



A Team of Teams
Making a Difference!

JOHN F. JACOBS III, P.E.
DIRECTOR

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www.ci.salisbury.md.us/publicworks/

June 15, 2005

Memorandum for City Administrator

**Subject: Proposed Memorandum of Understanding on
Stormwater with State of Highway Administration**

Purpose. The purpose of the proposed resolution is for the City Council to authorize the Mayor to sign a Memorandum of Understanding (MOU) with State Highway Administration (SHA) in the amount of \$ 1.6 million for the construction of stormwater mains in the Camden neighborhood area.

Discussion.

- The proposed SHA MOU is Enclosure 1.
- The proposed stormwater mains alignment is along Waverly Avenue as shown in Enclosure 2. This drawing is actually two maps. The bottom of the left-side map matches to the top of the right-side map. At the top of the left-side map shows the stormwater discharge into the eastern prong of the Wicomico River at Waverly Drive and Carroll Avenue. The upstream collection area of the proposed stormwater mains is shown in center of the right-side map.
- The City routinely experiences significant storm water flooding in the Powell-Smith-Hanover-Lloyd area located in the Camden neighborhood.
- One of the main contributors to the flooding that occurs is US 13 Business. If you stand at the Dunkin Donuts at the intersection of Lloyd Street and US 13 Business and look north and south on US 13 you will see that Lloyd is in the low point and collects a large amount of stormwater that then flows down Lloyd into the Camden residential neighborhood. SHA recognizes this issue and proposes this MOU to assist the City to solve the flooding in this area.
- An MOU commitment is for the City to perform the design engineering. Enclosure 3 is the Davis, Bowen, & Friedel, Inc.'s proposal for engineering in the amount of \$ 124,330. This proposal is in the award of bids for the June 20, 2005 City Council meeting.

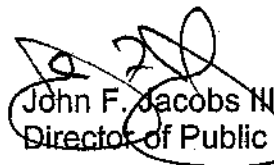
Subject: Proposed Memorandum of Understanding on Stormwater with State of Highway Administration

- The City staff received the proposed MOU on June 9, 2005.
 - Due to workload challenges with the Waste Water Treatment Plant award and other challenges, we have not completed a full staff review. Enclosure 4 provides some of the staff comments that we are in the process of reconciling with our SHA point of contact.
 - Also, the engineering is not complete so a full cost estimate is not available. We are not able to inform the Mayor and Council on the specific financial commitments the City will be required to honor, if any, in accordance with the MOU. We can possibly mitigate this issue by phasing the project so that SHA requirements are completed in the initial phase and later, follow-on phases paid totally by the City which augment the system and improve stormwater management in the regional area. These phases will be programmed in the City's Capital Improvement Plan budgeted in accordance with Mayor and Council approval.

Recommendation. I recommend the City Council authorize the Mayor to sign the MOU with the Maryland State of Highway Administration after complete staff review and some possible changes coordinated with SHA.

Unless you or the Mayor, have further questions, please forward this memorandum to the City Council. For any additional questions you may have, I can be reached at (410) 548-3170 or by e-mail at jjacobs@ci.salisbury.md.us.

Sincerely,


John F. Jacobs II, P.E.
Director of Public Works

Enclosures: as

Copy Furnished:

- Deputy Director for Engineering
- City Solicitor

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SUBJECT TO REVISION

MEMORANDUM OF UNDERSTANDING

Salisbury Drainage Improvements
from S. prong of Wicomico River to US 13B

by and between

City of Salisbury
and
Maryland State Highway Administration

THIS MEMORANDUM OF UNDERSTANDING, executed in duplicate, made effective this _____ day of _____ 2005 by and between the City of Salisbury, a political subdivision of the State of Maryland, hereinafter called the "**CITY**", and the Maryland State Highway Administration of the Maryland Department of Transportation, acting for and on behalf of the State of Maryland, hereinafter called "**SHA**".

WHEREAS, the existing storm drain system along US 13B, an SHA road, in the vicinity of South Boulevard and Lloyd Street does not provide adequate drainage along US 13B ("**US13B SYSTEM**"); and

WHEREAS, the SHA operated US13B SYSTEM ties into an existing CITY owned storm drain system ("**CITY SYSTEM**"); and

WHEREAS, the parties desire to alleviate flooding conditions ("**FLOODING**") on US13B (US 13 Business) at its intersections with Lloyd Street and South Boulevard; and

WHEREAS, the FLOODING on US 13B also affects local streets owned by the CITY; and

WHEREAS, the parties agree that the US13B SYSTEM and the CITY SYSTEM are both inadequate to provide proper drainage in order to prevent the FLOODING; and

WHEREAS, the parties have agreed to share in the cost to design and construct a new storm drain system ("**REPLACEMENT SYSTEM**") which will replace both the SHA operated US13B SYSTEM and the CITY SYSTEM; and

WHEREAS, the CITY has agreed to perform all activities necessary to design the REPLACEMENTS SYSTEM; and

WHEREAS, the CITY has agreed to construct the REPLACEMENT SYSTEM, and provide construction inspection and material testing ("**Construction Engineering Services**") under a CITY construction contract; and

- 3 -

ENCLOSURE 1 (1/11)

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WHEREAS, SHA agreed to fund all construction costs of the REPLACEMENT SYSTEM, including a portion of the Construction Inspection Services that is performed on US 13B; and

WHEREAS, SHA has established funds under contract number WI325A21 to reimburse the CITY for SHA's share of the REPLACEMENT SYSTEM up to a maximum funding amount of \$1,600,000 ("**SHA FUNDING**"); and

WHEREAS, the parties agree that all activities to construct the REPLACEMENT SYSTEM will occur on rights of way owned or controlled by the CITY and SHA; and

WHEREAS, SHA and the CITY agree that the REPLACEMENT SYSTEM will benefit both parties of this MEMORANDUM OF UNDERSTANDING and will promote the safety, health and general welfare of the citizens of the State and the CITY.

