

EXHIBIT "A"



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PRELIMINARY ENGINEERING REPORT

September 2018

CITY OF

Hanahan

South Carolina

Charleston Farms Neighborhood
Village Renaissance Planning Study



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EXECUTIVE SUMMARY

Weston & Sampson, on behalf of the City of Hanahan, has prepared this Preliminary Engineering Report to aid in obtaining a Community Development Block Grant (CDBG) from the South Carolina Department of Commerce. The grant will provide funding that will enable the City to improve the subject area and thus improve the quality of life for the residents and small businesses within the neighborhood. The goals of the improvements reviewed in the following report are pedestrian safety, crime reduction, and an increase to aesthetic appearance.

1.0 PROJECT AREA DESCRIPTION

The City of Hanahan is located along the southeastern border of Berkeley County, South Carolina. The City encompasses approximately 11.5 square miles and has a population of just under 20,000 residents according to the 2010 census.



The proposed improvement area is known as The Charleston Farms Neighborhood. The neighborhood is generally bounded by Remount Road to the south, Murray Avenue to the east, and Yeamans Hall Blvd to the north and west. The neighborhood boundary encompasses predominately residential structures, but also includes several small businesses, Hanahan City Hall, Hanahan Fire Department, and Hanahan Middle School. A detailed map of the project area can be seen in Exhibit 1. The demographics of this area indicate low to moderate income residents.

Public infrastructure is available to all residents and businesses within the neighborhood. Local roads and storm water drainage are maintained by either the South Carolina Department of Transportation or Berkeley County Public Works. Potable and fire protection water are provided by Charleston Water System. Sanitary sewer collection is maintained by Berkeley County Water and Sanitation.

The proposed improvements studied in this report include 1) Pedestrian safety and access along public roads and 2) Crime Reduction and Aesthetic Enhancements by removal of derelict structures and adding signage.

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2.0 PROJECT NEED

The following items have been identified as the basis for the grant request.

2.1 Pedestrian Access and Safety

Many of the local roads within the subject area lack sidewalks. This forces residents to either walk within travel lanes or along narrow shoulders, both of which are dangerous options. Most of the pedestrian traffic along these roads is comprised of school-age children walking to Hanahan Middle School and/or nearby bus stops to be picked up to attend the local elementary or high schools. Additionally, lack of street lighting and crosswalks further promote the potential interaction between pedestrians and vehicles. The lack of sidewalks along these streets has created a situation that is inherently dangerous to the youngest and most vulnerable members of this community.

2.2 Crime Reduction / Aesthetic Improvements

The City has taken recent steps to reduce crime within all City limits and particularly within the Charleston Farms Neighborhood. These activities include the introduction of both video surveillance and Automatic License Plate Readers (ALPRs). The improvements have made significant impacts in opportunistic crimes and provided residents with a sense of security. However, the presence of several abandoned structures within the neighborhood provides a potential location for criminal activity and their dilapidated appearance reduces the resident's levels of civic pride and leads to apathy among homeowners.

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3.0 PROJECT SOLUTIONS

The City is requesting to resolve the needs of this community by applying for a Community Development Block Grant on the following basis:

3.1 Pedestrian Access and Safety – Corner Avenue

Previous work within the neighborhood included the installation of a 5-foot sidewalk along the length of Berkeley St connecting to N. Murray Ave. Berkeley St serves as a collector road and a primary route for children walking to the middle school. The City proposes to install a new 5-foot sidewalk along Corner Ave (S-92) to allow pedestrians safe access to both the sidewalk along Berkeley St and the sidewalk along Remount Rd, a primary artery serving the surrounding area connecting Hanahan and the City of North Charleston. The proposed sidewalk would extend from Berkeley St to the City limits just north of Remount Rd (approx. 925 lf). Corner Ave is part of the SCDOT maintenance system and is served by an open drainage system consisting of road-side swales and culverts. Construction of the sidewalk will likely include improvements to the drainage system to facilitate installation and may include sections of curb and gutter where a minimum 5-foot buffer between the sidewalk and travel way cannot be maintained. See Exhibit 2 for a detailed map of the proposed project.

