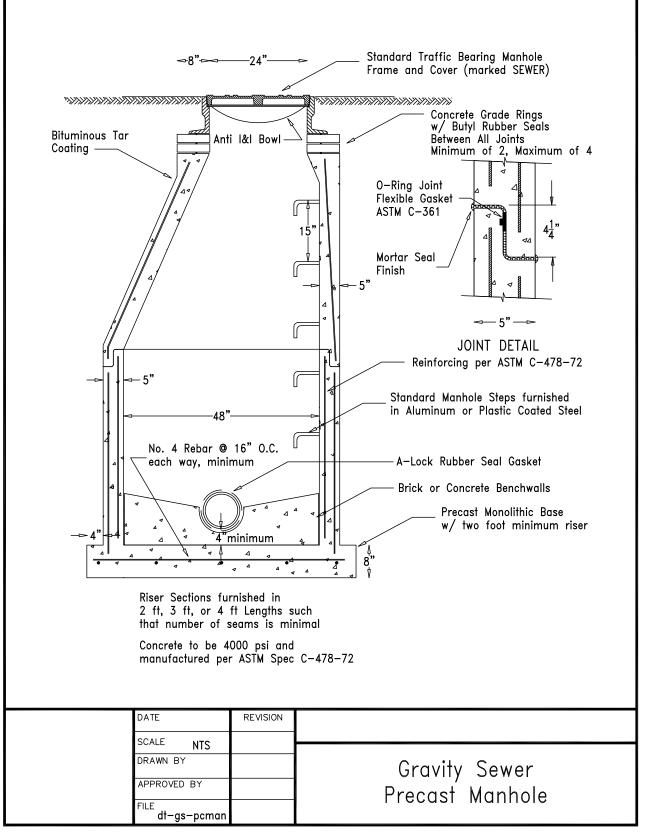
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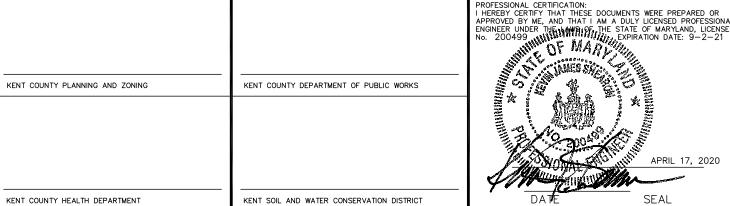








NOTE:
TESTING AND DISINFECTION OF THE PROPOSED WATER MAIN IN ACCORDANCE WITH STATE STANDARDS



Davis, Moore, Shearon & ASSOCIATES, LLC 4-17-20 ENGINEERING, DRAFTING/DESIGN, ENVIRONMENTAL SERVICES & SURVEYING P.O. BOX 80 CENTREVILLE, MARYLAND 21617

PHONE: 1-443-262-9130 FAX: 1-443-262-9148

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PER COMMENTS	OTIENT BETAILS
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	FOR KENT COUNTY
	ON THE LANDS OF

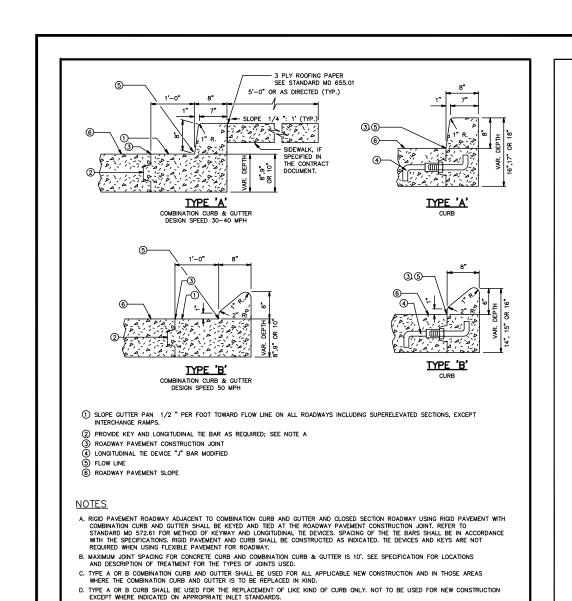
THE HUMANE SOCIETY OF KENT COUNTY, INC. CADD FILE - 19112C09 TAX MAP - 28, GRID - 4C, PARCEL - 120

JOB No. DRAWN BY 2019112 WJM OLDER Ref. ESIGNED BY KJS 28-2019112 SHEET No. - C-9

AS SHOWN

MARCH '20

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602

APPROVED DIRECTOR - OFFICE OF HIGHWAY DF

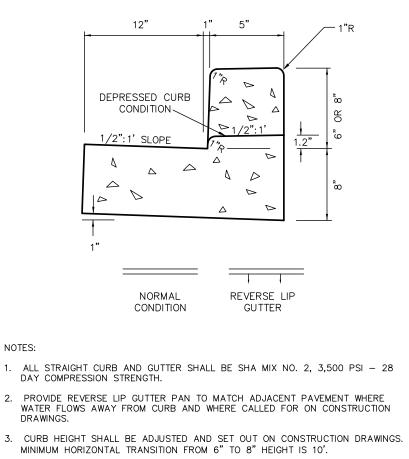
Maryland Department of Transportation

STATE HIGHWAY ADMINISTRATION

STANDARD TYPES A & B CONCRETE CURB AND

COMBINATION CONCRETE CURB & GUTTER

STANDARD NO. MD-620.02



- 1. ALL STRAIGHT CURB AND GUTTER SHALL BE SHA MIX NO. 2, 3,500 PSI 28
- 4. ALL METHODS OF CONSTRUCTION AND LOCATIONS OF CONSTRUCTION OR

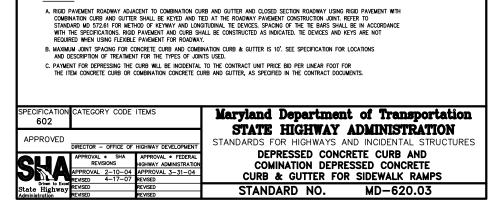
CONTRACTION JOINTS SHALL BE CONSISTENT WITH THE MDOT/SHA STANDARD

SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, 2001 EDITION.

		C. PAYME	
		IHE II	EM CONCE
SCALE:			
NO SCALE		SPECIFICATION 602	CATEG
	 I		

6" CURB & GUTTER DETAIL

STANDARD NO. RD-103.02



 $\underbrace{\text{$N$ SLOPE GUTTER PAN}} \text{$\%$ PER FOOT TOWARD FLOW LINE ON ALL ROADWAYS INCLUDING SUPERELEVATED SECTIONS, EXCEPT INTERCHANGE RAMPS.}$ 

<u>DEPRESED</u>

CONCRETE CURB

FOR SIDEWALK RAMPS

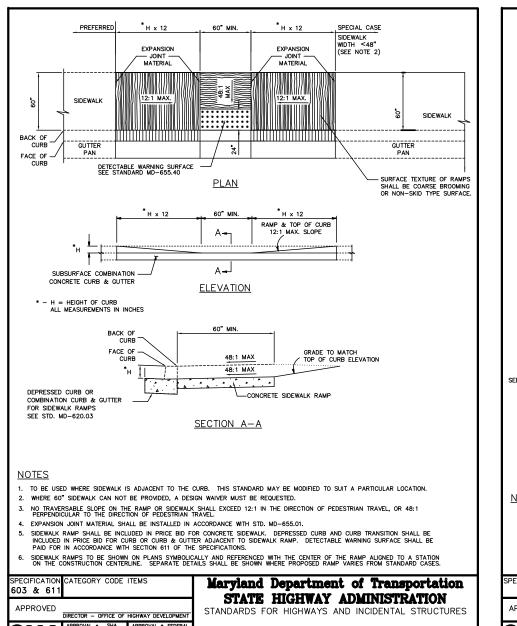
DEPRESED CURB FOR COMBINATION

 $\ensuremath{ \textcircled{2}}$  provide key and longitudinal tie bar as required; see note a

ROADWAY PAVEMENT CONSTRUCTION JOINT
 LONGITUDINAL TIE DEVICE "J" BAR MODIFIED
 FLOW LINE

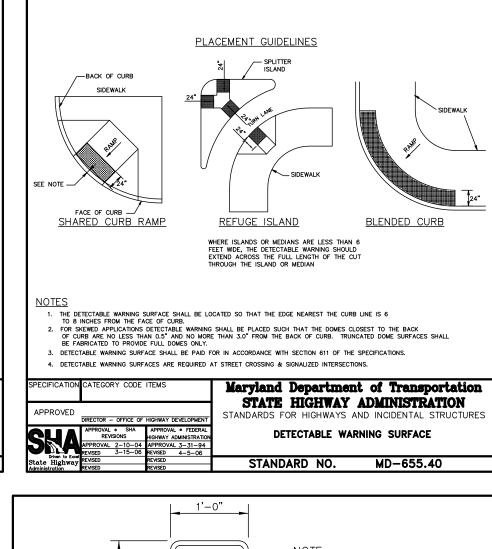
6 ROADWAY PAVEMENT SLOPE

CONCRETE CURB & GUTTER FOR SIDEWALK RAMPS



PARALLEL

MD-655.12



MAT DETAILS

0 0 0

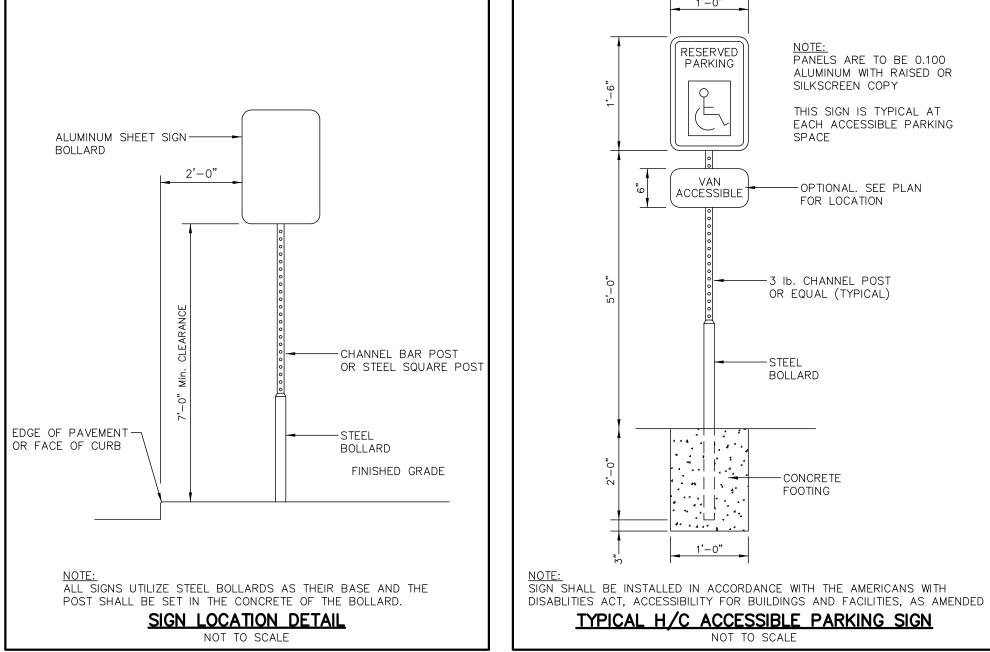
DOME SPACING

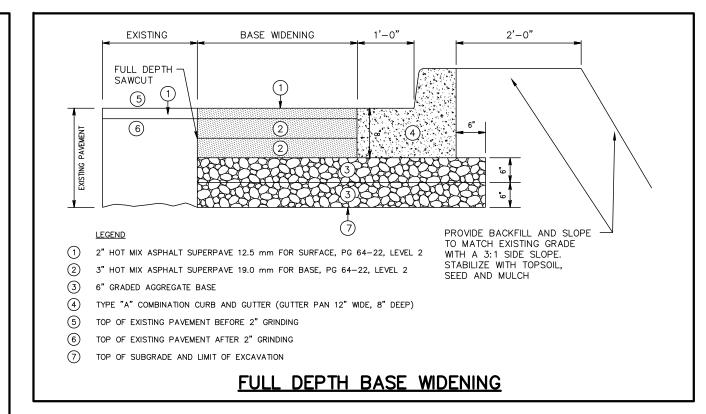
0.2"

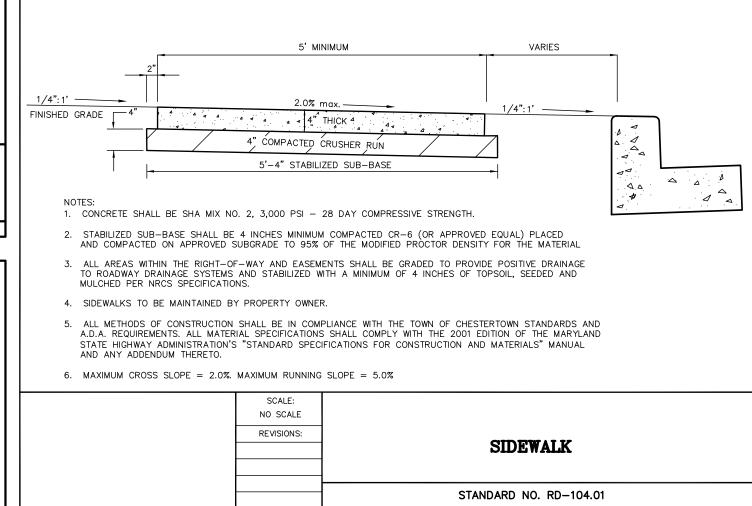
SEE PLACEMENT GUIDELINES BELOW

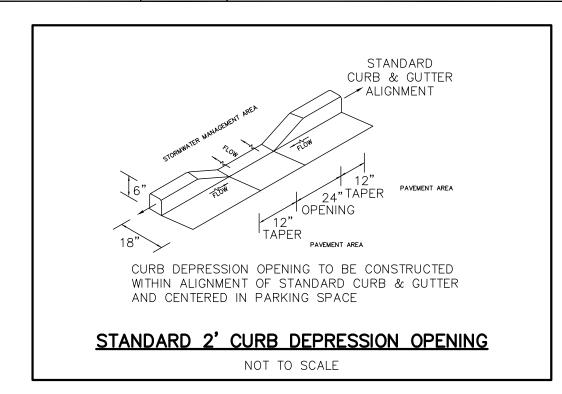
0.9" TO 1.4"

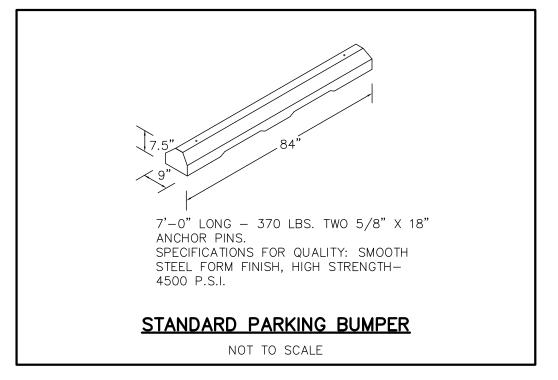
DOME SECTION

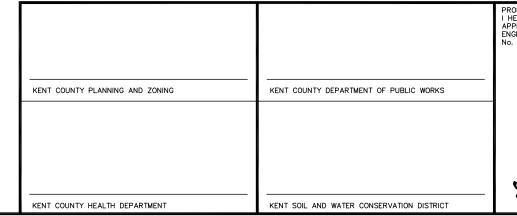


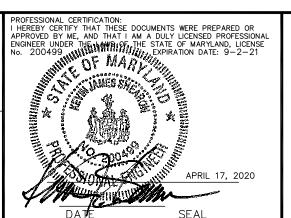


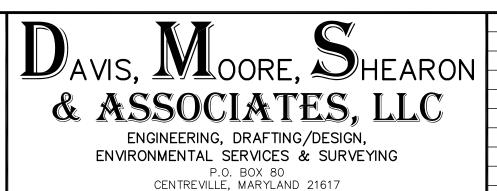












PHONE: 1-443-262-9130 FAX: 1-443-262-9148

	DATE	REVISION	
	4-17-20	PER COMMENTS	
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SITE DETAILS	DATE
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FOR	JOB No
THE ANIMAL CARE SHELTER	201
	FOLDER
FOR $KENT$ $COUNTY$	28-2

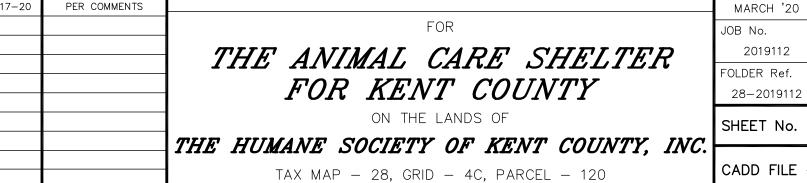
KJS SHEET No. - C-10 CADD FILE - 19112C10

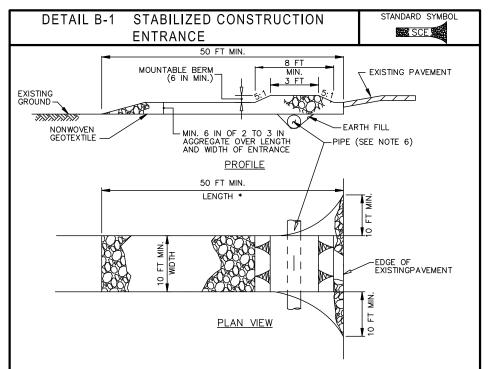
AS SHOWN

DRAWN BY

DESIGNED BY

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#### CONSTRUCTION SPECIFICATIONS

. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN, VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (\*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS

PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE

- MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT
- . PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS. 4 PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOU
- REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE. MAINTAIN FNTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE TURAL RESOURCES CONSERVATION SEF MARYLAND DEPARTMENT OF ENVIRONMEN WATER MANAGEMENT ADMINISTRATION

**ELEVATION** 

CROSS SECTION

JOINING TWO ADJACENT SILT

FENCE SECTIONS (TOP VIEW)

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

· L8 IN MIN. DEPTH INTO GROUND

FENCE POST 18 IN MIN.
— ABOVE GROUND

NATATATATA.