NOW, THEREFORE, THIS MEMORANDUM OF UNDERSTANDING WITNESSETH: that for and in consideration of the mutual promises contained herein, and other good and valuable considerations, the receipt and adequacy whereof is hereby acknowledged, be it understood that SHA and the CITY do hereby agree as follows:

I. DESCRIPTION

- A. The REPLACEMENT SYSTEM shall generally consist of the replacement of a portion of the US13B SYSTEM and the CITY SYSTEM in order to increase stormwater capacity. The REPLACEMENT SYSTEM will consist of, but is not limited to, the installation of 18" RCCP, 36" RCCP, 48" RCCP, 72" RCCP, 84" RCCP, various depth manholes, inlets and sediment and erosion control.
- B. CITY Responsibility
 - 1. The CITY shall design, obtain necessary permits and approvals, advertise for construction, construct, and provide Construction Engineering Services for the REPLACEMENT SYSTEM.
 - 2. The CITY shall fund all cost to design the REPLACEMENT SYSTEM and to provide Construction Engineering Services on those portions of the REPLACEMENT SYSTEM that are outside the limits of US 13B.
- C. SHA Responsibility
 - 1. SHA shall reimburse the CITY, up to the SHA FUNDING, for all costs related to the construction of the REPLACEMENT SYSTEM and for Construction Inspection Services that is performed on US 13B.

II. REPLACEMENT SYSTEM DESIGN PHASE

- A. CITY Responsibility:

- 4 -

ENCLOSURE 1 (2/11)

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SUBJECT TO REVISION

1. The CITY shall accomplish all tasks necessary to design the REPLACEMENT SYTEM to SHA and CITY standards based on physical location.
2. The CITY shall accomplish all tasks necessary to advertise the REPLACEMENT SYSTEM.
3. The CITY shall provide SHA with four (4) sets of plans at the 30, 60, 90, and 100% complete plan stages for the REPLACEMENT SYSTEM.
4. In the event the CITY desires to revise the REPLACEMENT SYSTEM plans subsequent to final plan approval, but prior to initiation of construction activities, the CITY shall provide SHA with written notification of said revisions including estimated costs.
5. The CITY shall, upon receipt of SHA's review comments, provide SHA with written comments of all data and materials provided to the CITY for review, and/or modify or revise the plans within thirty (30) working days following the CITY's receipt of SHA comments.

B. SHA Responsibility

1. The SHA shall provide the CITY with written review comments of all data or materials related to the design of the REPLACEMENT SYSTEM provided to SHA for review within thirty (30) working days following SHA's receipt thereof.
2. The SHA shall provide the CITY with all requested information and data SHA has concerning US 13B in an effort to assist the CITY in the design of the REPLACEMENT SYSTEM.
3. In the event SHA desires to revise the REPLACEMENT SYSTEM plans subsequent to final plan approval, but prior to initiation of construction activities, SHA shall provide the CITY with written notification of said revisions including estimated costs.

III. CONSTRUCTION PHASE

A. CITY Responsibility

1. The CITY shall: (i) advertise the REPLACEMENT SYSTEM for construction bids; (ii) award and administer the construction contract; (iii) construct the REPLACEMENT SYSTEM as shown on the final REPLACEMENT SYSTEM plans; and (iv) provide Construction Engineering Services for the REPLACEMENT SYSTEM.

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2. The CITY shall, within five (5) days of opening of construction bids for the REPLACEMENT SYSTEM, provide SHA with a copy of the apparent qualified low bid and a bid analysis for the REPLACEMENT SYSTEM for SHA's review and approval. The CITY shall obtain SHA's approval of the apparent qualified low bid prior to issuance of a Notice of Award to the apparent qualified low bid contractor. In the event the apparent qualified low bid is not approved by SHA, the CITY and SHA mutually agree to analysis the low bid package, including individual line items.
3. The CITY shall notify all utilities affected by the construction of the RELOCATION in order to arrange, coordinate, and supervise their relocation prior to the REPLACEMENT SYSTEM being advertised for bids wherever possible.

