

HISTORIC DISTRICT
INFRASTRUCTURE INITIATIVE

FINAL ENGINEERING
INFRASTRUCTURE ANALYSIS

April 2019

For:



City of Punta Gorda
326 West Marion Avenue
Punta Gorda, Florida 33950

By:



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I. BACKGROUND

The City of Punta Gorda (City) desired to contract with a Professional Engineering firm to provide professional services to develop an engineering analysis for a portion of the City's infrastructure and subsequently develop a strategic plan to assist with guiding the future improvements within a segment of the City's Historic District.



Fig. 1 – Map of the Punta Gorda Historic Overlay District

The City issued a solicitation (RFQ) seeking a qualified professional engineering firm to provide the desired engineering analysis. The focus of the analysis is an area located within the Historic District Infrastructure Initiative area. The limits of the analysis were defined in the City's RFQ and as depicted in green in Figure 1.

The portion of the study area known as the Historic District Infrastructure Initiative is generally bound by Hargreaves Avenue to the north, the Seminole Gulf Railway to the South, DuPont Street to the west, and Cooper Street to the east. The study area is comprised of a blend of residential and commercial uses. The residential uses are composed of a combination of single family and multi-family residences. The commercial uses vary and are generally composed of neighborhood commercial and support uses. The study area has a significant history dating back to the early 1900's, including The Blanchard House

Museum of African American History and Culture of Charlotte County. There are several active houses of worship and facilities of community interest like the Cooper Street Recreation Center, the Bailey Brothers Park, and The Baker Center. Figure 2 depicts the general project limits superimposed on an aerial location map.



Fig. 2 – The Historic District Infrastructure Initiative Study Area Limits

Infrastructure Solution Services, LLC (ISS) was retained by the City to review and analyze the existing infrastructure within the study area limits and to provide associated observations and recommendations for potential infrastructure improvements. ISS received purchase orders for two (2) phases of the analysis.

Phase 1 was authorized by the City in September, 2018 and included historical data research, first hand field investigation, supplemental data collection including drone aerial imagery and GIS data locations of existing infrastructure to be studied, along with assistance with public meetings seeking local resident input. The Phase 1 portion was completed and has been tabulated for the City.

Phase 2 was authorized by the City in late October, 2018. The final analysis was initiated upon completion of the Phase 1 Analysis. ISS had performed the conceptual analysis for the study area and upon input from the City, prepared the final analysis in conjunction with this report. The report represents the findings of the investigation and analysis.

II. PURPOSE

The purpose of this infrastructure analysis was to review the conditions of the City's existing infrastructure within the Historic District Infrastructure Initiative limits with a focus on the existing sidewalks, drainage, and lighting. A thorough analysis and subsequent comprehensive plan was to be prepared by ISS to provide the City with recommended solutions along with their associated magnitude of costs for the potential improvement options.

Based on the City's initial RFQ, the project area consisted of 4.9 miles of existing sidewalk along with 4.2 miles of sidewalk gaps totaling approximately 9.1 miles of potential sidewalk network. The existing sidewalk network was to be reviewed for its current integrity as well as compliance with ADA accessibility requirements. The pedestrian connectivity of the system gaps were to be reviewed for potential solutions.

The RFQ noted that street lighting conditions vary by location and occupational use. The lighting system was to be reviewed for its functional effectiveness, efficiency, and general system integrity. Recommendations for a District wide lighting standard were to be considered along with suggestions for addressing gaps in the system's coverage.

The existing drainage network is comprised of various levels of infrastructure from limited surface drainage to open drainage collection, and closed drainage collection systems. The current drainage system appeared to vary in effectiveness based on current infrastructure functionality and available discharge locations. The drainage basins associated with the District were to be reviewed and levels of solution options were to be provided.

Once the existing sidewalks, drainage, and lighting systems were reviewed by the ISS staff, the findings of the field investigations and assessments were to be compiled and a report prepared addressing the existing conditions. The initial data acquisition report was completed as part of the project's Phase 1 component and was based on field observations, available records and information, an understanding of the City's requirements, data collection and mapping, and ISS's knowledge and expertise in the analysis of infrastructure. Recommended improvements were to be identified and reviewed along with providing possible alternatives and their associated magnitude of cost.

The intent of the overall analysis was to determine the viability and estimated costs for proposed sidewalk, drainage, and lighting improvements within the Historic District Infrastructure Initiative so a cost-effective solution can be considered and future design and implementation can be anticipated within the City's Capital Improvement Program (CIP).

In accordance with the task orders between the City and ISS, this report has identified those options and budgets, and relays those initial findings for the City's review and ultimate consideration for the City's implementation. The analysis is to serve as a guide for the City in defining future design projects.

III. AVAILABLE INFORMATION

As part of Phase 1, ISS coordinated with the City and governing agencies to obtain and review available infrastructure mapping associated with the project limits. The acquisition and review of the available information included, but was not limited to, the following:

INFORMATION OBTAINED FROM THE CITY

The City provided ISS with record data and copies of adjacent and integrated projects, including the Martin Luther King Jr Blvd - Ph. II and III project plans, and the Wood Street Decorative Lighting project plans.

OTHER INFORMATION

ISS reviewed historical aerial mapping, record drawings for localized projects, FDOT drainage mapping, private utility coordination, SWFWMD drainage record documents, and available GIS mapping from the City and Charlotte County.

A compilation of the historical data research is provided in Appendix A.

IV. FIELD INVESTIGATION

ISS performed numerous field visits during the initial phase of the project. These initial field investigation visits were conducted predominantly during the months November and December 2018. The first grouping of visits included the establishment of the initial survey control and subsequent aerial photogrammetry conducted via drone for the full coverage limits of the study area.

The second grouping of field visits included approximately five to six days of a two-person crew walking the full extent of the project corridors to observe the conditions of all of the existing infrastructure to be studied. The conditions of sidewalk, drainage, and lighting were observed through the project limits. Approximately 300 photographs were taken of existing amenities, including all failing accessible ramps, sidewalk, each collected drainage structure; along with representative photos of the general corridor, drainage, and lighting conditions. Georeferenced data was collected of existing accessible ramps, drainage infrastructure, and lighting facilities. Photographs were cross referenced to the georeferenced data as provided to the City in GIS format. The photographs that are linked to GIS data are compiled for informational purposes in Appendix C as a general representation of the observed conditions. The photographs are not individually entitled since they are specifically linked directly to the GIS database for the associated entity they represent and should be accessed as part of the GIS function.

SIDEWALK NETWORK

The following summary tabulation is provided for the project's field investigation with regard to the existing sidewalk network as observed on Figure 3, Existing Sidewalk and Deficiencies. This figure is also provided in an enlarged format within Appendix B. Observations of the existing sidewalk included damaged/cracked areas, unlevel locations (requiring grinding or replacement), low areas of flooding, adjacent drop-offs of concern, and sidewalk panels marked for replacement. These areas are further detailed in the GIS data and the associated photographs.

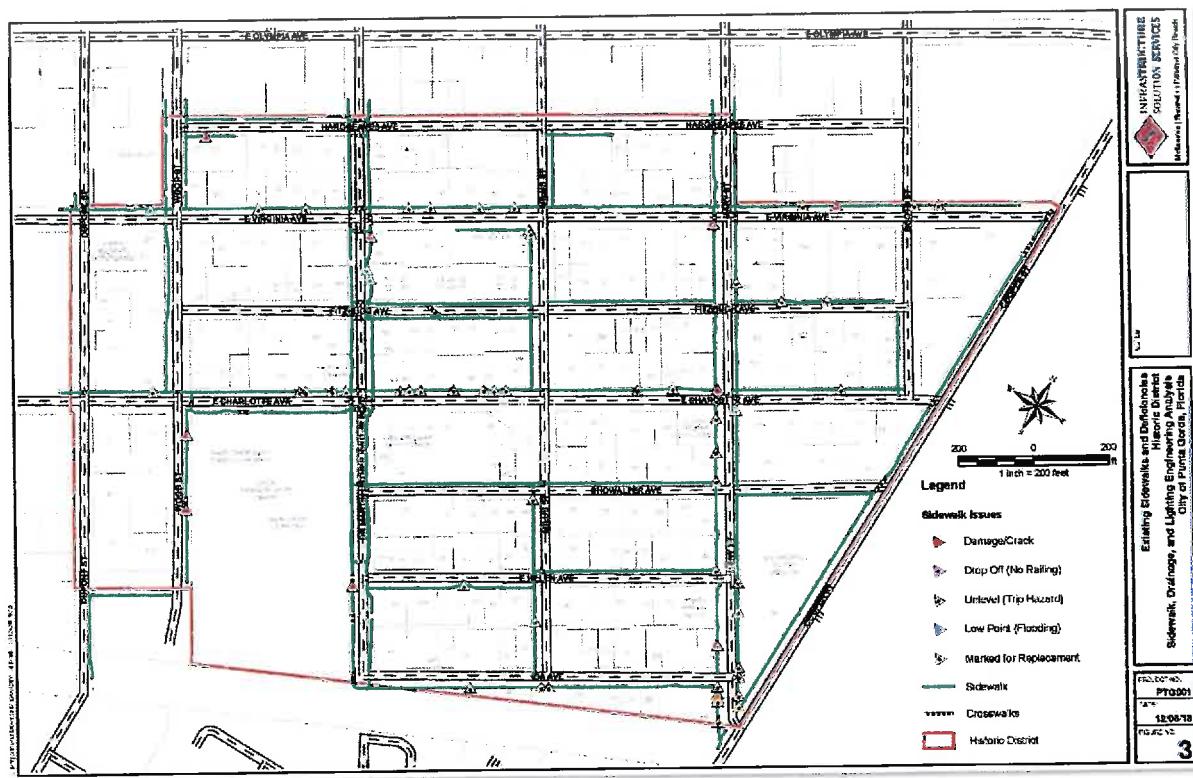


Fig. 3 – Existing Sidewalks and Deficiencies

There are numerous locations where the connectivity is interrupted in the existing sidewalk network. The following are locations of gaps in the existing sidewalk network for the roadways running from west to east:

- On Hargreaves Avenue (north) - From #323 to Dr. Martin Luther King Jr. Blvd.
- On Hargreaves Avenue (south) - From #311 to Dr. Martin Luther King Jr. Blvd.
- On Hargreaves Avenue (north) - From Dr. Martin Luther King Jr. Blvd. to Milus Street
- On Hargreaves Avenue (south) - From Dr. Martin Luther King Jr. Blvd. to Milus Street
- On Hargreaves Avenue (north) - From Milus Street to Mary Street
- On Hargreaves Avenue (north) - From #519 to Mary Street
- On E. Virginia Avenue (south) - From DuPont Street to Wood Street
- On E. Virginia Avenue (south) - From Wood Street to Dr. Martin Luther King Jr. Blvd.
- On E. Virginia Avenue (south) - From Dr. Martin Luther King Jr. Blvd. to #429
- On E. Virginia Avenue (south) - From Milus Street to Mary Street
- On E. Virginia Avenue (south) - From Mary Street to Booth Street
- On E. Virginia Avenue (north) – East end adjacent to Cooper Street
- On E. Virginia Avenue (south) - From Booth Street to Cooper Street
- On Fitzhugh Avenue (north) - From Wood Street to Dr. Martin Luther King Jr. Blvd.
- On Fitzhugh Avenue (south) - From Wood Street to Dr. Martin Luther King Jr. Blvd.

- On Fitzhugh Avenue (south) - From Milus Street to Mary Street
- On Fitzhugh Avenue (south) - From Mary Street to Booth Street
- On E. Charlotte Avenue (south) - From DuPont Street to Wood Street
- On E. Charlotte Avenue (south) - From #415 to Milus Street
- On E. Charlotte Avenue (south) - From Milus Street to Mary Street
- On E. Charlotte Avenue (south) - From Mary Street to Booth Street
- On E. Charlotte Avenue (north) - From Booth Street to Cooper Street
- On E. Charlotte Avenue (south) - From Booth Street to Cooper Street
- On Showalter Avenue (south) - From Dr. Martin Luther King Jr. Blvd. to Milus Street
- On Showalter Avenue (south) - From Milus Street to Mary Street
- On Showalter Avenue (north) - From Mary Street to Cooper Street
- On Showalter Avenue (south) - From Mary Street to Cooper Street
- On E. Helen Avenue (north) - From Dr. Martin Luther King Jr. Blvd. to Milus Street
- On E. Helen Avenue (south) - From Milus Street to Mary Street
- On Ida Avenue (north) - From Dr. Martin Luther King Jr. Blvd. to Milus Street
- On Ida Avenue (south) - From Milus Street to Mary Street

Likewise, the following are locations of gaps in the existing sidewalk network for the roadways running from south to north:

- On DuPont Street (west) – From south end to E. Charlotte Avenue
- On DuPont Street (east) – From south end to E. Charlotte Avenue
- On DuPont Street (west) – From E. Charlotte Avenue to E. Virginia Avenue
- On DuPont Street (east) – From E. Charlotte Avenue to E. Virginia Avenue
- On Wood Street (west) – From south end to E. Charlotte Avenue
- On Wood Street (east) – From E. Charlotte Avenue to Fitzhugh Avenue
- On Wood Street (east) – From Fitzhugh Avenue to E. Virginia Avenue
- On Milus Street (east) – From Ida Avenue to Helen Avenue
- On Milus Street (east) – From Helen Avenue to Showalter Avenue
- On Milus Street (west) – From Showalter Avenue to E. Charlotte Avenue
- On Milus Street (east) – From Showalter Avenue to E. Charlotte Avenue
- On Milus Street (east) – From E. Charlotte Avenue to Fitzhugh Avenue
- On Milus Street (east) – From Fitzhugh Avenue to E. Virginia Avenue
- On Milus Street (west) – From E. Virginia Avenue to Hargreaves Avenue

The segments noted above represent the gaps in the existing sidewalk network. It should be noted that these include both sides of the project's roadway corridors and only one side of a roadway may be necessary to provide acceptable accessible/sidewalk access.

The existing accessible sidewalk ramps can be observed on Figure No. 4, Existing Compliant Sidewalk Ramps. This figure is also provided in an enlarged format within Appendix B. The existing sidewalk ramps were reviewed for compliance with a maximum 8.3% longitudinal slope and a maximum 2.0% cross slope, as well as for condition, damage, and existence of tactile warnings. If any one of longitudinal slope, cross slope, condition, damage, tactile surface was observed unacceptable, then the ramp was deemed non-compliant. It should be noted that compliance remediation varies from full replacement to the addition of a tactile mat. Figure No. 4 and the associated photographs in Appendix C for all ramps further clarify this data.



Fig. 4 – Existing Compliant Sidewalk Ramps

DRAINAGE NETWORK

The existing drainage network can be observed on Figure No. 5, Existing Stormwater Drainage System. This figure is also provided in an enlarged format within Appendix B. Observations of the existing drainage system included the type of drainage structure, condition, pipe routing, and observation of surface drainage orientation and patterns. The surface water patterns were observed for consideration in this Engineering Analysis phase. Figure No. 5 and the associated photographs for all drainage structures further clarify this data. The photographs can also be found in Appendix C.

Generally, the drainage patterns are shallow and slight. Many of the existing drainage structures require maintenance (i.e. structure repairs, siltation removal, etc.). These structures are further detailed in the GIS data and associated photographs.

There were several locations where roadside swales flow across depressed areas of the existing sidewalks. This Engineering Analysis considers recommended improvements to the project's sidewalk network and associated stormwater improvements may be necessary to facilitate the integration of new or improved sidewalk segments.

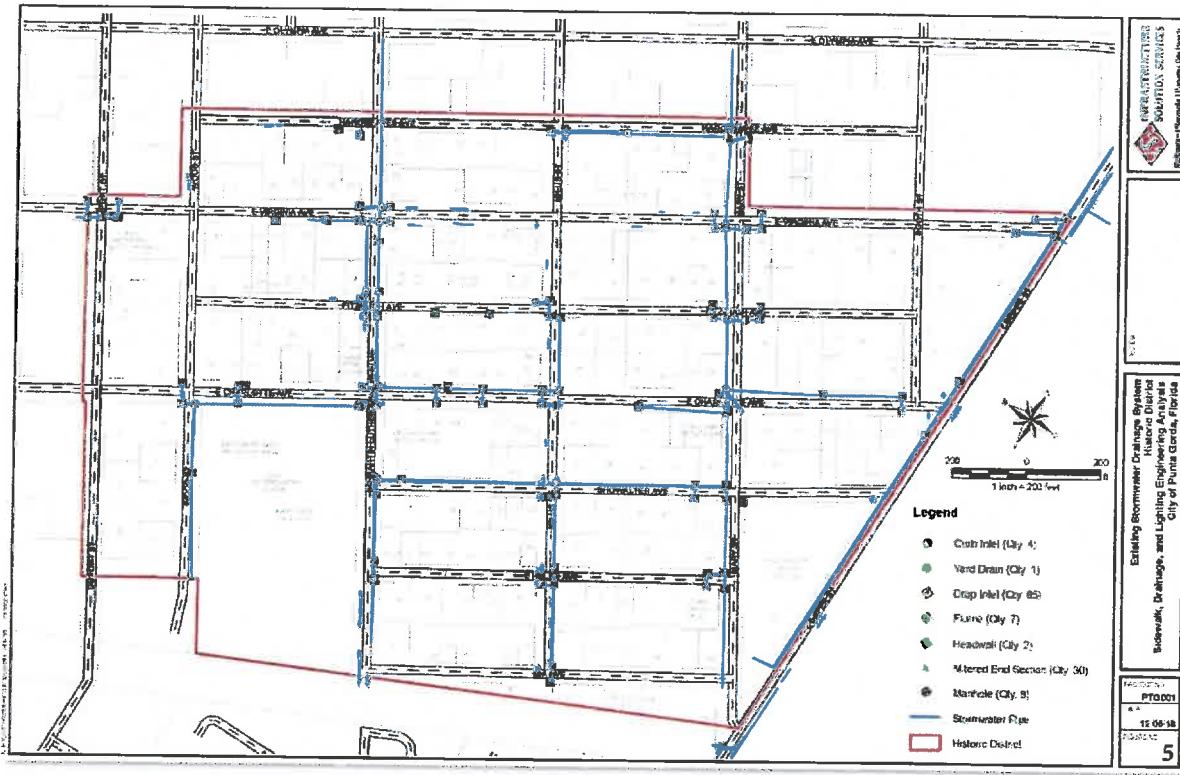


Fig. 5 – Existing Stormwater Drainage System

LIGHTING NETWORK

The existing street lighting network can be observed on Figure No. 6, Existing Street Lights. This figure is also provided in an enlarged format within Appendix B. Observations of the existing street lighting network included the type of fixture, condition, and type of pole. The existing fixtures generally fall in four different observed types, one decorative post light type style and three high mast pole mounted fixture types. Required infill lighting and/or replacement recommendations are considered in this Engineering Analysis phase. Representative photos were taken of the four general fixture types and they can be found in Appendix C.

Generally, the existing lighting is in acceptable to good condition. The adequacy of light coverage varies throughout the project limits and further consideration is provided in the analysis phase of this study regarding recommended standards and the need for supplemental fixtures.