STAPLE——

STAPLE ---

STAPLE-

TWIST POSTS TOGETHER

└─STAPLE

STAPLE

MARYLAND DEPARTMENT OF ENVIRONMEN WATER MANAGEMENT ADMINISTRATION

DETAIL E-1 SILT FENCE

KIKIKIK.

L—STAPLE

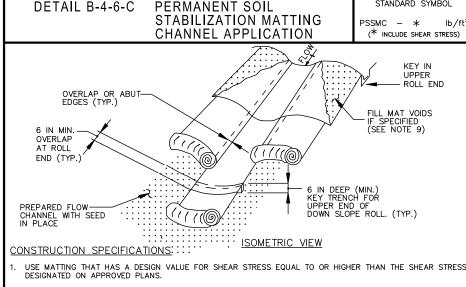
EMBED GEOTEXTILE-MIN. OF 8 IN VERTICALLY INTO THE GROUND. BACKFILL AND COMPACT THE SOIL ON BOTH SIDES OF GEOTEXTILE.

STEP '

STEP 3

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERV

STAPLE——



USE PERMANENT SOIL STABILIZATION MATTING MADE OF OPEN WEAVE SYNTHETIC, NON-DEGRADABLE FIBERS OR ELEMENTS OF UNIFORM THICKNESS AND DISTRIBUTION THROUGHOUT. CHEMICALS USED IN THE MAT MUST BE NON-LEACHING AND NON-TOXIC TO VECETATION AND SEED GERMINATION AND NON-INJURIOUS TO THE SKIN. IF PRESENT, NETTING MUST BE EXTRUDED PLASTIC WITH A MAXIMUM MESH OPENING OF 2x2 INCHES AND SUFFICIENTLY BONDED OR SEWN ON 2 INCH CENTERS ALONG LONGITUDINAL AXIS OF THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT MATERIAL. SECURE MATTING USING STEEL STAPLES OR WOOD STAKES. STAPLES MUST BE "U" OR "T" SHAPED STEEL WIRE HAVING A MINIMUM GAUGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 1 TO 1 ½ INCHES MIDE AND BE A MINIMUM OF 6 INCHES LONG. "T" SHAPED STAPLES MUST HAVE A MINIMUM 8 INCH MAIN LEG, A MINIMUM 1 INCH SECONDARY LEG, AND MINIMUM 4 HORD STAPLES MUST BE ROUGH—SAWN HARDWOOD, 12 TO 24 INCHES IN LENGTH, 1x3 INCH IN CROSS SECTION, AND WEDGE SHAPE AT THE POTTON.

PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDBED PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS, UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION AND SEDIMENT CONTROL

UNROLL MATTING IN DIRECTION OF WATER FLOW, CENTERING THE FIRST ROLL ON THE CHANNEL CENTER LINE. WORK FROM CENTER OF CHANNEL OUTWARD WHEN PLACING ROLLS. LAY MATTING SMOOTHLY AND FIRMLY UPON THE SEEDED SURFACE. AVOID STRETCHING THE MATTING. OVERLAP OR ABUT EDGES OF MATTING ROLLS PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSTREAM MAT OVERLAPPING ON TOP OF THE NEXT DOWNSTREAM MAT. KEY IN THE TOP OF SLOPE END OF MAT 6 INCHES (MINIMUM) BY DIGGING A TRENCH, PLACING THE MATTING ROLL END IN THE TRENCH, STAPLING THE MAT IN PLACE, REPLACING THE EXCAVATED MATERIAL, AND TAMPING TO SECURE THE MAT END IN THE KEY. STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND 2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS.

IF SPECIFIED BY THE DESIGNER OR MANUFACTURER AND DEPENDING ON THE TYPE OF MAT BEING INSTALLED ONCE THE MATTING IS KEYED AND STAPLED IN PLACE, FILL THE MAT VOIDS WITH TOP SOIL OR GRANULAR MATERIAL AND LIGHTLY COMPACT OR ROLL TO MAXIMIZE SOIL/MAT CONTACT WITHOUT CRUSHING MAT. ). ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.

EMBED GEOTEXTILE A MINIMUM OF 8 INCHES VERTICALLY INTO THE GROUND. BACKFILL AND COMPACT

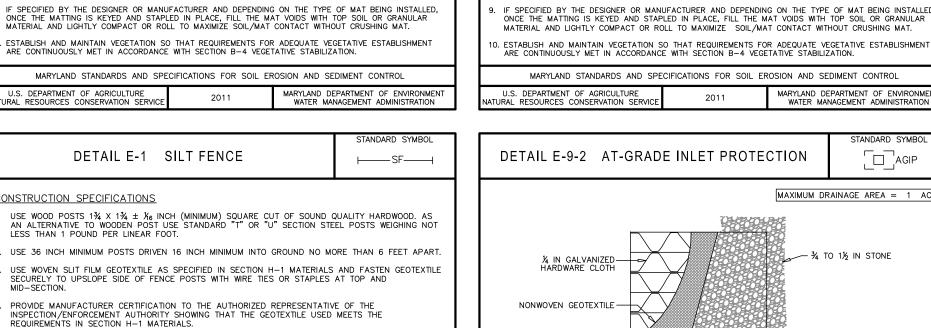
. EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS

. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL FENCE.

WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, TWIST, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL.

ONSTRUCTION SPECIFICATIONS

DESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION. MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE JRAI RESOURCES CONSERVATION SERV U.S. DEPARTMENT OF AGRICULTURE RAL RESOURCES CONSERVATION SERVI MARYLAND DEPARTMENT OF ENVIRONI WATER MANAGEMENT ADMINISTRATIO MARYLAND DEPARTMENT OF ENVIRONM WATER MANAGEMENT ADMINISTRATION



DETAIL B-4-6-D PERMANENT SOIL

ROLL EDGES (TYP.)

CONSTRUCTION SPECIFICATIONS

STABILIZATION MATTING

ISOMETRIC VIEW

USE MATTING THAT HAS A DESIGN VALUE FOR SHEAR STRESS EQUAL TO OR HIGHER THAN THE SHEAR STRESS DESIGNATED ON APPROVED PLANS.

USE PERMANENT SOIL STABILIZATION MATTING MADE OF OPEN WEAVE SYNTHETIC, NON-DEGRADABLE FIBERS OR ELEMENTS OF UNIFORM THICKNESS AND DISTRIBUTION THROUGHOUT. CHEMICALS USED IN THE MAT MUST BE NON-LEACHING AND NON-TOXIC TO VEGETATION AND SEED GERMINATION AND NON-INJURIOUS TO THE SKIN. IF PRESENT, NETTING MUST BE EXTRUDED PLASTIC WITH A MAXIMUM MESH OPENING OF 2x2 INCHES AND SUFFICIENTLY BONDED OR SEWN ON 2 INCH CENTERS ALONG LONGITUDINAL AXIS OF THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT MATERIAL.

SECURE MATTING USING STEEL STAPLES OR WOOD STAKES. STAPLES MUST BE "U" OR "T" SHAPED STEEL

PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDBED PREPARATION, AND PERMANENT SEEDING IN

FERFORM FINAL GRADING, TOPSUL APPLICATION, SEEDBED PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN

UNROLL MATTING DOWN SLOPE. LAY MATTING SMOOTHLY AND FIRMLY UPON THE SEEDED SURFACE. AVOID STRETCHING THE MATTING.

OVERLAP OR ABUT EDGES OF MATTING ROLLS PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS

KEY IN THE TOP OF SLOPE END OF MAT 6 INCHES (MINIMUM) BY DIGGING A TRENCH, PLACING THE MATTING

BY 6 INCHES (MINIMUM), WITH THE UPSTREAM MAT OVERLAPPING ON TOP OF THE DOWNSLOPE MAT.

ROLL END IN THE TRENCH, STAPLING THE MAT IN PLACE, REPLACING THE EXCAVATED MATERIAL, AND TAMPING TO SECURE THE MAT END IN THE KEY.

STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND

2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS

WIRE HAVING A MINIMUM GAUGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 1 TO 1½ INCHES WIDE AND BE A MINIMUM OF 6 INCHES LONG. "T" SHAPED STAPLES MUST HAVE A MINIMUM 8 INCH MAIN LEG, A MINIMUM 1 INCH SECONDARY LEG, AND MINIMUM 4 INCH HEAD. WOOD STAKES MUST BE ROUGH—SAWN HARDWOOD, 12 TO 24 INCHES IN LENGTH, 1x3 INCH IN CROSS SECTION, AND WEDGE SHAPE AT

SLOPE APPLICATION

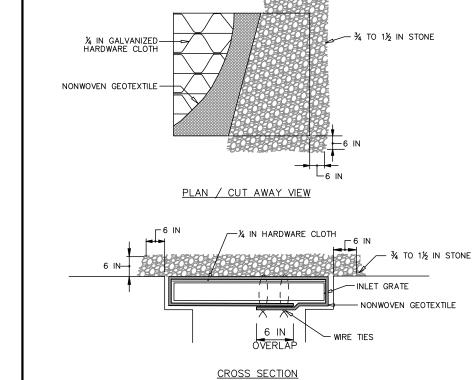
SSMS - \* lb/f

(\* INCLUDE SHEAR STRESS)

(SEE NOTE 9)

AGIP

- 6 IN MIN. OVERLAP



# CONSTRUCTION SPECIFICATIONS

- USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS. LIFT GRATE AND WRAP WITH NONWOVEN GEOTEXTILE TO COMPLETELY COVER ALL OPENINGS. SECURE WITH WIRE TIES AND SET GRATE BACK IN PLACE.
- PLACE CLEAN 3/4 TO 11/2 INCH STONE OR EQUIVALENT RECYCLED CONCRETE 6 INCHES THICK ON THE
- STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED

SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE

U.S. DEPARTMENT OF AGRICULTURE
URAL RESOURCES CONSERVATION SERVICE

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MARYLAND DEPARTMENT OF ENVIRONME WATER MANAGEMENT ADMINISTRATION MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

MARYLAND DEPARTMENT OF ENVIRONMEN WATER MANAGEMENT ADMINISTRATION

#### GENERAL NOTES

- 1. Notification of Kent County (410-778-7437) at least five (5) days prior to the start of work.
- 2. Prior to the start of work, the Contractor is to obtain County approval of any proposed plan changes and sequence of construction, specifically relating to installation, inspection, maintenance and removal of erosion and sediment control measures.
- 3. Sediment control measures are not to be removed until the areas served have established vegetative cover, or with the permission of the Kent County Sediment Control Inspector.
- 4. When pumping sediment—laden water, the discharge must be directed to an approved sediment trapping measure prior to
- release from the site. 5. All temporary stockpiles are to be located within areas
- temporary stabilized. 6. All sediment control dikes, swales, basins and flow lines to

protected by sediment control measures, and are to be

- basins will be temporarily seeded immediately upon installation to reduce the contribution to sediment loading. 7. Disposal of excess earth materials on State or Federal
- 8. Temporary soil erosion control and sediment control measures are to be provided as per the approved plan prior to grading operations. Location adjustments are to be made in the field as necessary. The minimum area practical shall be disturbed

disposed of at a location approved by the local authority.

property requires MDE Approval, otherwise materials are to be

9. If grading is completed out of a seeding season, graded areas are to be temporarily stabilized by mulch and mulch anchoring. Mulch material shall be unweathered, unchopped small grain straw spread at the rate of 1« to 2 tons per acre. Mulch anchoring to be accomplished by an approved method, use of a mulch anchoring tool is recommended where possible.

for the minimum possible time.

- 10. Implementation of the sediment control plan shall be in accordance with the "2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control", of the Department.
- 11. The Contractor is responsible for implementation and maintenance of the approved plan, and all other measures necessary to control, filter, or prevent sediment from leaving the site.
- 12. In case where stormwater management structures are a part of site development, removal of sediment control structures may not be accomplished before the contributing drainage area to the stormwater management structure is dewatered and stabilized.
- 13. On sites where infiltration techniques are utilized for the control of stormwater, extreme care must be taken to prevent all runoff from entering the structure during construction.
- 14. Sediment control for utility construction in areas outside of designed controls:
- (a) Excavated trench material shall be placed on the high side of the trench.
- (b) Immediately following pipe installation the trench shall be backfilled, compacted and stabilized at the end of each working day.
- (c) Temporary silt fence or straw bale dikes shall be placed immediately downstream of any disturbed area intended to remain disturbed longer than one working day.
- 15. All points on construction ingress and egress shall be protected to prevent tracking of mud onto public ways.

# 16. Site information

Total Area of Site Area Disturbed Area to be Roofed or Paved 0.90 Acres Total Fill 4,400 cy\*

THE FOLLOWING ITEMS HAVE BEEN ADDRESSED TO MEET THE REQUIREMENTS

OF THE GENERAL PERMIT FOR STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY (NPDES NUMBER MDR10, STATE DISCHARGE PERMIT NUMBER \_

CONTROL OF CONSTRUCTION EQUIPMENT AND VEHICLES EVALUATION AND APPROPRIATE LIMITATION OF SITE CLEARING

MAINTENANCE OF LIMITS OF DISTURBANCE TO PROTECT NATURAL AREAS

IDENTIFICATION OF SOILS AT HIGH RISK FOR EROSION AND ADVANCED

7. IDENTIFICATION OF STEEP SLOPES AND DESIGNATION OF LIMITATIONS ON

8. EVALUATION AND DESIGNATION OF STABILIZATION REQUIREMENTS AND TIME

LIMITS AND PROTECTION MEASURES FOR DISCHARGES TO THE CHESAPEAKE

BAY, IMPAIRED WATERS OR WATERS WITH AN ESTABLISHED TOTAL MAXIMUM

EVALUATION AND DESIGNATION OF SITE AREA FOR PHASING AND SEQUENCING

1. UTILIZATION OF ENVIRONMENTAL SITE DESIGN.

STABILIZATION TECHNIQUES TO BE USED

CLEARING THEM

DAILY LOAD (TMDL).

