

County Council Of Howard County, Maryland

2016 Legislative Session

Legislative Day No. 3

Resolution No. 36 -2016

Introduced by: The Chairperson at the request of the County Executive

A RESOLUTION approving the 2015 Amendment to the Howard County Master Plan for Water and Sewerage, consisting of text, tables, and maps incorporating various revisions based on and including:

1. A determination of future water and sewer system flow projections and infrastructure needs;
2. Changes to the Planned Service Area that have been implemented as amendments to both the General Plan 2000 and through the adoption of PlanHoward 2030;
3. The progress of projects for future water supply and sewerage treatment needs in the county and outside of the county, including improvements to the Baltimore City water supply and expansion of the Patapsco Wastewater Treatment, which are coordinated with Baltimore City and Baltimore County;
4. The review of water and sewer service priorities for properties in the Planned Service Area; and
5. Changes in the anticipated alignment, location, and sizing of future facilities.

Introduced and read first time March 7, 2016.

By order Jessica Feldmark
Jessica Feldmark, Administrator

Read for a second time at a public hearing on March 21, 2016.

By order Jessica Feldmark
Jessica Feldmark, Administrator

Tabled on April 4, 2016

This Resolution was read the third time and was Adopted , Adopted with amendments , Failed , Withdrawn , by the County Council

on May 2, 2016.

Certified By Jessica Feldmark
Jessica Feldmark, Administrator

Approved by the County Executive May 5, 2016

Allan H. Kittleman
Allan H. Kittleman, County Executive

NOTE: [[text in brackets]] indicates deletions from existing law; TEXT IN SMALL CAPITALS indicates additions to existing law; Strike-out indicates material deleted by amendment; Underlining indicates material added by amendment

1. **WHEREAS**, Title 9, Subtitle 5 of the Environment Article of the Annotated Code of
2 Maryland (the “State law”) requires each county governing body to adopt a Master Plan for
3 Water and Sewerage and to review the plan every 3 years; and

4
5 **WHEREAS**, the County Council and County Executive last approved a comprehensive
6 amendment to the Master Plan for Water and Sewerage by adoption of Council Resolution 136-
7 2012 on October 5, 2012; and

8
9 **WHEREAS**, in the summer of 2012, the County Council adopted PlanHoward 2030 as
10 the General Plan for Howard County; and

11
12 **WHEREAS**, PlanHoward 2030 was effective on October 8, 2012; and

13
14 **WHEREAS**, in accordance with State law, the Department of Public Works has prepared
15 the attached 2015 Amendment to the Master Plan for Water and Sewerage as a comprehensive
16 amendment and also to incorporate changes made in PlanHoward 2030; and

17
18 **WHEREAS**, also in accordance with Section 9-503 of the State Law, the County’s
19 governing body has conducted a public hearing on the amendment; and

20
21 **WHEREAS**, this Amendment was approved by the Public Works Board on December 8,
22 2015 and by the Planning Board on January 21, 2016.

23
24 **NOW, THEREFORE, BE IT RESOLVED** by the County Council of Howard County,
25 Maryland this 2nd day of May, 2016, that the Howard County Master Plan for
26 Water and Sewerage is amended by adopting the 2015 Amendment, consisting of the text, tables,
27 and maps attached hereto and incorporated herein.

County Council Of Howard County, Maryland

2016 Legislative Session

Legislative Day No. 3

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Introduced and read first time _____, 2016.

By order _____
Jessica Feldmark, Administrator

Read for a second time at a public hearing on _____, 2016.

By order _____
Jessica Feldmark, Administrator

This Resolution was read the third time and was Adopted___, Adopted with amendments___, Failed___, Withdrawn___, by the County Council on _____, 2016.

Certified By _____
Jessica Feldmark, Administrator

Approved by the County Executive _____, 2016

Allan H. Kittleman, County Executive

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**Howard County**
Internal Memorandum

To: Lonnie Robbins
Chief Administrative Officer

From: James M. Irvin, Director *JMI*
Department of Public Works

Subject: County Council Resolution Approving the 2015 Amendment of the
Howard County Master Plan for Water & Sewerage- Testimony

Date: February 9, 2016

Presented below is our testimony for the County Council resolution to approve the 2015 Amendment of the Master Plan for Water & Sewerage.