B. SHA Responsibility

1. In the event SHA desires to make changes to the REPLACEMENT SYSTEM subsequent to final plan approval and/or during construction, it shall promptly submit a request in writing to the CITY, including the requested revisions and their respective costs. The CITY shall incorporate such revision, and SHA agrees that additional costs incurred by the CITY to design and implement the revisions requested by SHA shall be the SHA's sole responsibility.
2. SHA shall, upon receipt of the apparent qualified low bid and the bid analysis from the CITY, review the apparent qualified low bid and provide comments or concurrence to the CITY within ten (10) business days. SHA's review of the apparent qualified low bid shall include, but not be limited to, the review of the bid for each individual item, the overall balance of the apparent qualified low bid as it relates to SHA and CITY funded items, and SHA's budgetary constraints. SHA concurrence shall be required prior to issues of the Notice to Proceed by the CITY.
3. SHA shall provide, at no cost to the CITY, periodic, non-exhaustive construction inspections during construction of the REPLACEMENT SYSTEM; however, the CITY's inspector(s) shall have final authority. The CITY's inspector(s) shall consult with the SHA's inspector prior to making decisions that affect the REPLACEMENT SYSTEM.
4. SHA shall grant and permit the CITY and its contractors' access to, on, over and across all SHA property as necessary to construct the REPLACEMENT SYSTEM.

IV. DESIGN PHASE FUNDING

A. CITY Responsibility

- 6 -

ENCLOSURE 1 (4/11)

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SUBJECT TO REVISION

1. The CITY shall fund all costs to design the REPLACEMENT SYSTEM.
2. The CITY shall be responsible to obtain all permits required to construct the REPLACEMENT SYSTEM.

B. SHA Responsibility

1. SHA shall be responsible for all costs incurred by SHA in reviewing and commenting on the design of the REPLACEMENT SYSTEM and providing same to the CITY.

V. CONSTRUCTION PHASE FUNDING

A. CITY Responsibility

1. The CITY shall be responsible for all costs to advertise, award and administer the REPLACEMENT SYSTEM for construction.
2. The CITY shall fund all costs for utility relocations and/or adjustments necessitated by the construction of the REPLACEMENT SYSTEM.
3. Concurrent with providing each approved invoice to SHA for work performed, the CITY shall provide a detailed invoice to SHA for all actual documented costs incurred by the CITY for the construction of the REPLACEMENT SYSTEM including the CITY's direct salaries, payroll burden and overhead for Construction Engineering Services up to the amount of SHA FUNDING. Each copy of approved invoice payments shall include detailed documentation to evidence actual costs incurred.
4. Invoices shall be submitted in a timely manner. All invoices shall be submitted prior to June 30, 2006.
5. In the event that actual costs incurred by the CITY to accomplish the REPLACEMENT SYSTEM exceed the SHA FUNDING, the CITY agrees to seek an increase in its current maximum budgeted amount from all sources available.
 - a. Notwithstanding the above, should the CITY not be able to obtain additional funding, and the unfinished REPLACEMENT SYSTEM will affect the safety and well being of the traveling public with respect to US 13B, SHA may, at it's sole discretion, elect to complete the REPLACEMENT SYSTEM and make a deduction from the CITY's share of Highway User Revenue for all costs that exceed the SHA FUNDING and that are incurred by SHA to complete the REPLACEMENT SYSTEM.
6. In the event the lowest responsible bid price for the construction of the REPLACEMENT SYSTEM, including the CITY's direct salaries, payroll

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SUBJECT TO REVISION

burden and overhead for Construction Engineering Services, total more than the SHA FUNDING, the CITY shall: (i) allocate additional funding to match the REPLACEMENT SYSTEM costs in the proposed winning construction bid plus the associated CITY direct salaries, payroll burden and overhead; (ii) revise the scope of work and change or delete items from the REPLACEMENT SYSTEM contract items to stay within current allocations, or (iii) reject the bid for the REPLACEMENT SYSTEM in its entirety. If the scope of work is revised, the intent of the project must still be met. Items directly affecting the alleviation of flooding on US 13B shall be given priority and shall not be deleted or changed until all other options are considered.

7. In the event the CITY deletes and/or reduces quantities to maintain its present budget constraints, and such deletions and/or reductions cause a premium price or a renegotiated price, the CITY shall be solely responsible for any resulting increased construction costs.
8. Once the REPLACEMENT SYSTEM has been advertised, changes to the REPLACEMENT SYSTEM construction shall be as follows:
 - a) changes which are a result of an existing, unanticipated condition shall be at the cost of the party responsible, and shall be subject to the prior written approval of the other party;
 - b) changes which are a result of an existing, unanticipated condition and which are necessitated by work attributed to both parties will be prorated between the parties at the same percentage of the original contact price for such work;
 - c) changes which are requested by either party, and which are not a result of an existing, unanticipated condition shall be at the sole cost of the requesting party.
9. In the event that revisions to the REPLACEMENT SYSTEM are required due to conditions encountered during construction, or the CITY desires to make revisions to the REPLACEMENT SYSTEM during construction, the CITY shall promptly submit a request in writing to SHA, including the requested revisions and their estimated costs, for SHA concurrence.

B. SHA Responsibility

1. SHA shall reimburse the CITY within forty-five (45) days of receipt of each periodic invoice for all costs incurred by the CITY in the construction of the REPLACEMENT SYSTEM up to the SHA FUNDING.