\* - CUT AND FILL AMOUNTS ARE APPROXIMATE THE CONTRACTOR SHALL DO A SEPARATE TAKE-OFF

5.00 Acres

4.42 Acres

#### EROSION & SEDIMENT CONTROL STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

- 1.) Contractor shall install soil erosion and sediment control devices prior to any grading. Following initial disturbance or re-disturbance, permanent or temporary stabilization shall be completed within three (3) calendar days as to the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes greater than three (3) horizontal to one (1) vertical (3:1) and seven days (7) as to all other disturbed or graded areas on the
- 2.) All temporary erosion and sediment control devices are to be provided as indicated on this plan, with location adjustments to be made in the field as necessary, and to be
  - 3.) Clearing and grubbing shall include all trees, brush, debris, root mat and organic

practical shall be disturbed for the minimal amount of time possible.

maintained at the end of each working day until project completion. The minimum area

- 4.) Temporary seeding shall be accomplished between February 15th through April 30th, or August 15th through November 30th. During other times, temporary mulching shall be
- 5.) Temporary seeding shall conform to the following applications: 436 lbs. per acre of 10—20—20; 4,000 lbs. per acre of ground limestone, to be incorporated into the soil by disking or other suitable means. Annual rye grass shall be applied at a rate of 50 lbs. per acre using suitable equipment. Mulching shall be accomplished immediately after

	Seed M		- ····	ļ ,,		
No. Species		Appl. Rate (lbs./ac.)	Seeding Dates	Seeding Depths	Fertilizer Rate (10-20-20)	Lime Rate
	ANNUAL RYE GRASS	50 lbs.	2/15-4/30 8/15-11/30	1/2"		
	BARLEY OATS WHEAT CEREAL RYE	72 lbs. 120 lbs.	2/15-4/30, 8/15-11/30 2/15-4/30, 8/15-11/30 2/15-4/30, 8/15-11/30 2/15-4/30, 8/15-12/15	1" 1" 1"	436 lb/ac 10 lb/ 1000 sf	2 tons/ac 90 lb/ 1000 sf
	FOXTAIL MILLET PEARL MILLET	30 lbs. 20 lbs.	5/1-8/14 5/1-8/14	1/2"		

- 6.) Mulching shall be unchopped, unrotted, small grain straw applied at a rate of  $2-2 \frac{1}{2}$ tons per acre. Anchor mulch with a mulch anchoring tool on the contour. Wood cellulose fiber may be used for anchoring straw at 750 lbs. per acre mixed with water at a maximum of 50 lbs. of wood cellulose fiber per 100 gals of water, or with a synthetic liquid binder according to manufacture recommendations. Wood cellulose fiber used as mulch must be applied at a net dry weight of 1,500 lbs. per acre. Mix wood cellulose fiber with water to attain a mixture with a maximum of 50 lbs. of wood cellulose fiber per 100 gals. of water.
- 7.) Permanent seeding shall be accomplished between March 1st through May 15th, or August 15th through October 15th. Permanent seeding at other than specified times will be allowed only upon written approval. Permanent seeding shall conform to the following applications: Permanent seeding for sites having disturbed over five (5) acres shall use fertilizer rates recommended by a soil testing agency and the recommendations provided in the Permanent Seeding Summary Table. Permanent seeding for conditions other than listed above shall be performed at the rates and dates as provided in the Permanent Seeding Summary Table below. Fertilizer and lime amendments shall be incorporated into the top 3" — 5" of the soil be disking or other suitable means. Mulching shall be accomplished as discussed in Item #6 of these specifications.

Seed Mixture (For Hazard Zone 7a) (From Table B—3)					Fertilizer Rate (10-20-20)			11
No.	Species	Appl. Rate (lbs./ac.)	Seeding Dates	Seeding Depths	N	P205	K20	Lime Rate
7	CREEPING RED FESCUE	60 lbs	3/1-5/15	1/4"				
/	KENTUCKY BLUEGRASS	15 lbs.	8/15-10/15	to 1/2"				
0		100 11	3/1-5/15	1/4"	45 lb/ac 1 lb/	90 lb/ac 2 lb/	90 lb/ac 2 lb/	2 tons/ac 90 lb/
8	TALL FESCUE	100 lbs.	8/15-10/15	to 1/2"	1000 sf	1000 sf	1000 sf	1000 sf
	TALL FESCUE KENTUCKY	60 lbs	3/1-5/15	1/4"				
9	BLUEGRASS	40 lbs.	3/1-5/15 8/15-10/15	to				
	PERENNIAL RYEGRASS	20 lbs.	8/15-10/15	to 1/2"				

- 8.) Any spoil or borrow will be placed at a site approved by the Soil Conservation District.
- 9.) All areas remaining or intended to remain disturbed for longer than three (7) days shall be stabilized in accordance with the USDA, Natural Resources Conservation Service Standards and Specifications for Soil Erosion and Sediment Control in developing areas for critical area stabilization.
- 10) It will be the responsibility of the Contractor or Subcontractor to notify the Engineer of any deviation from this plan. Any change made in this plan without written authorization from the Engineer will place responsibility of said change on the Contractor or the Subcontractor. INSPECTION CHECKLIST

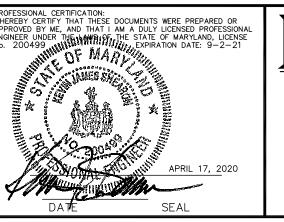
THE CONTRACTOR SHALL NOTIFY THE KENT COUNTY SEDIMENT AND EROSION CONTROL INSPECTOR AT (778-7437) AT THE FOLLOWING POINTS:

- 1. THE REQUIRED PRECONSTRUCTION MEETING.
- 2. FOLLOWING INSTALLATION OF SEDIMENT CONTROL MEASURES.
- 3. PRIOR TO REMOVAL OR MODIFICATION OF ANY SEDIMENT CONTROL STRUCTURE.
- 4. PRIOR TO REMOVAL OF ALL SEDIMENT AND EROSION CONTROL DEVICES.
- 5. PRIOR TO FINAL ACCEPTANCE.

# PHASE OF CONSTRUCTION

- 1. CONTACT THE KENT COUNTY SEDIMENT AND EROSION CONTROL INSPECTOR AT 410-778-7437 A MINIMUM OF 2 WEEKS PRIOR TO THE START OF CONSTRUCTION TO SCHEDULE A PRECONSTRUCTION MEETING PRIOR TO INITIATION OF ANY GRADING ACTIVITY.
- 2. PROVIDE A STABILIZED CONSTRUCTION ENTRANCE AT LOCATION SHOWN. CONTRACTOR SHALL BROOM SWEEP THE STATE ROAD ON A DAILY BASIS SHOULD MUD/DIRT BE DRAGGED OFFSITE
- 3. PROVIDE PERIMETER SILT FENCE AT LOCATIONS SHOWN.
- 4. STRIP THE TOPSOIL FROM THE LIMITS OF THE PROPOSED BUILDING AND STOCKPILE ONSITE. IMPORT FILL MATERIAL AS NEEDED TO PREPARE BUILDING PAD.
- 5. BEGIN BUILDING CONSTRUCTION.
- 6. INSTALL UTILITIES INCLUDING, BUT NOT LIMITED TO, WATER, SEWER, AND
- 6. STRIP THE TOPSOIL FROM THE LIMITS OF THE PARKING LOT AND STOCKPILE ON-SITE.
- 7. ROUGH GRADE THE SITE AND PROVIDE TEMPORARY STABILIZATION. PLACE
- STONE IN AREAS TO RECEIVE PAVEMENT OR CONCRETE. 8. GRADE THE BIORETENTION AREAS TO FINAL SURFACE ELEVATION WITHOUT
- EXCAVATING FOR BIO MEDIA AND STONE.
- 9. STABILIZE ALL DISTURBED AREAS WITH TOPSOIL, SEED AND MULCH. PROVIDE STABILIZATION MATTING ON ALL SLOPES 3:1 AND STEEPER.
- 19. MAINTAIN ALL PERIMETER CONTROLS THROUGHOUT THE PROJECT.
- 20. STABILIZE ALL DISTURBED AREAS WITH TOPSOIL (4" MINIMUM), SEED AND
- 21. UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREAS, EXCAVATE THE
- BIORETENTION AREAS AND INSTALL STONE, UNDERDRAIN, FILTER MEDIA, 22. UPON APPROVAL FROM THE KENT COUNTY SEDIMENT CONTROL INSPECTOR,
- REMOVE ALL TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES AND STABILIZE ALL DISTURBED AREAS PER PERMANENT STABILIZATION SPECIFICATIONS FOUND ON THIS SHEET.

KENT COUNTY DEPARTMENT OF PUBLIC WORKS KENT COUNTY PLANNING AND ZONING



DETAIL D-4-1-B ROCK OUTLET PROTECTION

L<del>-</del>∧

<u>PLAN VIEW</u>

<u>PROFILE</u>

0% SLOPE INVERT

CHANNEL RIPRAF

RIPRAP AND STONE MUST CONFORM TO THE SPECIFIED CLASS.

. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, AND PROTECT FROM PUNCTURING, CUTTING, OR TEARING. REPAIR ANY DAMAGE OTHER THAN AN OCCASIONAL SMALL HOLE BY PLACING ANOTHER PIECE OF GEOTEXTILE OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE GEOTEXTILE. PROVIDE A MINIMUM OF ONE FOOT OVERLAP FOR ALL REPAIRS AND FOR JOINING TWO

MINIMUM DEPTH) AND RIPRAP TO THE REQUIRED LINES AND GRADES. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL

. EXTEND GEOTEXTILE AT LEAST 6 INCHES BEYOND EDGES OF RIPRAP AND EMBED AT LEAST 4 INCHES AT SIDES OF RIPRAP.

CONSTRUCT RIPRAP OUTLET TO FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. PLACE STONE FOR RIPRAP OUTLET IN A MANNER THAT WILL ENSURE THAT IT IS REASONABLY HOMOGENOUS WITH THE SMALLER STONES AND SPALLS FILLING THE VOIDS BETWEEN THE LARGER STONES. PLACE RIPRAP IN A MANNER TO PREVENT DAMAGE TO THE STONE FILTER BLANKET OR GEOTEXTILE. HAND PLACE TO THE EXTENT NECESSARY.

WHERE NO ENDWALL IS USED, CONSTRUCT THE UPSTREAM END OF THE APRON SO THAT THE WIDTH TWO TIMES THE DIAMETER OF THE OUTLET PIPE, AND EXTEND THE STONE UNDER THE OUTLET BY A

CONSTRUCT APRON WITH 0% SLOPE ALONG ITS LENGTH AND WITHOUT OBSTRUCTIONS. PLACE STONE STRATT IT BLENDS IN WITH EXISTING GROUND.

MAINTAIN LINE, GRADE, AND CROSS SECTION. KEEP OUTLET FREE OF EROSION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. AFTER HIGH FLOWS INSPECT FOR SCOUR AND DISLODGED RIPRAP. MAKE NECESSARY REPAIRS IMMEDIATELY.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

PREPARE THE SUBGRADE FOR GEOTEXTILE OR STONE FILTER (34 TO 11/2 INCH STONE FOR 6 INCH

- 505

NONWOVEN GEOTEXTILE OR STONE FILTER

ONSTRUCTION SPECIFICATIONS

U.S. DEPARTMENT OF AGRICULTURE IRAL RESOURCES CONSERVATION SERV

CHARGE TO CONFIN

CHANNEL SECTION

EXTEND RIRRAP

19 IN

RIPRAP

CLASS THICKNESS (\*

III 46 IN

MARYLAND DEPARTMENT OF ENVIRONME WATER MANAGEMENT ADMINISTRATION

SIDE SLOPES TO TRANSITION FROM 2:1 AT PIPE OUTLET

THE EXISTING CHANNEL SLOF AT THE END OF THE APRON

--- d/2 <del>|--</del>-

6 IN T

NONWOVEN GEOTEXTILE OR STONE FILTER

SECTION A-A

LAVIS, LOORE, CHEARON & ASSOCIATES, LLC ENGINEERING, DRAFTING/DESIGN. ENVIRONMENTAL SERVICES & SURVEYING

PER COMMENTS

THE ANIMAL CARE SHELTER

SEDIMENT & EROSION CONTROL DETAILS AND SPECIFICATIONS

FOR KENT COUNTY ON THE LANDS OF

RAWN BY JOB No. 2019112 OLDER Ref. ESIGNED BY 28-2019112 KJS SHEET No. - C-11

AS SHOWN

MARCH '20

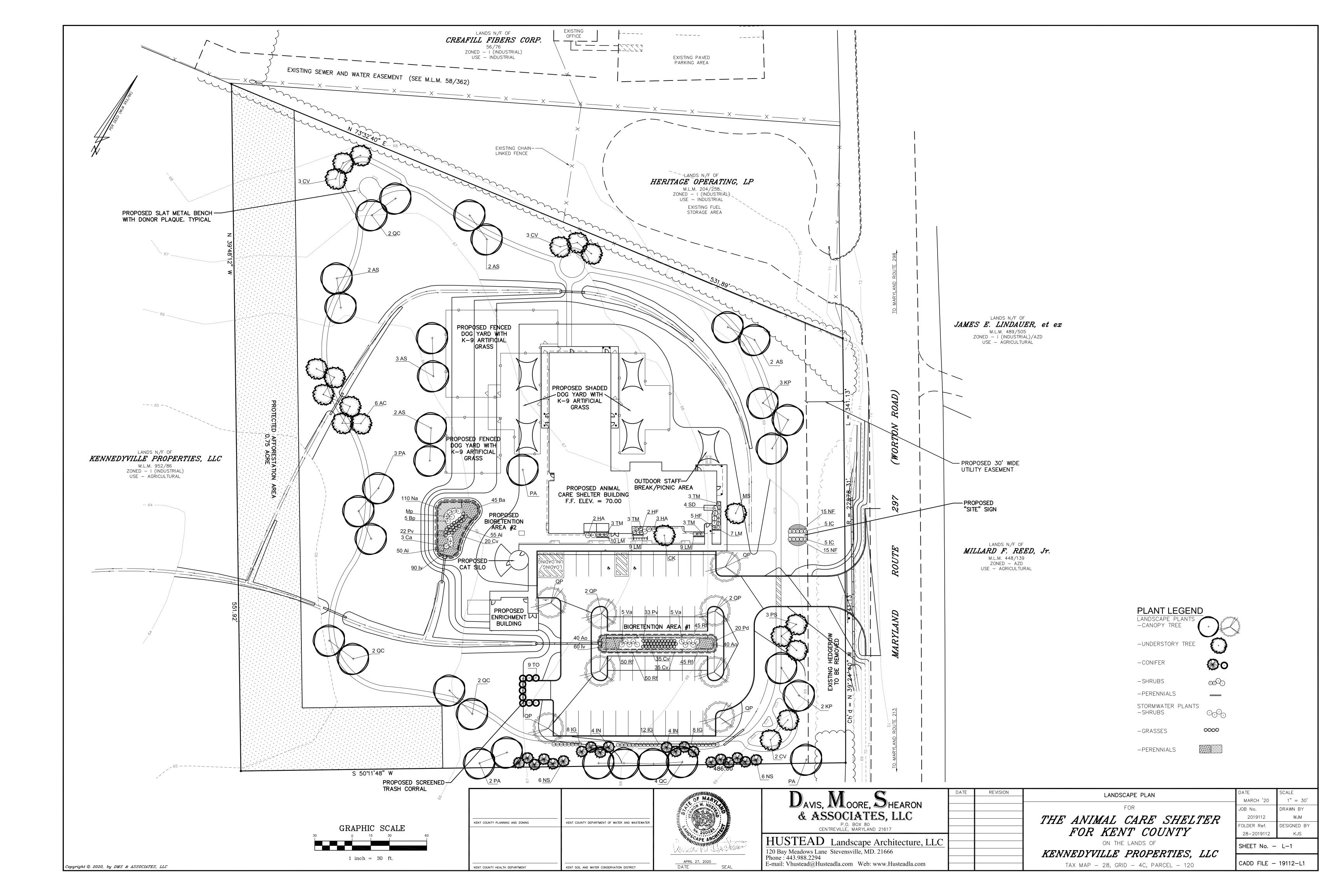
THE HUMANE SOCIETY OF KENT COUNTY, INC. CADD FILE - 19112C11

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KENT COUNTY HEALTH DEPARTMENT KENT SOIL AND WATER CONSERVATION DISTRICT

P.O. BOX 80 CENTREVILLE, MARYLAND 21617 PHONE: 1-443-262-9130 FAX: 1-443-262-9148

TAX MAP - 28, GRID - 4C, PARCEL - 120



### LANDSCAPING SPECIFICATIONS

OVERALL COMPLIANCE WITH THE TERMS OF THIS LANDSCAPE PLAN INCLUDING ALL MAINTENANCE AND WARRANTY REQUIREMENTS PRESCRIBED HEREON IS THE RESPONSIBILITY OF THE OWNER/DEVELOPER. MAINTENANCE, WARRANTY AND PLANT MATERIAL SURVIVAL RESPONSIBILITIES OF THE LANDSCAPE CONTRACTOR SHALL BE AS SPECIFICALLY NEGOTIATED BETWEEN OWNER/ DEVELOPER AND CONTRACTOR.