In accordance with State Law, each County in the State of Maryland must develop and maintain a Master Plan which provides for the orderly expansion of the local public water and sewerage systems. The last major Master Plan Amendment was the 2011 Master Plan adopted by the County Council in 2012. The 2015 Amendment will replace the 2011 Master Plan in its entirety.

State regulations require that the Master Plan be prepared as a tool for implementation of County development policy. Therefore, the Plan must be consistent with the County's General Development Plan and with the growth and development projections prepared by the Department of Planning & Zoning.

A few of the key updates of the 2015 Amendment are listed below:

- Preparation of the 2015 Amendment was coordinated with staff within the Department of Planning & Zoning and utilized the Round 8A population and commercial development projections by Planning & Zoning to determine future water and sewer system flow projections and infrastructure needs.
- The Plan was updated and revised to describe the changes to the Planned Service Area (PSA) that have been implemented since the adoption of the 2011 Master Plan. These changes were implemented by amendments to General Plan 2000 and the adoption of PlanHoward 2030 by the County Council. (Ref: Chapter 1, Section 1.3)
- The water and sewer service priorities for parcels within the Planned Service Area were updated and revised where appropriate to reflect the progress of existing and new development since the last Plan update. (Ref: Exhibits 1 and 2)
- The Plan was updated to reflect the progress of future water supply and sewerage collection and treatment projects within the County and outside the County including improvements to the Baltimore City water supply and expansion of the Patapsco Wastewater Treatment Plant, which are

coordinated with Baltimore City and Baltimore County (Ref: Chapter 3-The Water Plan, and Chapter 4-The Sewerage Plan).

- The 2015 Amendment provides an accurate assessment of the capital projects required to provide for adequate future water and sewerage service to the citizens of Howard County (Ref: Table 8 of Chapter 3, and Table 13 of Chapter 4).

As part of the Master Plan preparation process, the 2015 Amendment of the Master Plan was reviewed by the Department of Planning and Zoning, the County Health Department, the Bureaus within the Department of Public Works, and the Maryland Department of the Environment. The review comments from each of these agencies have been addressed within the plan.

cc: Stephen Gerwin
file



Howard County
Internal Memorandum

To: Holly Sun, Budget Administrator
Budget Office

From: James M. Irvin, Director *JMI*
Department of Public Works

Subject: Fiscal Impact Statement for the 2015 Amendment of the
Howard County Master Plan for Water & Sewerage

Date: February 9, 2016

The Council Resolution is for adoption of the Howard County Master Plan for Water and Sewerage. The Master Plan is a planning document only, and has no direct fiscal impact on the County.

Attachment

cc: Donald Campbell



Howard County
Internal Memorandum

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From: James M. Irvin, Director *JMI*
Department of Public Works

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Attachment
cc: Donald Campbell

FW: Water and sewer Master Plan amendment

Feldmark, Jessica

Sent: Tuesday, March 22, 2016 11:16 AM
To: Ball, Calvin B; Fox, Greg; Greg Fox (Greg.Fox@Constellation.com); Weinstein, Jon; Sigaty, Mary Kay; Terrasa, Jen
Cc: Sayers, Margery; Clay, Mary; Knight, Karen; McLeod, Kate; Pruum, Kimberly; Smith, Gary
Attachments: Memo.PublicHearingVerbalTe~1.pdf (165 KB) ; EXHIBIT 1 as 11x17.pdf (5 MB) ; EXHIBIT 2East as 11x17.pdf (5 MB)

Please see below and attached as follow-up from last night's hearing on CR36-2016.

Jessica Feldmark
Administrator
Howard County Council
410-313-3111
jfeldmark@howardcountymd.gov

From: Sager, Jennifer
Sent: Tuesday, March 22, 2016 11:03 AM
To: Feldmark, Jessica
Subject: Water and sewer Master Plan amendment

See the attached written testimony from Don Campbell regarding the w/s master plan amendment. Also see below for an explanation of the maps that are attached.

Should I send it to all the councilmembers?

"Also, Councilman Fox asked for a Word version of the Master Plan to view the "Tracked Changes" revisions to the old Master Plan. I'm sorry to say that a markup version of the Word document does not exist. The updates and revisions by all of the various review agencies (including County Health Department, Planning & Zoning, Bureau of Engineering) became so unwieldy that we ultimately produced a new clean document.

