MINUTES
City Council Public Works & Utilities Committee

Tuesday, August 6, 2025 – 3:30pm
City Council Chambers

Members Present:	Mac Morrow, Chair, Council Member (arrived late) Lauren Wise, Vice-Chair, Council Member Owen Carson, Citizen Member Mayor Copelof, Ex-Officio Member
Staff Present:	Wilson Hooper, City Manager David Todd, Assistant City Manager Dennis Richardson, Water Treatment Plant Supervisor Aaron Winans, Wastewater Treatment Plant Superintendent Dean Luebbe, Finance Director Selena Coffey, Assistant to the City Manager

A. Welcome and Call to Order

Committee Chair Mac Morrow called the meeting to order at 3:30pm.

B. Certification of Quorum

Assistant to the City Manager Selena Coffey certified that a quorum was present.

C. Approval of Agenda

Mr. Wise made a motion to approve the agenda after moving item G to E. This was seconded by Mr. Owen. All in favor.

D. Approval of Minutes

Mr. Carson made a motion to approve the agenda, which was seconded by Mr. Wise. All in favor.

E. Project Updates:

1. Hillview Street Culvert

Mr. Todd reported that the survey work has been done, and the H&H study is underway and staff has been working with FEMA to get funding secured for the A&E study.

Mr. Todd then provided a review of the following tables showing a timeline for the project.

2. **Norton Creek Restoration Phase 2**

Mr. Todd reported that this project was put out to bid with four bidders and we only received one bid. This bid was well within the budget and staff is in the process of rewarding the project to the bidder in order to begin the project.

3. **Water Treatment Plant Renovation Update**

Mr. Todd reported that the contractor, Carolina Specialties, has started their work and have excavated for the new clear well and are progressing well with the project. He reiterated that the project is estimated to be completed on time.

4. **Water and Sewer Asset Inventory Assessments**

Mr. Todd shared that the water asset inventory is moving along well and the sewer asset inventory is progressing even better. They are currently verifying that the flow model is working well. He feels that the schedule is going well and he anticipates that they may complete their work by the upcoming September.

Mr. Todd reported that the sewer asset inventory field work is 90% complete, mapping is 90% complete, mapping is 95% complete, smoke testing had been completed, and that work was ongoing. The smoke testing did show some issues for addressing and staff will continue to work on infrastructure as necessary based on this testing. Mr. Todd is comfortable the progress being made.

5. **Gallimore Basin Sewer Rehab Update**

Mr. Todd reported that this project is progressing well, but the contractor has been having trouble finding subcontractors.

6. **Sewer Lift Station Rehabilitation Project**

Mr. Todd reported that the necessary easements have been resolved, and this project can move forward as soon as the easements have been signed formally.

F. Stormwater Master Plan Update

Mr. Carson asked to be recused from the conversation on this topic. Mr. Wise made a motion to recuse Mr. Carson, which was seconded by Mr. Morrow. Both in favor.

Mr. Todd introduced the project manager and assistant project manager from McAdams. Mr. Todd updated that McAdams has completed their due diligence work, which is attached to these minutes. Mr. Todd asked the committee to call a special-called meeting to review a final proposal from McAdams that will include cost estimates. This meeting was scheduled for Thursday, August 28, 2025 at 3:30pm in council chambers.

[See Attachments for presentation]

The committee had brief discussions about the presentation but took no further action.

After the presentation, Mr. Wise made a motion to remove the recusal of Mr. Carson and this motion was seconded by Mr. Morrow. Both voted in favor.

G. Wastewater Treatment Plant Update

Mr. Todd updated the committee that staff met with KCI two weeks ago and KCI is moving through the schematic design quickly. He shared that there are three ways that the plant can be built:

1. Build concrete structures like now, with the expected life of 50-to-100-year structures; or
2. Build prefabricated structures that are made of steel or stainless steel and is modular so the city can buy as many as necessary to meet capacity needs with an estimated 25-year life span; or
3. Build a combination of the latter with a 25-to-50-year life span.

Mr. Todd stated that he recommended the first option of building concrete structures for longevity and effectiveness. Staff and the committee discussed the pros and cons of all options as well as the costs for each option. No final decisions were necessary at this meeting but will be necessary in the near future.

H. Public Comment

Doug Miller spoke and complimented the staff and committee for their work in making all the significant improvements in the city's utility infrastructure.

Harvey Sankey spoke and asked about the funding necessary for the water treatment plant upgrades. Mr. Hooper shared that staff wouldn't know the full cost until KCI finishes their work.

I. Set Next Meeting

The next meeting of the committee will be a special-called meeting on August 28, 2025 at 3:30pm and the next regular meeting of the committee will be September 3, 2025 at 3:30pm.

J. Adjourn

Mr. Morrow made a motion to adjourn, which was seconded by Mr. Carson. All voted in favor and the meeting was adjourned at 5:05pm.

Minutes Approved: September 3, 2025

Mac Morrow, Chair, Council Member
Lauren Wise, Vice Chair, Council Member

Selena D. Coffey
Assistant to the City Manager

MCADAMS

2100 South Tryon Street
Suite 400
Charlotte, NC 28203
704. 527. 0800

Due Diligence + Preliminary Design Phase

A4.10 PROJECT MANAGEMENT + ADMINISTRATION (PHASE 1 + PHASE 2):

FEE: $xx,xxx (lump sum)

- Project work plan development + kickoff meeting with City of Brevard staff, including identifying and prioritizing work areas;
- ~~Assistance with creation of project notifications and communication to impacted residents;~~
- Periodic project updates and status reports;
- General project management and administration throughout duration of contract;
- Up to ~~four (4)~~ two (2) meetings (either in person or virtual) with City Staff to discuss progress, updates and for planning purposes, including at least one meeting to discuss prioritization design criteria for infrastructure;
- Up to ~~two (2)~~ one (1) public informational meetings / presentations with City stakeholders, including any committee or council meetings as directed by the City; and
- One (1) final presentation meeting to City staff associated with draft Stormwater Assessment Report and product deliverables.