ALL WORK SHALL BE ACCOMPLISHED WITH QUALIFIED PERSONNEL, UTILIZING INDUSTRY STANDARD PRACTICES AND TECHNIQUES. THE CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE INSTALLATION OF ALL LANDSCAPING SHOWN OR IMPLIED ON THIS PLAN. PRIOR TO INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OR PLAN PREPARER IF SITE PLANTING CONDITIONS WARRANT RE-DESIGN CONSIDERATION AND VERIFY THE RECEIPT OF MOST CURRENT APPROVED BUFFER MANAGEMENT PLAN.

(1) PLANTS SHALL BE NURSERY GROWN IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES, AND GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT. THEY SHALL HAVE BEEN ROOT PRUNED WITHIN THE LAST TWO

THEY SHALL BE SOUND, HEALTHY AND VIGOROUS, WELL BRANCHED AND DENSELY FOLIATED WHEN IN LEAF. THEY SHALL BE FREE OF DISEASE, PEST, EGGS OR LARVAE, AND SHALL HAVE A HEALTHY, DEVELOPED ROOT SYSTEM. TREES AND SHRUBS SHALL NOT BE PRUNED BEFORE DELIVERY. ALL PLANTS WITH A DAMAGED OR CROOKED LEADER OR MULTIPLE LEADERS, ABRASIONS ON THE BARK, SUNSCALD, DISFIGURING KNOTS OR FRESH CUTS OVER 1 1/2" WILL BE REJECTED. THE OWNER RESERVES THE RIGHT TO HAVE THE PLANT MATERIAL INSPECTED AND TAGGED AT THE GROWING SITE AND TO REJECT ANY DEFICIENT MATERIAL AT THE JOB SITE. THE LANDSCAPE ARCHITECT OR PLAN PREPARER SHALL REJECT ANY AND ALL PLANT MATERIAL THAT DOES NOT MEET SPECIFICATIONS, IS DISEASED, OR IS OTHERWISE UNHEALTHY.

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

(2) TOPSOIL SHALL BE FERTILE, FRIABLE AND TYPICAL OF THE LOCALITY. IT SHALL BE FREE OF STONES, LUMPS, PLANTS, ROOTS, STICKS AND SHALL NOT BE DELIVERED IN A FROZEN OR MUDDY CONDITION. COMPACTED SOILS THAT CANNOT BE RESTORED TO A REASONABLE PLANTING SOIL SHALL BE REMOVED AND REPLACED WITH FRIABLE NATIVE SOILS.

(3) PLANTING SOIL (BACKFILL MIX) SHALL BE TWO PARTS NATIVE TOPSOIL AND ONE PART LEAF GRO, THOROUGHLY MIXED.

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

(5) MULCH: MULCH SHALL BE ORGANIC DOUBLE SHREDDED HARDWOOD BARK FREE OF HERBICIDES, LARGE CHUNKS AND WEEDS AND SEED AND AGED A MINIMUM OF 6 MONTHS.

"STANDARDIZED PLANT NAMES," LATEST EDITION AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE. "AMERICAN STANDARD FOR NURSERY STOCK," LATEST EDITION, AMERICAN ASSOCIATION OF NURSERYMEN.

C. PRE-DELIVERY DIGGING AND HANDLING OF PLANT MATERIALS:

(1) IMMEDIATELY BEFORE DIGGING, SPRAY ALL EVERGREEN OR DECIDUOUS PLANT MATERIAL IN FULL LEAF WITH ANTI-DESICCANT, APPLYING AN ADEQUATE FILM OVER TRUNKS, BRANCHES, TWIGS, AND/ OR FOLIAGE. (2) DIG BALL AND BURLAP (B&B) PLANTS WITH FIRM NATURAL BALLS OF EARTH, OF DIAMETER NOT LESS THAN THAT RÉCOMMENDED BY AMERICAN STANDARD FOR NURSERY STOCK, AND OF SUFFICIENT DEPTH TO INCLUDE THE FIBROUS AND

FEEDING ROOTS. PLANTS MOVED WITH A BALL WILL NOT BE ACCEPTED IF THE BALL IS CRACKED OR BROKEN BEFORE OR DURING PLANTING OPERATIONS. (3) THE LANDSCAPE CONTRACTOR SHALL PLAN DELIVER AND PLANT INSTALLATION TO MINIMIZE STRESS ON PLANT MATERIAL. MATERIAL TO BE STAGED ON OR OFF THE JOB SITE SHALL BE LOCATED TO MAXIMIZE PROTECTION FROM HOT SUN AND DRYING WINDS AND SHALL BE WATERED TO MAINTAIN A STRESS FREE CONDITION. THE LACK OF AVAILABLE WATER SHALL NOT RELIEVE THE CONTRACTOR OF ADEQUATE MAINTENANCE.

PLANTING AREAS THAT HAVE BEEN IN CONSISTENT AGRICULTURAL PRODUCTION SHALL BE PLANTED WITH NO OTHER REQUIRED SITE PREPARATION.

PLANTING AREAS THAT ARE VEGETATED AND STABLE WITH MINIMAL WEEDS SHALL BE MOWED TO 8" OR AS REQUIRED FOR PLANTING OR SEEDLING INSTALLATION.

THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING WORK. COORDINATE WITH OTHER CONTRACTORS ON SITE AND MISS UTILITY TO VERIFY UTILITY LOCATIONS. ANY REPAIRS TO EXISTING UNDERGROUND UTILITIES REQUIRED AS A RESULT OF ACTIONS OF THE CONTRACTOR AND/OR HIS ASSIGNS SHALL BE BORNE BY THE CONTRACTOR.

STAKE OUT ON THE GROUND LOCATIONS FOR PLANTS AND OUTLINES OF AREA TO BE PLANTED AND OBTAIN APPROVAL OF THE LANDSCAPE ARCHITECT/DESIGNER BEFORE EXCAVATION IS BEGUN. CONTRACTOR IS TO CAUTIOUSLY TEST PIT AREAS WHERE UNDERGROUND UTILITIES (ELECTRIC, GAS, CABLE/COMMUNICATIONS LINES, WATER LINES, SEWER, ROOF LEADERS, STORM DRAIN PIPE, ETC.) ARE SUSPECTED TO EXIST AND WHERE PROPOSED TO BE PLACED ACCORDING TO PLAN TO AVOID ANY DAMAGE OR DISRUPTIONS TO SERVICES. DO NOT PLACE PLANTS DIRECTLY OVER ANY EXISTING UNDERGROUND UTILITIES. OFFSET A REASONABLE AND PRACTICAL DISTANCE TO AVOID ANY IMMINENT OR FUTURE CONFLICT.

DO NOT MIX OR PLACE SOILS AND SOIL AMENDMENTS IN FROZEN, WET OR MUDDY CONDITION. SUSPEND SOIL SPREADING, GRADING AND TILLING OPERATIONS DURING PERIODS OF EXCESS SOIL MOISTURE UNTIL MOISTURE CONTENT REACHES ACCEPTABLE LEVELS TO ATTAIN THE REQUIRED RESULTS. UNIFORMLY MOISTEN EXCESSIVELY DRY SOIL THAT IS NOT WORKABLE AND TOO DUSTY.

TREE PITS SHALL BE EXCAVATED TO A DEPTH THAT ALLOWS FOR THE PLANTS TO BE SET AT THE SAME RELATIONSHIP TO FINISHED GRADE AS THEY BORE TO THE GROUND FROM WHICH THEY WERE DUG. USE PLANTING SOIL TO BACKFILL APPROXIMATELY 2/3 FULL, WATER THOROUGHLY BEFORE INSTALLING REMAINDER OF THE PLANTING SOIL TO TOP OF PIT, ELIMINATING ALL AIR POCKETS. SET PLANTS PLUMB AND BRACE RIGIDLY IN POSITION UNTIL THE PLANTING SOIL HAS BEEN STAMPED SOLIDLY AROUND THE BALL AND ROOTS, CUT ROPES OR STRINGS FROM TOP OF BALL AFTER PLANT HAS BEEN SET. LEAVE BURLAP OR CLOTH WRAPPING INTACT AROUND BALLS. TURN UNDER AND BURY PORTIONS OF BURLAP AT TOP OF BALL. FOR CONTAINER GROWN PERENNIALS, CAREFULLY REMOVE FROM CONTAINERS WITHOUT BREAKING APART PLANTS OR ROOT SYSTEMS AND GENTLY LOOSEN SOIL. PLACE IN PIT EXCAVATED TO THE DEPTH THAT ALLOWS FOR THE PLANT TO BE SET AT ITS FORMER GRADE, BACKFILL TO 2/3 FULL AND WATER THOROUGHLY. BACKFILL WITH REMAINING PLANTING SOIL TO TOP OF PIT, ELIMINATING ALL AIR POCKETS. DISPOSE OF REMOVED CONTAINERS OFFSITE AT AN APPROVED LANDFILL.

PROTECT PLANTS AT ALL TIMES FROM SUN OR DRYING WINDS. PLANTS THAT CANNOT BE PLANTED IMMEDIATELY ON DELIVERY SHALL BE KEPT IN THE SHADE, WELL PROTECTED WITH SOIL, WET MOSS OR OTHER ACCEPTABLE MATERIAL AND SHALL BE KEPT WELL WATERED. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN THREE DAYS AFTER DELIVERY, PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES. PLANTS SHALL BE LIFTED AND HANDLED FROM THE BOTTOM OF THE BALL ONLY.

MULCH ALL PITS AND BEDS WITH A TWO-INCH LAYER OF BARKMULCH IMMEDIATELY AFTER PLANTING. TO WORKED BEDS OF HERBACEOUS PERENNIALS ADD MULCH TO A DEPTH OF 2". PROVIDE AN 3-FOOT DIAMETER MULCH CIRCLE AROUND THE BASE OF ALL LARGE TREES. IN NO INSTANCE IS MULCH TO BE PILED AGAINST THE BASE OF TREE AND SHRUB TRUNKS. MULCH AREAS AROUND BASE OF EACH PLANT AND IN PLANTER AREAS. WATER ALL PLANTS IMMEDIATELY AFTER PLANTING.

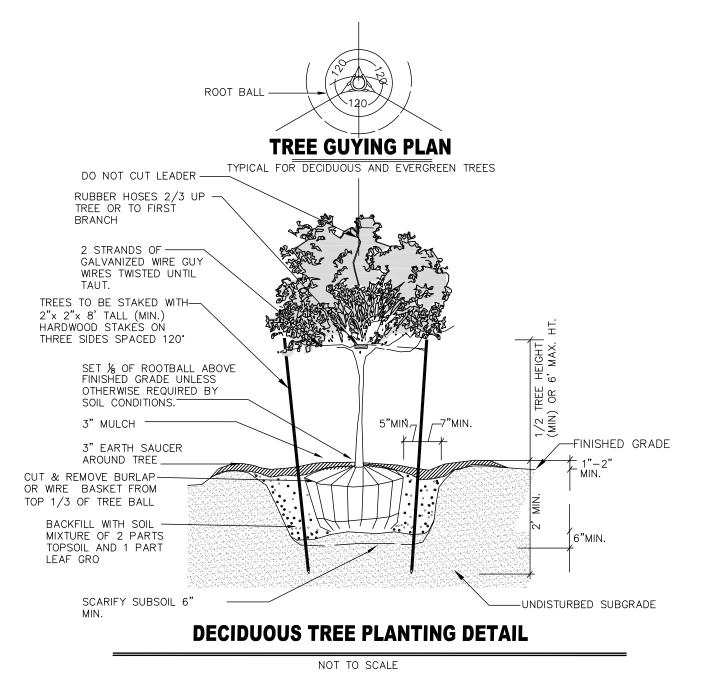
STAKE LARGE TREES IMMEDIATELY AFTER PLANTING. PLANTS SHALL STAND PLUMB AFTER STAKING. STAKES AND GUY WIRES SHALL BE OF THE SIZE AND MATERIAL SPECIFIED ABOVE AND POSITIONED AS SHOWN ON THE ACCOMPANYING PLANTING DETAIL. THEY SHALL BE REMOVED AT THE END OF THE GUARANTEE PERIOD AND DISPOSED OF OFF SITE BY THE CONTRACTOR.

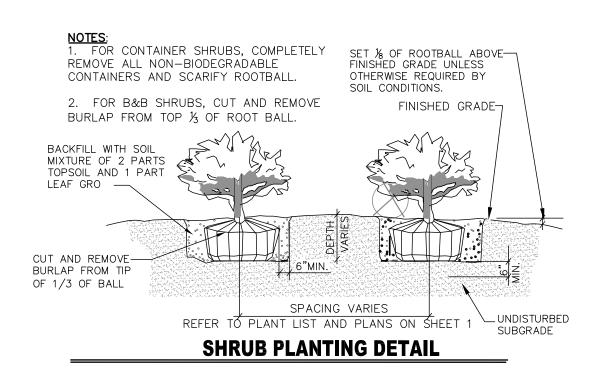
REMOVE ALL DEAD WOOD, SUCKERS, OR BROKEN BRANCHES AND PRESERVE THE NATURAL CHARACTER OF THE PLANT.

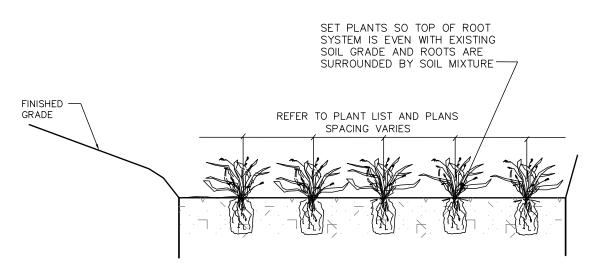
THE OWNER/DEVELOPER THROUGH HIS/HER CONTRACT WITH THE LANDSCAPE CONTRACTOR IS RESPONSIBLE AND SHALL INSURE ADEQUATE MAINTENANCE IS PROVIDED THROUGH THE INSTALLATION AND WARRANTY PERIOD AND FINAL INSPECTION BY THE

TREES AND HERBACEOUS PERENNIALS SHALL BE GUARANTEED FOR TWO (2) FULL YEARS FROM THE DATE THAT THE LANDSCAPE INSTALLATION IS ACCEPTED AS COMPLETE AND HAVE A 100% SURVIVABILITY RATING AT THE END OF THE TWO YEARS. PLANT MATERIAL NOT FOUND TO BE IN A HEALTHY, VIGOROUS CONDITION AT THE BEGINNING OF THE SECOND GROWING SEASON IS TO BE REPLACED. BARE-ROOT SEEDLINGS SHALL BE GUARANTEED FOR A PERIOD OF FIVE (5) YEARS AND HAVE A 50% SURVIVABILITY RATE AT THE END OF 5 YEARS. SEEDLINGS NOT FOUND TO BE IN A HEALTHY VIGOROUS CONDITION AT THE END OF THE FIVE-YEAR PERIOD ARE TO BE REPLACED.