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SUBJECT TO REVISION

2. In the event SHA reasonably determines that an invoice does not contain the necessary detailed documentation to evidence actual costs incurred, SHA shall promptly notify the CITY of the needed invoicing information and the CITY shall provide such information within thirty (30) days following receipt of the requested information from SHA and SHA shall then reimburse the CITY within forty-five (45) days following receipt of adequate invoicing.
3. Once the REPLACEMENT SYSTEM has been advertised, changes to the REPLACEMENT SYSTEM construction shall be as follows:
 - a) changes which are a result of an existing, unanticipated condition shall be at the cost of the party responsible and shall be subject to the prior written approval of the other party;
 - b) changes which are a result of an existing, unanticipated condition and which are necessitated by work attributed to both parties will be prorated between the parties at the same percentage of the original contact price for such work;
 - c) changes which are requested by either party, and which are not a result of an existing, unanticipated condition shall be at the sole cost of the requesting party.

All requested changes shall be submitted to SHA for review. In the event the change affects the SHA FUNDING, the CITY must seek SHA's written concurrence for such change. SHA's written concurrence for changes that affect the SHA FUNDING for the REPLACEMENT SYSTEM shall constitute the appropriation of additional funds for such change by SHA.

VIII. GENERAL

- A. The total amount of SHA FUNDING to be reimbursed to the CITY by SHA for the construction of the REPLACEMENT SYSTEM is One Million Six Hundred Thousand Dollars (\$1,600,000). Actual costs may exceed this amount and shall be the sole responsibility of the CITY.
- B. The CITY shall require its construction contractors for the REPLACEMENT SYSTEM to include SHA as an additional named insured on all certificates of insurance that SHA normally requires its construction contractors to provide. The CITY or its assignee shall furnish SHA certificate evidencing the insurance

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SUBJECT TO REVISION

coverage. All insurance policies evidencing such insurance shall name the Department of Transportation, the State of Maryland, and the SHA as additional insureds and shall also contain a provision by which the insurer agrees that such policy shall not be canceled except after having provided SHA with at least thirty (30) days prior written notice of pending cancellation. Failure of the CITY or its construction contractor to maintain such insurance shall be deemed a default under this MOU and shall entitle the SHA to proceed with any and all remedies contained herein and permitted by law.

- C. The CITY shall indemnify, hold harmless and defend, the State of Maryland, SHA and the Maryland Department of Transportation, from and against any and all claims, actions, damages, liability, and expense, including, but not limited to, attorney fees in connection with the loss of life, personal injury and/or property damage related to or arising in whole or in part from the design and/or construction of any portion of the REPLACEMENT SYSTEM by the CITY and/or its assigns/contractors, that is caused wholly or in part by any act or omission of the CITY, its agents, contractors, or employees,. The CITY further releases the State of Maryland, SHA and the Maryland Department of Transportation, their respective members, officers, agents, employees and contractors, from any and all claims or demands for damages or injuries to any person during the construction of the REPLACEMENT SYSTEM due to the CITY's responsibilities hereunder, including such things as the CITY's failure to properly maintain the construction of the REPLACEMENT SYSTEM in a safe condition.
- D. The CITY shall indemnify, hold harmless and defend, the State of Maryland, SHA and the Maryland Department of Transportation, their respective members, officers, agents, employees, and contractors from any and all claims or demands for damages or injuries to property or to any party of any nature whatsoever attributable to the design and/or construction of the REPLACEMENT SYSTEM due to non-execution of any work by the CITY, or due to defective work or materials; which shall survive construction of the REPLACEMENT SYSTEM and shall continue throughout the life and operation of REPLACEMENT SYSTEM.
- E. This MOU shall inure to and be binding upon the parties hereto, their agents, successors and assigns.
- F. This MOU and the rights and liabilities of the parties hereto shall be determined in accordance with Maryland law and in Maryland courts.
- G. The recitals (WHEREAS clauses) at the beginning of this MOU are incorporated herein as part of this MOU.
- H. All notices and/or invoices, if to the CITY, shall be addressed to:

The Honorable Barrie P. Tilghman, Mayor

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SUBJECT TO REVISION

City of Salisbury
1009 Monitor Court
Salisbury, MD 21801
Phone: 410-548-3100
Fax: 410-548-3102
E-Mail: sbymayor@ci.salisbury.md.us

If to SHA:

Mr. Donnie Drewer, District Engineer, D-1
State Highway Administration
660 West Road
Salisbury, MD 21801
Phone: 410-677-4006
Fax: 410-543-6598
E-mail: ddrewer@sha.state.md.us

with a copy to:

E. Glenn Klaverweiden, Agreements Coordinator
Regional and Intermodal Planning Division
State Highway Administration
707 North Calvert Street
Mail Stop C-502
Baltimore, Maryland 21202
Phone: 410-545-5675
Fax: 410-209-5025
E-mail: gklaverweiden@sha.state.md.us

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IN WITNESS WHEREOF, the parties hereto have caused this Memorandum of Understanding to be executed by their proper and duly authorized officers on the day and year first above written.