Please extend my apologies to Mr. Fox. It was my intent to identify and describe all of the substantive updates and revisions in the testimony to the Council so that they were aware of any issues that may be of concern to the public. I have attached reduced-size versions of the water and sewer master plan maps that are suitable for printing at 11x17 size and attaching to the testimony. These maps show in red ALL of the modifications to the Planned Service Area since 2011 and may be of interest to Mr. Fox. Full size versions of these maps are contained in the appendix of the Master Plan books as Exhibits 1 and 2."



Howard County
Internal Memorandum

Subject: 2015 Amendment of the Howard County Master Plan for Water & Sewerage

To: Howard County Council Public Hearing, March 21, 2016

From: Don Campbell,
Water & Sewer Planning Division, Manager
Department of Public Works

Date: March 21, 2016

Presented below is the verbal testimony for the County Council resolution to approve the 2015 Amendment of the Master Plan for Water & Sewerage.

The Department of Public Works is seeking approval of the 2015 Amendment of the Howard County Master Plan for Water and Sewerage in accordance with Section 22.405 of the County Code.

Title 9, Subtitle 5 of the Annotated Code of Maryland requires that each County develop and maintain a Master Plan to provide for the orderly expansion of the local public water and sewerage systems. The Plan must be consistent with the County's General Development Plan and with the growth and development projections prepared by the Department of Planning & Zoning.

The last major Master Plan Amendment was the 2011 Master Plan adopted by the County Council in October 2012. The 2015 Amendment is a comprehensive update and revision of the 2011 Amendment and will replace the 2011 Master Plan in its entirety.

The Master Plan consists of 4 Chapters, followed by supporting documents included as Exhibits 1 through 13.

CHAPTER 1 provides an overview of the County's W & S planning and organizational structure.

CHAPTER 2 provides geographic and demographic data.

CHAPTER 3 is the Water Plan, and

CHAPTER 4 is the Sewerage Plan.

CHAPTER 1:

Chapter 1 describes the organizational structure and processes that are in place to provide for the orderly management and expansion of the water & sewer infrastructure and to maintain consistency with County development policies. The preparation of the 2015 Master Plan was coordinated with the County's comprehensive development plan (i.e., General Plan 2000 and

the PlanHoward 2030 update) and with the staff within the Department of Planning & Zoning.

Water & sewer planning for Howard County is organized into two major planning regions: the Planned Service Area and the No Planned Service area. Several changes to the Planned Service Area (PSA) were implemented following the adoption of the 2011 Master Plan and are now incorporated into the 2015 Amendment. These changes were implemented either **by amendments to General Plan 2000 or by the adoption of PlanHoward 2030** by the County Council in August 2012 (with supplemental amendments through 2014).

Chapter 1, Section 1.3 of the Master Plan describes the revisions to the PSA that have been implemented as follows:

1. A Board of Education parcel and adjacent parcels in **west Ellicott City** (north of Frederick Road, south of U.S. 40 and east of Marriottsville Road), which were previously in the Water Service Only area, were added to the Sewer Service area;
2. The historic **Doughregan** property was added to the PSA; and
3. **Four parcels in the Clarksville area and one parcel in the Fulton area** (Maple Lawn Farms South) were added to the PSA under PlanHoward 2030.

The water and sewer infrastructure requirements for these revisions are addressed in Chapters 3 and 4.

CHAPTER 2:

In Chapter 2, we have County geographic and demographic data that were reviewed and updated where appropriate. The most significant changes were the population and development projections presented in the Tables included with the Chapter.

The 2015 Amendment utilizes the “**Round 8A**” **population and commercial development projections** provided by Planning & Zoning to project the future water and sewer system flows and infrastructure needs. The water and sewerage **infrastructure needs through the year 2040** were evaluated based on the DP&Z projections, which are tabulated in Tables 1 through 1C of Chapter 2.

CHAPTERS 3 and 4 provide the Water Plan and the Sewer Plan.

The capacities of the **water and sewer systems were each evaluated** using digital hydraulic models to determine when and where system upgrades will be required to meet demands through the planning period.

The **water and sewer service priority categories** for parcels within the Planned Service Area were updated and revised where appropriate to reflect the progress of existing and new

development since the last Plan update. The maps and tables presented later in **EXHIBITS 1 and 2** identify each of these revisions.