3.2 Pedestrian Access and Safety – Carolyn Street

A second sidewalk is proposed along Carolyn St (S-137). This road is in the southwestern boundary of project area and would provide pedestrian access for residents of the neighborhood to the Central Business District, including City Hall. The sidewalk would extend from Dickson Ave to Yeamans Hall Rd, a primary artery through the City and central corridor for many of the businesses. Carolyn St is again under state maintenance. Little, if any, storm drainage exists along this road and it is anticipated that a sidewalk would be installed at grade. Additionally, ample space exists along this road to provide the necessary buffer between the travel way and sidewalk. Exhibit 3 displays the project location in more detail.

3.3 Crime Reduction / Aesthetic Improvements – Building Demolition

The City has identified 3 abandoned structures for removal. These structures have created a blight within the neighborhood and their removal will improve citizen safety and community pride. The cleared property will provide opportunity for either public or private redevelopment. The three

properties are: 1305 Purvis Street, 5738 Salvo Street, and 5813 Knight Street. These have been identified on Exhibit 4.

3.4 Crime Reduction / Aesthetic Improvements – Neighborhood Signage

In order to create a neighborhood identity and promote civic pride, two signs will be constructed within the neighborhood boundary. The signs will stimulate engagement within the community and further enhance residents' lives.

4.0 PROJECT FEASIBILITY

The feasibility of the project has been evaluated based on site visits, data provided by The City of Hanahan and various online resources.

4.1 Property Rights

The two identified sidewalk projects will lie within the South Carolina Department of Transportation's existing right-of-way. No additional property is deemed necessary. A detailed survey will be completed during the design phase to identify the ideal placement of the sidewalks to limit utility and property impacts.

4.2 Environmental Factors

All the Charleston Farms Neighborhood lies outside the 100-yr floodplain identified on the most recent FEMA Floodplain Maps (2016).

Inspection of the US Fish and Wildlife Service National Wetland Inventory does not reveal any jurisdictional or non-jurisdictional wetland areas within the proposed project areas. However, an Environmental Scientist will conduct a field review during the design phase to confirm the presence of any Waters of the State and assist with obtaining US Army Corps of Engineer's permits if necessary.

4.3 Constructability

The proposed projects can be completed using normal construction methods. Impacts from construction will involve relocation of utility services and surface features (mailboxes, telephone pedestals, water meters, etc.) typical with projects of this nature. Detailed design of the routes will limit the amount of impacts and provide the most economical solution.

Permits for the proposed projects will include an encroachment permit from the SCDOT and a NPDES permit for land disturbance from SCDHEC. No wetland permits are anticipated.

Coordination with local utilities will be necessary. Relocation of utility poles likely can be avoided on these projects with proper planning.

A detailed cost estimate for the proposed activities is included in Exhibit 5.