A4.11 ASSESSMENT OF CURRENT DATA + INFORMATION (PHASE 1):

FEE: $xx,xxx (lump sum)

- Obtain and review all existing stream, flood, and other general hydrologic and topology data from available resources for use as background system data for stormwater analysis;
- Meet with other project stakeholders / City officials / staff to gather local knowledge of stormwater systems and flooding history;
- Assimilate information on previous basin studies and stormwater analyses within the City;
- Conduct initial project area assessments and field walks of the existing drainage basin;
- Assimilate available data of existing utilities to determine potential conflicts for storm drainage; and
- Review existing base system maps and strategic planning for additional field surveys and asset inspections.

L4.12 PIPE CLEANING / CCTV + TRAFFIC CONTROL (PHASE 1):

FEE: Not to Exceed $xxx,xxx without prior written approval

Work under this phase will include several components of the inspections process, including ~~200~~ 100 hours with a two-man crew (~~400~~ 200 man-hours total), or approximately ~~25~~ 12 days of CCTV work; ~~10~~ 5 days of heavy pipe cleaning and use of a vacuum truck; and 5 2 days of subcontracted traffic control. See below breakout of tasks to be completed as a part of this scope:

CLOSED CIRCUIT TELEVISION (CCTV) INSPECTIONS AND DOCUMENTATION:

FEE: $xxx,xxx (not to exceed, approximately xx days of CCTV work + Engineering Desktop Analysis)

The purpose will be to explore dimensions, alignment, and potential distresses of the storm drainage pipes along the requested pipe sections to help evaluate the existing conditions of the storm drainage system:

- CCTV video documentation using a two-person crew. The pipe CCTV video documentation will be conducted during daytime (typically between 8am to 6pm). The CCTV video documentation will include location ID's, direction of travel, and a linear footage counter.

Limitations of CCTV Services

- CCTV operators can only remotely video document what is safely accessible. Some pipes may contain a clog. CCTV operators will take care in not passing or traversing obstacles / debris that we do not feel we can safely advance or retreat from;
- The CCTV remote operated vehicle can transverse a minimum pipe size of 8 inches up to a maximum of 96 inches in diameter;
- To avoid loss of equipment, CCTV operators cannot cross obstacles such as debris and large defects in the pipeline. If an obstruction is found, CCTV operators will attempt to traverse the pipe from the opposite direction to capture the remaining pipeline data; and
- If required, a pipe cleaning contractor shall remove debris so that we can then access the pipe for video documentation (this is described in Pipe Cleaning / Vacuum Truck below).

A report summarizing the results of our CCTV video documentation will be prepared. The videos and data will be reviewed and transmitted to the client via an external flash drive (mailed or hand delivered to the client). The report will include the following:

- The extent of existing storm drainage system explored;
- A description of misalignments and potential distresses of the storm drainage pipe, if observed;
- A description of obstacles encountered such as debris and visible defects in the pipelines; and
- Opinion regarding the operating condition of the stormwater system documented.

PIPE CLEANING / VACUUM TRUCK:

FEE: $xx,xxx (not to exceed, assumes xx hours @ $xxx.xx / hour)

- Process involves hydro-vac suction of material from drains and lines as well as high-pressure jetting of storm systems. We note that severe blockages with tree parts, concrete, rubble, etc may not be able to be practically removed with these methods; and
- Up to xx days of subcontracted heavy pipe cleaning and use of a vacuum truck for the purposes of this proposal. The budget assumes the City will allow the materials collected to be disposed of on city property in Brevard. If disposal of the materials outside of Brevard is required, additional charges will be incurred.

TRAFFIC CONTROL:

FEE: $xx,xxx (not to exceed, assumes x days @ $x,xxx/day)

- Use of traffic control as need to access structures or provide cleaning / vacuum truck work;
- The traffic control will provide lane closures, proper signage, qualified flaggers, etc as necessary to help facilitate CCTV work safely; and
- Up to x days of subcontracted traffic control services for the purposes of this proposal.

A4.20 FIELD DATA COLLECTION (PHASE 1):

FEE: $xx,xxx (lump sum)

Work under this task includes time for field walks to verify storm system connectivity and additional pole camera and asset inspections within priority areas and will include the following:

- Initial field walks to verify and confirm system connectivity and limits;
- All field work support associated with pipe, structure, and outfall inspections (including site visits and any support during pipe cleaning and inspection work), plus additional pole camera inspections as determined appropriate; and
- Asset locations and verification as necessary or required for basemapping updates.

Existing Conditions Analysis

A4.30 GEODATABASE MANAGEMENT + DASHBOARD CREATION (PHASE 1):

FEE: $xx,xxx (lump sum)

McAdams will update the City's stormwater GIS inventory and integrate into a project dashboard where information on the City's drainage system will be updated based on inspection results and problem identification. This work will include:

- Data assembly and geodatabase development and maintenance;
- GIS Dashboard creation, including real-time updates during data collection and formatting based on feedback with City staff;
- Ongoing maintenance throughout the life-cycle of the Stormwater Master Plan study; and
- ~~For condition assessments, we will take detailed pipeline ratings and defect codes and build related tables that can be viewed via a GIS geodatabase. We will also catalogue CCTV inspection video and attach to the pipeline condition rating and records for the applicable features via a video link from an online library.~~

A4.40 ANALYSIS OF EXISTING STORMWATER SYSTEMS (PHASE 1):

FEE: $xx,xxx (lump sum)

For this task, McAdams will provide the following scope of services:

- Hydrologic and Hydraulic modeling software(s) will be used to analyze existing storm drainage systems within project area, including both closed conduit and open channel systems. For the majority of the H+H modeling, McAdams will primarily utilize PC-SWMM to prepare an analysis of integrated systems across City;
- For each drainage system, McAdams will determine peak flow rates, provided levels of service, and preliminary sizing of pipes and drainageways to meet intended level of service and / or drainage improvements for problem areas;
- McAdams will evaluate 2-, 10-, 25-, ~~50-~~, and 100-year, 24-hour SCS Type II rainfall distribution events as part of our modeling efforts. Rainfall depths will be based on NOAA Atlas 14 data;
- Field survey data and drainage basin maps will be used to develop the hydrologic models. Connectivity will be verified, and model calibrated through additional field work and engineering analysis; and
- Utilize hydrologic models to verify infrastructure capacities, flood prone areas, and identify system deficiencies and critical assets.