# **PLANTING DETAILS**







PERENNIAL & GRASS PLANTING DETAIL

NOT TO SCALE

#### PLANT SCHEDULES

#### LANDSCAPE PLANT SCHEDULE

KEY	QUA	BOTANICAL NAME	COMMON NAME	SIZE
	CANOPY TREES			
AS	10	Acer saccharinum'Commemoration'	Commemoration Sugar Maple	1 - 1 ½" cal. B&B
ΚP	5	Koelreuteria paniculata	Golden Rain Tree	1 - 1 ½" cal. B&B
QC	10	Quercus coccinea	Scarlet Oak	1 - 1 ½" cal. B&B
QP	8	Quercus phellos	Willow Oak	2 - 2 1/2" Cal. B&B
PA	6	Platanuis x acerifolia'Bloodgood'	Bloodgood London Plane Tree	1 - 1 ½" cal. B&B
	UNDERSTORY T			
AC	6	Amerlanchier x grandiflora'Autumn Brilliance	' Autumn Brilliance Serviceberry	6 - 8' B&B Multi-stemmed
CV	8	Chionanthus virginicus	White Fringe Tree	6 - 8' B&B
CK	1	Cornus kousa chinensis	Kousa Dogwood	6 - 8' B&B
MS	1	Magnolia x soulangiana	Saucer Magnolia	8 - 10' Ht. B&B Multi-stemmed
PS	3	Prunus serrulata'Kwanzan'	Kwanzan Cherry	6 - 8' B&B
	EVERGREEN CC	NIFERS	-	
IN	8	llex x 'Nellie R. Stevens'	Nellie R. Stevens Holly	5 - 6' Ht. B&B
NS	12	Picea abies	Norway Spruce	6 - 8' Ht. B&B
TO	9	Thuja occidentalis'Techny'	Techny Arborvitae	5 - 6' Ht. B&B
	SHRUBS			
НА	5	Hydrangea arborescens'Incrediball'	Incredible Hydrangea	36 - 42" Cont.
HF	7	Hypericum frondosum'Sunburst'	Sunburst St John's Wort	18 - 24" Cont.
IC	10	llex crenata'Green Lustre'	Green Luster Holly	36 - 42" Cont.
IG	28	llex glabra'Shamrock'	Shamrock Inkberry	36 - 42" Cont.
SD	4	Spirea x 'Double Play Doozie'	Double Play Doozie Spirea	36 - 42" Cont.
TM	12	Taxus x media'Everlow'	Everlow Yew	36 - 42" Cont.
	PERENNIALS			
LM	36	Liriope muscari'Big Blue'	Big Blue Liriope	1 Gal. Cont.
NF	30	Nepta x faasseni'Walkers Low'	Walkers Low Catmint	1 Gal. Cont.

#### SWM PLANT SCHEDULE

KEY	QUA	BOTANICAL NAME	COMMON NAME	SIZE	SPACING
	SHRUBS				
Ca		Clethra alniolia'Sixteen Candles'	Sixteen Candles Sweet Pepperbush	18 - 24" Cont.	As Shown
Вр		llex verticillata'Berry Poppins'	Berry Poppins Winterberry	18 - 24" Cont.	As Shown
Мр		llex verticillata'Mr. Berry'	Mr. Berry Poppins Winterberry	18 - 24" Cont.	As Shown
Vs		Itea virginica'Henry's Garnet'	Henry's Garnet Virginia Sweetspire	18 - 24" Cont.	As Shown
	PERENNIALS				
Ai		Asclepias incarnata'Ice Ballet'	Ice Ballet Swamp Milkweed	1 Qt. Cont.	18"o.c. stag.
Na		Aster novae-angliae	New England Aster	1 Qt. Cont.	18"o.c. stag.
Ao		Aster oblongifolius'October Skies'	October Skies Aster	1 Qt. Cont.	18"o.c. stag.
Ba		Baptisia australis'Purple Smoke'	Purple Smoke Blue False Indigo	1 Qt. Cont.	24" o.c. stag.
Cv		Coreposis verticillata'Moonbeam'	Moonbeam Tickseed	1 Qt. Cont.	18" o.c. stag.
lv		Iris versicolor	Blue Flag	1 Qt. Cont.	12"o.c. stag.
Pd		Penstemon digitalis'Huskers Red'	Huskers Red Beard Tongue	1 Qt. Cont.	18" o.c. stag.
Rf		Rudbeckia fulgida'Goldsturm'	Black Eyed Susan	1 Qt. Cont.	12" o.c. stag.
	GRASSES				
Pv		Panicum virgatum'Shenandoah'	Shenandoah Switch Grass	1 Gal. Cont.	As Shown

# LANDSCAPE REQUIREMENTS

PARKING LOT LANDSCAPE
Parking Lot Area: 19,702 sq.ft. Required Green Space: 19,702 sq.ft. x 10% = 1,970 sq.ft. Proposed Green Space: 3,732 sq.ft.

GENERAL LANDSCAPING
217,665 sq.ft. Required Landscaped Area: 217,665 sq.ft. x 15% = 32,650 sq.ft.

Proposed Planting
- Afforestation Area = 32,670 sq.ft. Canopy Trees = 475 sq.ft. x 25 = 11,875 sq.ft.

Understory Trees = 215 sq.ft. x 23 = 4,945 sq.ft. Evergreen Trees = 60 sq.ft. x 20 = 1,200 sq.ft. SWM Planting Areas = 2,670 sq.ft.

Parking Lot Landscaping = 1,060 sq ft (less swm area) Total Planting Proposed: 54,420 sq.ft. or 25% PERIMETER LANDSCAPE SCREENING

Screening is required to protect adjoining properties and roadways from noise, glare and uses which are visually incompatible with neighboring uses.

The following uses and proposed buffers are provide to the adjacent properties:

North - Industrial use Proposed Buffer - existing hedgerow and supplement tree plantings East - Road Proposed Buffer - existing hedgerow for a portion of the property line; additional plantings to supplement and accentuate the entrance

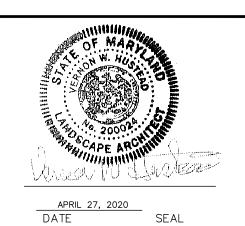
South and West - Agricultural Use Proposed Buffer - proposed afforestaiotn area to the west; evergreen and tree screening to the south

REVISION

KENT COUNTY PLANNING AND ZONING	KENT COUNTY DEPARTMENT OF WATER AND WASTEWATER

KENT SOIL AND WATER CONSERVATION DISTRICT

KENT COUNTY HEALTH DEPARTMENT





CENTREVILLE, MARTLAND 21017				
HIICTEAD				
HUSTEAD Landscape Architecture, LLC				
120 Bay Meadows Lane Stevensville, MD. 21666				
Phone: 443.988.2294				
E-mail: Vhustead@Husteadla.com Web: www.Husteadla.com				

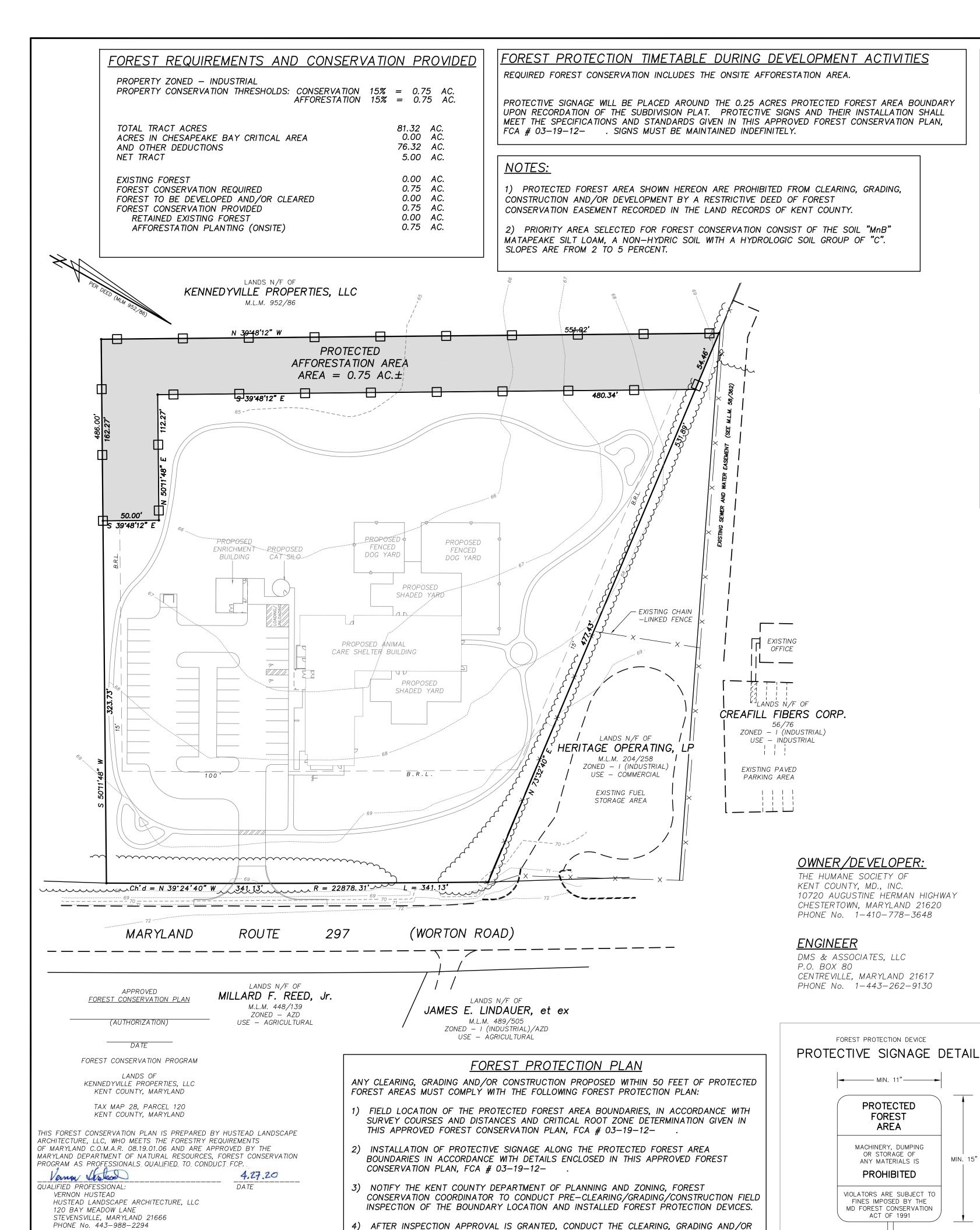
REVISION	LANDSCAPE DETAIL
	FOR
	THE ANIMAL CARE SHELTER
	FOR KENT COUNTY

ON THE LANDS OF	
KENNEDYVILLE PROPERTIES, LLC	
TAX MAP - 28, GRID - 4C, PARCEL - 120	

CADD FILE - 19112-L2

1" = 30'

MARCH '20



CONSTRUCTION.

1 inch = 50 ft.

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5) AFTER COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND BEFORE REMOVAL OF THE

PLANNING AND ZONING, FOREST CONSERVATION COORDINATOR TO CONDUCT A FIELD

FOREST PROTECTION DEVICES, NOTIFY THE KENT COUNTY DEPARTMENT OF

INSPECTION OF THE PROTECTED FOREST AREAS.

#### FOREST CONSERVATION WORKSHEET NET TRACT AREA TOTAL TRACT AREA **DEDUCTIONS** = 76.32NET TRACT AREA = 5.00LAND USE CATEGORY ARA MDR HDR MPDIDA0 AFFORESTATION THRESHOLD (Net Tract Area X 15%) = 0.75CONSERVATION THRESHOLD (Net Tract Area X 15%) = 0.75EXISTING FOREST COVER EXISTING FOREST COVER WITHIN THE NET TRACT AREA = 0.00AREA OF FOREST ABOVE CONSERVATION THRESHOLD = 0.00BREAK EVEN POINT BREAK EVEN POINT = 0.00FOREST CLEARING PERMITTED WITHOUT MITIGATION = 0.00PROPOSED FOREST CLEARING TOTAL AREA OF FOREST TO BE CLEARED = 0.00TOTAL AREA OF FOREST TO BE RETAINED = 0.00PLANTING REQUIREMENTS REFORESTATION FOR CLEARING ABOVE THE CONSERVATION THRESHOLD = 0.00REFORESTATION FOR CLEARING BELOW THE CONSERVATION THRESHOLD = 0.00CREDIT FOR RETENTION ABOVE THE CONSERVATION THRESHOLD = 0.00TOTAL REFORESTATION REQUIRED = 0.00TOTAL AFFORESTATION REQUIRED = 0.75TOTAL PLANTING REQUIRED = 0.75

# **LEGEND** BOUNDARY OF TOTAL TRACT ---- 65 ---- EXISTING CONTOUR ELEVATION EXISTING BRUSH PROTECTED AFFORESTATION AREA PROTECTED FOREST SIGNAGE LOCATION

#### AFFORESTATION TREE CALCULATIONS

Required Afforestation Area: 0.75 acres Required PLanting Ratio: 100 trees per acre for  $1\frac{1}{2}$ " Caliber tree size  $0.75 \times 100 = 75 \text{ trees}$ Required Trees:

# AFFORESTATION PLANT SCHEDULE

QUA BOTANICAL/COMMON NAME	SIZE & ROOT
21 Acer saccharum/Sugar Maple	1.5 – 1.75" Cal. B&B
15 Cercis canadensis/Eastern Redbud	1.5 – 1.75" Cal. B&B
18 Juniperus virginiana/Eastern Redcedar	1.5 – 1.75" Cal. B&B
21 Platanus acerifolia/Sycamore	1.5 — 1.75" Cal. B&B

75 Total Trees Proposed

A. SIGNS TO BE PLACED AT MAXIMUM OF 50 FEET INTERVALS

B. SIGNS CANNOT BE NAILED, SCREWED OR STAPLED TO TREES.

C. SIGNS WITH SIMILAR WORDING MAY BE OBTAINED FROM

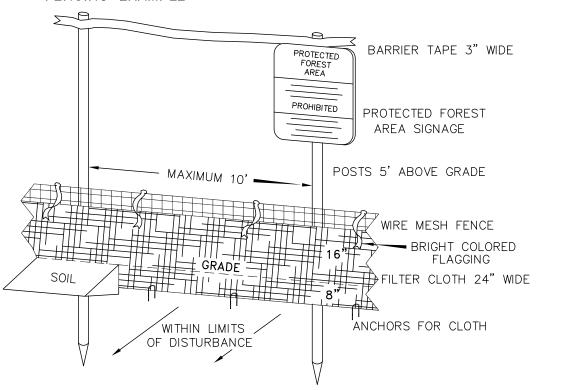
ALONG PROTECTED FOREST BOUNDARY.

SURVEYOR/FORESTRY SUPPLY STORES.