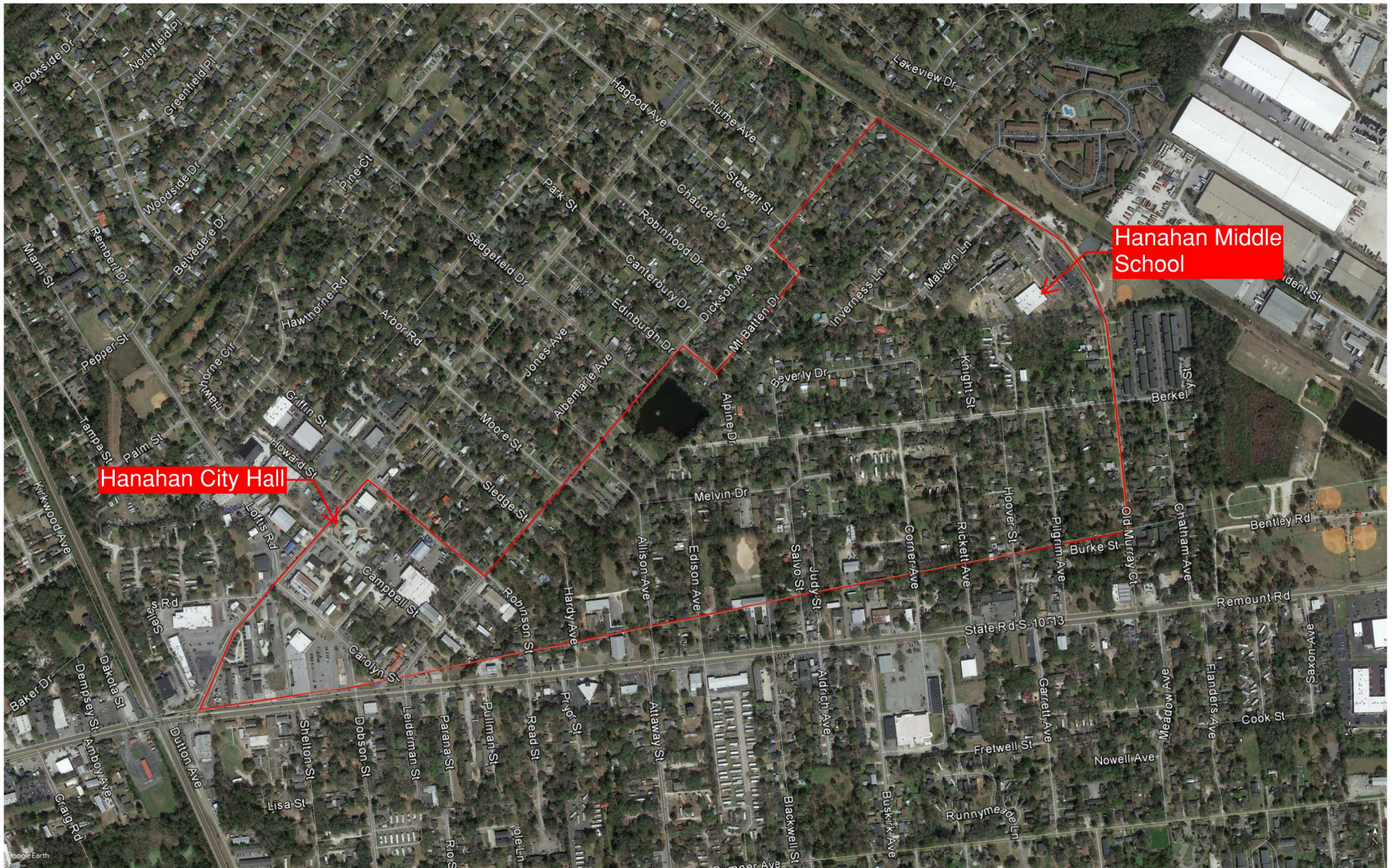
5.0 CONCLUSION

The proposed sidewalk improvements outlined in this report will resolve a hazardous situation in the Charleston Farms Neighborhood by providing safe pedestrian access to the surrounding areas. Likewise, the demolition of the abandoned homes will lessen the chances of injury and will remove possible havens for criminal activity. Along with the proposed signage, all these improvements will considerably increase the community's quality of life.

The City of Hanahan has shown their commitment to improving the quality of life for the citizens of this area through past CDBG program grants. Awarding a grant from the Community Development Block Grant program will allow the City to continue this effort and make a significant improvement to its citizens.