L4.41 ENVIRONMENTAL REGULATIONS (PHASE 2):

FEE: $ x,xxx (lump sum)

For this task, Equinox will provide the following scope of services:

- Develop "Environmental Regulations" chapter for SWMP document, which will include, but is not limited to, the following items:
  - Watershed Characterization;
  - Surface Water Classifications, Impairments, and Special Designations;
  - Summary of changes to the Clean Water Act since the 2007 Master Plan;
  - Stormwater Ordinance Review;
  - Inventory and assessment of existing NPDES permits and requirements; and
  - Discussion of nutrient load reduction standards.

Engineering Concept + Design Plans

A4.50 CIP PRIORITIZATION DEVELOPMENT + IMPLEMENTATION (PHASE 1):

FEE: $xx,xxx (lump sum)

Based on the results of the above investigations and analyses, McAdams will perform the following tasks and prepare the following final deliverable items:

We will ~~review video recordings and~~ assess the storm drainage system to determine current condition and where immediate, remedial action may be necessary. A prioritization list relative to repairs needed based on current conditions will be provided. Based on assessment and analysis of storm drainage, McAdams will develop a detailed prioritization of capital improvement projects (CIP) for the City to utilize for budgetary planning purposes.

Deliverables:

- ~~Structural assessments of pipes, catch basins, and other storm structures within the area of interest;~~
- Development of scoring matrix based on ~~structural conditions~~ level of service of pipe;
- Development of Capital Improvement Plan, including prioritization development and design criteria; and
- Revisions and updates based on feedback from City of Brevard.

A4.51 PRELIMINARY PLANS + ALTERNATIVES (PHASE 2):

FEE: $xx,xxx (lump sum)

McAdams will provide services associated with suitable alternatives for flood mitigation or necessary stormwater management within the area of interest, subject to the following:

- Alternatives analysis and replacement recommendations should balance the replacement longevity and the cost to each community including upfront and maintenance costs. It is envisioned that alternatives will likely include the following:
  - ~~Integration of stormwater management into the proposed parks masterplan;~~
  - Upgrade of culvert / drainage systems to meet established design criteria;
  - Improvements along alternative alignments to minimize construction cost and impacts to private property, transportation systems, and other existing infrastructure;
  - Non-structural floodproofing options, including alternative flood-hazard mitigation strategies;
  - ~~Review and consider alternatives and "what-if" scenarios to identify the most critical improvements and their sensitivity to changes in flooding conditions;~~
  - Recommend potential stormwater retrofit locations and identify potential GSI retrofit opportunities to be assessed, compared, and ranked to determine the most feasible and beneficial projects for the City;
- For the majority of minor drainage systems, one (1) alternative will be proposed. ~~For more complex or larger infrastructure repairs, up to two (2) alternatives may be proposed as appropriate;~~
- To the degree appropriate, future conditions hydrology will be used in development of alternatives and proposed conditions. Future conditions will be based on City / County zoning and/or comprehensive planning info;
- Assist with the preparation of conceptual / schematic plans for additional stormwater conveyance infrastructure, or improvements to existing infrastructure, to alleviate or mitigate against future flooding in those areas with consistent flooding problems;
- Concept level plans are proposed to be exhibits generated from GIS, and will show locations, type, sizes, and preliminary elevation information for proposed drainage infrastructure; and
- Opinions of Probable Construction Costs (OPCC) for necessary improvements.

A4.52 STORMWATER INFRASTRUCTURE O&M PLAN (PHASE 2):

FEE: $xx,xxx (lump sum)

We will assess the storm drainage system to determine current condition and where immediate, remedial action may be necessary. A prioritization list relative to repairs needed based on current conditions will be provided. From this information, McAdams will develop an optimized stormwater infrastructure and operation maintenance plan for the City of Brevard considering the full inventory of all stormwater control structures and other planned City developments. The purpose of this O&M plan will be to extend the life of the existing infrastructure and to optimize its existing operation. Other tasks include:

- ~~For components of the system that have significant trash and / or sediment accumulation, determine the likely sources of that within the watershed and develop a plan to minimize those impacts to the drainage system;~~
- Development of a routine inspection and maintenance schedule to assure the system operates at peak efficiency;
- Identification of any sources of illicit discharge into the drainage system and potential corrective action required;
- Assessment of the existing drainage system to determine areas of the existing system require significant maintenance, repair or replacement; and
- ~~For areas requiring repair and / or replacement, consideration will be given to future conditions flowrates within that system during design and whether drainage from adjacent overtaxed existing systems can be diverted to the replacement system to extend the existing systems' useful life and level of service.~~

A4.53 STORMWATER ASSESSMENT REPORT (PHASE 1):

FEE: $xx,xxx (lump sum)

McAdams will prepare a final Stormwater Assessment Report detailing all findings, recommendations, and prioritization of projects. This task includes the following:

- Development of comprehensive inventory of all system components, documentation of the condition of all assets, and development of a system for future management of the assets;
- Development of preliminary / draft version of the Stormwater Assessment report based on initial findings and review with project stakeholder staff;
- Participate in group meetings with City personnel and project stakeholders to share and discuss draft report;
- Development of the final Stormwater Assessment Report based on feedback and revisions discussed on the draft review; and
- Assist with presentation of the final report and findings to City leadership and other project stakeholders

Policy + Program Recommendations

A14.60 IDENTIFICATION OF FUNDING OPPORTUNITIES (PHASE 2):

FEE: $xx,xxx (lump sum)

McAdams will perform a funding scan to assist the City of Brevard to identify potential grant and loan programs, with an emphasis on Disaster recovery and emergency funding, for up to ~~twenty (20)~~ fifteen (15) projects and programs identified in the City's Capital Improvement Plan (CIP). The funding scan will assess the eligibility and competitiveness of the projects for various Federal, state, and private grants and loans, and provide strategies to maximize the City's chances of securing funding for these projects.