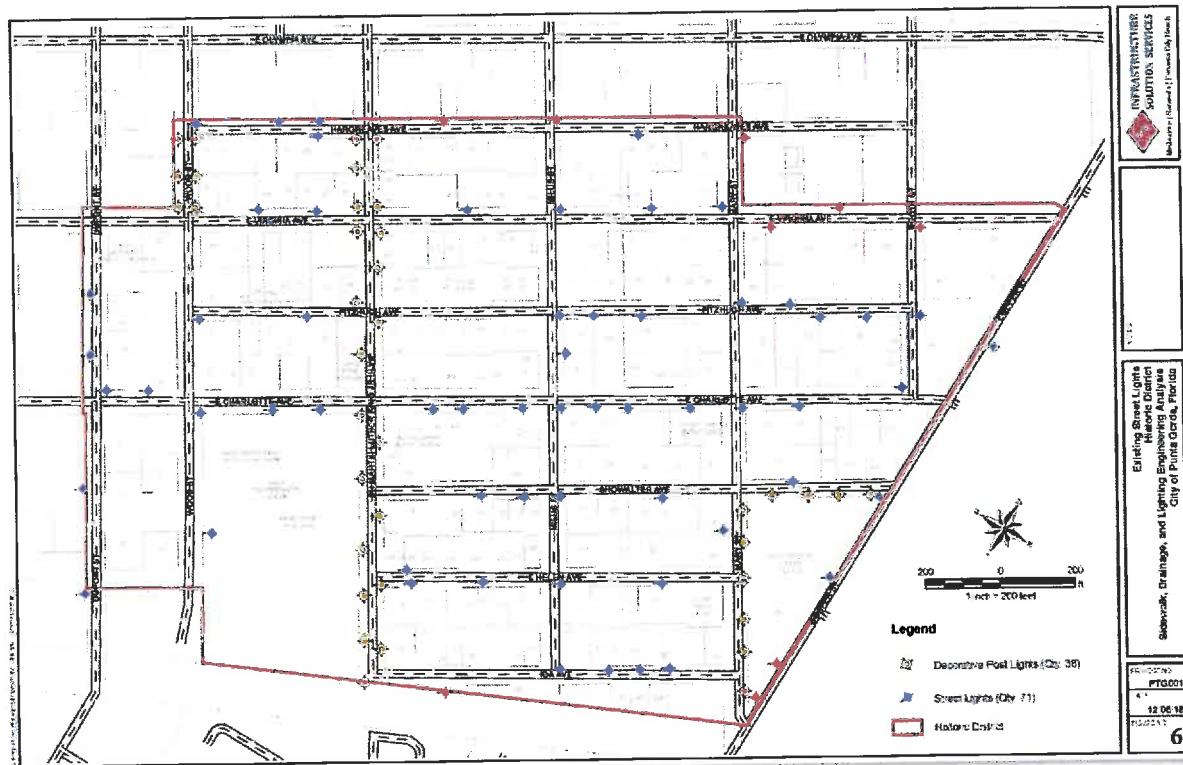


Fig. 6 – Existing Street Lights

V. PUBLIC INVOLVEMENT

ISS coordinated with the City regarding potential stakeholder and neighborhood input. Presentation materials including large scale mapping and an infrastructure questionnaire were prepared to assist with garnering input from the public regarding the neighborhood's pertinent facilities. A neighborhood meeting was conducted and the subsequent mapping and questionnaire input was tabulated.

The community meeting was held on the evening of December 12, 2018 at the Cooper Street Recreation Center. The meeting was attended by City and ISS staff, as well as, over 50 local residents.

An introduction to the purpose of the analysis was provided to the attendees. The meeting was conducted in a dynamic participation format in order to actively obtain input from the residents. A questionnaire was provided seeking that input in the three main disciplines of the analysis; Sidewalks and ADA ramps, Stormwater System, and Street Lighting. The questionnaire sought input to several specific infrastructure related questions as well as general insight and comment regarding each study discipline. Copies of the

completed questionnaires were included with a summary and provided to the City. Additionally, oversized aerial graphic boards were provided where the public could actively participate in placing stickers on the large-scale aerials to address specific concerns. The stickers were color-coded to correspond to specific discipline issues referenced in the questionnaire.



The information obtained by the public is generally consistent with conditions observed during the numerous field walks and obtained as part of the data acquisition phase of the project. It was helpful to hear concerns specific to particular parcels or areas. A tabulation of the collected comments is provided in Appendix D.

The following images are copies of the completed aerials, including the resident input stickers placed by the public during the neighborhood meeting. Enlarged versions can be found in Appendix E.



Fig. 7 – Neighborhood Meeting Input – Northwest Quadrant



Fig. 8 – Neighborhood Meeting Input – Northeast Quadrant



Fig. 9 – Neighborhood Meeting Input – Southwest Quadrant



Fig. 10 – Neighborhood Meeting Input – Southeast Quadrant

VI. EVALUATION MATRIX

An Evaluation Matrix was prepared by ISS to assist with determining the weighting factors for various impacts associated with the infrastructure elements being reviewed. An evaluation matrix can be an essential tool for organizing and tabulating the key criteria being considered in an evaluation. The Evaluation Matrix for this project was utilized to assist with the prioritization of design elements and critical needs. The City of Punta Gorda has implemented an ADA Transition Plan for Public Rights-of-Way and Sidewalks that includes and emphasis on compliance prioritization. This evaluation helps provide the assessment and inventory of needs required by the City's plan.

The initial step in establishing the matrix was to divide the Historic District Infrastructure Initiative project limits into individual right-of-way segments for the purpose of reviewing on a more specific basis. Since each roadway segment was often comprised of unique characteristics that was not necessarily consistent within the primary roadway segment itself, ISS took each roadway and further broke them down by block segments for the purposes of analysis.

The following tabulation, Figure 11, is representative list of the roadway right-of-way segment delineation used within the matrix. For the purposes of this report, the Segment number will be used as an abbreviated text reference.

Right-of-Way Segment	Street	From	To
1	HARGREAVES AVE	WOOD ST	DR. MLK BLVD
2	HARGREAVES AVE	DR. MLK BLVD	MILUS ST
3	HARGREAVES AVE	MILUS ST	MARY ST
4	E VIRGINIA AVE	DUPONT ST	WOOD ST
5	E VIRGINIA AVE	WOOD ST	DR. MLK BLVD
6	E VIRGINIA AVE	DR. MLK BLVD	MILUS ST
7	E VIRGINIA AVE	MILUS ST	MARY ST
8	E VIRGINIA AVE	MARY ST	BOOTH ST
9	E VIRGINIA AVE	BOOTH ST	COOPER ST
10	FITZHUGH AVE	WOOD ST	DR. MLK BLVD
11	FITZHUGH AVE	DR. MLK BLVD	MILUS ST
12	FITZHUGH AVE	MILUS ST	MARY ST
13	FITZHUGH AVE	MARY ST	BOOTH ST
14	E CHARLOTTE AVE	DUPONT ST	WOOD ST
15	E CHARLOTTE AVE	WOOD ST	DR. MLK BLVD
16	E CHARLOTTE AVE	DR. MLK BLVD	MILUS ST
17	E CHARLOTTE AVE	MILUS ST	MARY ST
18	E CHARLOTTE AVE	MARY ST	BOOTH ST
19	SHOWALTER AVE	DR. MLK BLVD	MILUS ST
20	SHOWALTER AVE	MILUS ST	MARY ST
21	SHOWALTER AVE	MARY ST	COOPER ST
22	E HELEN AVE	DR. MLK BLVD	MILUS ST
23	E HELEN AVE	MILUS ST	MARY ST
24	IDA AVE	DR. MLK BLVD	MILUS ST
25	IDA AVE	MILUS ST	MARY ST
26	DUPONT ST	-	E CHARLOTTE AVE
27	DUPONT ST	E CHARLOTTE AVE	E VIRGINIA AVE
28	WOOD ST	-	E CHARLOTTE AVE
29	WOOD ST	E CHARLOTTE AVE	FITZHUGH AVE
30	WOOD ST	FITZHUGH AVE	E VIRGINIA AVE
31	WOOD ST	E VIRGINIA AVE	HARGREAVES AVE
32	DR. MLK BLVD	IDA AVE	E HELEN AVE
33	DR. MLK BLVD	E HELEN AVE	SHOWALTER AVE
34	DR. MLK BLVD	SHOWALTER AVE	E CHARLOTTE AVE
35	DR. MLK BLVD	E CHARLOTTE AVE	FITZHUGH AVE
36	DR. MLK BLVD	FITZHUGH AVE	E VIRGINIA AVE
37	DR. MLK BLVD	E VIRGINIA AVE	HARGREAVES AVE
38	MILUS ST	IDA AVE	E HELEN AVE
39	MILUS ST	E HELEN AVE	SHOWALTER AVE
40	MILUS ST	SHOWALTER AVE	E CHARLOTTE AVE
41	MILUS ST	E CHARLOTTE AVE	FITZHUGH AVE
42	MILUS ST	FITZHUGH AVE	E VIRGINIA AVE
43	MILUS ST	E VIRGINIA AVE	HARGREAVES AVE
44	MARY ST	IDA AVE	E HELEN AVE
45	MARY ST	E HELEN AVE	SHOWALTER AVE
46	MARY ST	SHOWALTER AVE	E CHARLOTTE AVE
47	MARY ST	E CHARLOTTE AVE	FITZHUGH AVE
48	MARY ST	FITZHUGH AVE	E VIRGINIA AVE
49	MARY ST	E VIRGINIA AVE	HARGREAVES AVE
50	BOOTH ST	E CHARLOTTE AVE	FITZHUGH AVE
51	BOOTH ST	FITZHUGH AVE	E VIRGINIA AVE

Fig. 11 – Roadway Segment Tabulation

Once the individual segments were defined, the evaluation matrix was drafted based on the segments noted in Figure 11 and the key analysis criteria. This matrix incorporated ten (10) considered criteria within the matrix along with established weighting factors. The criteria include compliance and safety related considerations, infrastructure needs, community input, and financial considerations.

The matrix was then processed by each roadway segment based on the related criteria and then a composite weighted score was provided for each roadway segment evaluated. Figure 12A represents an example of the matrix implemented for this project. Refer to Appendix F for the completed evaluation documents.



CITY OF PUNTA GORDA INFRASTRUCTURE EVALUATION MATRIX		ROADWAY SEGMENT													
NO.	CONSIDERATION CRITERIA	WEIGHTING FACTOR	1	2	3	4	5	6	7	8	9	10	11	12	13
1	AGENCY COMPLIANCE REQUIREMENTS (Meeting Regulatory Standards)	6	1	1	1	1	1	1	1	1	1	1	1	1	1
2	PUBLIC SAFETY NEED (Inh-Cohesive or Unsafe Condition)	5	5	5	5	5	5	5	5	5	5	5	5	5	5
3	INFRASTRUCTURE NEED - SIDEWALK (Inadequate or Missing)	3	1	1	1	1	1	1	1	1	1	1	1	1	1
4	INFRASTRUCTURE NEED - DRAINAGE (Inadequate or Impaired)	3	3	3	3	3	3	3	3	3	3	3	3	3	3
5	INFRASTRUCTURE NEED - LIGHTING (Inadequate or Non-existent)	3	1	1	1	1	1	1	1	1	1	1	1	1	1
6	TYPE AND SEVERITY OF FAILURE	4	1	1	1	1	1	1	1	1	1	1	1	1	1
7	SOCIAL AESTHETIC NEED	3	1	1	1	1	1	1	1	1	1	1	1	1	1
8	PUBLIC (RE)REQUESTED	4	3	3	3	3	3	3	3	3	3	3	3	3	3
9	CAPITAL COSTS	3	1	1	1	1	1	1	1	1	1	1	1	1	1
10	OPERATION & MAINTENANCE COSTS	3	3	3	3	3	3	3	3	3	3	3	3	3	3
WEIGHTED TOTAL Maximum Possible Score:		100	28	29	29	29	29	29	29	29	29	29	29	29	29

Score 1 to 5 for each item
Weighted Sum = Weighted Factor
Weighting Factors and Scoring to be reviewed with City Staff

Fig. 12A – Evaluation Matrix Example

The actual matrix results were somewhat evenly spread with a weighted total varying from a low of 46 up to 87. A baseline norm was established for the criteria resulting in a weighted total of 41; all of the roadway segments within the study area calculated above the baseline norm.

The results of the evaluation matrix help compare the study roadway segments to each other on a common assessment. This comparison will help define a related ranking for prioritization of the areas.

Once the conceptual analysis is reviewed by the City, the evaluation weighting may be adjusted to further hone the prioritization prior to the issuance of the final analysis. The evaluation matrix results are tabulated in the following Figure 12B, including the weighted total from the matrix and an associated ranking.

Right-of-Way Segment	Street	Matrix Weighted Total	Associated Priority Rank
1	HARGREAVES AVE	81	3
2	HARGREAVES AVE	81	3
3	HARGREAVES AVE	70	8
4	E VIRGINIA AVE	87	1
5	E VIRGINIA AVE	75	7
6	E VIRGINIA AVE	54	43
7	E VIRGINIA AVE	65	18
8	E VIRGINIA AVE	64	19
9	E VIRGINIA AVE	55	42
10	FITZHUGH AVE	77	6
11	FITZHUGH AVE	61	25
12	FITZHUGH AVE	70	8
13	FITZHUGH AVE	61	25
14	E CHARLOTTE AVE	63	20
15	E CHARLOTTE AVE	67	15
16	E CHARLOTTE AVE	50	47
17	E CHARLOTTE AVE	59	34
18	E CHARLOTTE AVE	62	24
19	SHOWALTER AVE	63	20
20	SHOWALTER AVE	60	30
21	SHOWALTER AVE	46	49
22	E HELEN AVE	67	15
23	E HELEN AVE	66	17
24	IDA AVE	80	5
25	IDA AVE	69	12
26	DUPONT ST	70	8
27	DUPONT ST	83	2
28	WOOD ST	60	30
29	WOOD ST	59	34
30	WOOD ST	57	38
31	WOOD ST	48	48
32	DR. MLK BLVD	46	50
33	DR. MLK BLVD	51	45
34	DR. MLK BLVD	53	44
35	DR. MLK BLVD	46	50
36	DR. MLK BLVD	51	45
37	DR. MLK BLVD	56	41
38	MILUS ST	61	25
39	MILUS ST	69	12
40	MILUS ST	68	14
41	MILUS ST	61	25
42	MILUS ST	61	25
43	MILUS ST	59	34
44	MARY ST	60	30
45	MARY ST	57	38
46	MARY ST	60	30
47	MARY ST	63	20
48	MARY ST	63	20
49	MARY ST	57	38
50	BOOTH ST	58	37
51	BOOTH ST	70	8

Fig. 12B – Evaluation Matrix Results

VII. FINAL INFRASTRUCTURE ANALYSIS

Once the data acquisition and field investigation effort were compiled, a full review of the data was conducted to fully understand the integrity and disposition of the existing infrastructure. As part of that review, ISS has established potential enhancements, modifications, and/or improvements that can be considered by the City to be implemented to provide more comprehensive systems. This initial analysis was primarily focused on the sidewalk, drainage, and lighting components of the existing infrastructure.

SIDEWALK ROUTING CONCEPT

During the initial phase of the project, ISS observed ADA compliance concerns based on size, location / slope, and orientation of the existing accessible transitions / ramps. We observed that there were concerns with the integrity of some segments of the existing sidewalk network. The review further considered the potential for closing gaps of the existing sidewalk routes and the impacts limiting enhanced pedestrian connectivity. As a culmination of the various research data, along with the field reconnaissance and a review of the analyzed data, ISS has prepared a recommendation concept defining the potential areas for the proposed sidewalk modifications.

The Concept Plan for Sidewalk is presented in Figure 13 and within Appendix G. The concept references proposed sidewalks to be added where none currently exist, as well as denotes problem areas where existing sidewalk sections are suggested to be replaced.

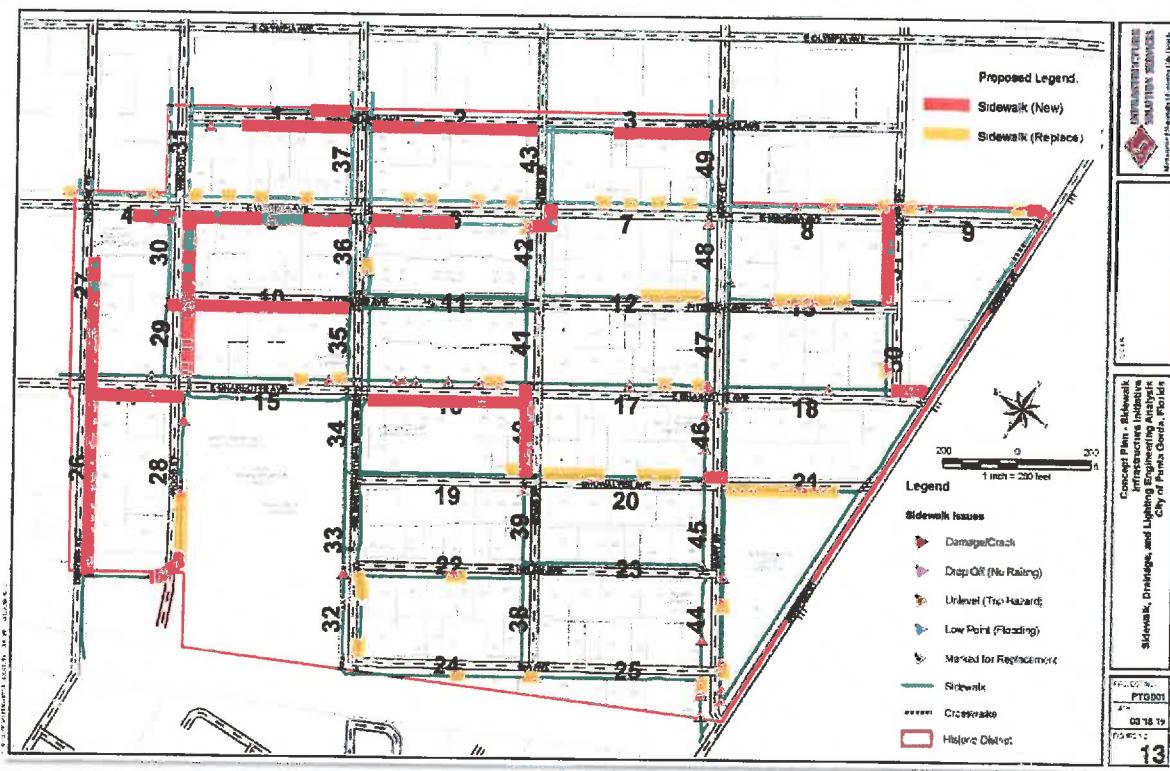


Fig. 13 – Concept Plan – Sidewalk

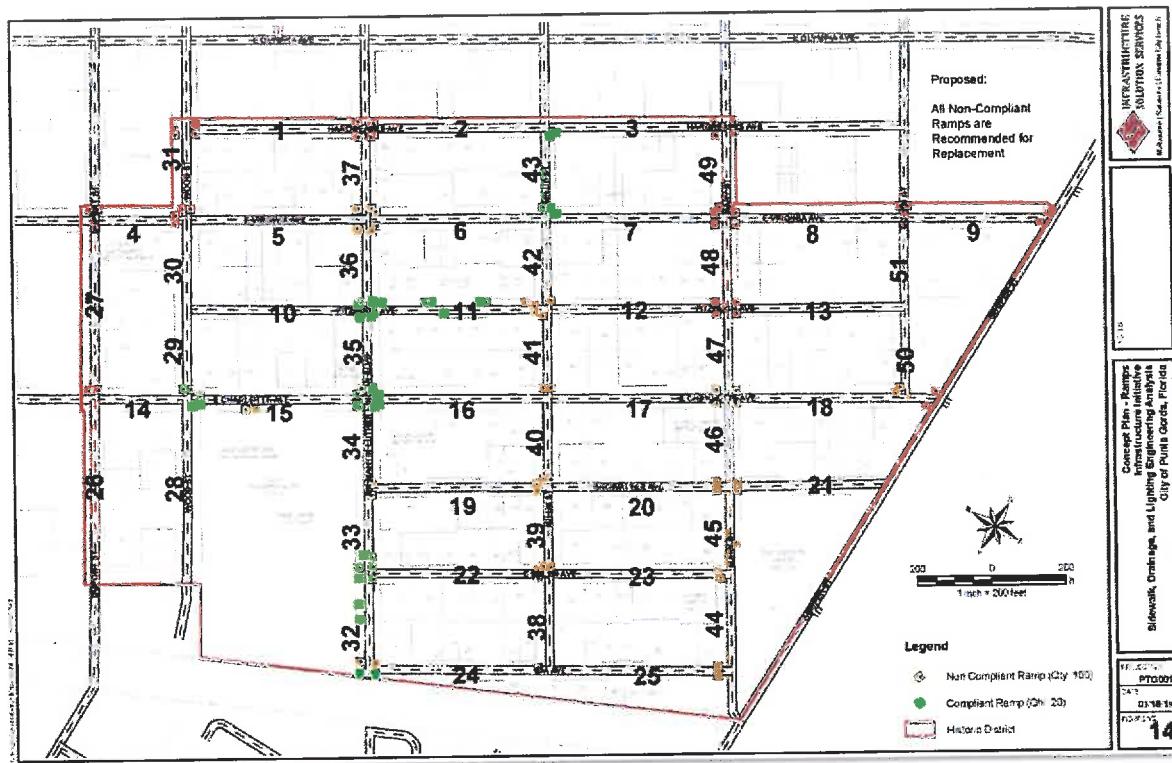


Fig. 14 – Concept Plan - Ramps

As a component of the sidewalk network, accessible sidewalk ramps were reviewed for compliance with recognized standards for horizontal orientation and vertical transitions. The initial phase of the analysis defined the non-compliant accessible ramps. It is the recommendation of this analysis to correct all of the non-compliant ramps. The replacement of these facilities has been considered in the evaluation matrix and the opinion of probable cost for the proposed modifications within each roadway segment.