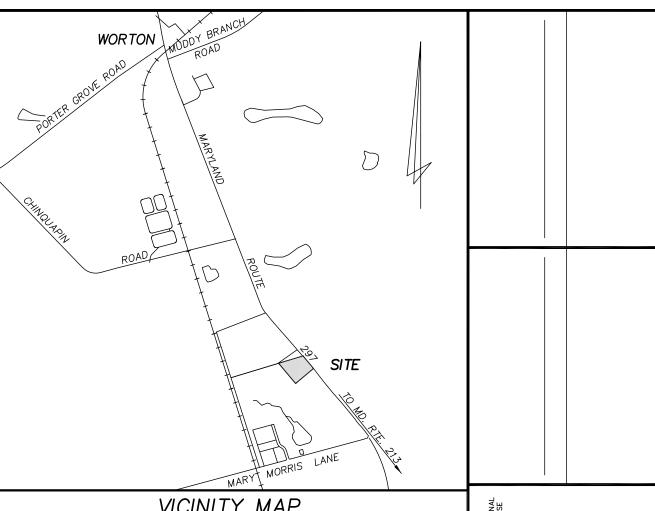
#### FOREST PROTECTION DEVICE PROTECTIVE FENCING DETAIL

CONSTRUCTION FENCING SUCH AS FILTER CLOTH, CHAIN-LINK, PLASTIC OR WIRE MESH, STAKED STRAW BALES, BARBED WIRE, OR SNOW FENCING MAY BE USED TO MARK BOUNDARIES OF "PROTECTED FOREST AREAS" DURING CLEARING, GRADING, AND/OR CONSTRUCTION; HOWEVER THE FENCE MUST MEET THE FOLLOWING REQUIREMENTS:

- A) FENCE POSTS MUST BE A MINIMUM OF 5' ABOVE GRADE WITH CLOTH, MESH, WIRE OR SLATS SECURELY ATTACHED TO FORM A STRUCTURE CAPABLE OF RESISTING THE WEIGHT OF AN ADULT HUMAN. BRIGHTLY COLORED, 3" WIDE, PLASTIC, BARRIER TAPE MUST BE STRUNG BETWEEN THE TOPS OF EACH FENCE POST.
- B) BRIGHTLY COLORED FENCING SLATS, MESH, OR CLOTH, EXTENDING FROM GROUND TO AT LEAST 4' ABOVE GRADE ARE RECOMMENDED. DRAB FENCING MATERIALS (CLOTH. WIRE) MAY BE HIGH-LIGHTED WITH COLORED FLAGGING STREAMERS AT FREQUENT INTERVALS ALONG THE UPPER EDGE.
- C) PROTECTED FOREST AREA SIGNAGE (SEE ENCLOSED DETAIL) MUST BE ATTACHED TO FENCE POSTS A MINIMUM OF EVERY 50 FEET.
- D) SEE STATE, MUNICIPAL OR COUNTY FOREST CONSERVATION MANUAL FOR ILLUSTRATIONS OF VARIOUS TYPES OF PROTECTED FOREST AREA FENCING, AND THE ENCLOSED EXAMPLE OF A MODIFIED STANDARD FILTER CLOTH FENCE USED FOR SEDIMENT CONTROL AND FOREST PROTECTION: FENCING EXAMPLE



STANDARD FILTER CLOTH FENCING REQUIRED TO CONTROL EROSION SEDIMENT ON CONSTRUCTION SITES CAN ALSO BE USED AS THE PROTECTED FOREST AREA FENCING WITH SOME MODIFICATIONS (SEE ABOVE EXAMPLE) IF THE LIMITS OF CLEARING, GRADING AND/OR CONSTRUCTION ARE SYNONYMOUS WITH THE BOUNDARIES OF THE PROTECTED FOREST AREA OR IF LIMITS OF DEVELOPMENT DISTURBANCE ARE ANY DISTANCE OUTSIDE THE BOUNDARIES OF THE PROTECTED FOREST AREA.



VICINITY MAP SCALE 1" = 2000

PARCEL:

#### AFFORESTATION PLANTING PLAN

FOREST CONSERVATION APPLICATION NUMBER: FCP# 03-19-12-

PROPERTY OF: THE HUMANE SOCIETY OF KENT COUNTY, MD., INC.

**TAX MAP:** 28

**METHOD:** 

POST PLANTING:

AFFORESTATION SITE LOCATION: **ELECTION DISTRICT:** 3rd 4/24/2020 COUNTY: KENT

AFFORESTATION AREA ASSESSMENT: 0.75 ACRES OF AN EXISTING GRASS AREA COMPRISED OF INGLESIDE SILT LOAM (IgB)

MOWING AND DISKING TO ELEMINATE COMPETING HERBACEOUS VEGETATION PRE-PLANTING: PLANTING: WITHIN ONE YEAR OR TWO GROWING SEASONS AFTER RECORDATION OF SCHEDULE: THE APPROVED SUBDIVISION.

MATERIAL: ROOTED AND BALLED NURSERY GROWN STOCK WITH CALIPER

GREATER THAN 1-1/2" SOURCE: LANDSCAPE CONTRACTOR AS CONTRACTED BY FOX POINT PROPERTIES, LLC STOCK: 75 TOTAL TREES:

21 Sugar Maple 15 Eastern Redbud 18 Eastern Redcedar 21 Sycamore

APPROXIMATELY FIFTEEN FEET SPACING BETWEEN TREES PLANTED WITH A MECHANICAL PLANTER OR MANUALLY WITH SHOVEL, SUPPORTED WITH TREE STAKES AND GUY WIRES, AND PORTECTED FROM DEER BROWSING WIHT A TREE SHELTER. "PROTECTED FOREST AREA" SIGNS BOLTED ON STEEL FENCE POSTS ERECTED AT

POSTING: 50 FOOT INTERVALS FACING OUTWARD ALONG THE AFFORESTATION AREA BOUNDARIES AND PROTECTION FENCING. AFFORESTATION MUST BE INSPECTED AT 12 AND 24 MONTH INTERVALS AFTER

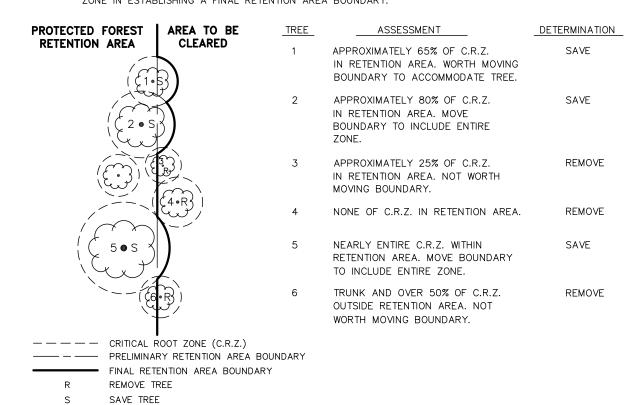
PLANTING, AND A WRITTEN REPORT ADDRESSING STATUS OF THE TREES AND RECOMMENDATIONS FOR CORRECTING ANY NOTABLE EXISTING MORTALITY (DAMAGE, DISEASE, DROUGHT, PESTS, ETC.) FILED WITH THE FOREST CONSERVATION COORDINATOR AT QUEEN ANNE'S COUNTY DEPARTMENT OF LAND USE, GROWTH MANAGEMENT & ENVIRONMENT.

ESTIMATED COST: STOCK, POSTS, BOLTS, SIGNS, PLUS LABOR FOR OBTAINING THE MATERIALS AND PLANTING, ERECTING SIGNS & POSTS, ANNUAL INSPECTION AND REPORTS: ESTIMATED COST.....

# CRITICAL ROOT ZONE

AREA OF ROOT PROTECTION NECESSARY FOR TREE SURVIVAL. DEFINED ZONE ENCIRCLES A TREE TRUNK ONE FOOT OUTWARD FOR EACH INCH OF TRUNK DIAMETER MEASURED AT 4.5 FEET ABOVE GROUND. MINIMUM RADIUS IS 8 FEET. THE ZONE IS 1.5 FEET OUTWARD FOR EACH TRUNK DIAMETER EQUALING OR EXCEEDING 30 INCHES, AND FOR ALL TREES WITHIN A RETENTION AREA LESS THAN 10,000 SQ. FT.

FIELD LOCATION AND MARKING OF THE PROTECTED FOREST BOUNDARY MAY REQUIRE A CRITICAL ROOT ZONE DETERMINATION FOR EACH INDIVIDUAL TREE IN CLOSE PROXIMITY TO THE BOUNDARY. THE DETERMINATION SAVES TREES WITH APPROXIMATELY 70 PERCENT OR MORE OF THE CRITICAL ROOT ZONE IN THE RETENTION AREA BY ADJUSTING THE RETENTION AREA BOUNDARY TO INCLUDE THE ENTIRE CRITICAL ROOT ZONE. THE FOLLOWING EXAMPLE SHOWS USE OF THE CRITICAL ROOT ZONE IN ESTABLISHING A FINAL RETENTION AREA BOUNDARY

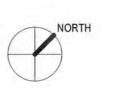


- 1) TREE SPECIES AND HEALTH SHOULD BE CONSIDERED IN C.R.Z. ASSESSMENTS ALONG THE RETENTION AREA BOUNDARY. 2) ANY DISTURBED CRITICAL ROOT ZONE IN THE RETENTION AREA MUST BE SHOWN ON THE FOREST CONSERVATION PLAN.
- 3) PRUNING, AERATION, TUNNELING, STORMWATER MANAGEMENT AND OTHER PROCEDURES (SEE EXAMPLES IN APPENDIX C OF 1995 STATE FOREST CONSERVATION TECHNICAL MANUAL, 2ND EDITION) SHOULD BE CONSIDERED TO ENSURE LONG TERM SURVIVAL OF RETAINED TREES.

O

SO

3 ELECTRICAL SITE PLAN
E-1.0 1/32" = 1'-0"



# SITE GENERAL NOTES

- A UNLESS OTHERWISE NOTED, ALL CIRCUIT NUMBERS INDICATED ON THIS SHEET SHALL REFER TO CIRCUIT ORIGINATING IN PANELBOARDS BASED UPON THE FOLLOWING CONVENTION, (THIS SHEET ONLY):

  TBD-# = CIRCUIT TO PANEL 'TBD'
- B ALL EXTERIOR LIGHTING CIRCUITS SHALL UTILIZE A MINIMUM WIRE SIZE OF #8AWG COPPER, UON.

KEY

VALUE

# KEYNOTE LEGEND KEYNOTE TEXT

LOCATION OF BUILDING UTILITY TRANSFORMER AND CONCRETE PAD. DELMARVA POWER SHALL FURNISH AND INSTALL ALL PRIMARY CONDUIT AND CABLING BETWEEN THE NEAREST UTILITY SWITCH CABINET AND THE PRIMARY CONNECTION POINT AT THE TRANSFORMER. THE CONTRACTOR SHALL PERFORM ALL TRENCHING AND BACKFILLING ON THE PRIMARY AND SECONDARY SIDE OF THE TRANSFORMER. DELMARVA POWER SHALL FURNISH AND INSTALL THE TRANSFORMER. THE TRANSFORMER CONCRETE PAD SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR PER THE REQUIREMENTS OF DELMARVA POWER. THE CONTRACTOR SHALL FURNISH AND INSTALL THE CONDUIT/CABLING ON THE SECONDARY SIDE OF THE TRANSFORMER. DELMARVA POWER SHALL MAKE ALL CONNECTIONS OF THE PRIMARY AND SECONDARY CABLING AT THE TRANSFORMER LANDINGS. ALL COSTS FOR WORK DESCRIBED ABOVE TO BE PERFORMED BY DELMARVA POWER SHALL BE BILLED TO THE NEW PROJECT NUMBER TO BE PAID BY THE PROJECT OWNER.

- APPROXIMATE ROUTING OF THE UNDERGROUND CONDUIT SYSTEM BETWEEN THE TRANSFORMER AND THE BUILDING EXTERIOR MAIN DISCONNECT 'MSB'. REFER TO ELECTRICAL ONE LINE DIAGRAM FOR MORE INFORMATION.
- INFORMATION.

  3 EC SHALL PROVIDE GFI/WP RECEPTACLE MOUNTED WITHIN OUTDOOR RECEPTACLE POST, GARD-N-POST #GP19X. COORDINATE FINAL LOCATION WITH OWNER AND ARCHITECT PRIOR TO ROUGH-IN.
- APPROXIMATE ROUTING OF CONDUIT BETWEEN TELECOMMUNICATIONS
  UTILITY CONNECTIONS PEDESTAL AND THE BUILDING MDF LOCATION FOR
  LOW VOLTAGE TELECOMMUNICATIONS UTILITY SERVICE CABLING
  RACEWAY. REFER TO LOW VOLTAGE RISER DIAGRAM #4/E-6.0 FOR MORE
- 5 PROVIDE (1) 2"C ROUTED FROM BUILDING IT CLOSET 129 TO STUB OUTSIDE THE BUILDING FOR COMMUNICATIONS CONNECTION RACEWAY TO ENRICHMENT BUILDING.
- 6 APPROXIMATE ROUTING OF UNDERGROUND CONDUIT BETWEEN UTILITY PRIMARY AND NEW TRANSFORMER. REFER TO THE ELECTRICAL ONE LINE FOR MORE INFORMATION.

  7 LIGHTING FIXTURE SHALL BE MOUNTED ALONG RIGID FENCE POST
- STRUCTURE.

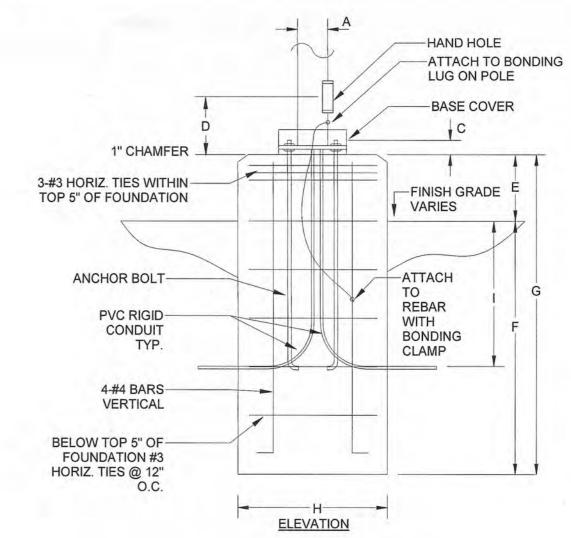
  8 APPROXIMATE ROUTING OF UNDERGROUND CONDUIT BETWEEN 'DSB' AND ENRICHMENT BUILDING. REFER TO ELECTRICAL ONE LINE DIAGRAM FOR

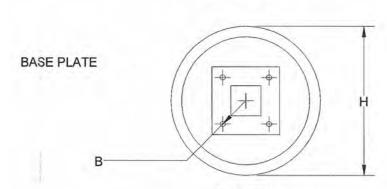
# SITE SEQUENCE OF OPERATIONS

THE FOLLOWING CONTROL SEQUENCE OF OPERATIONS ARE UTILIZED IN THIS PLAN. REFER TO PLAN AND/OR ZONE/RELAY SCHEDULE FOR SPECIFIC ASSOCIATED SEQUENCE.



MORE INFORMATION.





POLE	OVERALL	Α	ANCHOR BOLT DATA		D	E	F	G	Н	i	
KEY	HEIGHT	A	В	SIZE	C	U	_	Г	G	T1	1
EA1	12'0"	4"	PER	R MANUF	ACTU	RER	X'0"	6'0"	X'0"	24"	36
EA2	18'0"	4"	PER	R MANUF	ACTU	RER	0'0"	6'0"	6'0"	24"	36
EA3	24'0"	4"	PEF	R MANUF	ACTU	RER	0'0"	6'0"	6'0"	24"	36
EA4	30'0"	4"	PER	R MANUF	ACTU	RER	0'0"	6'0"	6'0"	24"	36
EA5	36'0"	4"	PER	R MANUE	ACTU	RER	0'0"	6'0"	6'0"	24"	36

TOP VIEW

2 POLE BASE DETAIL E-1.0 N.T.S.

AEDESIGN
Integrated Lighting and Electrical Solutions
1900 Wazee Street #205 Denver, CO 80202 303.296.3034
aedesign-inc.com Project #: 4739.00

Animal Care Shel

Kent

for

ART

ST CO AF	DPYRIGHT 2018, ANIMAL ARTS DESIGN FUDIOS. THESE DRAWINGS ARE DPYRIGHTED UNDER THE 1990 RCHITECTURAL WORKS COPYRIGHT ROTECTION ACT. ANY UNAUTHORIZED SE, COPYING OR MODIFICATION OF THE RIGINAL IS PROHIBITED.
R	EVISIONS

APPROVALS

SEAL

DRAWING TITLE
ELECTRICAL SITE PLAN

DATE: 02/28/20

FOR

20%

E-1.0



# **D-Series Size 0**

#### LED Area Luminaire









#### **Specifications**

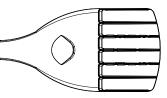
0.95 ft<sup>2</sup> EPA: (.09 m<sup>2</sup>) 26" Length: (66.0 cm) 13" Width: (33.0 cm) 3" Height,: (7.62 cm)

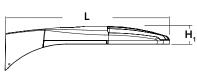
Height,:

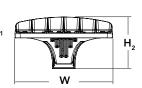
Weight

(max):

(17.8 cm) 16 lbs (7.25 kg)









Notes

Туре

Hit the Tab key or mouse over the page to see all interactive elements.

#### Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire. The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 400W metal halide with typical energy savings of 70% and expected service life of over 100,000 hours.



#### **Ordering Information**

#### **EXAMPLE:** DSX0 LED P6 40K T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX0 LED					
Series	LEDs	Color temperature	Distribution	Voltage	Mounting
DSX0 LED	Forward optics	<b>30K</b> 3000 K	T1S Type I short T5S Type V short	MVOLT 4,5	Shipped included
	P1 P4 P7	<b>40K</b> 4000 K	T2S Type II short T5M Type V medium	120 <sup>5</sup>	SPA Square pole mounting
	P2 P5	<b>50K</b> 5000 K	T2M Type II medium T5W Type V wide	2085	RPA Round pole mounting
	P3 P6		T3S Type III short BLC Backlight control <sup>3</sup>	2405	WBA Wall bracket <sup>2</sup>
	Rotated optics		T3M Type III medium LCCO Left corner cutoff <sup>3</sup>	277 5	SPUMBA Square pole universal mounting adaptor <sup>7</sup>
	P10 <sup>1</sup> P12 <sup>1</sup>		T4M Type IV medium RCCO Right corner cutoff <sup>3</sup>	347 5,6	RPUMBA Round pole universal mounting adaptor 7
	P11 <sup>1</sup> P13 <sup>1</sup>		TFTM Forward throw	480 5,6	Shipped separately
			medium		KMA8 DDBXD U Mast arm mounting bracket adaptor
			T5VS Type V very short <sup>2</sup>		(specify finish) <sup>8</sup>

Control opt	ions	Other options		options	Finish (required)		
PIRHN PER PER5 PER7	nLight AIR generation 2 enabled <sup>9,10</sup> Network, high/low motion/ambient sensor <sup>11</sup> NEMA twist-lock receptacle only (control ordered separate) <sup>12</sup> Five-pin receptacle only (control ordered separate) <sup>12,13</sup> Seven-pin receptacle only (leads exit fixture) (control ordered separate) <sup>12,13</sup> 0-10V dimming extend out back of housing for external control (control ordered separate) <sup>14</sup>	PIR PIRH PIR1FC3V PIRH1FC3V FAO	High/low, motion/ambient sensor, 8–15' mounting height, ambient sensor enabled at 5fc <sup>15,16</sup> High/low, motion/ambient sensor, 15–30' mounting height, ambient sensor enabled at 5fc <sup>15,16</sup> High/low, motion/ambient sensor, 8–15' mounting height, ambient sensor enabled at 1fc <sup>15,16</sup> High/low, motion/ambient sensor, 15–30' mounting height, ambient sensor enabled at 1fc <sup>15,16</sup> Field adjustable output <sup>17</sup>	HS SF DF L90 R90 DDL	House-side shield 18 Single fuse (120, 277, 347V) 5 Double fuse (208, 240, 480V) 5 Left rotated optics 1 Right rotated optics 1 Diffused drop lens 18 Ded separately Bird spikes 19 External glare shield	DDBXD DBLXD DNAXD DWHXD DWHXD DDBTXD DBLBXD DNATXD DWHGXD	Dark bronze Black Natural aluminum White Textured dark bronze Textured black Textured natural aluminum Textured white



#### KBD8 LED LED Specification Bollard

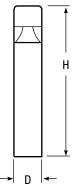
Catalog Number	
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#### **Specifications**

8" Round (20.3 cm)

42" Height: (106.7 cm)

Weight 27lbs (max): (12.25 kg)



#### Introduction

The KBD8 Bollard is a stylish, fully integrated LED solution for walkways. It features a sleek, modern design and is carefully engineered to provide long-lasting, energy-efficient lighting with a variety of optical and control options for customized performance.

With an expected service life of over 20 years of nighttime use and up to 70% in energy savings over comparable 100W metal halide luminaires, the KBD8 Bollard is a reliable, low-maintenance lighting solution that produces sites that are exceptionally illuminated.

Orderi	ng Inform	ation	7					EXAM	PLE: k	(BD8 LED 16	C 700	40K SYM M	IVOLT I	DDBXD
KBD8 LED														
Series	LEDs	Drive curren		Color tem	perature	Distrik	oution	Voltage	Control	options	Other op	tions	Finish (requ	
KBD8 LED	Asymmetric 12C 12 LEDs <sup>1</sup> Symmetric 16C 16 LEDs <sup>2</sup>	350 350 n 450 450 n 530 530 n 700 700 n	A <sup>3,4</sup>	30K 40K 50K AMBPC	3000 K 4000 K 5000 K Amber phosphor converted Amber limited wavelength <sup>3,4</sup>	ASY SYM	Asymmetric <sup>1</sup> Symmetric <sup>2</sup>	MVOLT <sup>5</sup> 120 <sup>5</sup> 208 <sup>5</sup> 240 <sup>5</sup> 277 <sup>5</sup> 347 <sup>4</sup>	Shippe PE DMG	d installed  Photoelectric cell, button type  0–10v dimming wires pulled outside fixture (for use with an external control, ordered separately) Emergency battery backup <sup>6</sup>	Shippe SF DF H24 H30 H36 FG	d installed  Single fuse (120, 277, 347V) 47  Double fuse (208, 240V) 47  24" overall height 30" overall height Ground-fault festoon outlet  Without anchor	DWHXD DNAXD DDBXD DBLXD DDBTXD DBLBXD DNATXD	White Natural aluminum Dark bronze Black Textured dark bronze Textured black Textured
											L/AB4	bolts (3 bolt base) 4 bolt retrofit base without anchor bolts <sup>8</sup>	DWHGXD	natural aluminum Textured white

#### **Accessories**

Ordered and shipped separately

MRAB U Anchor bolts for KBD8 LED 8

- Only available in the 12C, ASY version.
- Only available in the 16C, SYM version.
- Only available with 450 AMBLW version.
- Not available with ELCW.
- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Specify 120, 208, 240 or 277 options only when ordering with fusing (SF, DF options), or photocontrol (PE option).
- Not available with 347V. Not available with fusing. Not available with 450 AMBLW.
- Single fuse (SF) requires 120, 277, or 347 voltage option. Double fuse (DF) requires 208 or 240 voltage option.
- MRAB U not available with L/AB4 option.



OVERVIEW • SPECIFICATIONS • ORDERING

INTERIOR + EXTERIOR | F080 SINGLE ROUND

DATE PROJECT FIRM TYPE

RISE IS A SYSTEM OF BEAUTIFULLY DESIGNED OUTDOOR RATED LUMINAIRES THAT PROVIDE EFFICIENT AND POWERFUL LIGHT USING THE LATEST IN LED TECHNOLOGY. RISE FO80 SINGLE IS A POWERFUL AND COMPACT LED LIGHT FIXTURE, DELIVERING UP TO 1170 LUMENS, THAT CAN BE USED IN SPOT, ACCENT, LANDSCAPE AND FLOODLIGHT APPLICATIONS. ITS UNIQUE MACRO™ LOCK FEATURE ALLOWS FOR FULL 180 DEGREE TILT AND 360 DEGREE PAN AIMABILITY USING ONLY ONE TWIST.

#### FEATURES:

- POWERFUL CBCP
- EXTREMELY COMPACT
- POWERFUL OUTPUT UP TO 1170 LUMENS
- MACRO™ LOCK 180° TILT AND 360° PAN
- 12 UNIQUE BEAM ANGLES
- MULTIVOLT (110V-277V)
- 8 CCTS: 2200K THROUGH 6500K
- 80+ AND 90+ CRI
- DIMMABLE TO 5%
- IP66 RATED



FIXTURE MODEL	FIXTURE CONFIG.	POWER/ LUMEN OUTPUT*	CCT/ COLOR	CRI	BEAM ANGLE	FINISHES	ACCESSORIES	WIRING AND MOUNTING
F080	1R - Single Round	LO - Low Output  MO - Medium Output  HO - High Output	22 - 2200K 25 - 2500K 27 - 2700K 30 - 3000K 35 - 3500K 40 - 4000K 50 - 5000K 65 - 6500K RD - Red GR - Green BL - Blue AM - Amber *2200K and 2500K not available in 40°, 60°, 70° and 90°	8 - 80 9 - 90* X - For RD, GR, BL, AM *90 CRI not available in 2500K, 5000K, and 6500K	05 - Laser Spot (5°)   10 - Very Narrow Spot (10°)   15 - Narrow Spot (15°)   20 - Spot (20°)   40 - Flood (40°)   60 - Medium Flood (60°)   70 - Wide Flood (70°)   90 - Very Wide Flood (90°)   E1 - Elliptical 1 (15°x60°)   E2 - Elliptical 2 (30°x60°)   E3 - Elliptical 3 (60°x15°)   E4 - Elliptical 4 (60°x30°)	K - Black Z - Bronze S - Silver W - White C - Custom* *Provide RAL #	X - No Accessory RH - Half Snoot RF - Full Snoot Will ship as X if not specified	A - 19" Flying Leads - Internal Cable IC; Bottom Exit; 1/2" NPT; UL/CE Listed B* - 10' External Cable Side Exit; Surface Mount; UL Listed C* - 10' External Cable Bottom Exit; Surface Mount - 1/2" NPT; UL Listed D* - 10' External Cable Side Exit; Surface Mount; CE Listed E* - 10' External Cable Bottom Exit; Surface Mount; CE Listed E* - 10' External Cable Bottom Exit; Surface Mount - 1/2" NPT; CE Listed Will ship as A if not specified

#### **EXAMPLE:** F080-1R-LO-22-8-05-S-X-A

\*SEE PHOTOMETARY CHART FOR LUMEN DATA

SEET HOTOMETAKT CHART FOR COMEN DATA								
PERFORMANCE	WATTS	POWER	LUMEN OUTPUT		EFFICACY		СВС	P
			5°	40°	5°	40°	5°	40°
	4	Low Output	309	429	76	107	21,991	705
	7.5	Medium Output	531	761	71	101	37,824	1,251
	11.5	High Output	744	1,120	65	99	53,048	1,874

ALL LUMEN DATA IS FROM 4000K 80CRI FIXTURES. PLEASE SEE PHOTOMETRY SPEC SHEET FOR ADDITIONAL LUMEN DATA.

COLOR RENDERING INDEX
COLOR CONSISTENCY
LUMEN DEPRECIATION

80+, 90+

3-STEP MACADAM ELLIPSE

\* ENERGY STAR REPORTED TESTING HOURS TO DATE.
CALCULATIONS FOR LED FIXTURES ARE BASED ON
MEASUREMENTS THAT COMPLY WITH IES LM-80 TESTING
PROCEDURES AND IES TM-21 CALCULATOR

WATTS	L70 @ 25C	L70 @ 50C	L90 @ 25C	L90 @ 50C
LOW	>60,500*	>60,500*	>60,500*	>60,500*
	>(109,000)**	>(109,000)**	>(109,000)**	>(109,000)**
MEDIUM	>60,500*	>60,500*	>60,500*	>60,500*
	>(109,000)**	>(109,000)**	>(109,000)**	>(109,000)**
HIGH	>60,500*	>36,300*	>60,500*	>33,200*
	>(181,000)**		>(69,800)**	

 $NOTE: Information \ on \ this \ Spec \ Sheet \ is \ subject \ to \ change, \ please \ visit \ ecosense \ lighting. com/downloads/rise \ for \ the \ most \ updated \ information.$ 

**ECOSENSE** LIGHTING INC. 837 NORTH SPRING STREET SUITE 103 LOS ANGELES, CA 90012

\*\* ESTIMATED HOURS

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#### **FEATURES & SPECIFICATIONS**

**INTENDED USE** — Ideal for applications requiring low-profile, attractive emergency lighting with Optional normally-off or normally-on with photocell control. Provides a minimum of 90 minutes of illumination both indoors and outdoors upon loss of AC power. **Certain airborne contaminants can diminish the integrity of acrylic and/or polycarbonate**. **Click here for Acrylic-Polycarbonate Compatibility table for suitable uses**.

**CONSTRUCTION** — Compact, low-profile, architectural design with die-cast aluminum housing. Finishes are texturized powder coat paint for dark bronze, white, black and non-texturized for natural aluminum. Test switch indicator light and remote enabled are located on the bottom of the housing and are easily accessible and visible from the floor.

**OPTICS** — LEDs with L70 of 55,000 hours. Delivers 635 lumens in Normal-On and Emergency operation. Optional field configurable for wide and forward throw distribution **(US Patent Pending)**. Outdoor wide throw distribution: 70' (3' path of egress) at a 7.5' mounting height with 1 FC Average.

4,000K correlated color temperature (CCT).

70 CRI

**ELECTRICAL** — UVOLT (120 thru 347V, 50/60hz). Current-limiting charger maximizes battery life and minimizes energy consumption to provide low operating costs. Small battery chargers Certified in the CA Title 20 Appliance Efficiency Database

Short-circuit protection — current-limiting charger circuitry protects printed circuit board from shorts. Regulated charge voltage maintains a stable charge voltage over a wide range of line voltages.

Prevents over/undercharging that shortens battery life and reduces capacity. Filtered charger input minimizes charge voltage ripple and extends battery life.

Photocell option (PEL) for normally on product in order to discontinue illumination during periods when ambient light is present.

Remote units (OELR) are normally off. Emergency only functionality with DC power from an external battery.

BATTERY: Sealed, maintenance-free Lithium Iron Phosphate battery.

**SELF-DIAGNOSTICS AND REMOTE TEST (SDRT OPTION):** Automatic 24-hour recharge after a 90-minute discharge. Advanced electrical design provides constant light output throughout the entire discharge period for non-CW batteries. (For cold weather and cold temperature applications, the light may diminish though the discharge cycle). Brownout protection is automatically switched to emergency mode when supply voltage drops below approximately 80 percent nominal of 120, 220, 277 or 347. Other input voltages may vary. AC/LVD re-set allows battery connection before AC power is applied and prevents battery damage from deep discharge.

Self-Diagnostics: Continuously monitors AC functionality. Standard derangement monitoring will indicate disconnected battery, charger failure and displays green flashing indicator light while in emergency mode. Single multi-chromatic LED indicator to display two-state charging, test activation and three-state self-diagnostics.

Self-diagnostic testing: Five minutes every 30 days and 90 minutes annually. Diagnostic evaluation of lamps, AC to DC transfer, battery charging and condition of microprocessor. Automatic test is easily postponed for eight hours by activating manual test switch or use of remote tester (RTKIT accessory).

Manual testing: Test switch and remote tester (RTKIT accessory) provides manual activation of 60-second diagnostic testing for on-demand visual inspection. 90 minute manual testing can be enabled by pressing the test switch again while in test mode.

**INSTALLATION** — Wall mount: typically meets 7.5' to 14' mounting height from ground or floor. Power supplied by either mounting directly to a 4" square or 4" octagon j-box (wall mount) and accepts rigid or flex conduit.

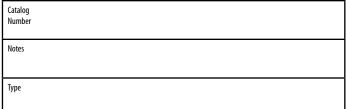
**LISTINGS** — UL wet location listed standard at 32-122°F (0-50°C). Unit with CW battery(cold weather) listed for -22°F to 122°F (-30° to 50°C). Remote listed for -40°F to 122°F (-40° to 50°C). Meets or exceeds all applicable requirements for UL 924, NFPA 101 (current Life Safety code), NFPA 70 (NEC), NOM (Norma Oficial Mexicana), California Energy Commission Title 20 section 1605.3 (W)(4), FCC Title 47, Part 15, Subpart B and OSHA. List and labeled to comply with Canadian Standards C22.2 No. 141-10.