Upon completion of the CIP, McAdams will convene up to one (1) kickoff meeting with City staff and collect data on the CIP projects, including project descriptions / scopes, challenges addressed, benefits, project locations, timelines, costs, and project partners. Upon receipt of this information, McAdams will perform a review of currently active federal, state, and private grant and loan programs and evaluate the eligibility criteria and requirements of each program to determine those for which the project is eligible and may be most competitive. A project's competitiveness will be evaluated based on the project information provided in Task 1 as well as previous grant recipients, success rates, and funding trends for the funding programs evaluated. McAdams will consider the ongoing changes in the federal funding landscape (including authorized programs and funding levels) and provide information in the scan on any identified uncertainties to assist the City in managing risk. This task will also identify opportunities to "stack" funding sources (e.g., use a state-funded grant to provide the non-Federal match for a Federal grant). A memo documenting the results of the funding scan, as well as up to one (1) PowerPoint slide to use for City Council briefing(s) shall be provided to the City upon completion. One (1) consultant staff will participate in up to two (2) City Council meeting or other stakeholder meetings at the discretion of City staff.

~~McAdams will also provide a table or funding matrix that includes key attributes of the funding sources, including overview, eligibility criteria, match requirements, application deadlines, evaluation criteria, and the competitive landscape (e.g., historical success rates or information on the number of applicants versus the number of grants awarded where such data is available). This table will also reflect the results of the funding scan and link the identified grant programs to those projects that are eligible and most competitive for these grant programs. This funding matrix may also include information about grant programs that have not been matched to projects but are worth tracking. These additional programs will be added at the discretion of McAdams and the City.~~

A4.61 ~~STORMWATER UTITLITY FEE ANALYSIS~~ STORMWATER ERU ANALYSIS (PHASE 2):

FEE: $xx,xxx (lump sum)

For this phase, McAdams will advise the key policy issues and goals for the existing stormwater utility. This phase will involve the following tasks:

- ~~Determining capital requirements based on the Asset Inventory / CIP based on the selected Level of Service (LOS);~~
- ~~Estimating program costs related to MS4 compliance;~~
- ~~Conducting GIS analysis and developing a database to calculate built-upon area (BUA) per parcel in support of utility fee development;~~
- ~~Establishing the Equivalent Residential Unit (ERU);~~
- ~~Creation of the updated utility rate structure;~~
- ~~Providing guidance on methodology; and~~
- ~~Updating the stormwater utility ordinance.~~
- Using recent, high-quality aerial photography to estimate the built-upon area on ten percent of the City's single-family lots to calculate the ERU for the City's stormwater utility.
- Applying the same aerial photography to determine the built-upon area for all commercial, institutional, industrial, and multi-family properties within the City.
- Calculating the total number of ERUs citywide and providing an interactive spreadsheet that enables the City to test various stormwater utility fee scenarios and project potential revenue based on the fee assessed per ERU.

A4.62 UDO UPDATE (PHASE 1):

FEE: $xx,xxx (lump sum)

McAdams will prepare an update to Chapter 6.6 of the Unified Development Ordinance (UDO) to clarify and streamline the existing stormwater management requirements while addressing the City's identified goals. The scope of work for this task includes:

- A comprehensive review of Chapter 6.6 [Stormwater runoff provisions], with annotated notes for discussion prior to a meeting with City staff. The review will evaluate clarity, structure, alignment with state and federal regulations, technical accuracy, and any additional concerns raised by the City;
- Up to two one-hour virtual meetings with the City to present McAdams' findings and gather initial feedback;
- Development of a draft revised Chapter 6.6, incorporating underlines and strikethroughs to clearly show proposed changes, along with comments explaining the rationale behind each recommendation;
- Up to two one-hour virtual meetings with the City to review and refine the draft based on feedback received; and
- Preparation of the final updated version of Chapter 6.6, incorporating all approved changes.

Stormwater Hotspot Flooding Areas

Area 1 – Silversteen Park

- FEMA Floodplain
- Recent stream restoration + current design for new culvert
- Frequent park and road flooding in flashy storms
- Mills Avenue closed due to sink hole over culvert alignment
- Overtopping closes Cashiers Valley Road
- Failing, corroded corrugated metal pipe





Stormwater Hotspot Flooding Areas

Area 2 – Silversteen Community Garden

- FEMA Floodplain
- Frequent greenway and road flooding in flashy storms
  - Silversteen Drive frequently closed
- Failing, corroded corrugated metal pipe
- Prior to Helene, stabilization needed on downstream side with riprap







Stormwater Hotspot Flooding Areas

Area 3 – Oakdale Street between Caldwell and Broad Street

- Frequent road flooding in flashy storms
  - Stormwater has moved dumpster into road
- System 8 years old
  - Yellow replaced by City
  - Blue replaced by NCDOT
- Large blind junction in front of Cardinal







Stormwater Hotspot Flooding Areas

Area 4 – Varsity and Gaston Street

- Frequent road and parking lot flooding in flashy storms
- Replaced pipe through church parking lot
  - Old alignment causing sink holes
- Sheet flow across Gaston from NE to SW
- Varsity street experiences road flooding







Stormwater Hotspot Flooding Areas

Area 5 – Cherry Street Neighborhood

- FEMA Floodplain
- Entire neighborhood experiences flooding issues
- Flat grading through neighborhood
- Roads and utilities are public R/W
- Mostly driveway culverts and swales but also has storm network