The implementation of the ramp remediation can be accomplished as part of more comprehensive improvements, as in roadway segment improvements that include, sidewalk, drainage, and lighting; or as stand-alone replacement on a more limited basis. As this analysis is contemplated by the City, the consideration of capital improvements, isolated or comprehensive, can be defined for future design.

During the initial phase of the project, ISS observed ADA compliance concerns based on size, location / slope, and orientation of the existing accessible transitions / ramps. We observed that there were concerns with the integrity of some segments of the existing sidewalk network. The review further considered the potential for closing gaps of the existing sidewalk routes and the impacts limiting enhanced pedestrian connectivity. As a culmination of the various research data, along with the field reconnaissance and a review of the analyzed data, ISS has prepared a recommendation concept defining the potential areas for the proposed sidewalk modifications.

DRAINAGE MODIFICATIONS CONCEPT

The drainage element has been observed as a critical component of the review and recommendations. The existing study area limits fully lie within the FEMA flood zone AE and there are observed concerns with newly constructed single-family homes and their associated lot filling. Currently single-family homes are to be constructed to building elevation requirements of the flood plain which inherently create encroachments that are not currently required to be mitigated. Any required mitigation could create a further hardship for the property owner. During the public meeting and related coordination with City officials, it was noted that the area would benefit from a regional stormwater facility that would help mitigate the area's stormwater influence. Additionally, it is understood that the study area limits are limited in part by the effectiveness of the receiving downstream facilities bordering the study limits. Though this analysis does not look at remedies beyond the area limits, the City may consider additional off-site improvements to further enhance the recommendations within this report.

It will be important to expand and not impede the effectiveness of the drainage system. The existing drainage infrastructure varies significantly in application and capabilities, to the extent that standing water was observed within the public right-of-way and on adjacent private properties. Any modifications to the sidewalk network will need to include efficient drainage components.

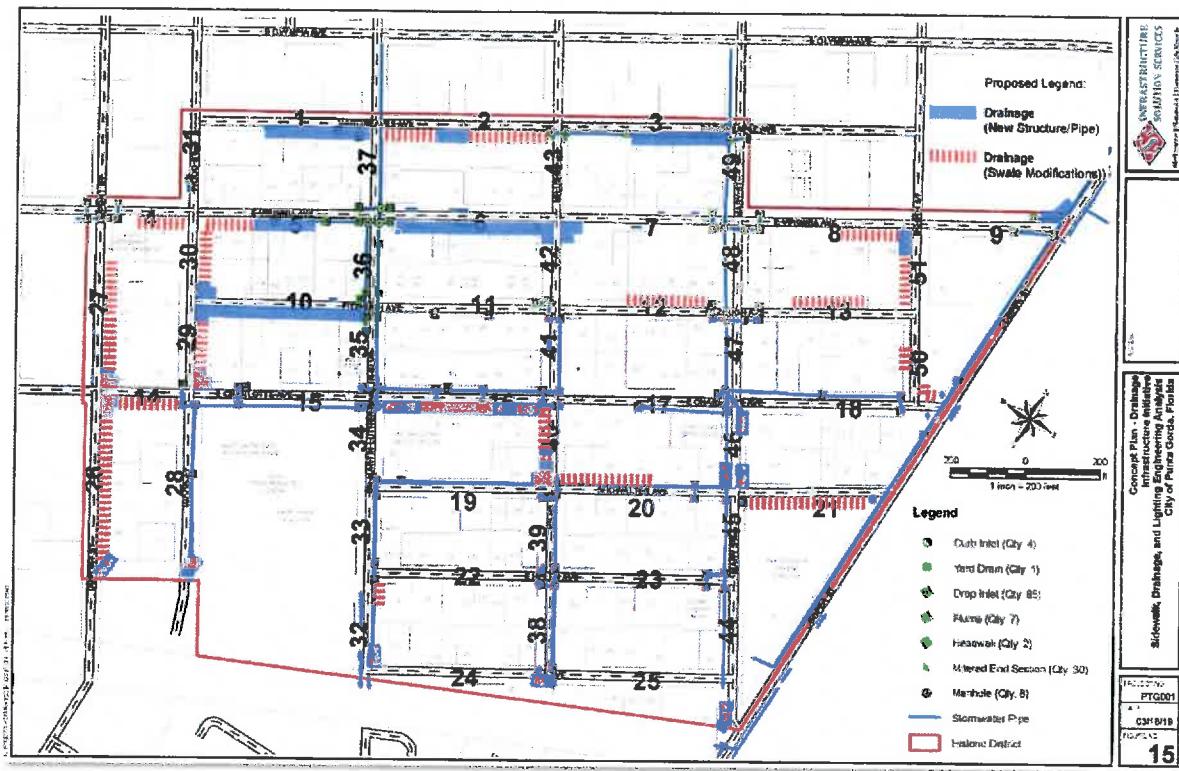


Fig. 15 – Concept Plan – Drainage Modifications

The existing study limits are generally low lying with shallow gradient for surface drainage features. The existing drainage patterns flow to the northwest toward US 17, ultimately reaching the Peace River; and to the northeast, also toward US 17, ultimately reaching the Peace River. The majority of the study area right-of-way improvements range between elevation 5 and 6 (NAVD-88). There is a very slight fall to the northeast where the area's low point is located at the intersection of Hargreaves Avenue and Mary Street. At that location, the intersection elevation is approximately elevation 3. Additionally, there are existing ridges created by the Seminole Gulf Railroad to the south and Cooper Street to the east. There are existing drainage facilities that allow limited penetrations at these ridges, though they do not appear to provide considerable relief to the surface water contained within the project limits.

As new development has been constructed within the project area, appropriate stormwater management systems have been required and implemented. ISS has reviewed several existing SWFWMD permits within the study area and these systems appear to be generally functioning as designed. An appreciable benefit to the overall drainage basin is uncertain as it appears to have been partially offset by the redevelopment of single-family homes that are not required to provide floodplain compensation.

The Concept Plan for Drainage is presented in Figure 15 and is also included in Appendix G. The concept predominantly addresses new drainage facilities required to accommodate the sidewalk connectivity and the associated segments proposed. The new facilities would be comprised of drainage structures and piping as required to permit sidewalk connections crossing roadside swales at sidewalk ramps, or as necessary to realign proposed parallel roadside swales where new sidewalks are proposed.

There are minor drainage improvements proposed where existing structures are in disrepair or where an observed correction is necessary, though no comprehensive stormwater system rehabilitation is proposed. Since the project area is located fully within a floodplain, it is suggested to maximize the capacity of the existing drainage facilities including open swales. There were observed areas where surface water drains toward, and ponds within, private lots. One consideration for review with the City would be to consider implementing some rear lot drainage swales and/or piping that could possibly provide a relief point for standing water. Approximately a third of the area's blocks appear to include 10-foot-wide rear lot alleys. The challenge with this type of solution is impact to existing improvements (i.e. trees, fences, etc.), as well as their function only being a relief, but not a global remedy. Upon review, should the City consider this option, ISS could incorporate within the final analysis.

Since the limited topographic relief of the project area does not allow significant reconditioning of the surface water system, and with much of the effectiveness of the drainage basin being tied to drainage components (and possible restrictions) located outside of the study area, broad changes to the existing drainage system are not practical. One significant relief that could be implemented within, or in proximity to the study area, would be the implementation of a regional stormwater drainage facility to alleviate the historical flooding. A recommendation of this analyst is to consider a facility near the northeast corner of the project area to provide beneficial relief. Upon review, should the City consider this option, ISS could spot suggested location as part of the final analysis.

LIGHTING NETWORK CONCEPT

Site lighting within the public right-of-way was reviewed by ISS. ISS observed that the minor streetscape enhancement projects along with various residential and commercial uses create a somewhat disjointed lighting network. As previously noted, the existing fixtures within the project area are generally either a decorative post light style or standard high mast pole mounted fixture types.

Within the project limits, existing decorative lighting is limited to a short section of northern Wood Street, the length of Dr. Martin Luther King Boulevard, and the segments of Mary Street and Showalter Avenue abutting the Cooper Street Recreation Facility. The high mast lighting is then sporadically distributed throughout the area. In general, the existing lighting is in acceptable to good condition. Some maintenance and repair (i.e. repainting decorative fixtures, replacing non-functioning bulbs, etc.) is warranted to bring the existing system up to a fully functioning network. The adequacy of light coverage varies throughout the project limits and should be augmented to provide improved coverage for the existing and expanded sidewalk network.

The Concept Plan for Lighting is presented in Figure 16 and is also included in Appendix G. The concept predominantly addresses new lighting facilities to provide infill where lighting is lacking as well as accommodating the new sidewalk connectivity. The new facilities are comprised of an expansion of the current decorative lighting corridors and then additional infill fixtures.

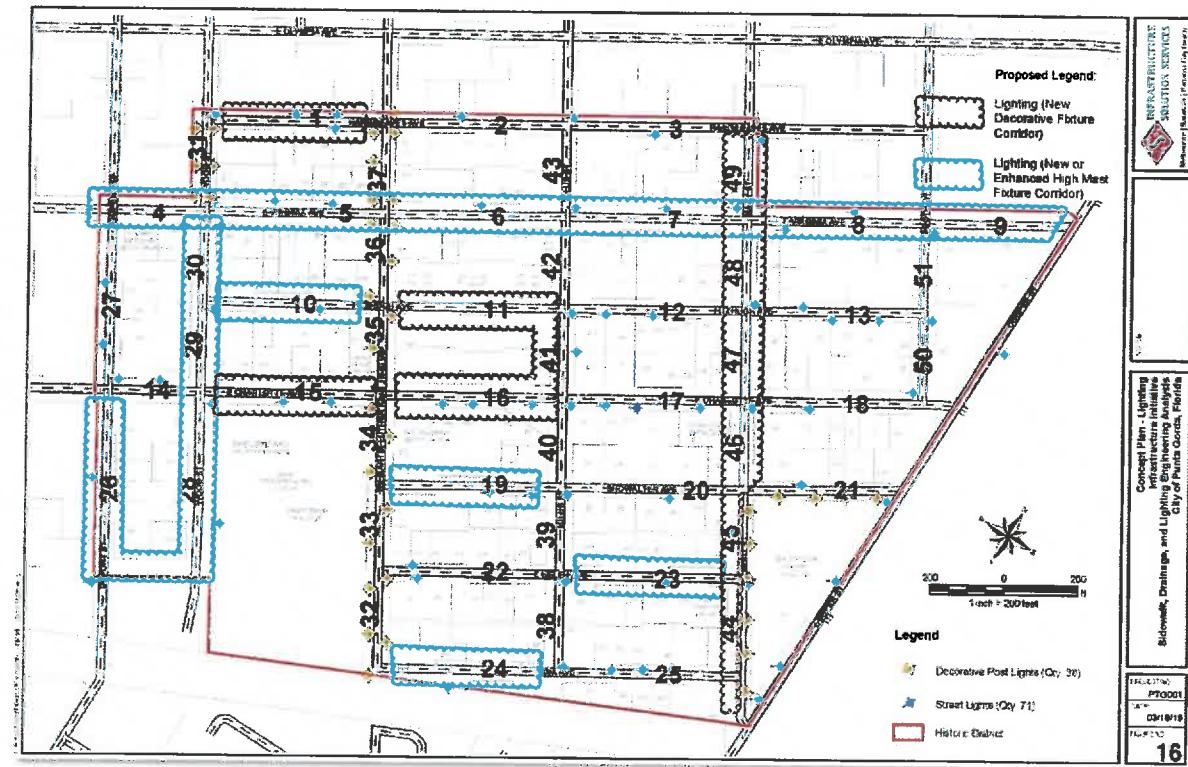


Fig. 16 – Concept Plan - Lighting

Decorative lighting is suggested for the following roadway segments:

- Segment 1 - Hargreaves Avenue: from Wood Street to Dr. MLK Jr. Blvd.
- Segment 11 – Fitzhugh Avenue: from Dr. MLK Jr. Blvd. to Milus Street
- Segments 15 & 16 – E. Charlotte Avenue: from Wood Street to Milus Street
- Segments 44 & 45 – Mary Street: from Cooper Street to Showalter Avenue (west side)
- Segments 46-49 – Mary Street: from Showalter Avenue to Hargreaves Avenue

High mast lighting is suggested for infill within existing corridors to improve lighting gaps for the following roadway segments:

- Segments 4-9 – E. Virginia Avenue: from Wood Street to Cooper Street
- Segment 10 - Fitzhugh Avenue: from Wood Street to Dr. MLK Jr. Blvd.
- Segment 19 - Showalter Avenue: from Dr. MLK Jr. Blvd. to Milus Street
- Segment 23 – E. Helen Avenue: from Milus Street to Mary Street
- Segment 24 - Ida Avenue: from Dr. MLK Jr. Blvd. to Milus Street
- Segment 26 – DuPont Street
- Segments 28-30 – Wood Street

ISS has reviewed the existing conditions and suggests standardizing the fixtures to one decorative style fixture and one high mast fixture for future implementation and replacement.

The decorative fixture shall be a Granville Post Light with LED luminaire. The fixture shall be consistent in appearance to the fixtures implemented by the City of Punta Gorda as part of the Wood Street Decorative Lighting Plan (2012). The proposed fixtures shall include all required appurtenances including circuitry and base foundations in accordance with City requirements.

High mast fixtures shall be preferred as a single style and manufacturer of pole mount fixture to maintain consistency within the City. The standard shall be established by the City based on that available by the power company.



VIII. ANALYSIS REVIEW

FACTORS

The details and observations from the field investigation were discussed previously in this report. The additional factors considered include, but are not limited to, agency compliance, infrastructure needs, public safety, capital costs, and public involvement. These criteria were considered in the evaluation matrix as well as in any objective review.

The City of Punta Gorda's ADA Transition Plan for Public Rights-of-Way and Sidewalks proposes to regularly conduct a self-assessment and inventory of needs along with developing an implementation schedule for improvements. The recommendations of this analysis incorporate the intent for compliance with ADA and FDOT standard guidelines.

FINDINGS AND POTENTIAL CONSIDERATIONS

The feasibility of the conceptual improvements discussed in this report may be impacted by various site-specific considerations, as follows:

- **RIGHT-OF-WAY:** The availability of the apparent right-of-way limits and the associated adequacy of space to construct the desired sidewalk and drainage improvements.
- **RIGHT-OF-WAY:** Consider implementing rear lot drainage swales and/or piping (at locations of existing 10 foot alleys) to possibly provide a relief point for standing water.
- **RIGHT-OF-WAY:** Consideration of encroachment on adjacent property for the potential for sidewalk easements if necessary.
- **COST BENEFIT:** Maintaining one sided sidewalk corridors where cost is prohibitive to implement major modifications for sidewalk to be installed on second adjacent side.
- **UTILITIES:** Subsurface utility conflicts will need to be reviewed as part of final design and could affect the ultimate design.
- **INFRASTRUCTURE:** Some existing sidewalk segments need replacement to correct deficiencies potentially limiting available budget for additional proposed improvements
- **GEOMETRY:** Vertical tolerances due to the existing topography and limited cover over existing utilities or elevations of existing swales flow lines may limit ability for stormwater size upgrades.
- **DRAINAGE:** Existing basin dynamics may require off-site (downstream) drainage improvements to relieve study area drainage inefficiency.
- **REGULATORY:** Non-compliant accessible sidewalk ramp replacements may prompt supplemental sidewalk and/or curb improvements to facilitate a compliant ramp installation.
- **PUBLIC RELATION:** Public involvement persuades a potential option to be considered for inclusion or removed from consideration. Proposed improvements may need to be altered based on the potential impacts and associated perceptions.

- GEOMETRY: Review of adequate clear zone for the sidewalk improvements and consideration of minimum clearance at constraints (i.e. utility poles).
- GEOMETRY: Location and gradient of adjacent sidewalk to meet agency standards and comply with ADA guidelines.
- GEOMETRY: Potential impacts to the proposed design due to existing drainage being directed to, or from, adjacent private property.
- GEOMETRY: Physical constraints in the area (large power poles, buildings in close proximity to the R/W, etc.) require transition grading to be considered with any sidewalk placement.
- LIGHTING: Application of lighting improvements to be subject to available service and circuitry.
- DRAINAGE: Existing drainage structures may need to be modified to provide adequate transition sloping at locations of new sidewalks.
- REGULATORY: Site permitting is anticipated to be limited to exemption requests from the Southwest Florida Water Management District based on their standard consideration that sidewalk projects (6' in width or narrower) are exempt from stormwater permitting. Consider potential impacts to stormwater conveyance for reduction or removal of surface swales to accommodate sidewalk.
- DRAINAGE: Based on the topographic information collected as part of the concept analysis, the existing storm sewer network appears to struggle to adequately convey runoff from the study area and may require further modifications beyond those prompted by the proposed sidewalk.
- BUDGET: With an estimate cost over \$1M dollars and an available annual budget of \$50K, the City will need to closely scrutinize their CIP and available funding sources as part of the consideration for implementation.