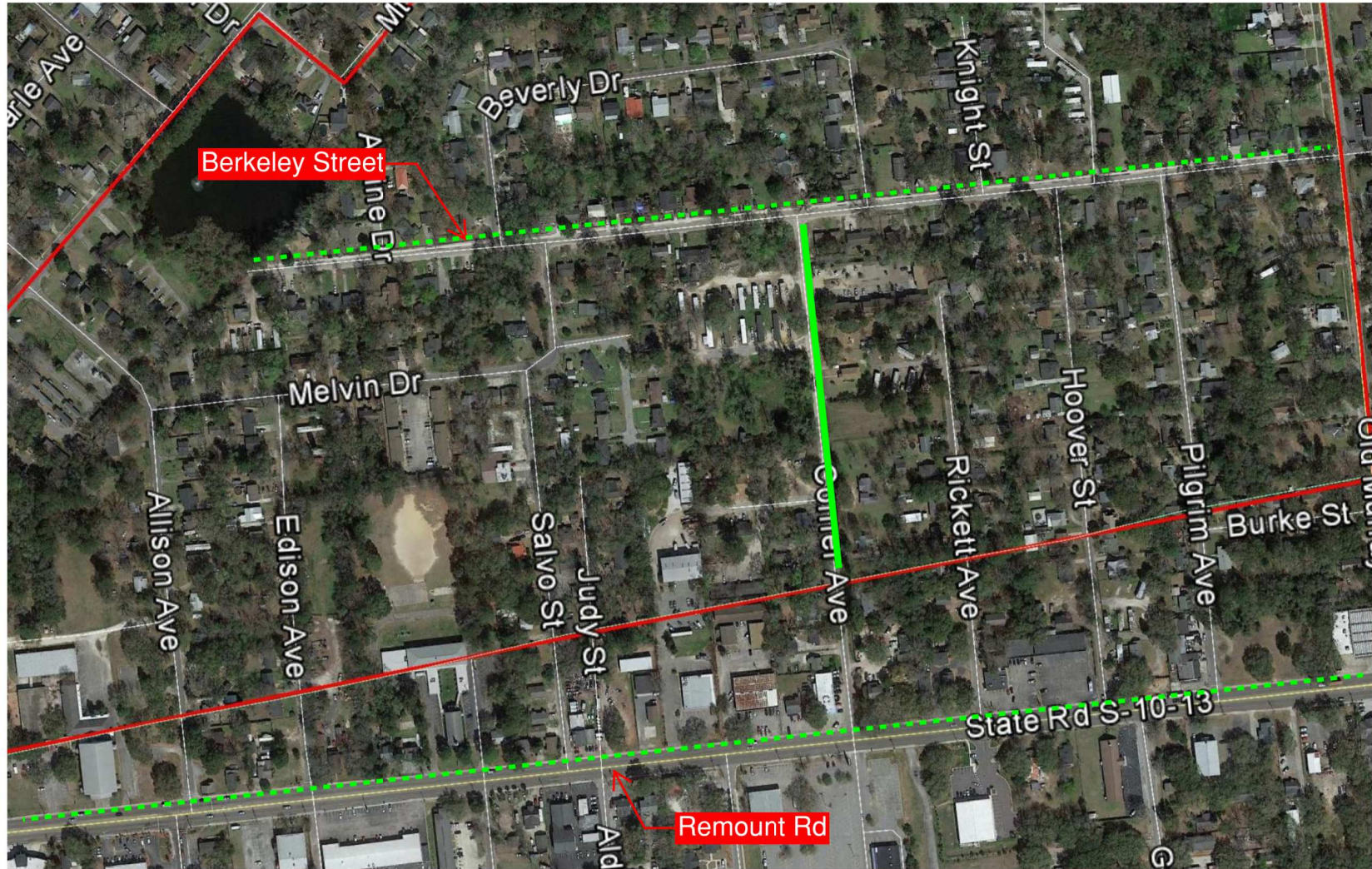
APPENDIX A

Exhibits



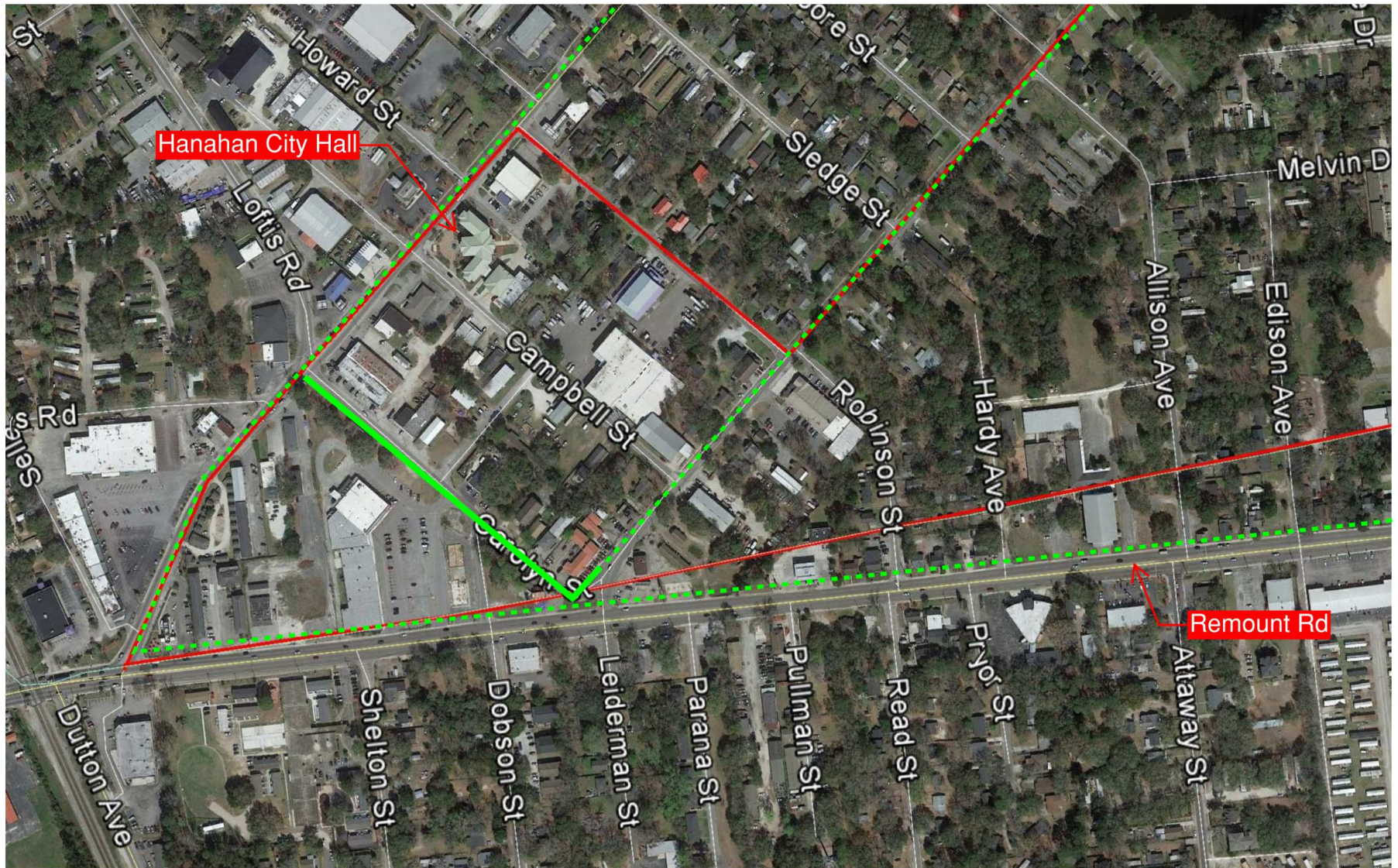
Legend

□ Project Boundary



Legend
□ Project Boundary

Legend
--- Existing Sidewalk
— Proposed Sidewalk



Legend
□ Project Boundary

Legend
--- Existing Sidewalk
— Proposed Sidewalk



- Legend
- House Demo
- Legend
- Project Boundary

Corner Avenue Sidewalk and Street Improvements

Description	Unit	Qty	Price	Total
MOBILIZATION	LF	1255	\$ 8.73	\$ 10,951.07
CONSTRUCTION LAYOUT	LF	1255	\$ 5.30	\$ 6,647.17
UTILITY RELOCATION, UTILITY POLE / ALLOWANCE	EA	1	\$ 25,001.00	\$ 25,001.00
UTILITY RELOCATION, WATER METER	EA	3	\$ 2,282.00	\$ 6,846.00