Stormwater Hotspot Flooding Areas

Area 6 – Oakwood Drive Neighborhood

- North side of road has frequent property flooding issues
  - Multiple dwellings along Oakwood experience yard and driveway flooding
- Public and private drainage in area
- No curb or gutter





Stormwater Hotspot Flooding Areas

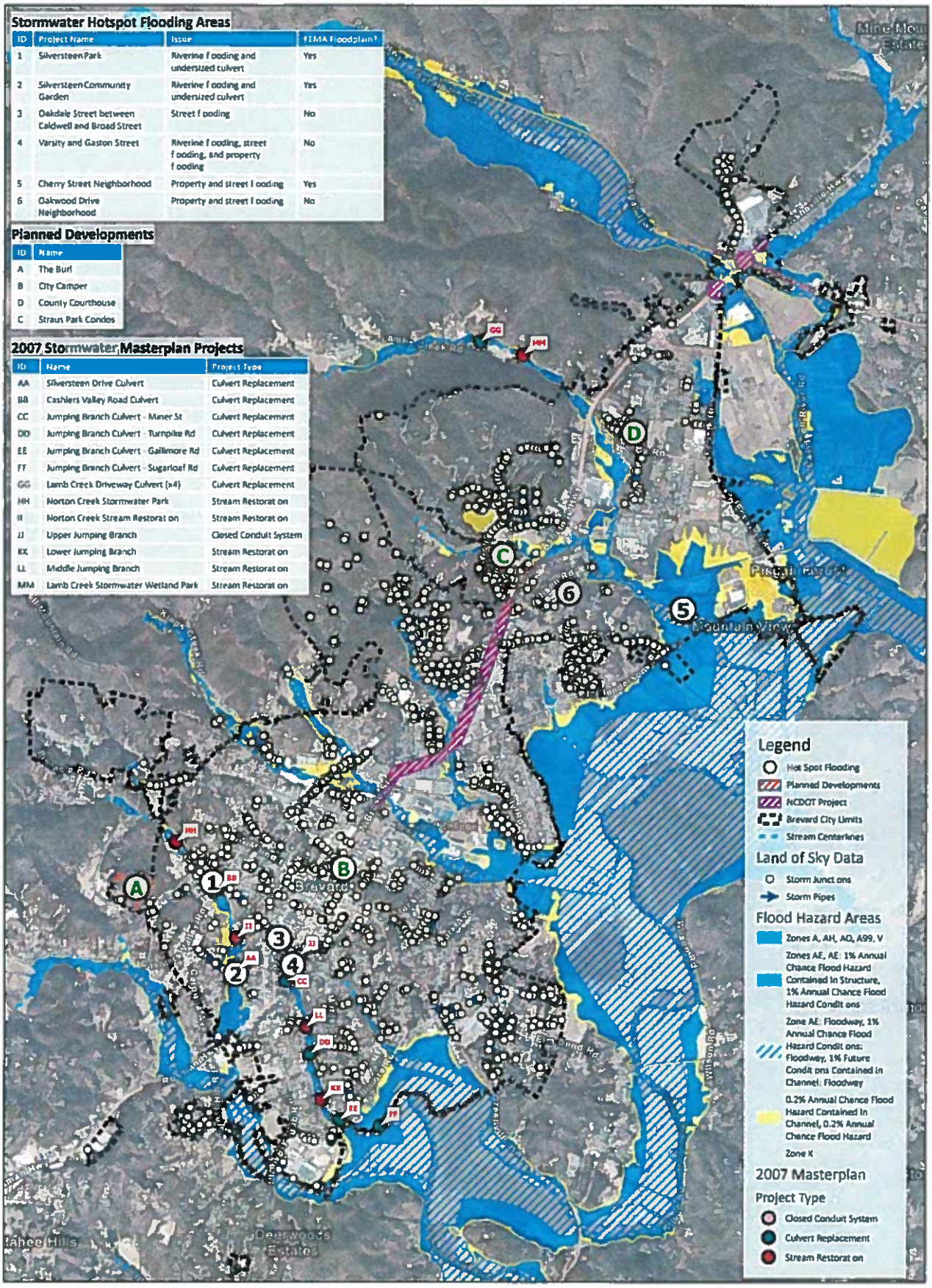
Private Business Property

- Walmart
  - Just outside of FEMA floodplain
- Lowe's
  - Within FEMA floodplain
  - Outside of City limits – within ETJ
- Brevard College
  - Half of campus within FEMA floodplain