WITNESS:

STATE HIGHWAY ADMINISTRATION

BY: _____ (SEAL)

Neil J. Pedersen Date
Administrator

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:

RECOMMENDED FOR APPROVAL:

Assistant Attorney General

Douglas R. Rose
Deputy Administrator/Chief Engineer
for Operations

Douglas H. Simmons
Deputy Administrator for
Planning and
Preliminary Engineering

Gayle M. Seward
Director of Finance and
Information Technology

ENCLOSURE 1 (10/11)

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CITY OF SALISBURY, MARYLAND

WITNESS

**APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:**

City Attorney

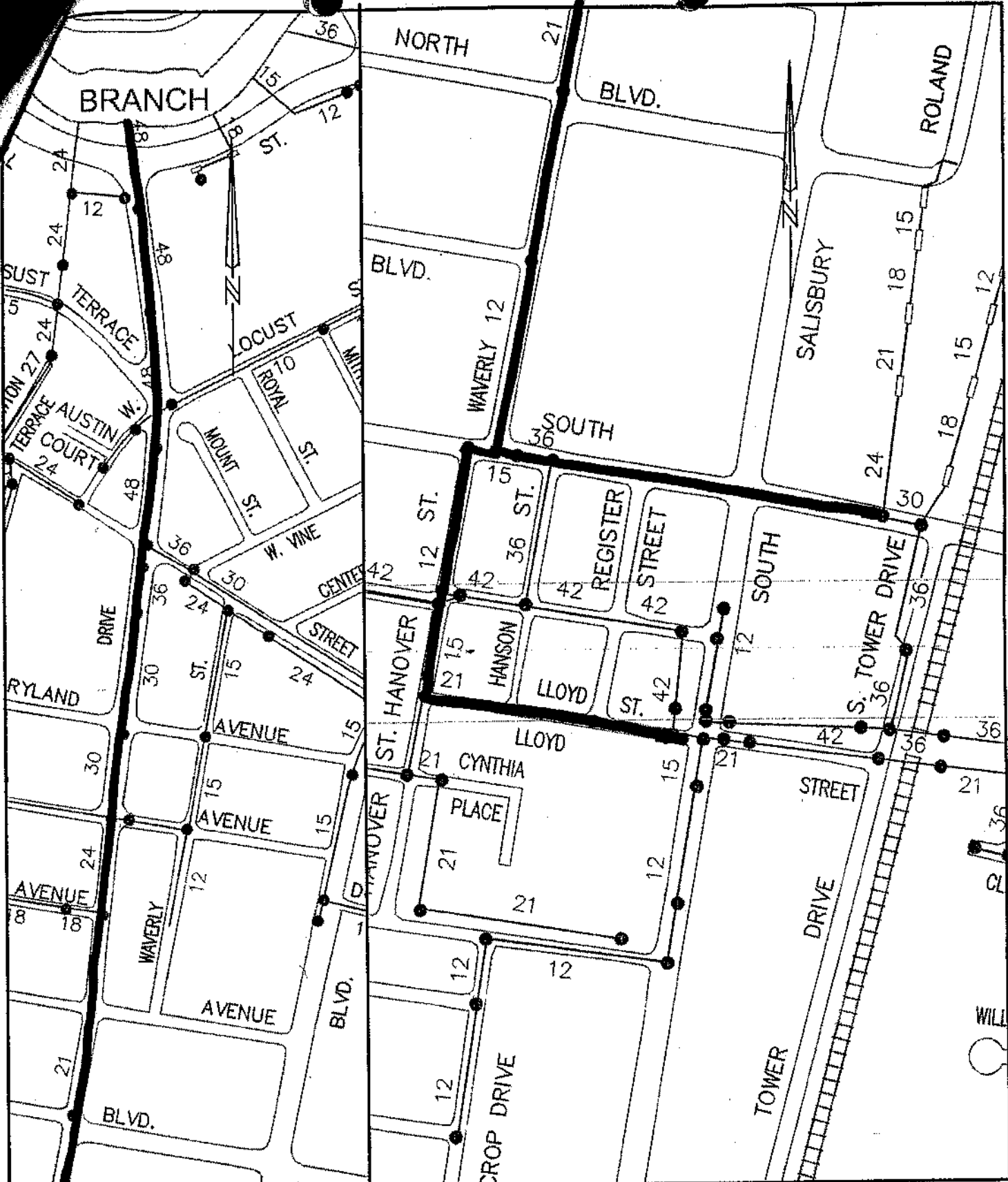
BY: _____ (SEAL)

Barrie P. Tilghman, Date
Mayor

**REVIEWED AND APPROVAL
RECOMMENDED:**

John Jacobs
Public Works Director

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SALISBURY PUBLIC WORKS
 125 N. DIVISION STREET, ROOM 202
 SALISBURY, MARYLAND 21801

PHONE: 410-548-3170
 FAX: 410-548-3107
 WEB: WWW.CI.SALISBURY.MD.US
 "A Team of Teams Making a Difference."

ROUTE 13 RELIEF STORM DRAIN
 WAVERLY DRIVE
 SALISBURY, MARYLAND

Date: MAY 2005 Scale: N/A Proj.No.: 5112

DWG. NO.: 1 OF 1

Enclosure 2



**DAVIS,
BOWEN &
FRIEDEL, INC.**

ARCHITECTS ENGINEERS SURVEYORS

Gerald G. Friedel, P.E.
Michael R. Wigley, AIA
Randy B. Dupluchan, P.E.
Charles R. Woodward, Jr., LS
Jo Anne Williams, P.E.
Charles A. Hauser, P.E.