UTILITY RELOCATION, SEWER SERVICE	EA	3	\$ 2,846.00	\$ 8,538.00
UTILITY RELOCATION, FIRE HYDRANT	EA	2	\$ 4,815.00	\$ 9,630.00
UTILITY RELOCATION, PHONE PEDESTAL	EA	3	\$ 3,339.00	\$ 10,017.00
TRAFFIC CONTROL	LF	1255	\$ 14.21	\$ 17,829.66
REMOVAL OF MARKED TREES	EA	2	\$ 1,884.50	\$ 3,769.00
REMOVAL & DISPOSAL OF EXISTING DROP INLET	EA	1	\$ 1,268.75	\$ 1,268.75
REMOVAL & DISPOSAL OF EXISTING CULVERT 15"	LF	140	\$ 26.81	\$ 3,753.40
RELOCATE MAILBOX	EA	14	\$ 180.00	\$ 2,520.00
SITE EXCAVATION	LF	1255	\$ 17.50	\$ 21,962.50
GRADING	LF	1255	\$ 16.62	\$ 20,858.10
15" RC PIPE CUL.-CLASS III	LF	1000	\$ 82.55	\$ 82,550.00
CATCH BASIN - TYPE 9	EA	6	\$ 4,801.50	\$ 28,809.00
CONCRETE CURB & GUTTER (1' 6") VERTICLE FACE	LF	1255	\$ 31.62	\$ 39,683.10
CONCRETE SIDEWALK (4" UNIFORM)	SY	697	\$ 62.06	\$ 43,255.82
CONCRETE SIDEWALK (6" UNIFORM)	SY	25	\$ 63.51	\$ 1,587.75
DETECTABLE WARNING SURFACE	SF	25	\$ 30.88	\$ 772.00
CONCRETE DRIVEWAY (6" UNIFORM)	SY	25	\$ 76.26	\$ 1,906.50
ASPHALT DRIVEWAY, SECTION PER PLAN	SY	133	\$ 67.57	\$ 8,986.81
PERMANENT GRASSING FOR SMALL PROJECTS	ACRE	0.3	\$ 5,962.50	\$ 1,788.75
TREE MAINTENANCE & ROOT BARRIER	EA	13	\$ 861.00	\$ 11,193.00
SEDIMENT TUBES	EA	8	\$ 161.00	\$ 1,288.00
SILT FENCE	LF	2000	\$ 4.20	\$ 8,400.00
INLET STRUCTURE FILTER - TYPE A	LF	6	\$ 250.50	\$ 1,503.00
SIGNING & PAVEMENT MARKING	LF	1255	\$ 1.84	\$ 2,310.02
Subtotal			\$	383,625.40