IX. OPINION OF CONSTRUCTION COSTS

Based on the concept plans noted above, an Opinion of Probable Construction Cost has been prepared. There are numerous approaches to how to breakout the costs of the needs could be broken out. Since the improvements are interrelated, ISS believes that the opinion of cost should be broken down by roadway segments consistent with the study segments and proposed concepts. This allows for a generalized cost by smaller focused areas. The projected opinion of costs currently anticipates the sidewalk, drainage, and lighting improvements, along with associated mobilization, erosion control, MOT, and impacted driveway aprons. The current opinions of cost vary per roadway segment from just a few hundred dollars to nearly \$80,000.

The conceptual opinion of cost totals over \$1.1M for the improvements covering all of the considered disciplines for all of the reviewed roadway segments. This equates to an average cost per segment of approximately \$22,600. The opinion of cost breakdown is included in Appendix H. A summary of the costs associated with each segment is provided within Figure 17 on the following page.

Right-of-Way Segment	Street	Approximate Cost	Associated Cost Rank
1	HARGREAVES AVE	\$57,200	47
2	HARGREAVES AVE	\$33,700	43
3	HARGREAVES AVE	\$34,600	45
4	E VIRGINIA AVE	\$21,200	28
5	E VIRGINIA AVE	\$51,500	48
6	E VIRGINIA AVE	\$82,700	50
7	E VIRGINIA AVE	\$23,100	38
8	E VIRGINIA AVE	\$13,700	24
9	E VIRGINIA AVE	\$34,400	42
10	FITZHUGH AVE	\$80,900	51
11	FITZHUGH AVE	\$33,300	16
12	FITZHUGH AVE	\$16,700	26
13	FITZHUGH AVE	\$17,300	27
14	E CHARLOTTE AVE	\$22,800	37
15	E CHARLOTTE AVE	\$22,100	23
16	E CHARLOTTE AVE	\$81,400	49
17	E CHARLOTTE AVE	\$4,700	14
18	E CHARLOTTE AVE	\$12,100	21
19	SHOWALTER AVE	\$25,400	31
20	SHOWALTER AVE	\$20,600	33
21	SHOWALTER AVE	\$24,800	39
22	E HELEN AVE	\$5,800	18
23	E HELEN AVE	\$6,000	5
24	IDA AVE	\$23,100	25
25	IDA AVE	\$2,100	3
26	DUPONT ST	\$39,700	46
27	DUPONT ST	\$28,800	40
28	WOOD ST	\$25,200	30
29	WOOD ST	\$20,000	32
30	WOOD ST	\$21,400	28
31	WOOD ST	\$3,100	9
32	DR. MLK BLVD	\$22,600	35
33	DR. MLK BLVD	\$3,100	9
34	DR. MLK BLVD	\$2,100	3
35	DR. MLK BLVD	\$3,600	11
36	DR. MLK BLVD	\$5,600	16
37	DR. MLK BLVD	\$8,700	19
38	MILUS ST	\$5,200	15
39	MILUS ST	\$4,300	13
40	MILUS ST	\$30,000	41
41	MILUS ST	\$13,100	12
42	MILUS ST	\$12,000	21
43	MILUS ST	\$2,800	8
44	MARY ST	\$32,000	36
45	MARY ST	\$11,900	7
46	MARY ST	\$44,000	44
47	MARY ST	\$9,700	1
48	MARY ST	\$9,700	1
49	MARY ST	\$11,800	5
50	BOOTH ST	\$11,700	20
51	BOOTH ST	\$21,600	34

Fig. 17 – Conceptual Costs Tabulation

X. RECOMMENDATIONS

DISCUSSION

ISS has reviewed the collected data, evaluated project priorities, and formulated concepts by discipline (sidewalk, drainage, and lighting) for potential improvements. This final analysis report has been prepared based on that examination and is provided to the City of Punta Gorda for their consideration and use. The proposed Concept Plans are presented by discipline in Figures 13-16, and are included within Appendix G.

The recommendations have considered the City of Punta Gorda's ADA Transition Plan for Public Rights-of-Way and Sidewalks which includes a regular self-assessment and inventory component, along with an implementation schedule for improvements. The recommendations of this analysis further incorporate the intent for compliance with ADA and FDOT standard guidelines.

Through the coordination conducted with City staff, ISS has reviewed the annual budget available for the Historic District Infrastructure improvements. The tentative annual budget currently calls for \$50,000 to be allocated for improvements to this analysis area. This budget would need to cover the final design and construction related costs of the selected segment(s) to be implemented.

The available annual budget covers approximately 5% of the estimated costs, so as the City weighs their overall priorities, an expansion of the CIP allocation may need to be considered for this effort. Additionally, supplemental funding through various grant programs will also likely be important to the success of implementing this program, and should be considered by the City.

SUMMARY

In summary, the analysis has reviewed the conditions of the City's existing infrastructure within the Historic District Infrastructure Initiative limits focusing on the existing sidewalks, drainage, and lighting. Each of these components interrelate, especially with regard to the pedestrian accessibility, connectivity, and safety within the project limits.

Based on the limited available budget, it the recommendation of ISS for the City to focus on the life, health and safety components of the required infrastructure needs. As previously noted, and when analyzed for costs, the recommended improvements were broken down by roadway segments consistent with the study segments shown within the data acquisition and proposed concepts. Since the prioritization of these segments by available budget could span up to 20 years, the following guidelines are provided for recommended prioritization.

Sidewalk: For sidewalk components, damaged sidewalks should be considered for initial correction to provide for functional infrastructure and limit liability due to failing conditions. Secondarily, smaller more easily isolated, and higher priority segments of new sidewalk shall be considered for connectivity. Then subsequent improvements would provide for the infill of remaining connectivity.

Accessible Ramps: For accessible ramps and related components, non-compliant and damaged ramps should be considered for initial correction to provide for safe and functional facilities and limit liability due to failing conditions. Secondarily, ramps associated with the need of secondary ranked sidewalk connectivity shall be considered.

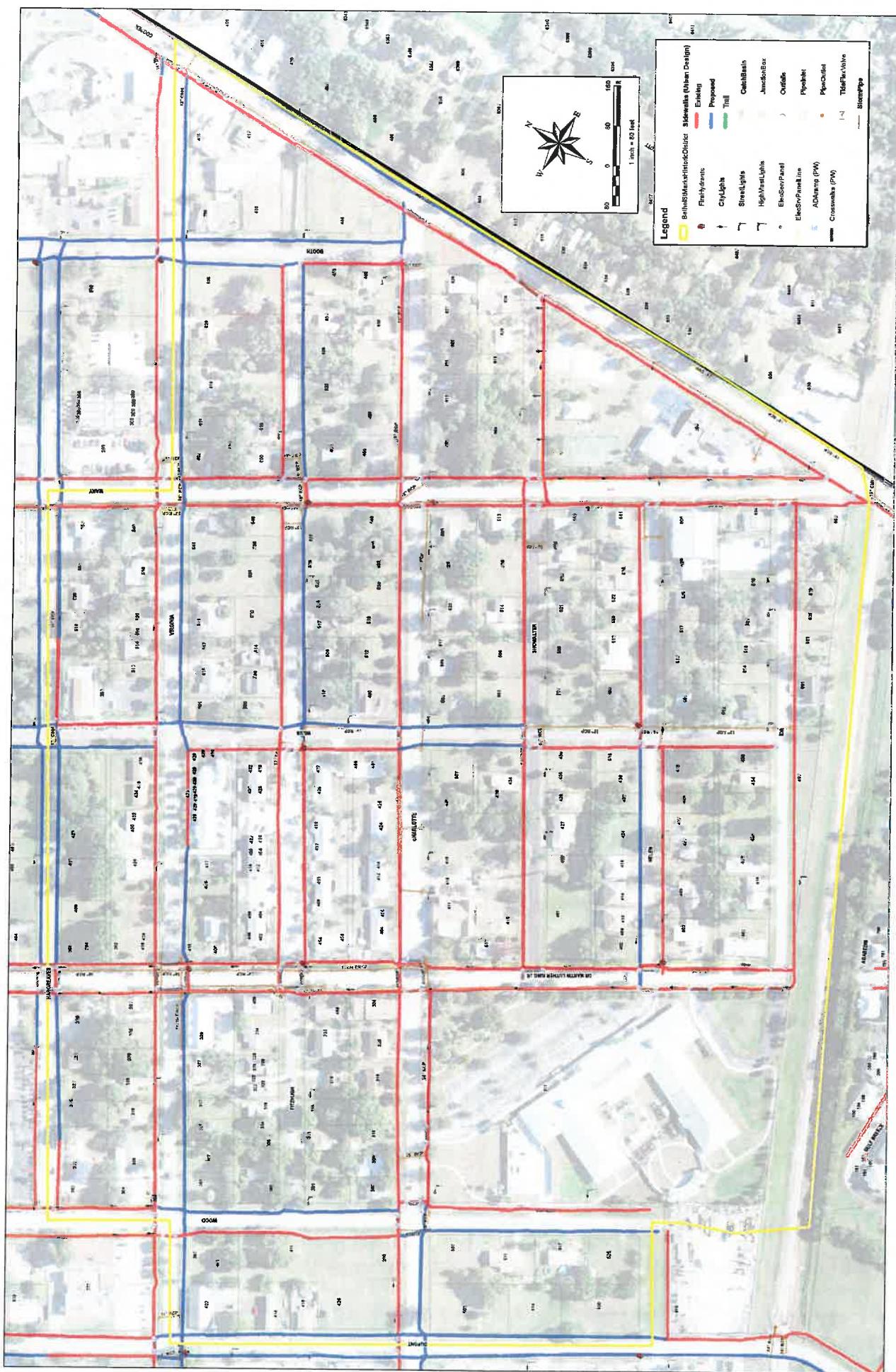
Drainage: For drainage elements, damaged structures and piping should be considered for initial correction to provide for functional infrastructure. Secondarily, drainage improvements related to improvements proposed for sidewalk and ramping shall be considered to allow for a comprehensive approach to the infrastructure remedies within a given location. Then subsequent improvements could be implemented on a more regionwide basis. At this level, a regional stormwater facility should be considered to alleviate flooding and improve overall drainage efficiency.

Lighting: For street lighting, damaged and non-functioning fixtures should be considered for initial correction to provide for an immediate safety improvement. Secondarily, additional fixtures should be considered to supplement the unlit, or poorly lit, areas and corridors. Then subsequent lighting should be considered to parallel new sidewalk segments and improvement areas as they are implemented.

Should significant CIP or supplemental funding become available, the overall prioritization of the roadway segments shown in Figure 12B of this report should be considered as a guideline for the order of implementation. This priority is based on the evaluation matrix and weighting factors concurred to by the City and may be adjusted to best fit groupings by related area or by cost/budget availability.

APPENDIX A

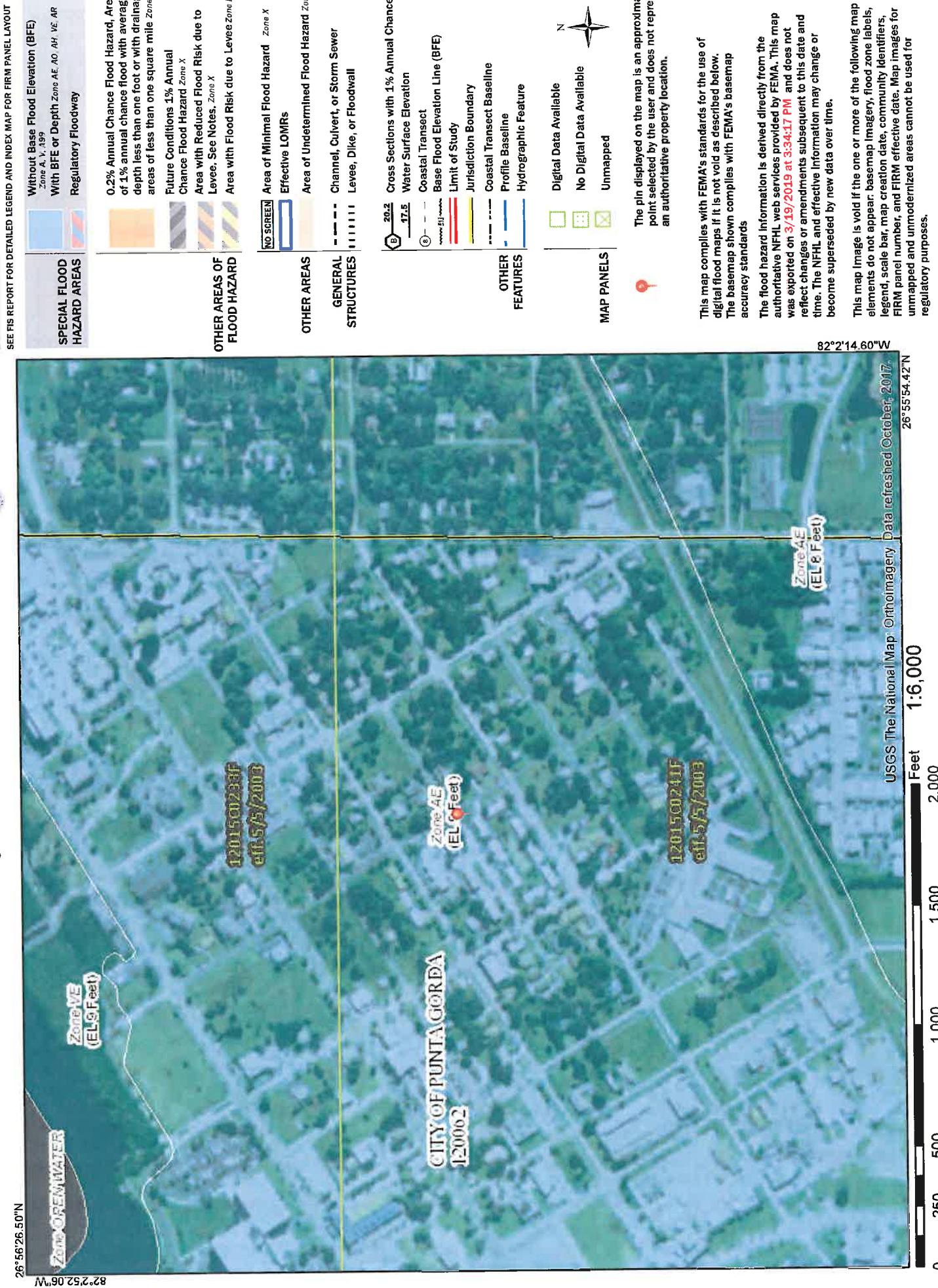
HISTORICAL RECORD DATA



National Flood Hazard Layer FIRMette



Legend



ENGINEERING ANALYSIS - SIDEWALK, DRAINAGE & LIGHTING
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State: FL Cnty: CHARLOTTE GeoPlace: PUNTA GORDA
 CallerPlace: PUNTA GORDA
 Subdivision:

Address : 311 to 625
 Street : E CHARLOTTE AVENUE
 Cross 1 : COOPER STREET
 Within 1/4 mile: Y

Locat: DESIGN TICKET

:
 Remarks : IN RESPONSE TO RECEIPT OF A DESIGN TICKET, SSOCOF PROVIDES THE ORIGINATOR OF THE DESIGN TICKET WITH A LIST OF SSOCOF MEMBERS IN THE VICINITY OF THE DESIGN PROJECT. SSOCOF DOES NOT NOTIFY SSOCOF MEMBERS OF THE RECEIPT BY SSOCOF OF A DESIGN TICKET. IT IS THE SOLE RESPONSIBILITY OF THE DESIGN ENGINEER TO CONTACT SSOCOF MEMBERS TO REQUEST INFORMATION ABOUT THE LOCATION OF SSOCOF MEMBERS' UNDERGROUND FACILITIES. SUBMISSION OF A DESIGN TICKET WILL NOT SATISFY THE REQUIREMENT OF CHAPTER 556, FLORIDA STATUTES, TO NOTIFY SSOCOF OF AN INTENT TO EXCAVATE OR DEMOLISH. THAT INTENT MUST BE MADE KNOWN SPECIFICALLY TO SSOCOF IN THE MANNER REQUIRED BY LAW. IN AN EFFORT TO SAVE TIME ON FUTURE CALLS, SAVE YOUR DESIGN TICKET NUMBER IF YOU INTEND TO BEGIN EXCAVATION WITHIN 90 DAYS OF YOUR DESIGN REQUEST. THE DESIGN TICKET CAN BE REFERENCED , AND THE INFORMATION ON IT CAN BE USED TO SAVE TIME WHEN YOU CALL IN THE EXCAVATION REQUEST.