June 8, 2005

City of Salisbury
Department of Public Works
124 North Division Street & U.S. Route 50
Salisbury, Maryland 21801

Attn: Dallas Baker
Project Engineer

Re: Monticello Avenue Stormdrain
Phase I - Hydraulic Study and Cost Analysis
Salisbury Project Order #5112, PO No. 202363
DBF #094A022

Dear Mr. Baker:

Pursuant to your request, we are pleased to present this revised scope of services and fee proposal (maximum not to exceed basis) for the above referenced project. The new scope of work will include the design, cost analysis, development of construction documents, survey, and construction services for the installation of a relief stormdrain for Monticello Avenue, to be located in Waverly Drive and South Boulevard.

The intention of the relief stormdrain will be to alleviate flooding on Monticello Avenue and Route 13 South in the vicinity of Lloyd Street.

| <u>Description</u> | <u>Total</u> |
|---|-----------------|
| Original Purchase Order Price | \$29,093 |
| Additional Cost due to Expanded Project Scope | <u>\$95,237</u> |
| Total New Project Cost | \$124,330 |

The following represents our understanding of the new scope of work.

DESIGN OF RELIEF STORM DRAIN

A stormdrain relief system will be designed with an outfall at the East Prong of the Wicomico River, continuing upstream via Waverly Drive to the intersection of Waverly Drive and South Boulevard. A Secondary relief line will be designed for that portion of South Boulevard from Route 13 on the downstream end to the low point approximately 300' east of Route 13 on the upstream end, while minimizing the impact to Route 13. We will recommend sizes, slopes and alignment for the stormdrain. A 10-year hydraulic gradient

- 15 -

ENCLOSURE 3 (1/6)

Monticello Avenue Stormdrain
Phase I - Hydraulic Study and Cost Analysis
page 3

Salisbury Department of Public Works, Wicomico Conservation District (for erosion control), State Highway Administration, the Maryland Department of the Environment-Tidal Wetlands Division, the Army Corps of Engineers and the Chesapeake Bay Critical Area Commission. Construction documents for the section of stormdrain relief between the East Prong outfall and Locust Street will be developed first and submitted by August 2005. Construction documents for the remainder of the relief system will be submitted by November 2005.

DEVELOPMENT OF CONSTRUCTION DOCUMENTS

| | | | | |
|-----------------|----------|---|---------|----------------|
| Senior Engineer | 120 hrs | x | \$110 | \$13,200 |
| CADD I | 180 hrs | x | \$70 | \$12,600 |
| Clerical | 16 hrs | x | \$45 | \$720 |
| Sub-Consultant | Lump Sum | | \$1,600 | <u>\$1,600</u> |
| | | | TOTAL | \$28,120 |

SURVEY

Field work will be completed as necessary for the development of the construction documents. Tasks will include survey to develop topographic plans, locate utilities and generate as-built drawings.

SURVEY

| | | | | |
|------------------|---------|---|-------|--------------|
| Senior Surveyor | 8 hr | x | \$110 | \$880 |
| Surveyor | 20 hrs | x | \$90 | \$1,800 |
| CADD I | 80 hrs | | \$70 | \$5,600 |
| 3-Man Field Crew | .80 hrs | x | \$150 | \$12,000 |
| Clerical | 8 hrs | x | \$45 | <u>\$360</u> |
| | | | TOTAL | \$20,640 |

CONSTRUCTION SERVICES

Construction phase services will include attending the pre-bid and pre-construction meetings, shop drawing review, responding to RFI's, attending a maximum of 2 progress meetings per month, providing meeting minutes and periodic site visits (average 1 hr/day).

Monticello Avenue Stormdrain
Phase I - Hydraulic Study and Cost Analysis
page 4

CONSTRUCTION AND INSPECTION SERVICES

| | | | | |
|----------------------------|---------|---|--------------|-----------------|
| Senior Engineer | 120 hrs | x | \$110 | \$13,200 |
| CADD I | 60 hrs | x | \$70 | \$4,200 |
| Construction Administrator | 280 hrs | x | \$95 | \$26,600 |
| Clerical | 40 hrs | x | \$45 | \$1,800 |
| Reimbursable Expenses | Lump | | \$500 | <u>\$500</u> |
| | | | TOTAL | \$46,300 |

Exclusions to this proposal include:

1. Bid advertisement
2. Full-time resident project representation services
3. Contractor invoice review
4. Progress meeting scheduling
5. Survey from Locust Street to East Prong Outfall

We will invoice monthly based upon the percentage of work completed during the previous month. Schedule of Rates No. 42, which identifies hourly rates, reimbursable costs, and payment terms is attached.

Our tentative schedule for the development of the design and construction documents is as follows:

| <u>START</u> | <u>FINISH</u> | <u>TASK</u> |
|--------------|---------------|--|
| | 06/10/05 | DPW issues Notice to Proceed |
| 06/10/05 | 06/24/05 | DBF prepares relief storm drain design. Submit application to Tidal Wetlands Divisions and Chesapeake Bay Critical Area. |
| 06/27/05 | 07/01/05 | DPW review and comment |
| 07/04/05 | 07/15/05 | DBF prepares construction documents for segment between Locust St. and the East Prong. DBF starts surveying for relief storm drain upstream of Locust St.. |
| 07/18/05 | 07/22/05 | DPW and SCD review period for permits |
| 07/25/05 | 07/29/05 | DBF revises plans per agency comments |

Monticello Avenue Stormdrain
Phase I - Hydraulic Study and Cost Analysis
page 2

analysis of all proposed pipelines will be performed. Based upon the proposed pipe sizes and associated cost, the analysis may be revised by DPW using the 2-year storm. The decision will be made prior to the commencement of the development of construction documents. Included in the relief storm drain design will be the sub-watersheds of the old Montgomery Wards site and Giant Food site.