Carolyn Street Sidewalk and Street Improvements

Description	Unit	Qty	Price	Total
MOBILIZATION	LF	915	\$ 8.73	\$ 7,984.25
CONSTRUCTION LAYOUT	LF	915	\$ 5.30	\$ 4,846.34
UTILITY RELOCATION, WATER METER	EA	3	\$ 2,282.00	\$ 6,846.00
UTILITY RELOCATION, SEWER SERVICE	EA	3	\$ 2,846.00	\$ 8,538.00
UTILITY RELOCATION, FIRE HYDRANT	EA	2	\$ 4,815.00	\$ 9,630.00
UTILITY RELOCATION, PHONE PEDESTAL	EA	3	\$ 3,339.00	\$ 10,017.00
TRAFFIC CONTROL	LF	915	\$ 14.21	\$ 12,999.31
REMOVAL & DISPOSAL OF EXISTING CULVERT 15"	LF	140	\$ 26.81	\$ 3,753.40
RELOCATE MAILBOX	EA	10	\$ 180.00	\$ 1,800.00
SITE EXCAVATION	LF	1300	\$ 17.50	\$ 22,750.00
GRADING	LF	1300	\$ 16.62	\$ 21,606.00
15" RC PIPE CUL.-CLASS III	LF	500	\$ 82.55	\$ 41,275.00
CATCH BASIN - TYPE 9	EA	4	\$ 4,801.50	\$ 19,206.00
CONCRETE CURB & GUTTER (1' 6") VERTICLE FACE	LF	915	\$ 31.62	\$ 28,932.30
CONCRETE SIDEWALK (4" UNIFORM)	SY	510	\$ 62.06	\$ 31,650.60
CONCRETE SIDEWALK (6" UNIFORM)	SY	25	\$ 63.51	\$ 1,587.75
DETECTABLE WARNING SURFACE	SF	25	\$ 30.88	\$ 772.00
CONCRETE DRIVEWAY (6" UNIFORM)	SY	25	\$ 76.26	\$ 1,906.50
ASPHALT DRIVEWAY, SECTION PER PLAN	SY	133	\$ 67.57	\$ 8,986.81
PERMANENT GRASSING FOR SMALL PROJECTS	ACRE	0.3	\$ 5,962.50	\$ 1,788.75
TREE MAINTENANCE & ROOT BARRIER	EA	10	\$ 861.00	\$ 8,610.00
SEDIMENT TUBES	EA	8	\$ 161.00	\$ 1,288.00
SILT FENCE	LF	1200	\$ 4.20	\$ 5,040.00
INLET STRUCTURE FILTER - TYPE A	LF	4	\$ 250.50	\$ 1,002.00
SIGNING & PAVEMENT MARKING	LF	915	\$ 1.84	\$ 1,684.20
Subtotal				\$ 264,500.21

House Demolition

Description	Unit	Qty	Price	Total
MOBILIZATION	LS	1	\$ 25,000.00	\$ 25,000.00
DEMOLITION SINGLE STORY 1500SF BUILDING	EA	3	\$ 5,250.00	\$ 15,750.00
FOUNDATION REMOVAL	SF	4500	\$ 1.05	\$ 4,725.00
DUMP FEES	TON	403.125	\$ 81.00	\$ 32,653.13
DEMOLITION OF DRIVEWAY	SY	135	\$ 3.58	\$ 483.30
DEMOLITION OF UTILITIES	LF	360	\$ 4.50	\$ 1,620.00
ASBESTOS SURVEY	EA	3	\$ 2,056.00	\$ 6,168.00
ROUGH GRADE SITE	EA	3	\$ 905.00	\$ 2,715.00
12IN COMPACTED EARTH FILL	SF	4500	\$ 2.25	\$ 10,125.00
EROSION CONTROL	EA	3	\$ 650.00	\$ 1,950.00
Subtotal				\$ 101,189.43

Community Signage

Description	Unit	Qty	Price	Total
MOBILIZATION	LS	1	\$ 600.00	\$ 600.00
6'X4' SIGN	EA	2	\$ 2,500.00	\$ 5,000.00
Subtotal				\$ 5,600.00

	Total Construction Cost	\$ 754,915.04
	CDBG Administration (8%)	\$ 60,393.20
	Engineering Design (10%)	\$ 75,491.50
	Construction Observation (5%)	\$ 37,745.75
	Total Project Cost	\$ 928,545.49