*** LOOKUP BY MANUAL ***

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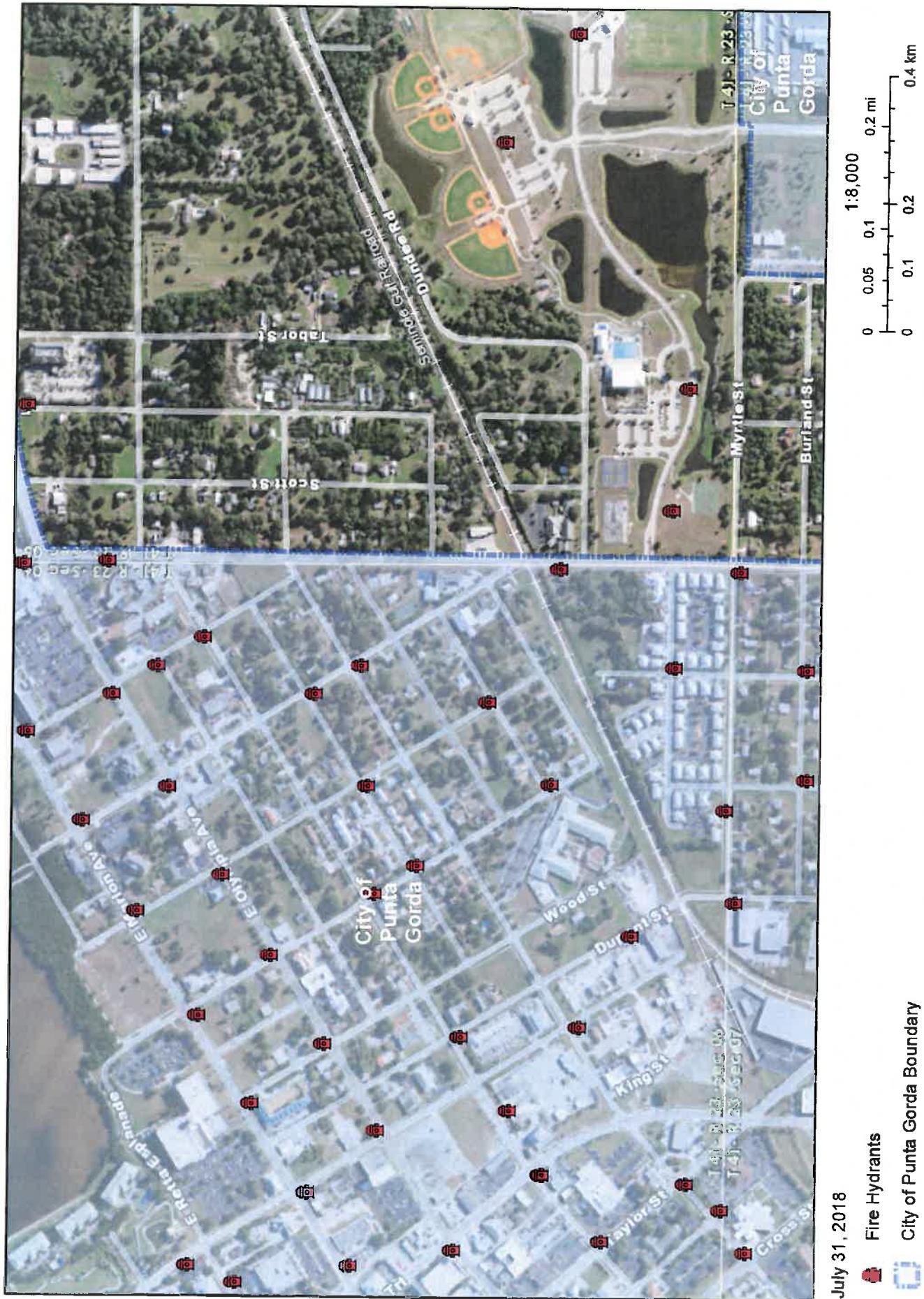
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 Co addr : 7827 N WICKHAM RD
 City : MELBOURNE State: FL Zip: 32940
 Caller : CASEY COFFEY Phone: 321-622-4646
 Contact : MARK MUELLER Email: MMUELLER@INFRASTRUCTURESS.COM
 BestTime: 8AM-5PM
 Mobile : 321-427-9696
 Fax : 321-256-5088
 Email : CCOFFEY@INFRASTRUCTURESS.COM

Submitted: 09/27/18 12:07ET Oper: CAS Chan: WEB
 Mbrs : CCL925 CPG521 FPLCHA FPLFOW LC1569 LS1104 PGSSW QST885 STRPTC UTI300

Service Area Code	Service Area Name	Contact	Phone Numbers	Utility Type
CCL925	CHARLOTTE COUNTY LIGHTING DISTRICT	ANDREW AMENDOLA	Day: (941) 575 - 3648 Alt: (941) 628 - 9301	ELECTRIC
CPG521	CITY OF PUNTA GORDA	STEVE ADAMS	Day: (941) 575 - 3325	WATER, ELECTRIC,

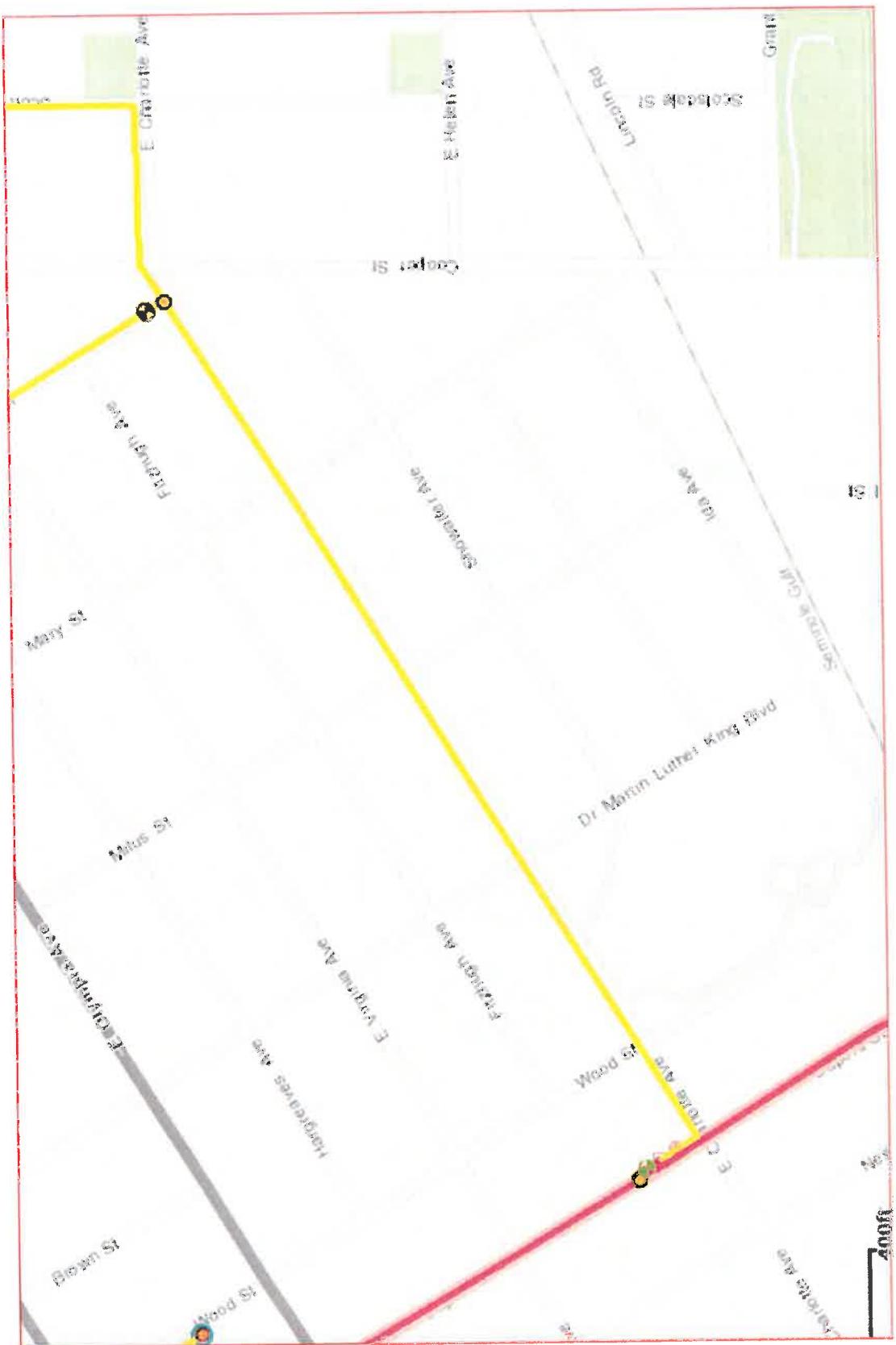
				SEWER, STREET LIGHTS
FPLCHA	FLORIDA POWER & LIGHT--CHARLOTTE	JOEL BRAY	Day: (386) 586 - 6403	ELECTRIC
FPLFOW	CROWN CASTLE FIBER	DANNY HASKETT	Day: (786) 610 - 7073 Alt: (786) 246 - 7827	FIBER
LC1569	C/O PUNTA GORDA- MIS	ART BREWSTER	Day: (941) 575 - 5041	FIBER
PGSSW	TECO PEOPLES GAS - FT MYERS	JOAN DOMNING	Day: (813) 275 - 3783	GAS
QST885	CENTURYLINK (FORMERLY QWEST COMMUNICATIONS)	GEORGE MCELVAIN	Day: (303) 992 - 9931	FIBER
STRPTC	COMCAST CABLE -- PORT CHARLOTTE	GONZALO ROJAS	Day: (941) 342 - 3578	CATV
UTI300	CENTURYLINK	RONALD SMITH	Day: (941) 637 - 5145	FIBER, TELEPHONE

Map Layout



Charlotte County
Charlotte County GIS

Charlotte County GIS





Date: November 9, 2018

To: Mark Mueller

Subject: Design Ticket #270807027

- Peoples Gas System, Inc. has no gas mains or services within the referenced area.
- We are returning your prints marked with Peoples Gas System, Inc. gas mains or services within the referenced area.
- We are returning a print of Peoples Gas System, Inc. gas main or services within the referenced area.
- Please furnish final construction plans for this job and include Peoples Gas System, Inc. in the pre-design and pre-construction meeting(s).
- For further information please contact: Ken Smith, Gas Design Department at KESmith@tecoenergy.com**
- Remarks:

THE ATTACHED DRAWINGS ARE PROVIDED SUBJECT TO RESTRICTIONS AND LIMITATIONS.

NOTE: If a map is provided with this letter the following applies: The map is provided for convenience purpose only, and is not intended to be used for detailed locations. No warranty or guaranty expressed or implied, is made as to completeness, accuracy or fitness for a particular purpose. Use of this map is at the risk of the recipient who assumes full responsibility therefor.

Please call 811, two full business days prior to construction to have the locations of the facilities field verified



IT'S THE LAW

Environmental Resource Permits

Environmental Resource Permits

Legend Tools Permit # & Permittee Selection Go! Reset Address Search

Measuring Tools Measurement Result

Help About Environmental resource permit boundaries. Boundaries are created by District staff to sit in location the general vicinity of the project area. These boundaries and the data they contain are not legal documents. do not comprise the legal definition of the project area, as referenced in 40D-4.012, F.A.C., and are not intended to represent or be used as such. To view the lease, project area

1 - City of P.G.-2 Sidewalks.
2 - CPG - Cooper St. Rec.Gr.
3 - St. Mary Primitive Baptist Church
4. - 1st Macedonia Miss. Baptist Ch.
5. - Charlotte Co. S.B. - Baker Head Start
6. - P.G. Milk Blvd Ph. II
7. - C.P.E. P.W.D. Party Ave. Imp.
8. Mike Street
9. Trade Winds ~~Residence Estates~~ Residences Ph. I
10. Virginia St. On-street parking
11. Dunn + Assoc. Parking
12. Milk Blvd Imp.
13. Berrien A Russell Blg
14. Patton Market
15. ORourke Parking lot
16. May Street On-street parking

CITY OF PUNTA GORDA

WOOD STREET DECORATIVE LIGHTING PLAN

SEC. 6 TWN 41 RNG 23

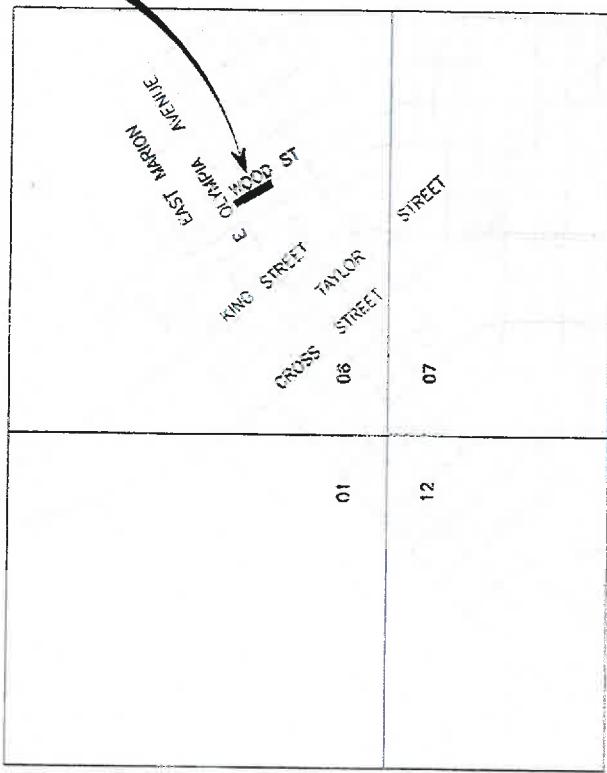
PROJECT
LOCATION

CITY COUNCIL:
BILL ALBERS, Mayor
HARVEY GOLDBERG, Vice Mayor
CAROLYN FREELAND
RACHEL KEESLING
CHARLES WALLACE

CITY MANAGER:
HOWARD D. KUNIK

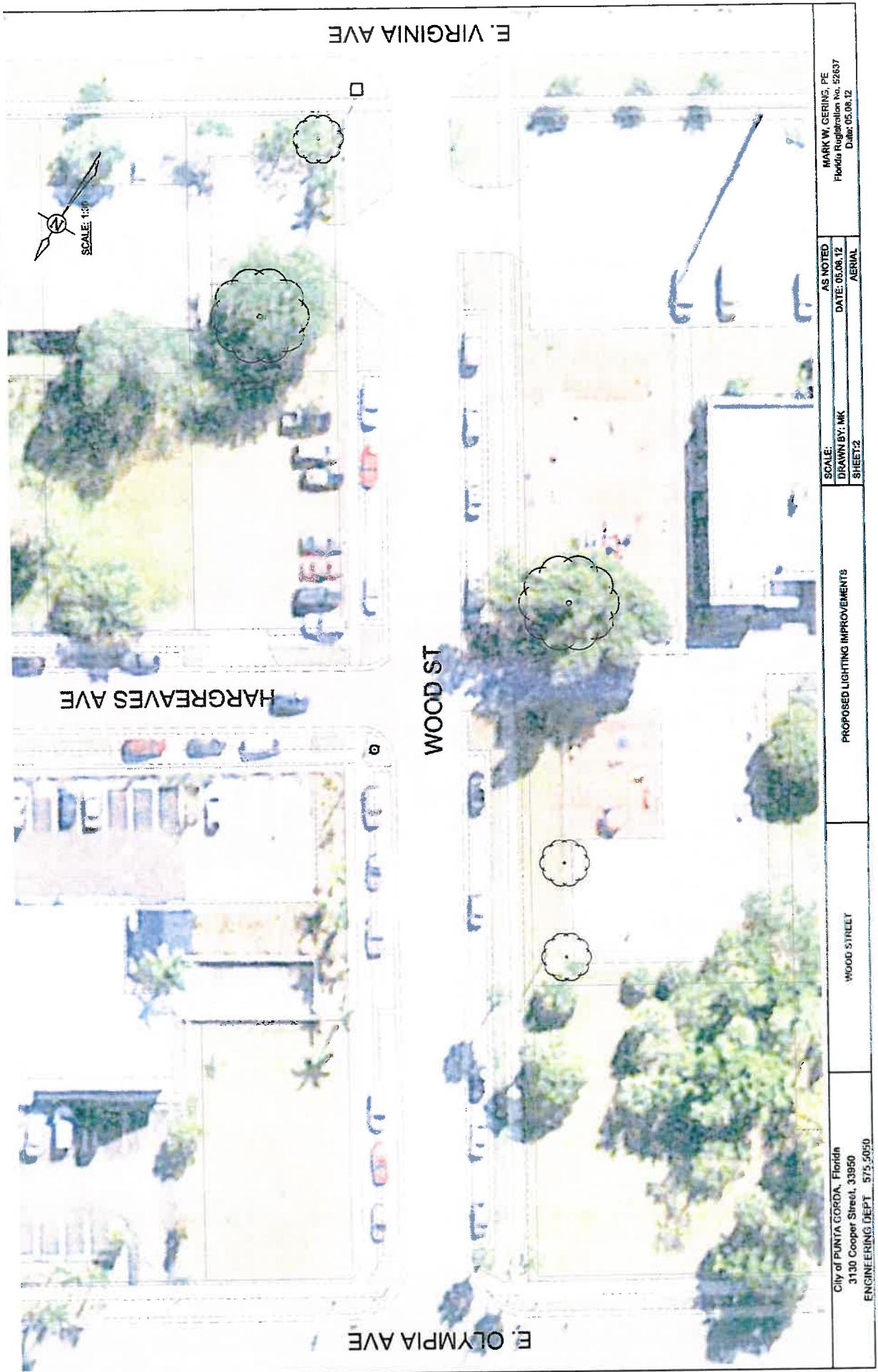
PUBLIC WORKS:
RICHARD C. KEENEY, Director
MARK GERING, PE, City Engineer

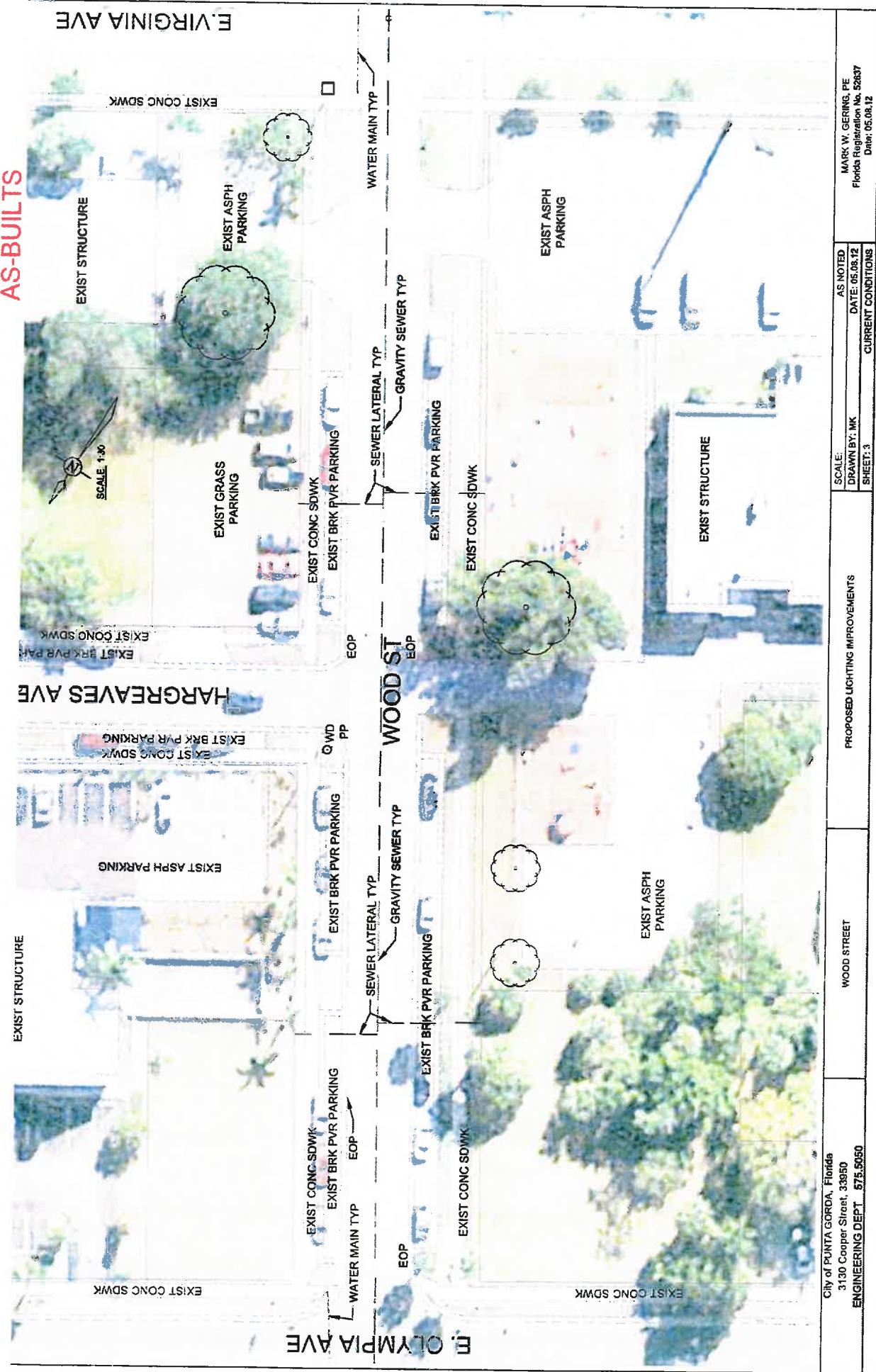
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2	AERIAL PHOTO
3	CURRENT CONDITIONS PLAN
4	PROPOSED IMPROVEMENTS PLAN
5	DETAILS
6	DETAILS
7	GENERAL NOTES