Chapters 3 and 4 were also updated to report the **progress of other projects inside and outside of the County** that are necessary for the County's future water supply and wastewater treatment needs including (1) water supply improvements to Baltimore City's Second and Western Third Water Zones, and (2) upgrade of Baltimore City's Patapsco Wastewater Treatment Plant. These projects are coordinated with both the Baltimore City and Baltimore County public works departments.

CHAPTER 3:

In addition to the aforementioned updates and revisions, the following sections of Chapter 3 were updated:

1. Section 3.10, titled Required Local System Improvements

This section identifies the capital water system projects in the County's individual water pressure zones that are necessary to satisfy future demands. **Table 8 is a comprehensive listing** of planned capital and private developer water projects.

2. Section 3.11 Water Quality Modeling

The digital hydraulic model was used to evaluate the water residence time (or "water age") within the distribution system, which is a factor that can affect water quality. Section 3.11 identifies several areas of concerns and provides recommendations for improvements.

3. Section 3.13 Financing Water Improvements

This section describes the Department of Public Works' fiscal management of the water system along with the various fees and rate schedules that fund the water system.

4. Figure 3-4: Immediate, 5-Year, 10-Year and Comprehensive Priorities Plan for Water System Development

This map displays planned major water system projects and the timeframe for implementation.

CHAPTER 4

In addition to the aforementioned revisions, the following sections of Chapter 4 were updated:

1. Section 4.3, titled Consent Agreement.

This section describes the status of the Consent Agreement that was established between Howard County and MDE in March 2010 to implement corrective actions to prevent potential sewer overflows.

2. Section 4-10 Required Local System Improvements based on Capacity Evaluation

This section identifies the capital sewer projects in each of the County's sewer drainage basins that are necessary to satisfy future capacity needs. **Table 13 is a comprehensive listing** of planned capital and private developer sewer projects.

3. Section 4.12 Reclaimed Water System

This section describes the development of the County's reclaimed water system including the recent preparation of a **Reclaimed Water Master plan, a Reclaimed Water Management plan and** establishment of a capital project to develop a reclaimed water supply and distribution system.

4. Section 4.14 Financing Sewerage Improvements

This Section describes the Department of Public Works' fiscal management for the sewerage system along with the various fees and rate schedules that fund the sewer system.

5. Figure 4-3: Immediate, 5-Year, 10-Year and Comprehensive Priorities Plan for Sewerage System Development

This map displays planned major sewerage system projects and the timeframe for implementation.

Following Chapter 4, we have a number of Exhibit folders containing documents to support the Plan. Most notable of these are **EXHIBITS 1 and 2**.

EXHIBIT 1 is a detailed map that displays the major facilities of the **County water system and the service area changes** that have taken place since adoption of the 2011 Master Plan amendment. The descriptions of the water service area revisions are provided in the table that accompanies the map.

EXHIBIT 2 consists of two maps that display the major facilities of the **County sewerage system and the service area changes** that have taken place since adoption of the 2011 Master Plan amendment. The descriptions of the sewer service area revisions are provided in the table that accompanies the maps.