N

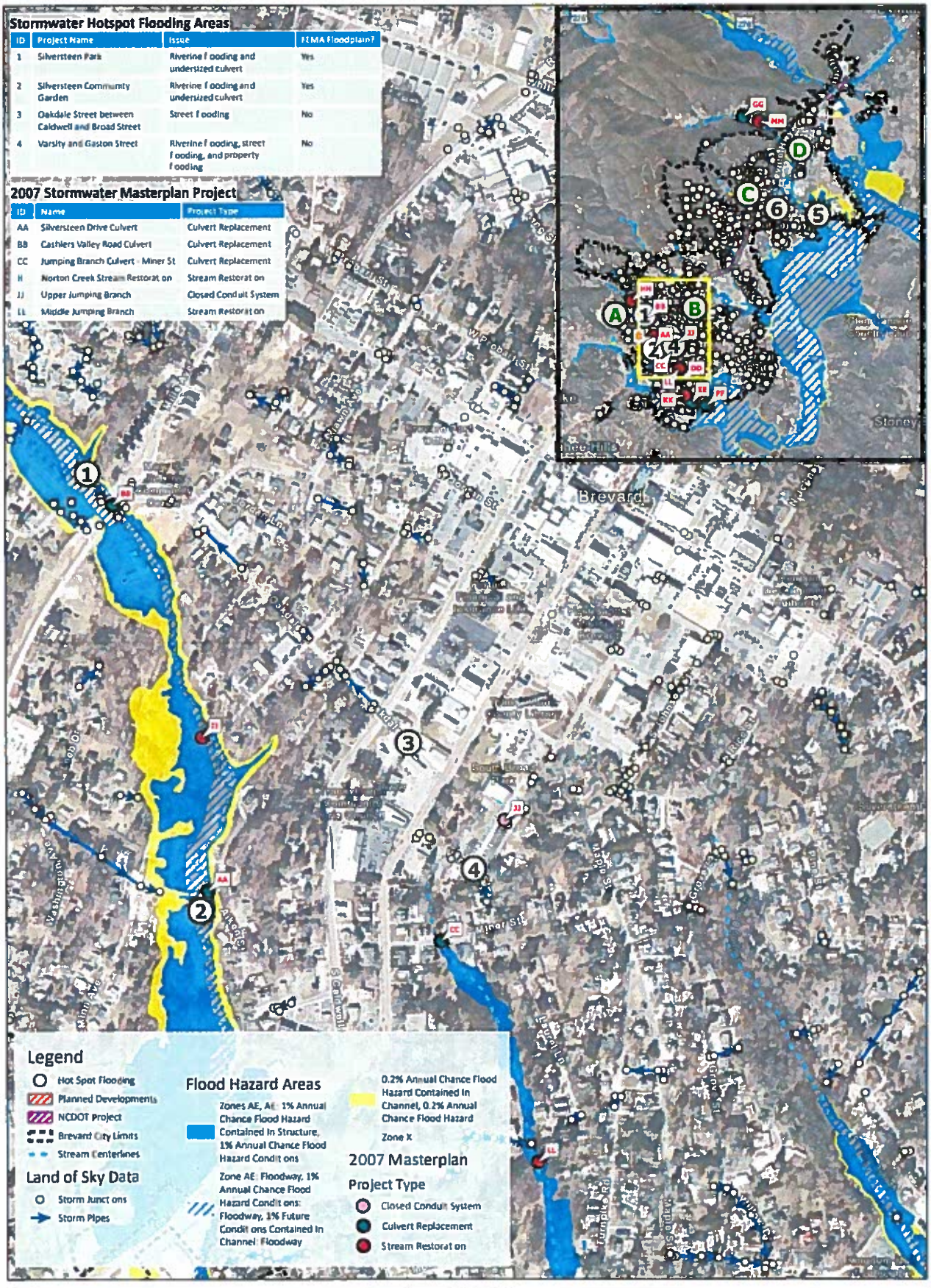
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Overall Due Diligence Map

Project #: CYB25002

CITY OF BREVARD, NORTH CAROLINA

McAdams



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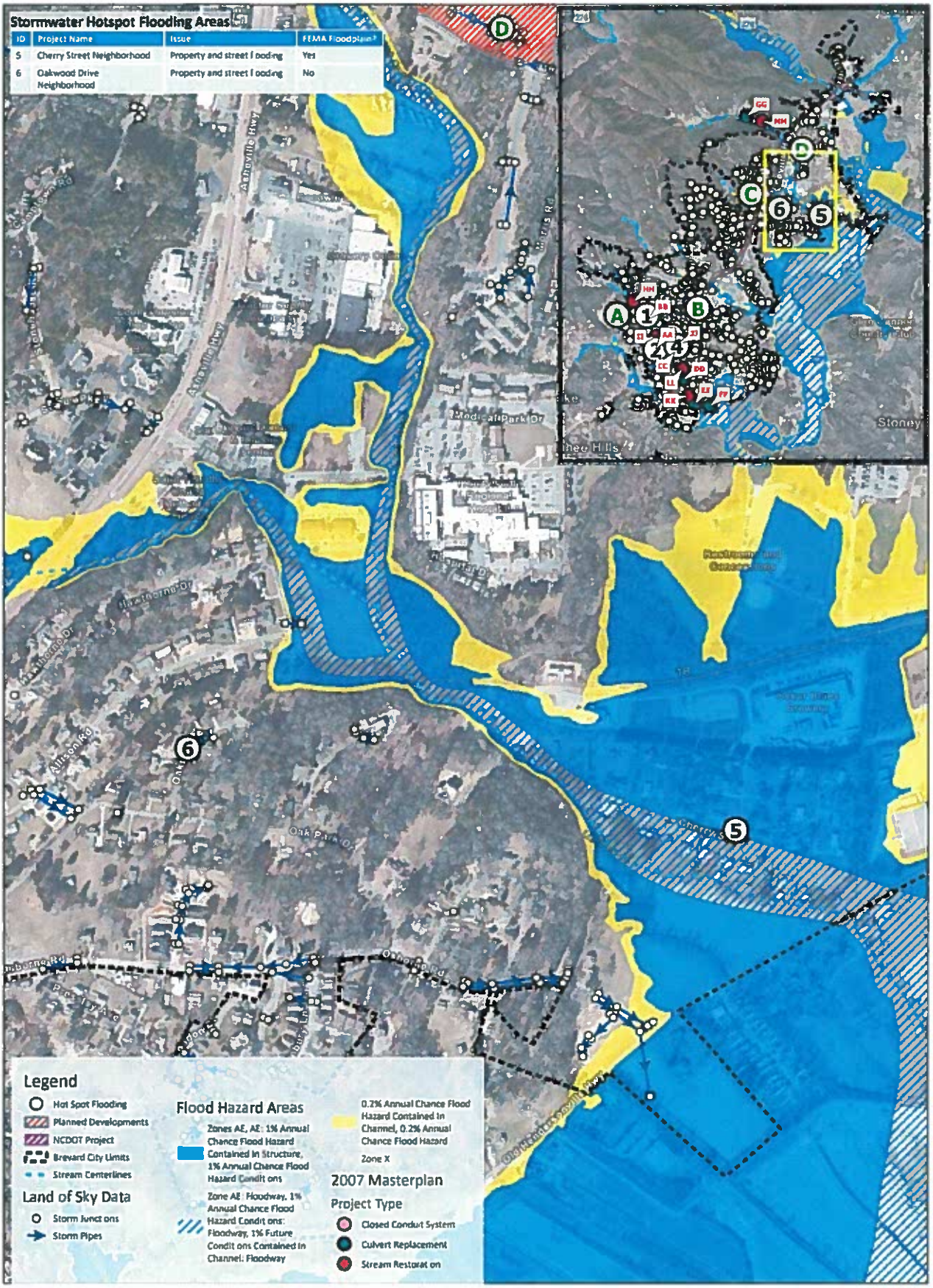
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Area 1 Due Diligence Map