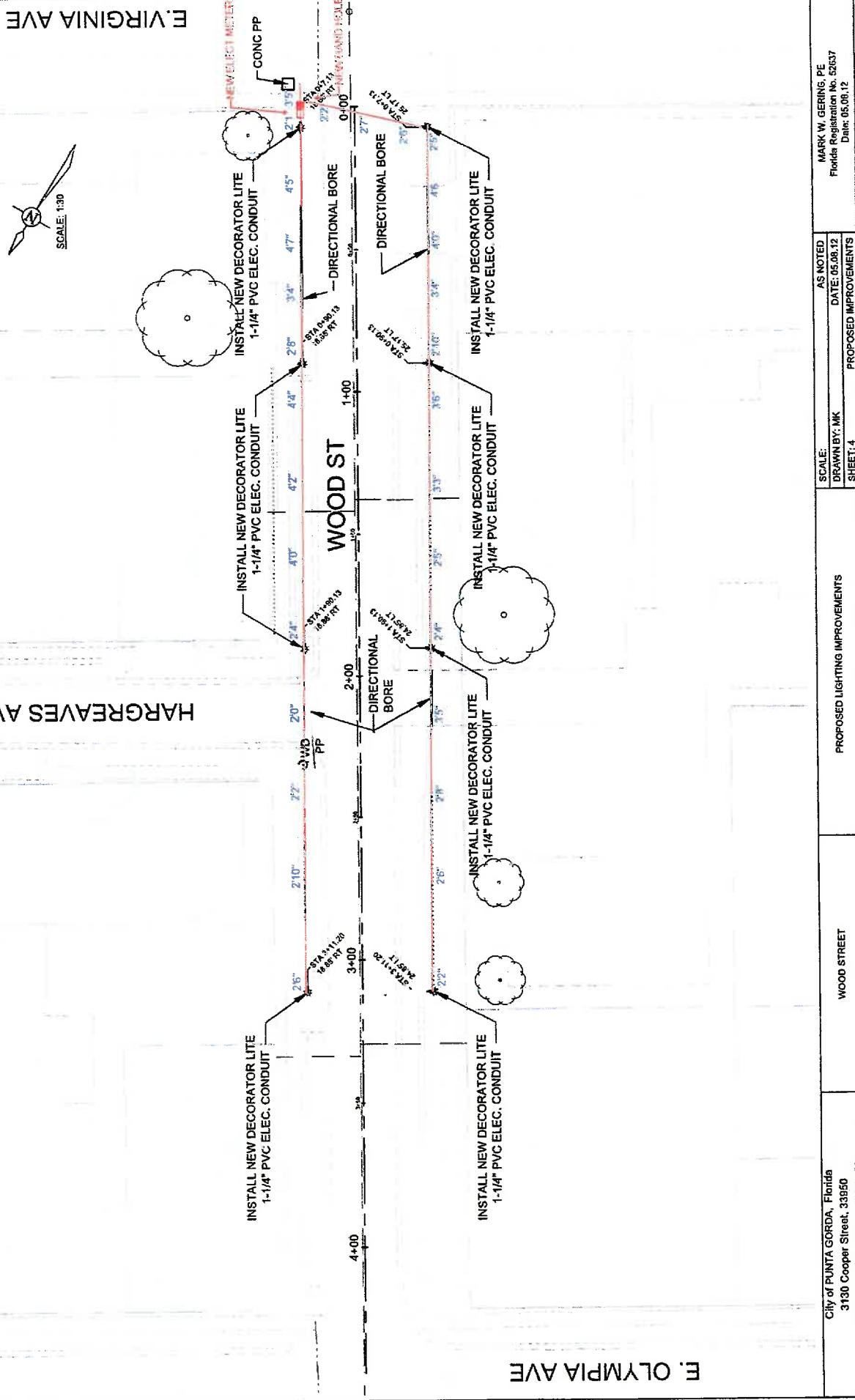
CITY OF PUNTA GORDA
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
3130 COOPER ST.
PUNTA GORDA, FLORIDA 33950
941-575-5850

AS-BUILT



AS-BUILT

AS-BUILT



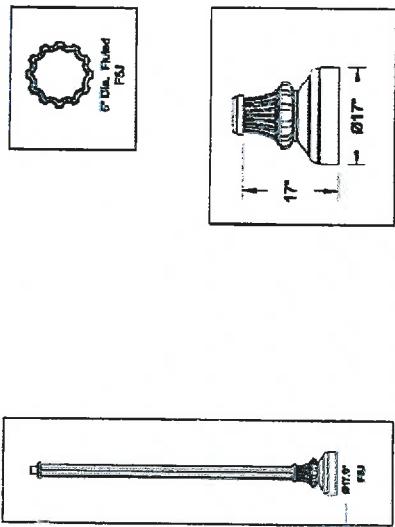
City of PUNTA GORDA, Florida
3130 Cooper Street, 33950
ENGINEERING DEPT. 575.50560

PROPOSED LIGHTING IMPROVEMENTS

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DRAWN BY: MK	Florida Registration No. 52637
SHEET: 4	Date: 05.08.12
PROPOSED IMPROVEMENTS	

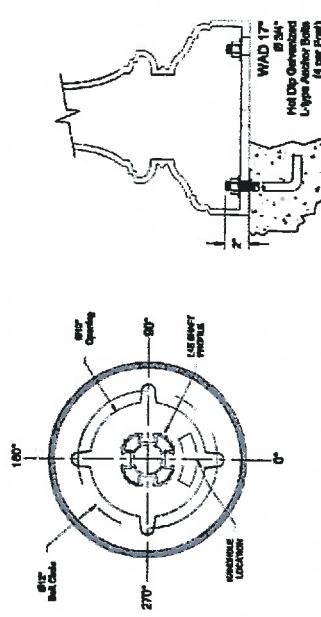
AS NOTED
DATE: 05.08.12
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AS-BUILTS

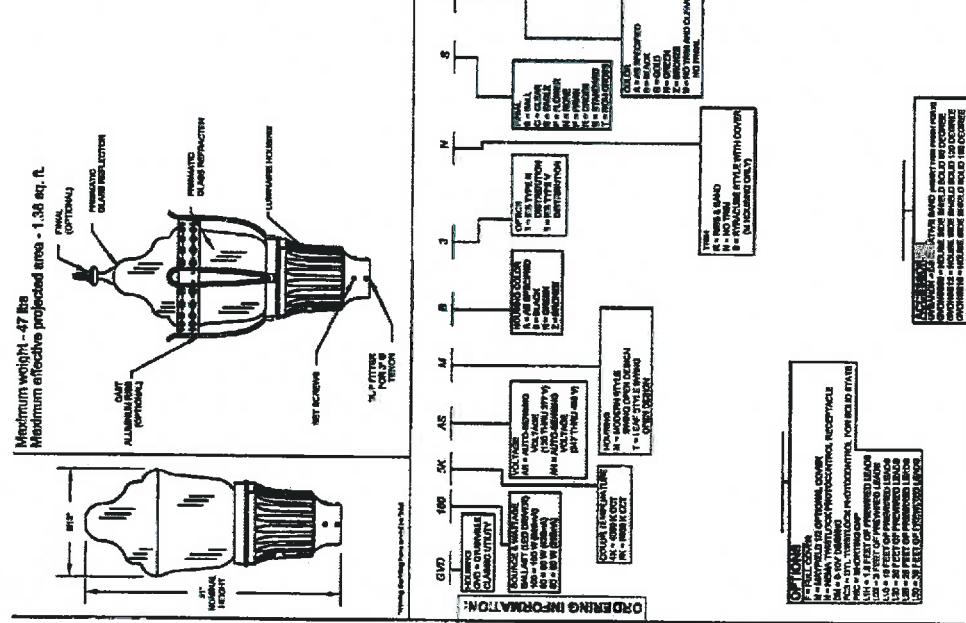


ZW12 F5 17 CABKH FG-SBKH

ANCHORAGE GUIDE



GVD 80 4K AS C B 3 N N U GV1A73B



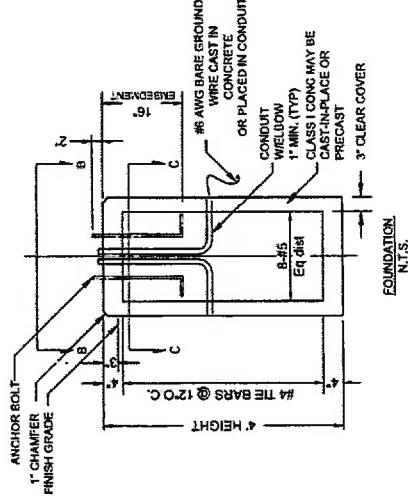
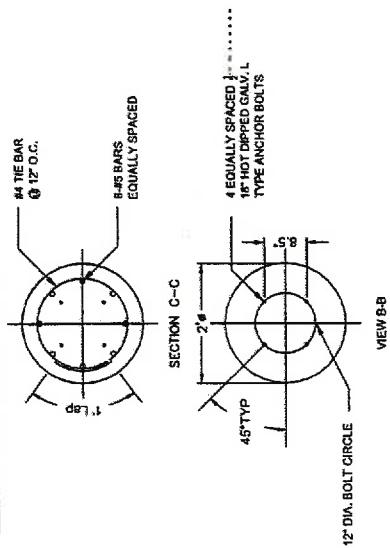
City of PUNTA GORDA, Florida
3130 Cooper Street, 39950
ENGINEERING DEPT. 575-5050

AS NOTED
SCALE:
DRAWN BY: MRC
DATE: 06.06.12
SHEET: 5
DETAILS

MARY W. CLERING, PE
Florida Registration No. 52437
Distr.: 05.06.12

AS-BUILT

LIGHT POLE FOUNDATION



City of PUNTA GORDA, Florida 3130 Cooper Street, 33950 ENGINEERING DEPT. 575.5050	WOOD STREET	PROPOSED LIGHTING IMPROVEMENTS	SCALE: DRAWN BY: MK SHEET: 6	AS NOTED DATE: 05.06.12 DETAILS
MARK W. GERING, PE Florida Registration No. 526337 Dori: 05.06.12	MARK W. GERING, PE Florida Registration No. 526337 Dori: 05.06.12			

AS-BUILTS

GENERAL NOTES:

1. ALL WORK IS TO BE COMPLETED IN ACCORDANCE WITH ALL LOCAL, COUNTY, STATE AND FEDERAL REQUIREMENTS AND SPECIFICATIONS.
2. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROJECT SAFETY AND COMPLIANCE WITH ALL OSHA REGULATIONS. CONTRACTOR SHALL HAVE A DESIGNATED COMPETENT PERSON ON SITE AT ALL TIMES AND SHALL, THROUGHOUT THE DURATION OF THE PROJECT, MAINTAIN A DAILY SAFETY CHECKLIST PROGRAM. CONTRACTOR SHALL MAINTAIN AND POST IN A CONSPICUOUS LOCATION, ALL COMPLETED SAFETY CHECKLISTS, AND LABOR INFORMATION REQUIRED BY THE FLORIDA LABOR LAW, FAILURE TO COMPLY IS CONSIDERED DUE CAUSE TO STOP WORK.
3. THROUGHOUT THESE CONTRACT DOCUMENTS, REFERENCES ARE MADE TO OTHER SPECIFICATIONS. REFERENCES TO OTHER SPECIFICATIONS SHALL MEAN THAT THE APPLICABLE PORTIONS THEREOF SHALL BE FOLLOWED AS IF THE SPECIFICATIONS WERE ACTUALLY INCORPORATED INTO THESE CONTRACT DOCUMENTS. ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND RELATED STANDARD SHEETS REGARDING ITEM SPECIFICATIONS, DESCRIPTIONS, MATERIALS, CONSTRUCTION DETAILS AND RELATED WORK NECESSARY TO COMPLETE THE IMPROVEMENTS, UNLESS SPECIFICALLY SHOWN OTHERWISE.
4. RIGHT-OFF-WAY LINES AND PROPERTY LINES, AS SHOWN, ARE APPROXIMATE AND ARE INTENDED FOR GENERAL INFORMATION. NO WARRANTY IS EXPRESSED OR IMPLIED TO THEIR EXACTNESS.
5. ADJACENT PROPERTY OWNERS SHALL BE NOTIFIED 24-HOURS IN ADVANCE OF ANY CONSTRUCTION WORK EITHER ON THEIR PROPERTY OR ALONG THE HIGHWAY RIGHT-OF-WAY IN FRONT OF THEIR PROPERTY.
6. ACCESS TO PROPERTIES SHALL BE MAINTAINED AND PROTECTED SO THERE WILL BE A MINIMUM OF DELAY AND INCONVENIENCE. INTERRUPTION OF VEHICULAR OR PEDESTRIAN ACCESS TO AND FROM ALL PROPERTIES SHALL BE LIMITED TO 30 MINUTES. CONTRACTOR SHALL PROVIDE TEMPORARY FACILITIES IF NECESSARY TO MEET THIS REQUIREMENT AT NO ADDITIONAL COST TO THE CITY.
7. WHENEVER WORK IS NOT IN PROGRESS, ACERS SHALL NOT BE BLOCKED TO ANY PROPERTY. IMMEDIATE ACCESS SHALL BE PROVIDED IF NECESSARY FOR FIRE AND EMERGENCY EQUIPMENT. UNDER NO CIRCUMSTANCES SHALL ACCESS TO FIRE HYDRANTS BE OBSTRUCTED.
8. AREAS DISTURBED BEYOND THE LIMITS SHOWN ON THE CONTRACT DOCUMENTS, OR AS REVISED BY ENGINEER, SHALL BE RESTORED BY CONTRACTOR AT NO ADDITIONAL COST TO CITY.
9. SURVEY MONUMENTS AND PROPERTY PINS EXIST THROUGHOUT THE PROJECT LENGTH. CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY SURVEY MONUMENTS AND PROPERTY PINS DISTURBED AS A RESULT OF HISHER CONSTRUCTION ACTIVITIES AT NO ADDITIONAL COST TO CITY. CONTRACTOR SHALL RESET THE DISTURBED SURVEY MONUMENTS AND PROPERTY PINS AND PROVIDE CERTIFICATION SIGNED BY A LICENSED LAND SURVEYOR THAT VERIFIES THEIR LOCATIONS AT NO ADDITIONAL COST TO CITY.
10. CONTRACTOR SHALL PRESERVE AND PROTECT ALL TREES, BUSHES AND SHRUBS WITHIN HIGHWAY RIGHT-OF-WAY THAT ARE NOT SHOWN AS TO BE REMOVED ON THE CONTRACT DOCUMENTS AT NO ADDITIONAL COST TO CITY.
11. CONTRACTOR SHALL RETAIN THE SERVICES OF A QUALIFIED TREE EXPERT TO REMOVE, WHERE NECESSARY, BRANCHES THAT INTERFERE WITH THE CONSTRUCTION OPERATION, OR REPAIR TREES HAVING SUFFERED DAMAGE BY CONSTRUCTION ACTIVITIES AT NO ADDITIONAL COST TO CITY.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH ALL AGENCIES AND UTILITIES HAVING AN INTEREST OR JURISDICTION OVER ANY PART OF THE WORK ON THIS PROJECT. CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR TEMPORARY UTILITIES, AND COORDINATE UTILITY RELOCATION AS REQUIRED TO FACILITATE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS, WITH THE UTILITY OWNER.
13. UTILITY POLES SHALL BE SUPPORTED BY THE UTILITY OWNER, AS NECESSARY DURING CONSTRUCTION AT NO ADDITIONAL COST TO CITY.

14. INFORMATION AND LOCATION OF EXISTING SURFACE AND SUBSURFACE FEATURES ARE SHOWN ACCORDING TO INFORMATION AVAILABLE FROM VARIOUS SOURCES AND THE ACCURACY OF THIS INFORMATION IS DEPENDENT UPON THE SOURCES FROM WHICH IT WAS OBTAINED. THE INFORMATION IS FOR GENERAL INFORMATION ONLY AND IS PRESENTED FOR THE CONVENIENCE OF CONTRACTOR. THE ACCURATE LOCATION OF EXISTING FACILITIES AND THE NATURE OF LOCAL CONDITIONS IN REGARD TO TRANSPORTATION, DISPOSAL, HANDLING AND STORAGE OF MATERIALS, SURFACE AND SUBSURFACE CONDITIONS, DEMOLITION, CONSTRUCTION, AND ALL OTHER FACTORS NEEDED TO COMPLETE THE WORK IS THE RESPONSIBILITY OF CONTRACTOR.
15. CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND DEPTHS OF ALL UTILITIES AND STRUCTURES THAT MAY BE IMPACTED BY THE CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE VARIOUS UTILITY COMPANIES IN ADEQUATE TIME FOR THEM TO LOCATE AND MARK THEIR FACILITIES. CONTRACTOR SHALL NOTIFY SUNSHINE-ONE-CALL AT LEAST 72-HOURS IN ADVANCE OF COMMENCING ANY WORK 1-800-432-4770.
16. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PRESERVE THE INTEGRITY OF EXISTING UTILITIES TO REMAIN AND PROVIDE UNINTERRUPTED SERVICE TO ALL USERS OF THE EXISTING UTILITIES. EXISTING UTILITIES (TO REMAIN) ENCOUNTERED SHALL BE SUPPORTED AS ORDERED BY ENGINEER OR AS DIRECTED BY THE UTILITY COMPANY AT NO ADDITIONAL COST TO CITY.
17. CONTRACTOR SHALL EXERCISE CAUTION WHEN WORKING NEAR EXISTING UTILITIES, WHICH ARE TO BE RETAINED IN SERVICE. NO VIBRATORY EQUIPMENT IS TO BE USED WITHIN EIGHT (8) FEET (HORIZONTAL DISTANCE) OF EXISTING UTILITIES. EXISTING UTILITIES DAMAGED BY CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE CITY.
18. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT DAMAGE TO EXISTING ROADWAY PAVEMENTS, SIDEWALKS, AND DRIVEWAYS. CONTRACTOR SHALL REPAIR ANY DAMAGE AS A RESULT OF HISHER CONSTRUCTION ACTIVITIES AT NO ADDITIONAL COST TO CITY.
19. WHEN AND WHERE GROUNDWATER IS ENCOUNTERED CONTRACTOR SHALL PROVIDE PROPER AND TIMELY DEWATERING SYSTEMS, THE DEWATERING SYSTEMS SHALL BE CAPABLE OF LOWERING AND MAINTAINING CONTROL OF GROUNDWATER AT LEAST 1-FOOT BELOW THE STRUCTURE AND/OR PIPE INVERT FROM THE TIME OF THE OPENING OF THE EXCAVATION UNTIL BACKFILL.
20. MAINTENANCE AND PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF SECTION 102 OF THE IHD STANDARD SPECIFICATIONS, AND MUTCH.
21. CONTRACTOR SHALL PROVIDE, MOVE AND MAINTAIN BARRIERS, SIGNS AND LIGHTED WARNING DEVICES IN ACCORDANCE WITH THE FIELD MANUAL OF TRAFFIC CONTROL DEVICES (MUTCD), OR AS ORDERED BY ENGINEER. ALL FLAGGERS SHALL WEAR AN ORANGE HARD HAT AND AN ORANGE VEST WITH REFLECTIVE STRIPES OF FLUORESCENT ORANGE OR YELLOW.
22. DUST SHALL BE CONTROLLED DURING CONSTRUCTION BY FLUSHING PAVEMENTS WITH WATER AND BY APPLYING WATER TO DISTURBED AREAS. NYSD DEC PROHIBITS APPLICATION OF CALCIUM CHLORIDE OR OIL.
23. EROSION CONTROL DEVICES SHALL BE ESTABLISHED PRIOR TO COMMENCING BARTHWORK. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL UPSTREAM GROUND COVER HAS BEEN ESTABLISHED.
24. DISTURBED AREAS MUST BE TEMPORARILY MULCHED IF THE TIME OF YEAR PREVENTS TURF ESTABLISHMENT. TEMPORARY MULCH MUST BE APPLIED WITHIN 5-DAYS AFTER EXCAVATION, AND BE REPLACED BY SEEDING AND MULCHING AS SOON AS WEATHER FAVORS GERMINATION. NO SEPARATE PAYMENT WILL BE MADE FOR TEMPORARY MULCH. COST OF PROVIDING ALL TEMPORARY MULCH SHALL BE INCLUDED UNDER APPROPRIATE PAYMENT ITEMS.