**WARRANTY** — 5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms\_and\_conditions.aspx

Note: Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25  $^{\circ}$ C. Specifications subject to change without notice.

† Small Battery Chargers Certified in the CA Title 20 Appliance Efficiency Database.



#### **AFFINITY**®

**Premium Die-Cast Architectural Emergency Light** 

# **AFF**



without photocell (white)



without photocell (natural aluminum)



with photocell (white)



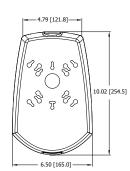
with photocell (dark bronze)

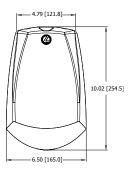
#### MOUNTING

All dimensions are inches (centimeters). Shipping weight: 3.5 lbs. (1.59 kgs.)

Length: 6 1/2 (16.51) Depth: 3 27/100 (8.30) Height: 10 ( 25.45) Weight: 3.5 lbs ( 1.59kg)



















EMERGENCY AFF

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A-1.3



BIRD'S EYE VIEW - 2
SCALE:



BUILDING ENTRY PERSPECTIVE

SCALE:

6 REAR BLDG PERSPECTIVE - MINUS FENCING FOR CLARITY



7 DOG HOUSING PERSPECTIVE -MINUS FENCING FOR CLARITY
SCALE:



PERSPECTIVE FROM PARKING LOT SCALE:

8 ENRICHMENT BLDG SCALE:

5 REAR BLDG PERSPECTIVE
SCALE:

# **GENERAL NOTES**

. RE: CIVIL AND LANDSCAPING PLANS FOR ADDITIONAL INFORMATION.

EXISTING SITE LANDSCAPING, PARKING AREA, PARKING STRIPING, BUILDING ENVELOPE TO REMAIN AS-IS UNLESS OTHERWISE NOTED.

# LEGEND

SYMBOL	DESCRIPTION
-	PROPERTY LINE
-	EASEMENT / RIGHT OF WAY
	BUILDING SETBACK
XX	FENCE, RE: X/A-1.1

# FENCING TYPES



FENCING TYPE

S: CHAINLINK, RE: SPEC. AND 1&2/A-1.20
D: ORNAMENTAL METAL FENCING, RE: SPEC. AND 3/A-1.20
P: PRIVACY PANEL

SPECIAL CONDITIONS

V: VINYL COATED
C: ANIMAL INTRUSION PREVENTION ROLLERS, RE: SPEC., TYP.

# KEYNOTES

SYMBOL	DESCRIPTION
1	FIELD GRASS
2	K-9 ARTIFICIAL GRASS OVER DRAINAGE COURSES, RE: CIVIL
3	ELECTRICAL TRANSFORMER, RE: ELECTRICAL
4	ELECTRICAL SWITCHGEAR, RE: ELECTRICAL
5	LANDSCAPE PLANTING, RE: LANDSCAPE
6	CONCRETE SIDEWALK, RE: CIVIL
7	TENSION FABRIC SHADE STRUCTURE W/ PAINTED STEEL POSTS
8	OUTDOOR STAFF BREAK AREA W. PICNIC TABLE
10	SIGNAGE, RE: CIVIL
12	SLAT METAL BENCH W. DONOR PLAQUE
13	CONCRETE DUMPSTER PAD, CMU ENCLOSURE & METAL ROOF, RE: CIVIL
14	DONOR BRICK PAVERS
34	PARKING LOT PAVEMENT, RE: CIVIL
35	BACKUP GENERATOR, RE: ELEC
36	AFORESTATION AREA RE: CIVIL
37	CUT BACK EXISTING ROAD HEDGE, RE: CIVIL
38	NEW ROAD CUT, RE: CIVIL
43	100' - 0" SLAB ELEVATION TO ADJACENT GRADE ELEVATION

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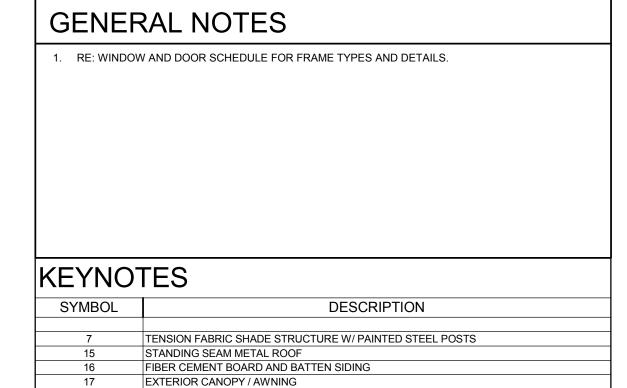
DRAWING TITLE SITE PLAN

DATE: 02/28/20

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WORK NOTES SYMBOL DESCRIPTION

ALUMINUM FRAMED WINDOW - TYP.

ALUMINUM FRAMED STOREFRONT PRECAST WINDOW SILL - TYP.

FIBER CEMENT TRIM BOARD - TYP.

HEAVY TIMBER FRAMING - DARK MAHOGANY STAIN

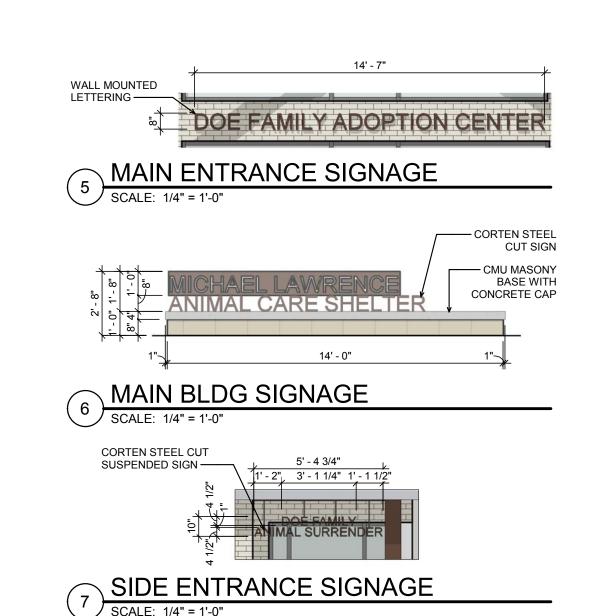
PAINTED WELDED WIRE CATIO SCREEN - SEE SPEC

PAINTED GALVANIZED STEEL LOUVER CANOPY

BRICK MASONRY

BIKE RACK

STAFF PICNIC TABLE



THE ANIMAL CARE
FOR KENT CC
THE ANIMAL CARE SHELTER FOR SES46 MARY MORRIS ROAD, CH

ANIMAI

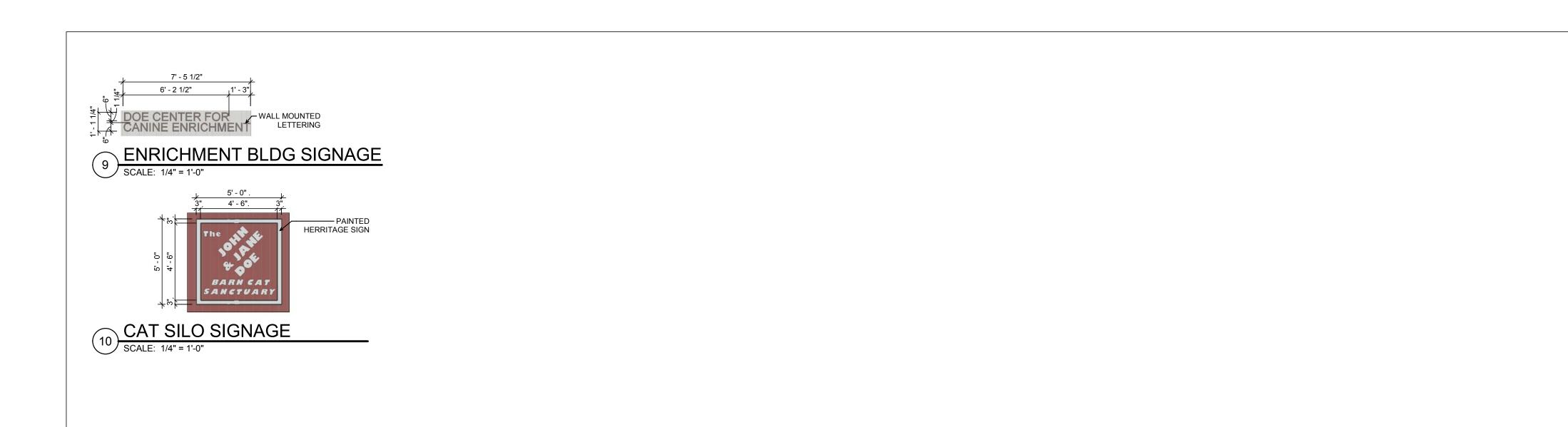
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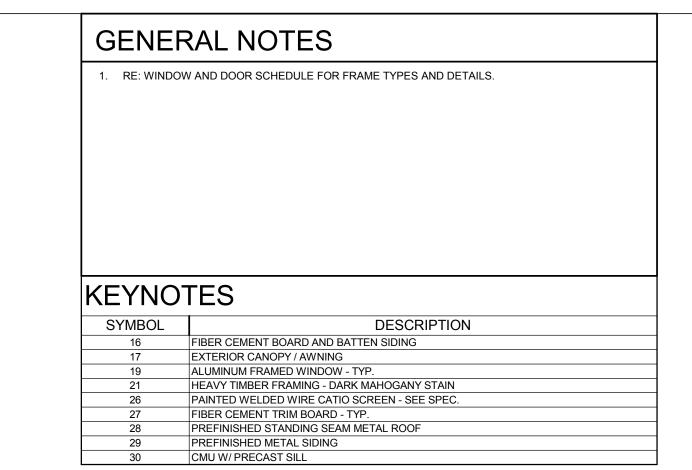
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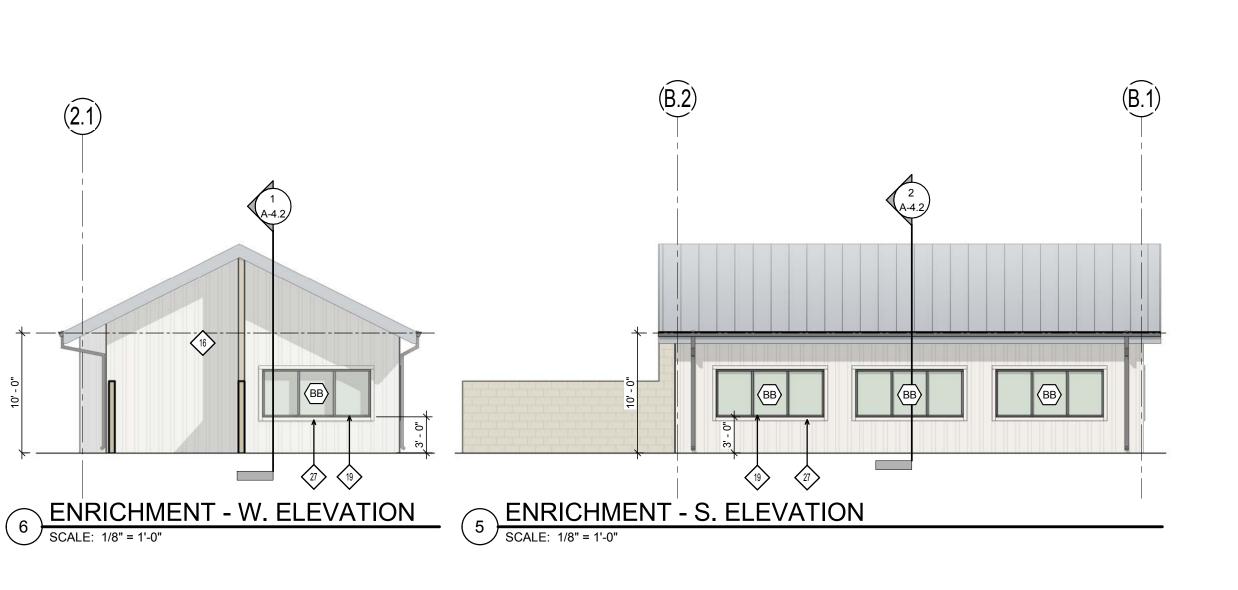
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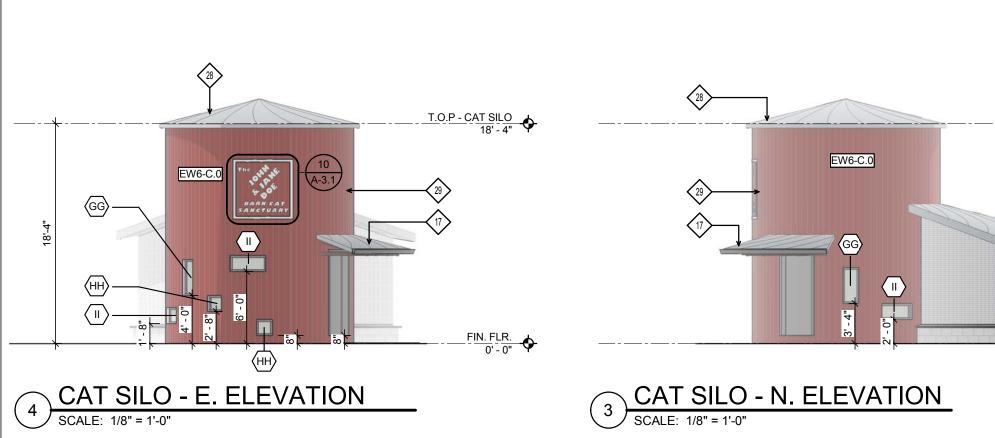
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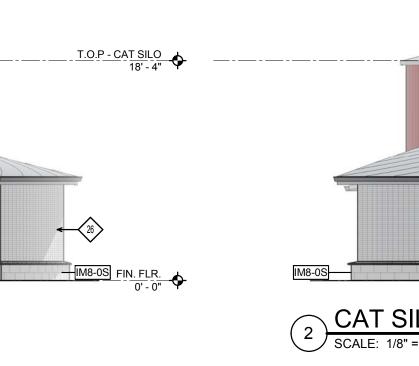


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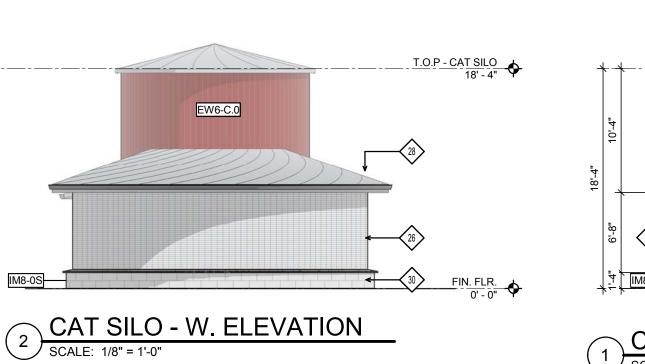
9 A-3.1

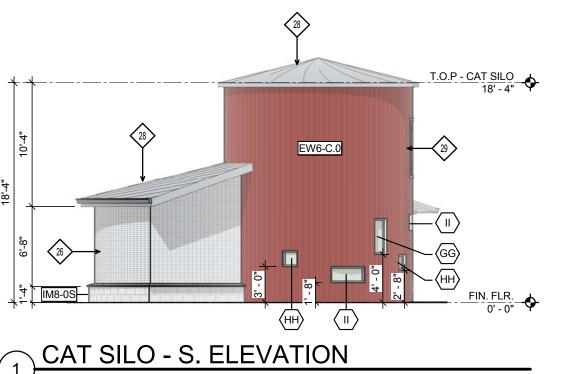
7 ENRICHMENT - N. ELEVATION
SCALE: 1/8" = 1'-0"

(2.1)



(2.1)





SHELTER

ANIMAL

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8 ENRICHMENT - E. ELEVATION
SCALE: 1/8" = 1'-0"