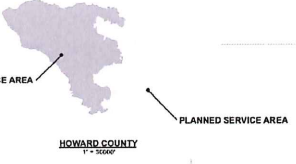
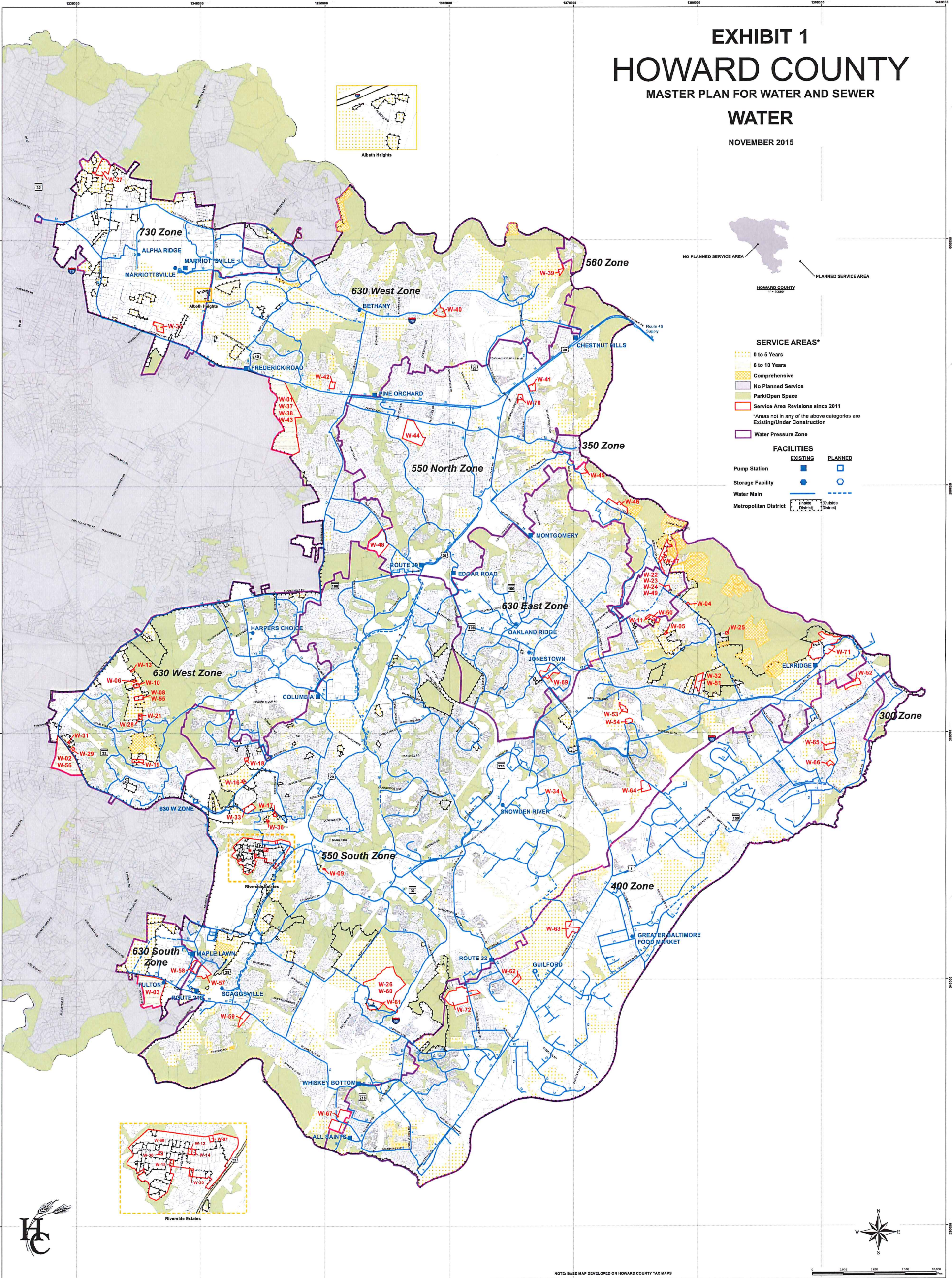
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Thank you for your time. We ask the Council to approve the 2015 Amendment as a comprehensive and rational plan for the County's water and sewer infrastructure.

END

EXHIBIT 1 HOWARD COUNTY MASTER PLAN FOR WATER AND SEWER WATER

NOVEMBER 2015



SERVICE AREAS*

- 0 to 5 Years
- 6 to 10 Years
- Comprehensive
- No Planned Service
- Park/Open Space
- Service Area Revisions since 2011
- *Areas not in any of the above categories are Existing/Under Construction
- Water Pressure Zone