City of PUNTA GORDA, Florida 3130 Cooper Street, 33950 ENGINEERING DEPT. #775, 50550	SCALE: DRAWN BY: MK DATE: 05/08/12 SHEET: 7 GENERAL NOTES:
PROPOSED LIGHTING IMPROVEMENTS	AS NOTED Mark W. GIERING, PE Florida Registration No. 52857 Date: 05/08/12

CITY OF PUNTA GORDA

MARTIN LUTHER KING JR. BLVD.
Phase II & III
SEC. 6 TWP. 41S RGE 23E



CITY COUNCIL:
LAWRENCE J. FRIEDMAN, MAYOR
HARVEY GOLDBERG, VICE MAYOR
CHARLES WALLACE
MARILYN P. SMITH MOONEY
BILL AHERS

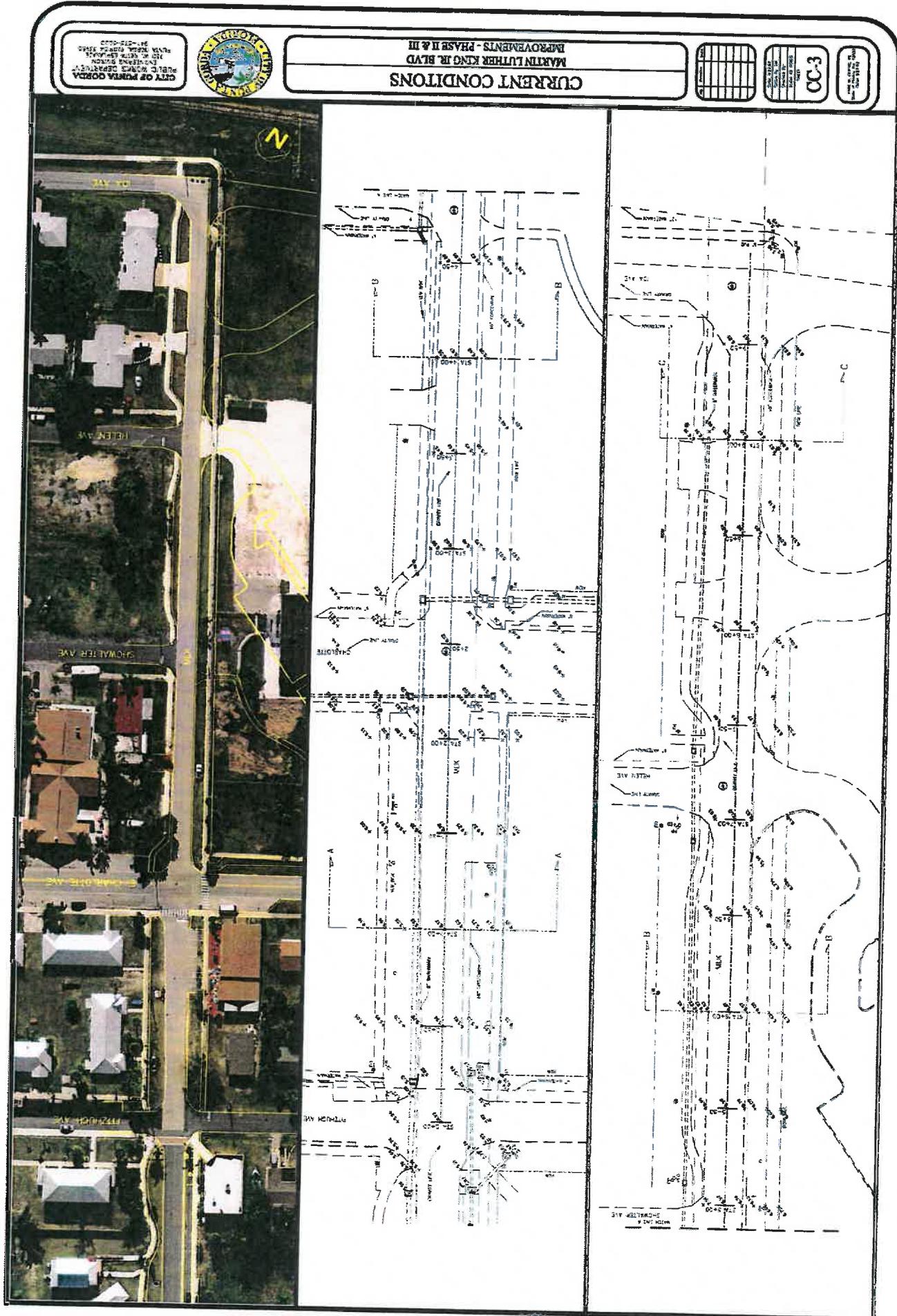
CITY MANAGER:
HOWARD D. KUMIK

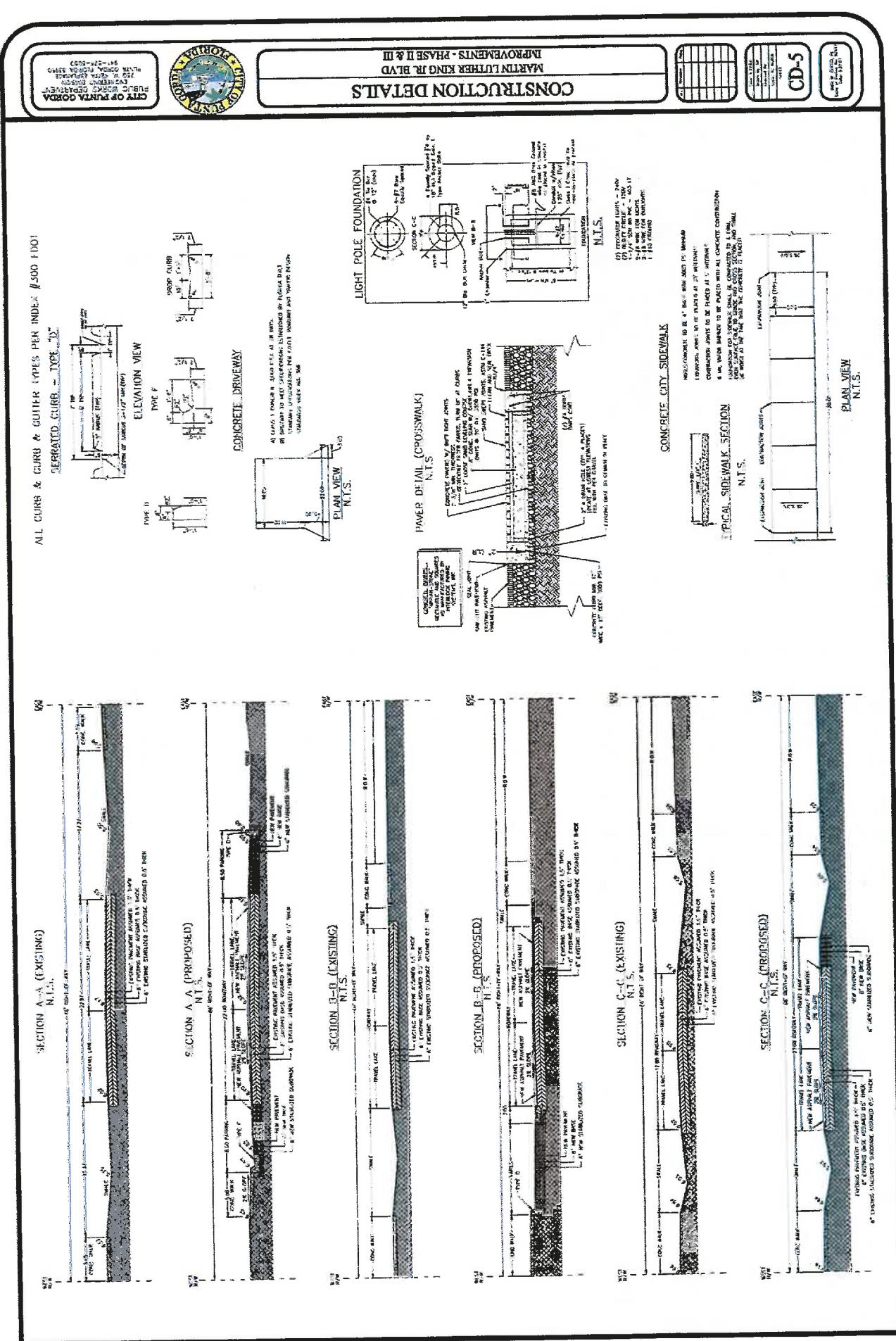
PUBLIC WORKS:
RICHARD C. KEENLY, Director
MARK GERING, PE, City Engineer

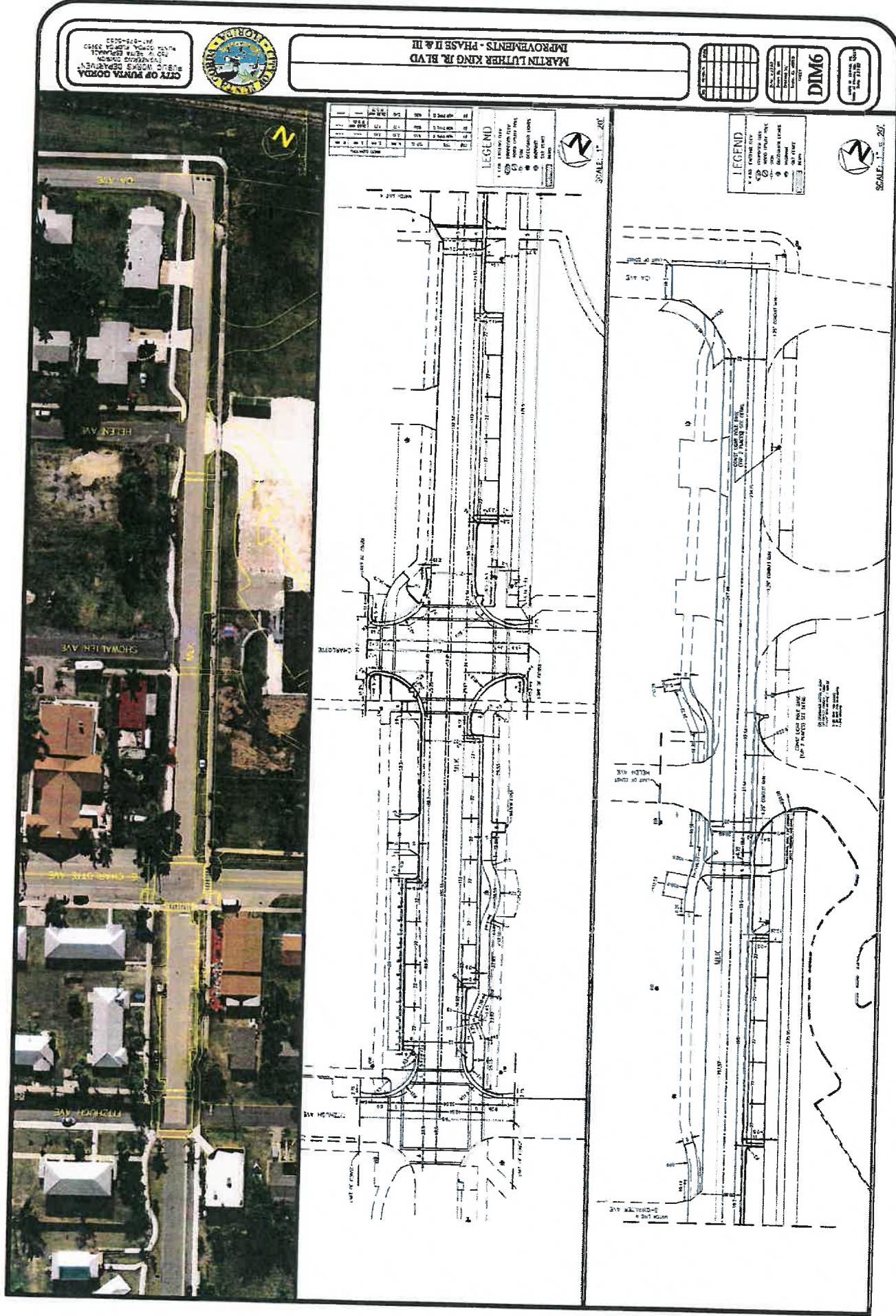
INDEX OF DRAWINGS	
FILE	TITLE SHEET, INDEX OF DRAWINGS
RD 2	ROAD & DRAINAGE
CC 3	CURRENT CONDITIONS
GN 4	GENERAL NOTES / EROSION CONTROL
CD 5	CONSTRUCTION DETAILS
DIM 6	DIMENSIONS
L 7	LANDSCAPE PLAN
IR B	IRRIGATION PLAN



CITY OF PUNTA GORDA
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
750 W. RIBERA ESPANOLA
PUNTA GORDA, FLORIDA 33950
941-375-5060







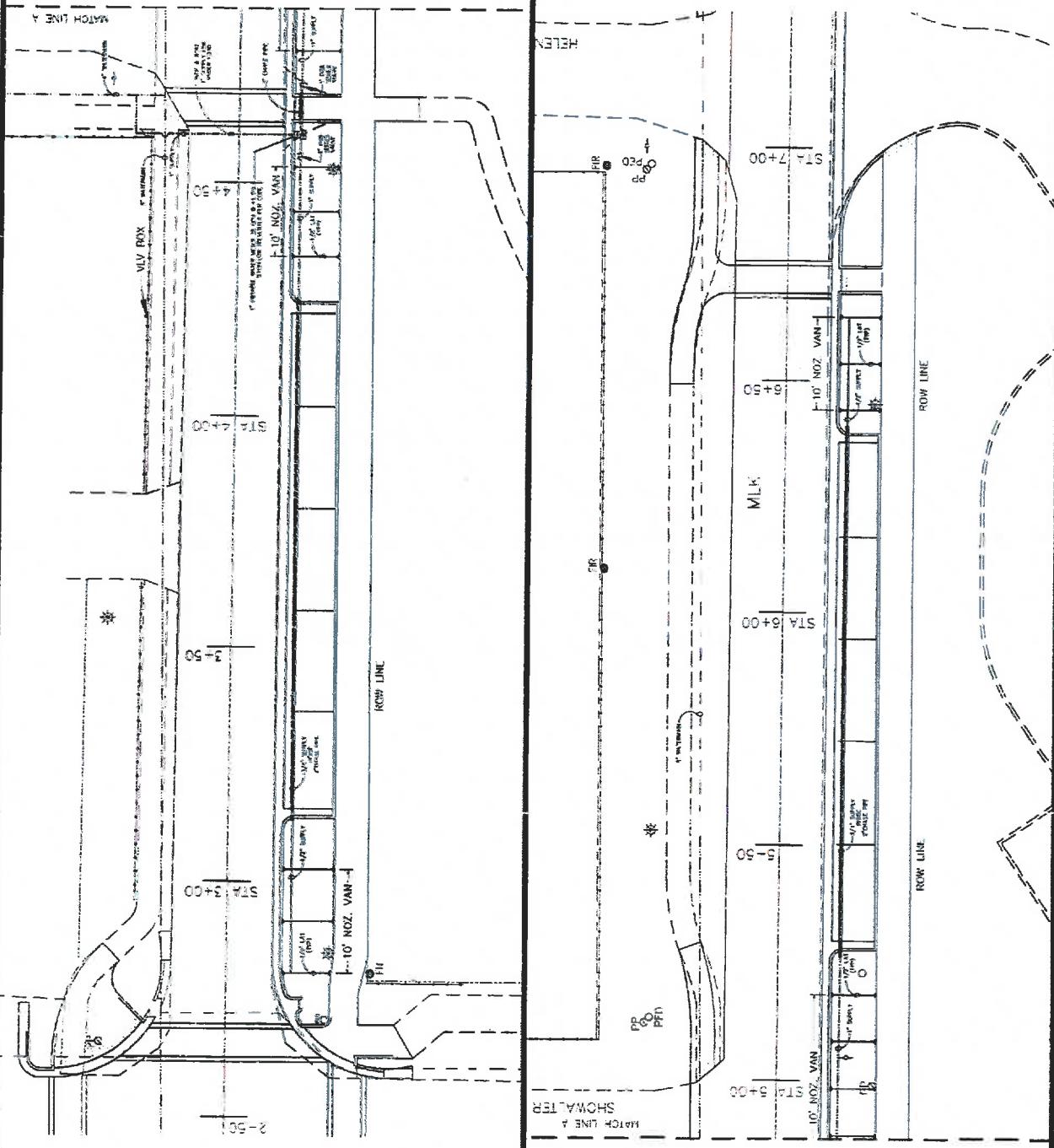
IRRIGATION PLAN



MARTIN LUTHER KING JR BLVD
IMPROVEMENTS - PHASE II & III

IR-8

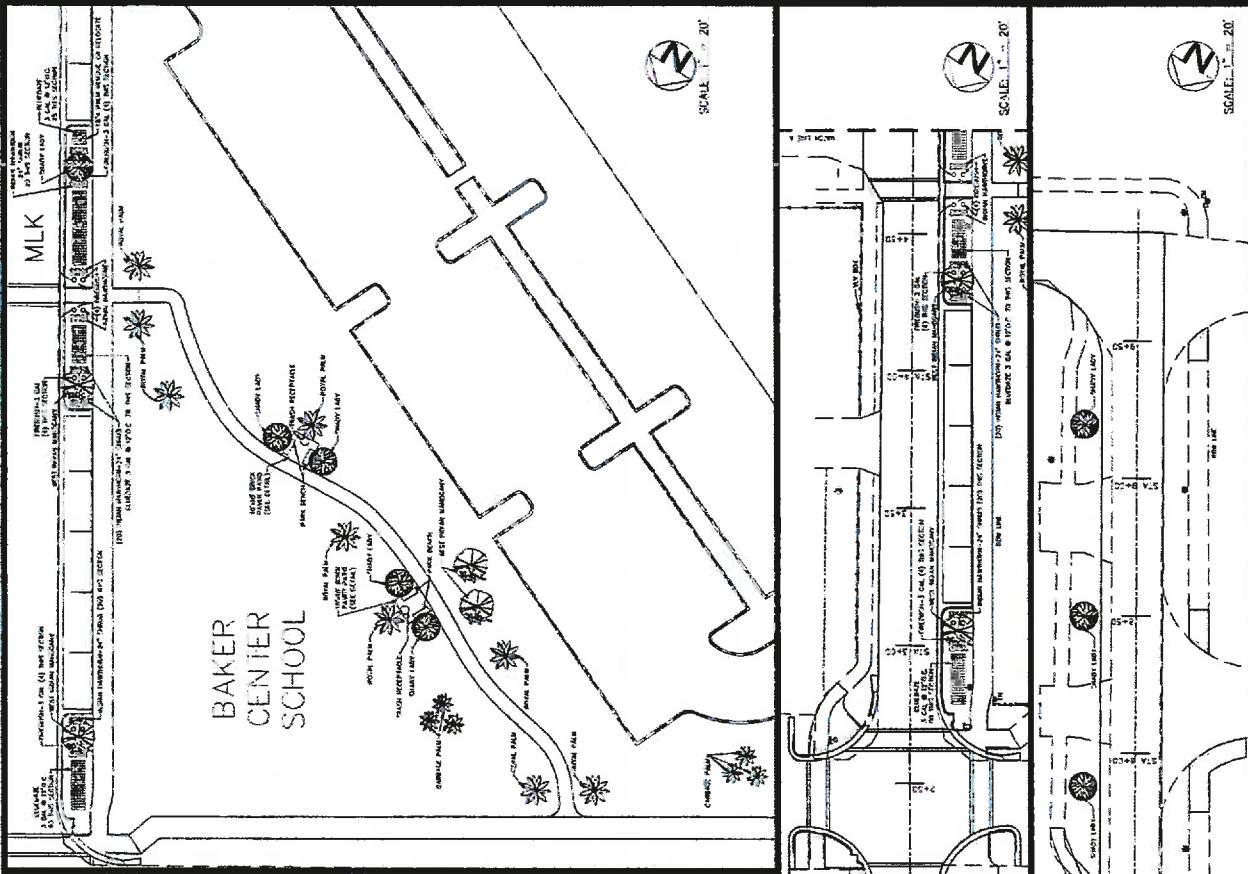
IRRIGATION LEGEND	
•	Water gun spray (approx 30 ft)
■	Water gun (approx 10 ft)
□	Water gun (approx 5 ft)
◆	Adjustable nozzle (approx 10 ft)
○	Adjustable nozzle (approx 5 ft)
●	Adjustable nozzle (approx 2 ft)
△	Adjustable nozzle (approx 1 ft)