Project #: CYB25002

CITY OF BREVARD, NORTH CAROLINA

MCADAMS



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0 105 210 420 630 840 Feet

Area 2 Due Diligence Map

Project #: CYB25002

CITY OF BREVARD, NORTH CAROLINA

McADAMS

Pipe - SWP1793
*Indicated NASSCO scoring performed by McAdams

Likelihood of Failure

Prioritization Parameter	Description	Score
Physical Integrity (NASSCO)	NASSCO Score = 4	7
Clogging	Less than 25%	0
Material	Concrete / CMU	3
Maintenance Access / Constructability	Permanent Structures (Buildings, sheds, etc.)	10
	Raw Score	20
	Weighted Score	4.45

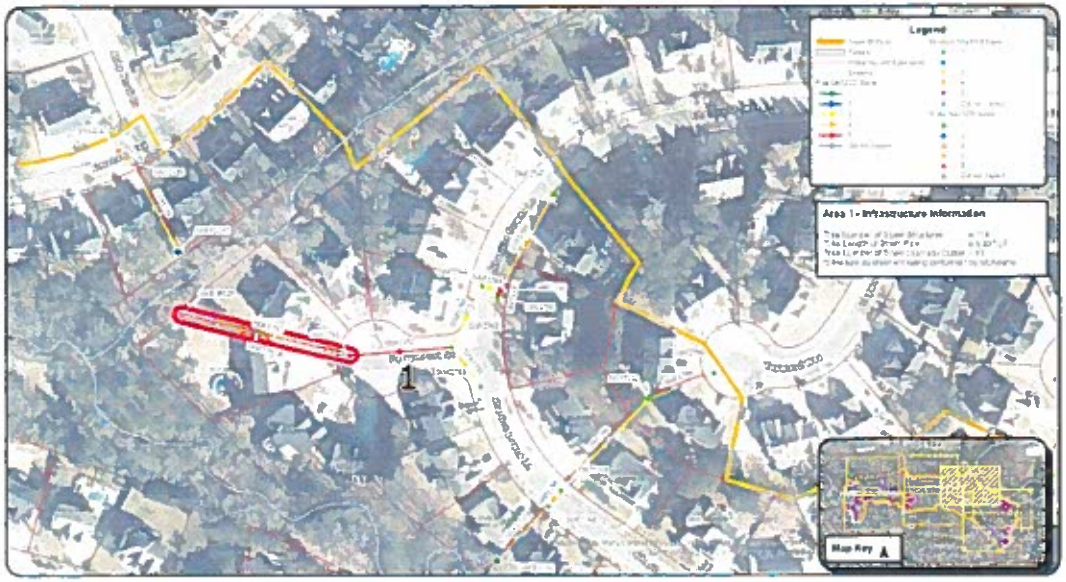
Consequence of Failure

Prioritization Parameter	Description	Score
Proximity to roads and roadway type	Residential / Local	5
Proximity to structures	Dwelling	8
Diameter / Pipe Size	1.50" (18")	1
Public Responsibility / Safety	Private Property within Easement	10
Public Interest	No Resident Concern / Complaint	0
Depth to Asset	7.5'	3
	Raw Score	27
	Weighted Score	5.6

Product Weighted Score	24.92/100



Notes



Infrastructure Technologies
10412 Menaul Blvd
Albuquerque, NM
877-ITpipes

Defect Listing Plot

Pipe Segment Reference	City*	Street*	Material*		Location Code	Pipe Use
SWP1793	APEX	PERRYMOUNT CT	Reinforced Concrete Pipe		Local rural streets	Stormwater
Upstream MH*	**Total Length**	**Year Constructed**	**Shape***		**Location Details**	
SWCI761			Circular			
Length surveyed		**Year Renewed**	**Height***	**Width***	**Pipe Joint**	
166.5			18			

SPR	25	**MPR**	10	**PO Number**	**Customer** McAdams
SPRI	3.1	**MPRI**	1.4		
QSR	4235	**QMR**	2314	**Work Order Number**	**Purpose** Routine Assessment

OPR	**Surveyed By***	**Direction***	**Date***	**Media label**	
35	Jacob	Downstream	1/24/2025 3:34:30 PM		
OPRI	**Certificate Number***	**Pre-Cleaning**	**Time**	**Weather**	
2.3	P0047022-032024	Heavy Cleaning	1/24/2025 3:43:24 PM	Dry - No	
Date Cleaned			**End Time**	**Additional Info**	
			1/24/2025 4:02:51 PM		



0 ft	Miscellaneous Water Level	
0 ft	Miscellaneous General Photograph	
0 ft	Access Points Catch Basin	
12.9 ft	Intruding Sealing Material Sealing Ring	2
20.7 ft	Infiltration Stain	1
29.1 ft	Infiltration Stain	1
53.7 ft	Infiltration Stain	1
60.6 ft	Broken Pipe	4
60.6 ft	Joint Offset Medium	3
67.2 ft	Crack Multiple	3

*Indicates required field

Infrastructure Technologies
10412 Menaul Blvd
Albuquerque, NM
877-ITpipes

Defect Listing Plot

Pipe Segment Reference	City*	Street*	Material*		Location Code	Pipe Use
SWP1793	APEX	PERRYMOUNT CT	Reinforced Concrete Pipe		Local rural streets	Stormwater
Upstream MH*	**Total Length**	**Year Constructed**	**Shape***		**Location Details**	
SWCI761			Circular			
Length surveyed		**Year Renewed**	**Height***	**Width***	**Pipe Joint**	
166.5			18			