FACILITIES

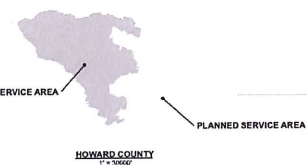
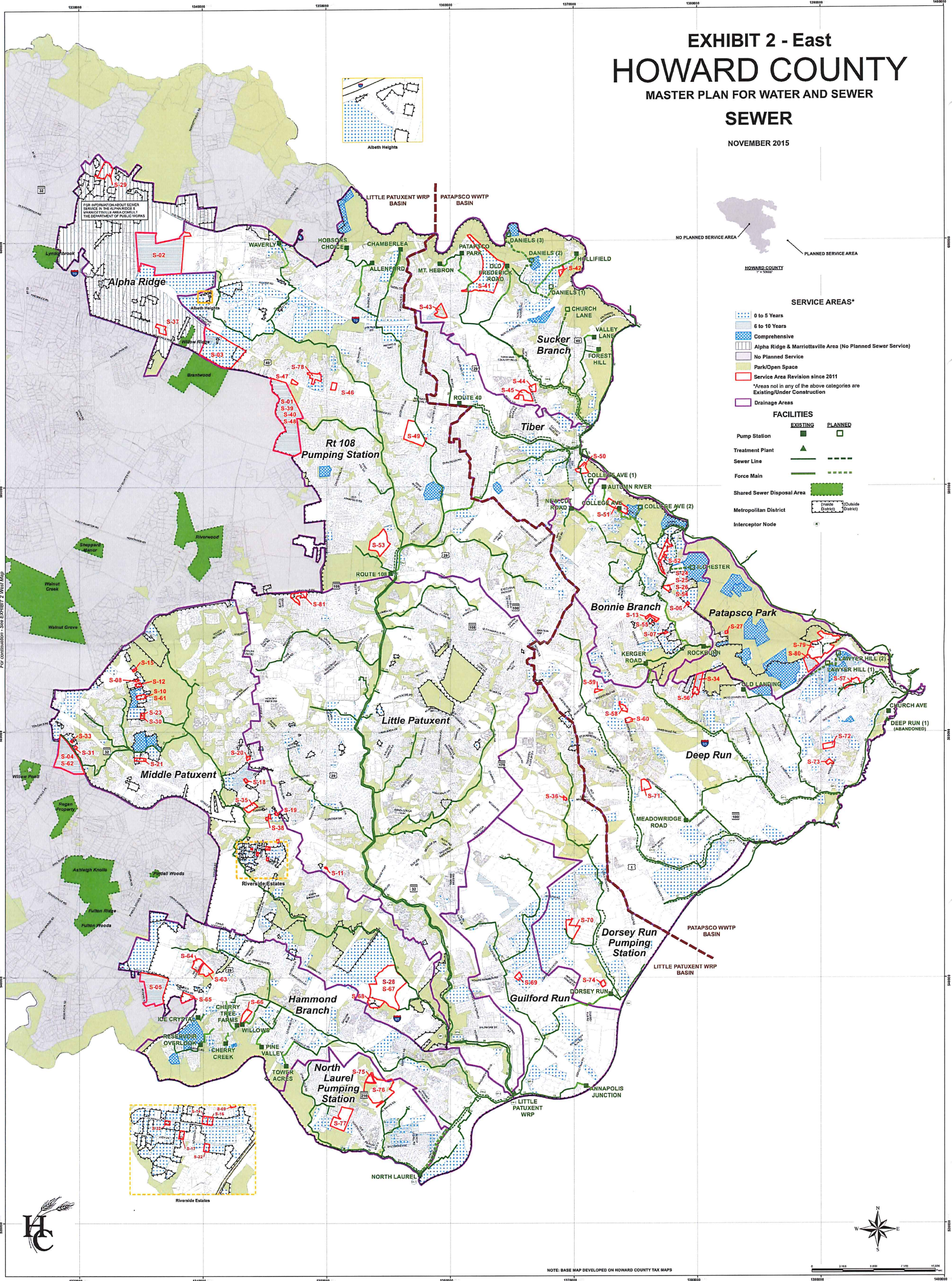
	EXISTING	PLANNED
Pump Station		
Storage Facility		
Water Main		
Metropolitan District		



NOTE: BASE MAP DEVELOPED ON HOWARD COUNTY TAX MAPS

EXHIBIT 2 - East HOWARD COUNTY MASTER PLAN FOR WATER AND SEWER SEWER

NOVEMBER 2015



- SERVICE AREAS***
- 0 to 5 Years
 - 6 to 10 Years
 - Comprehensive
 - Alpha Ridge & Marriottsville Area (No Planned Sewer Service)
 - No Planned Service
 - Park/Open Space
 - Service Area Revision since 2011
 - *Areas not in any of the above categories are Existing/Under Construction
- Drainage Areas**
- FACILITIES**
- | | | |
|----------------------------|-----------------|----------------|
| | EXISTING | PLANNED |
| Pump Station | | |
| Treatment Plant | | |
| Sewer Line | | |
| Force Main | | |
| Shared Sewer Disposal Area | | |
| Metropolitan District | | |
| Interceptor Node | | |

For continuation - See EXHIBIT 2 West Map

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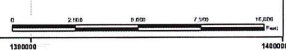
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NOTE: BASE MAP DEVELOPED ON HOWARD COUNTY TAX MAPS



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