In addition, catchbasins will be located and designed along Lloyd Street between Hanover Street and Route 13, in order to reduce the incidents of flooding along that road. An hydraulic gradient and inlet capacity analysis will be performed for the catchbasin design.

Finally, the entire Monticello Avenue stormdrain system, analyzed in Part I of the study, will be re-analyzed based upon the 2-year storm event, incorporating the proposed changes into the system model. The results of the new analysis will be presented to the DPW for review.

DESIGN OF RELIEF STORM DRAIN

| | | | | |
|-----------------|---------|---|-------|--------------|
| Senior Engineer | 120 hrs | x | \$110 | \$13,200 |
| CADD I | 200 hrs | x | \$70 | \$14,000 |
| Clerical | 10 hrs | x | \$45 | <u>\$450</u> |
| | | | TOTAL | \$27,650 |

COST ANALYSIS

Davis, Bowen & Friedel, Inc., shall provide a detailed cost analysis of the proposed improvements outlined above. A summary cost report shall be prepared with StormCAD software and presented in a format acceptable to the City. Unit prices used in the cost analysis will be reviewed and approved by DPW prior to conducting the cost analysis.

COST ANALYSIS

| | | | | |
|-----------------|-------|---|-------|--------------|
| Senior Engineer | 8 hrs | x | \$110 | \$880 |
| CADD I | 8 hrs | x | \$70 | \$560 |
| Clerical | 4 hrs | x | \$45 | <u>\$180</u> |
| | | | TOTAL | \$1,620 |

DEVELOPMENT OF CONSTRUCTION DOCUMENTS

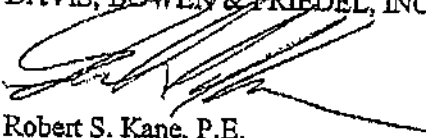
Upon approval by the DPW of the design documents, we will develop construction documents for the project. The design will be modified to address DPW review comments of the preliminary design. Contract drawings, specifications, project schedule and bid documents will be prepared. Necessary permits will be obtained from

Monticello Avenue Stormdrain
Phase I - Hydraulic Study and Cost Analysis
page 5

| | | |
|----------|----------|--|
| 08/01/05 | 08/05/05 | Plan Review and Approval |
| 08/08/05 | 09/09/05 | DBF prepares construction documents for remainder of relief storm drain. Submit SHA permit application |
| 09/12/05 | 09/30/05 | DPW, SCD and SHA review period for permits |
| 10/03/05 | 10/21/05 | DBF revises plans per agency comments |
| 10/24/05 | 10/31/05 | Plan Review and Approval |

Please do not hesitate to call with any questions or to discuss any modifications necessary to the scope, fee, or schedule. We look forward to hearing from you soon.

Sincerely,
DAVIS, BOWEN & FRIEDEL, INC.



Robert S. Kane, P.E.
Civil Engineer

N:\00\094s\094A028\Letters\Change Order2.wpd

cc: Mr. Newell Messick, III, Deputy Director, City of Salisbury Department of Public Works
Ms. Carol Turner, Director of Procurement, City of Salisbury Purchasing Department

DAVIS, BOWEN & FRIEDEL, INC.
 Architects • Engineers • Surveyors

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Post-It* Fax Note 7671

| | | |
|---------------------------|---|----------------------|
| To: <i>Alan Helms</i> | Date: <i>4/22/05</i> | # of pages: <i>1</i> |
| Co./Dept: <i>SHA</i> | From: <i>Dallas Baker</i> | |
| Phone # | RECEIVED <i>4/22/05</i> <i>17:15</i> | |
| Fax # <i>410-209-5031</i> | | |

**PRELIMINARY CONSTRUCTION COST ESTIMATE FOR
 MONTICELLO AVENUE STORMDRAIN RELIEF
 NEW TRUNKLINE ALONG WAVERLY DRIVE
 DBF #094A028**

STORMDRAIN IMPROVEMENTS*

| ITEM** | QUANTITY | UNIT | UNIT COST | TOTAL |
|----------------------------------|----------|------|-------------------------------------|-----------------------|
| 1) 18" RCP Pipe | 250 | FT | \$90.00 | \$22,500.00 |
| 2) 36" RCP Pipe | 1,100 | FT | \$110.00 | \$121,000.00 |
| 3) 48" RCP Pipe | 350 | FT | \$140.00 | \$49,000.00 |
| 4) 72" RCP Pipe | 600 | FT | \$210.00 | \$126,000.00 |
| 5) 84" RCP Pipe | 3,235 | FT | \$255.00 | \$824,925.00 |
| 6) 7' Manhole | 9 | EA | \$5,000.00 | \$45,000.00 |
| 7) 6' Manhole | 4 | EA | \$4,000.00 | \$16,000.00 |
| 8) 4' Manhole | 7 | EA | \$3,500.00 | \$24,500.00 |
| 9) Inlets*** | 8 | EA | \$4,500.00 | \$36,000.00 |
| 10) Sediment and Erosion Control | 1 | LUMP | \$35,000.00 | \$35,000.00 |
| | | | Subtotal | \$1,299,925.00 |
| | | | Contingencies | \$259,985.00 |
| | | | Engineering and Survey | \$100,000.00 |
| | | | Construction Management | \$35,000.00 |
| | | | Total Estimated Project Cost | \$1,694,910.00 |