68.4 ft	Intruding Sealing Material Sealing Ring	2	
76.5 ft	Joint Offset Medium	3	
84.9 ft	Crack Longitudinal	2	
100.2 ft	Intruding Sealing Material Sealing Ring	2	
108 ft	Joint Offset Medium	3	
115.2 ft	Crack Multiple	3	
116.4 ft	Fracture Multiple	4	
160.8 ft	Miscellaneous Water Level		
163.5 ft	Roots Fine Joint	1	
166.5 ft	Miscellaneous Survey Abandoned		ROOTS

SWEOP129

*Indicates required field

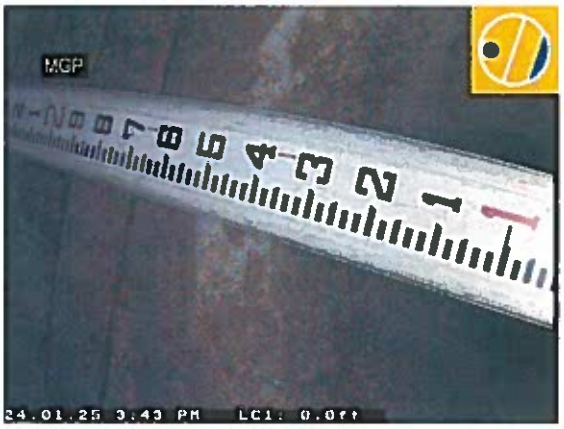
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877-ITpipes

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Pipe Segment Reference	City*	Street*	Material*		Location Code	Pipe Use
SWP1793	APEX	PERRYMOUNT CT	Reinforced Concrete Pipe		Local rural streets	Stormwater
Upstream MH*	**Total Length**	**Year Constructed**	**Shape***		**Location Details**	
SWCI761			Circular			
Length surveyed		**Year Renewed**	**Height***	**Width***	**Pipe Joint**	
166.5			18			



Distance: 0 ft **Grade:**
Conditions: Miscellaneous Water Level
Remarks:



0 ft **0 ft** **Grade:**
Conditions: Miscellaneous General Photograph
Remarks:



Distance: 0 ft **Grade:**
Conditions: Access Points Catch Basin
Remarks: SWCI761



12.9 ft **12.9 ft** **Grade:** 2
Conditions: Intruding Sealing Material Sealing Ring
Remarks:

*Indicates required field

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Pipe Segment Reference	City*	Street*	Material*		Location Code	Pipe Use
SWP1793	APEX	PERRYMOUNT CT	Reinforced Concrete Pipe		Local rural streets	Stormwater
Upstream MH*	**Total Length**	**Year Constructed**	**Shape***		**Location Details**	
SWCI761			Circular			
Length surveyed		**Year Renewed**	**Height***	**Width***	**Pipe Joint**	
166.5			18			



Distance: 20.7 ft **Grade:** 1
Conditions: Infiltration Stain
Remarks:



29.1 ft **29.1 ft** **Grade:** 1
Conditions: Infiltration Stain
Remarks:



Distance: 53.7 ft **Grade:** 1
Conditions: Infiltration Stain
Remarks:



60.6 ft **60.6 ft** **Grade:** 4
Conditions: Broken Pipe
Remarks:

*Indicates required field

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Pipe Segment Reference	City*	Street*	Material*		Location Code	Pipe Use
SWP1793	APEX	PERRYMOUNT CT	Reinforced Concrete Pipe		Local rural streets	Stormwater
Upstream MH*	**Total Length**	**Year Constructed**	**Shape***		**Location Details**	
SWCI761			Circular			
Length surveyed		**Year Renewed**	**Height***	**Width***	**Pipe Joint**	
166.5			18			



Distance: 60.6 ft **Grade:** 3
Conditions: Joint Offset Medium
Remarks:



67.2 ft **67.2 ft** **Grade:** 3
Conditions: Crack Multiple
Remarks:



Distance: 68.4 ft **Grade:** 2
Conditions: Intruding Sealing Material Sealing Ring
Remarks:



76.5 ft **76.5 ft** **Grade:** 3
Conditions: Joint Offset Medium
Remarks:

*Indicates required field

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Pipe Segment Reference	City*	Street*	Material*		Location Code	Pipe Use
SWP1793	APEX	PERRYMOUNT CT	Reinforced Concrete Pipe		Local rural streets	Stormwater
Upstream MH*	**Total Length**	**Year Constructed**	**Shape***		**Location Details**	
SWCI761			Circular			
Length surveyed		**Year Renewed**	**Height***	**Width***	**Pipe Joint**	
166.5			18			



Distance: 84.9 ft **Grade:** 2
Conditions: Crack Longitudinal
Remarks:



100.2 ft 100.2 ft **Grade:** 2
Conditions: Intruding Sealing Material Sealing Ring
Remarks:



Distance: 108 ft **Grade:** 3
Conditions: Joint Offset Medium
Remarks:



115.2 ft 115.2 ft **Grade:** 3
Conditions: Crack Multiple
Remarks:

*Indicates required field

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Pipe Segment Reference	City*	Street*	Material*		Location Code	Pipe Use
SWP1793	APEX	PERRYMOUNT CT	Reinforced Concrete Pipe		Local rural streets	Stormwater
Upstream MH*	**Total Length**	**Year Constructed**	**Shape***		**Location Details**	
SWCI761			Circular			
Length surveyed		**Year Renewed**	**Height***	**Width***	**Pipe Joint**	
166.5			18			



Distance: 116.4 ft **Grade:** 4
Conditions: Fracture Multiple
Remarks:



160.8 ft 160.8 ft **Grade:**
Conditions: Miscellaneous Water Level
Remarks:



Distance: 163.5 ft **Grade:** 1
Conditions: Roots Fine Joint
Remarks:



166.5 ft 166.5 ft **Grade:**
Conditions: Miscellaneous Survey Abandoned
Remarks: ROOTS

*Indicates required field