- * Pipe sizes and lengths based upon preliminary pipe alignment
- ** All items include traffic control, installation, material, stakeout, overhead and profit
- *** Inlets on L.Loyd Street only

N:\00\094A\094A028\SDCOST.123

ENCLOSURE 3 (6/6)

FILE NOTE

PROJECT: Monticello Avenue/Waverly Drive Storm Drain

PROJECT No.: 5112

DATE: 6/15/05

SUBJECT: Dale Pusey and Dallas Baker comments on 1st draft of MOU w/ SHA

- Page 1, paragraph 9: part-time needs to be specified; materials testing should be a function of construction and therefore be covered by SHA.
- Page 2, paragraph 2: a portion of the design may include an extension of the storm drain from the west side of Rt. 13 to the east side along South Blvd, there also may be additional inlets located on Lloyd St within SHA ROW, this paragraph precludes any work in SHA ROW.
- Part II.A.1: this section needs to be revised to indicate the use of SHA standards in SHA ROW and City standards in City ROW.
- Part II.A.3: PRMC needs the construction documents for the portion of the storm drain from the river to Locust St. by August 1 2005, since they will be building the first portion. Submittals at 30%, 60%, 90% and 100% may make this deadline impossible to meet.
- Part V.A.2: relocation of existing utilities should be a function of construction and therefore be covered by SHA. In addition, the design of the project will include the reconnection of storm drain inlet laterals to the new main, this paragraph seems to preclude that work. It may be reasonable for the City to pay to relocate our water and sewer mains but it doesn't seem reasonable for the City to pay to relocate electric, telephone, cable, gas, etc.
- Part V.A.3: this paragraph seems to be asking for verified contractor invoices, for that to take place we may need full-time inspection, which has not been included in the cost estimate from DBF. If SHA requires this then they should be willing to cover some of the cost of full-time inspection. It also appears SHA is asking the City to provide them with our own in-house numbers of how much money and man-hours we are spending on the project. This needs to be clarified and eliminated, if possible.
- Part V.A.8. a-c: contingency money was include in the cost estimate provided to SHA, can the City use that money to cover the costs of unanticipated changes that the City is responsible for (like utility relocates mentioned above). These items do not address who covers unanticipated costs due to acts of God.
- Part VIII: in the event there is a conflict between the terms and conditions of the MOU and the terms and conditions of the contract between the City and the Contractor (i.e City's General Conditions), which shall prevail?

Monticello Avenue/Waverly Drive Storm Drain MOU
June 15, 2005
Page 2

Typos

- Page 1, paragraph 6: change *WHERAS* to *WHEREAS*
- Page 1, paragraph 8: change *REPLACEMENTS* to *REPLACEMENT*
- Page 1, paragraph 10: change "...including a portion..." to "including that portion..."
- Page 2, paragraph 2: change *STSTEM* to *SYSTEM*
- Part I.B.2: change "*The CITY fund...*" to "*The CITY shall fund...*"
- Part III.B.3, 1st sentence: change *not* to *no*

RESOLUTION NO. 1260

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SALISBURY, MARYLAND AUTHORIZING THE MAYOR OF THE CITY OF SALISBURY TO SIGN A MEMORANDUM OF UNDERSTANDING WITH MARYLAND STATE OF HIGHWAY ADMINISTRATION TO PERFORM DRAINAGE IMPROVEMENTS FROM THE SOUTH PRONG OF THE WICOMICO RIVER TO U.S. ROUTE 13 BUSINESS.

WHEREAS, the City of Salisbury has a stormwater system to collect stormwater that is frequently overwhelmed resulting in significant flooding of the residential neighborhoods of the Camden area and impacting on their quality of life and safety; and

WHEREAS, the Maryland State Highway Administration proposes the funding of \$ 1.6 million for the construction of stormwater to assist in alleviating this flooding; and

WHEREAS, the City of Salisbury commits to the design and construction of an upgrade to the stormwater collection to significantly reduce the flooding; and,

WHEREAS, the proposed Memorandum of Understanding between the City of Salisbury and the Maryland State Highway Administration will provide a mutually agreed and reasonable drainage improvements from the Wicomico River's south prong and US Route 13 Business.

NOW, THEREFORE, BE IT RESOLVED that the City Council authorizes the Mayor of Salisbury to sign the Maryland State Highway Administration's Memorandum of Understanding for drainage improvements from the south prong of the Wicomico River to US Route 13 Business after completion of the staff review.

THE ABOVE RESOLUTION was introduced and duly passed at a meeting of the Council of the City of Salisbury, Maryland held on _____, 2005, and is to become effective immediately upon adoption.

ATTEST:

Brenda J. Colegrove
CITY CLERK

Michael P. Dunn
COUNCIL PRESIDENT

APPROVED this _____ day of _____, 2005.

Barrie P. Tilghman
MAYOR