LANDSCAPE PLAN

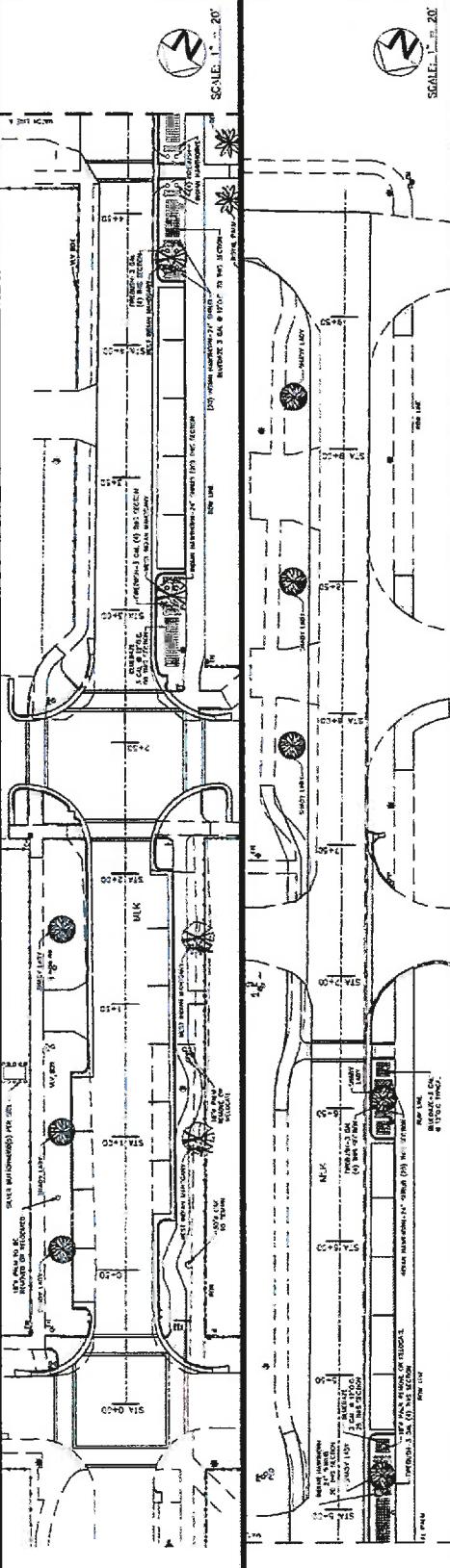
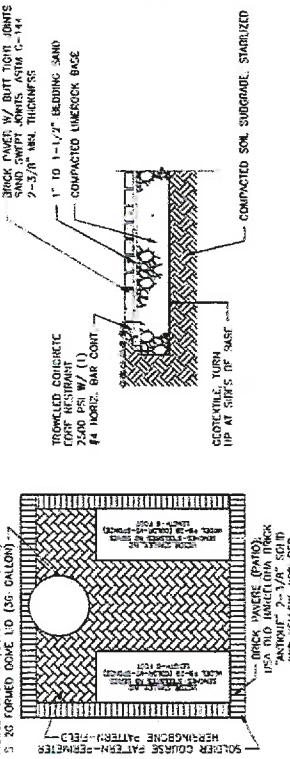


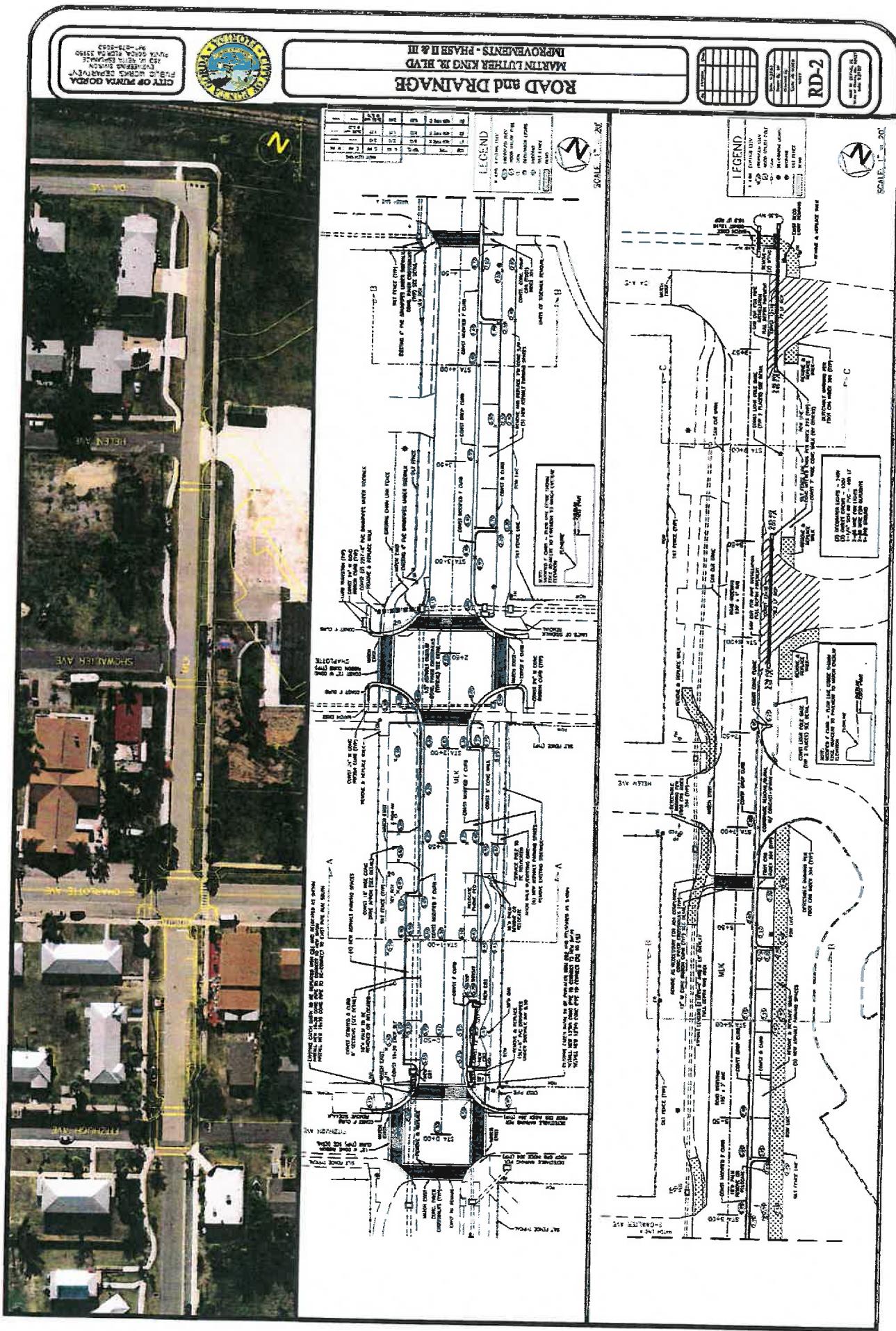
MARTIN LUTHER KING JR BLVD
IMPROVEMENTS - PHASE II E MI



PROPOSED PLANTING LIST	
CHEMICAL NAME	COMMON NAME
BACCHARIS	SPIREA
BIGELOWIA, SPARCE LEAF	THISTLE
BUDDELLIA	LEMON BLOSSOM
CALYPSO MUSK	MUSK TULIP
CARAGANA	AMERICAN BIRCH
COTONEASTER	RED BELL
DEODORANT PLANT	INDIAN HAWTHORN
DICLIPIA	INDIAN HAWTHORN
GYROSTACHYS	INDIAN HAWTHORN
HAMILIA DRAFTS	INDIAN HAWTHORN
HIBISCUS	INDIAN HAWTHORN
INDIAPOLIS INDICA	INDIAN HAWTHORN
EVERGREEN SHrubLAND	INDIAN HAWTHORN
CONCRETE-FRUIT, YANKEE RIFLES	INDIAN HAWTHORN
SLIVER MULBERRIES	INDIAN HAWTHORN

PAVILION DETAIL (PATIO)







INDEX OF ROADWAY PLANS SECTION TWO	
SHEET NO.	SHEET DESCRIPTION
2-1	KEY SHEET
2-2	TIPTICAL SECTION
2-3	DRAINAGE MAP
2-4	SUMMARY OF QUANTITIES
2-5	SUMMARY OF DRAINAGE STRUCTURES
2-6 - 2-8	ROADWAY PLAN AND PROFILE SHEETS
2-9 - 2-12	DRAINAGE STRUCTURES
2-13 - 2-15	TRAFFIC CONTROL PLANS

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

CONTRACT PLANS

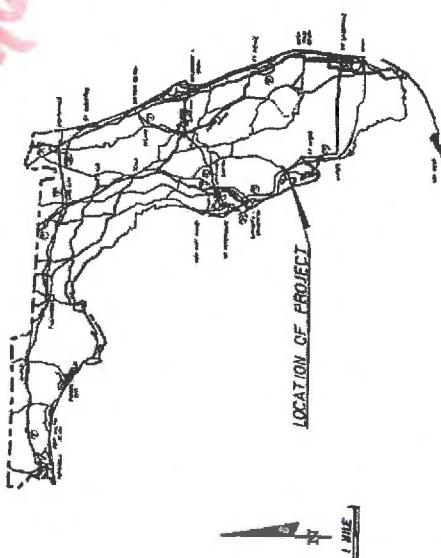
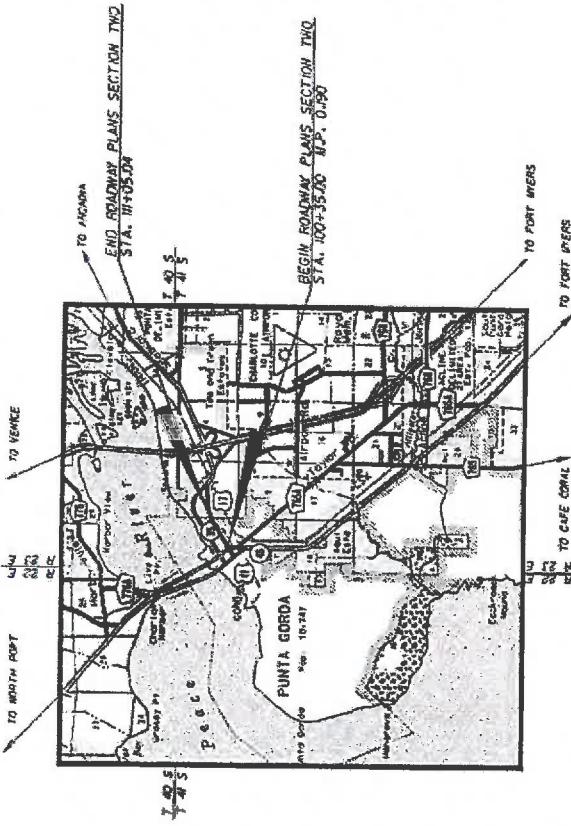
FINANCIAL PROJECT ID 4/2015-1-52-01

CHARLOTTE COUNTY (U04U)

STATE ROAD NO. 35 (U.S. 17)

ROADWAY PLANS SECTION TWO

- KEY SHEET
TIPTICAL SECTION
DRAINAGE MAP
SUMMARY OF QUANTITIES
SUMMARY OF DRAINAGE STRUCTURES
ROADWAY PLAN AND PROFILE SHEETS
DRAINAGE STRUCTURES
TRAFFIC CONTROL PLANS



PHASE II SUBMITTAL

FEBRUARY 2007

MANUFACTURER'S SHEET TO BE SUBMITTED TO:

HARD D. ARTHAS
P.E.
PARKER,
WEST CYPRESS ST.
SUITE 300
TAMPA, FL 33607
(813) 282-2725

CONTRACT NO. C-0805
CONSULTANT VENDOR NO. F-530-996-174-102
FBPR CERTIFICATE OF AUTHORIZATION NO. 24
NOTE: THE SCALE OF THESE PLANS ARE
NOT CHANGED OR REPRODUCED.

PBS
PLANS PREPARED BY:

KEY SHEET NUMBER	SECTION NUMBER
REV. #	DATE
PLANS DRAWN BY CONTRACTOR	

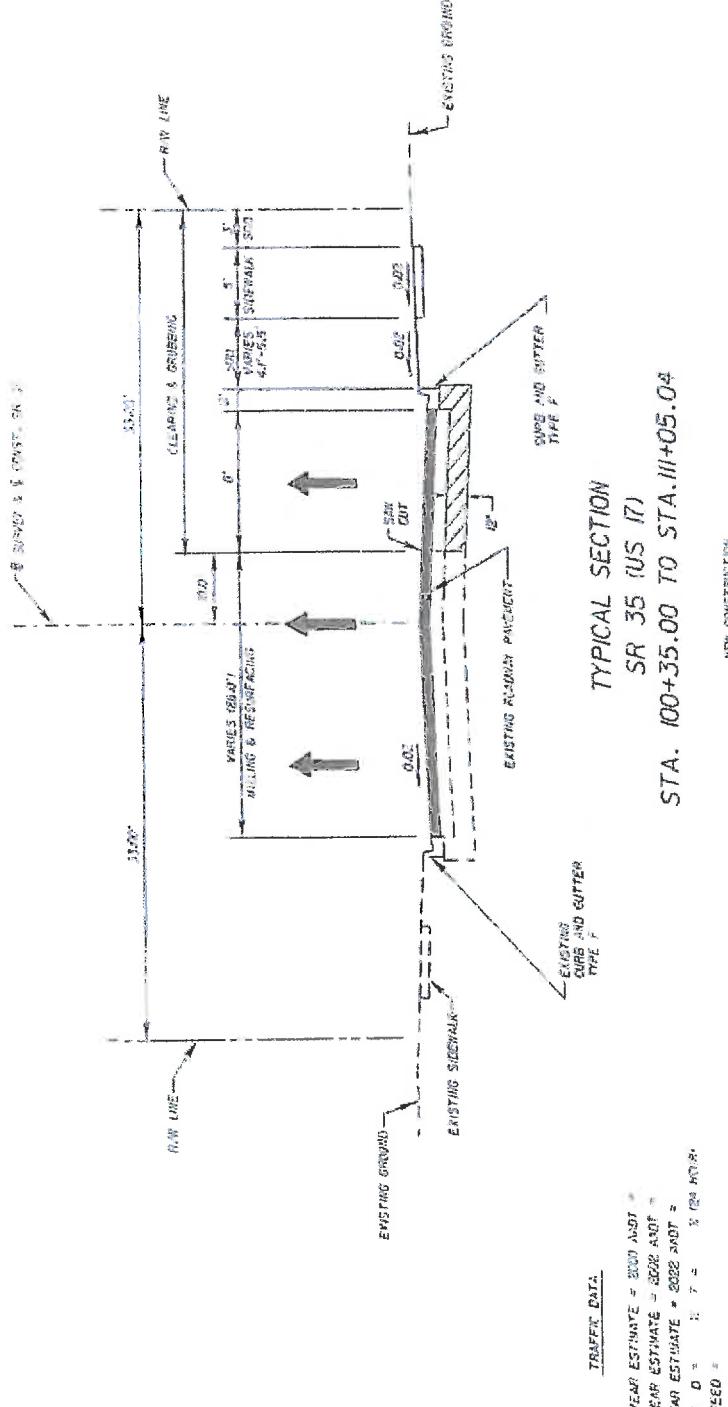
FISCAL YEAR	SHEET NO.
04	2-1

CONTINUING STANDARDS AND SPECIFICATIONS
FLORIDA DEPARTMENT OF TRANSPORTATION,
DESIGN STANDARDS
ASBESTOS, LEAD, AND
STANDBY SPECIFICATIONS
FOR ROAD AND BRIDGE
CONSTRUCTION DATED 2000
AS AMENDED OR CORRECTED.

REV. #

DATE

PLANS DRAWN
BY CONTRACTOR



CURRENT YEAR ESTIMATE = 2000 AND
OPENING YEAR ESTIMATE = 2002 AND
DESIGN YEAR ESTIMATE = 2002 AND =
 $N = 2.0$ = $\tau = 10\%$
DESIGN SPEED =

LATERAL
PIPE DETAIL

TYPIFICAL SECTION NOTES

SEE PLAN SHEETS FOR SIDEWALK SIZING & RESURFACING OF
SPECIFIED ROADWAY PLANS SECTION C

SEE PLAN SHEETS FOR SIDEWALK
SIZES RIGHT SIDE:

OPTIONAL BASE GROUP
TYPE SP STRUCTURAL GROUP
AND FRCTION GROUP FC-6 REINFORCING STEEL.

STA. 100+35.00 TO STA. 100+05.04
SR 35 (US 17)

BILLING AND RESURFACING - THROUGH LINE
OR EXCISE ACCOUNT PAYMENT 100% FTE DEPTH

THE JOURNAL OF CLIMATE

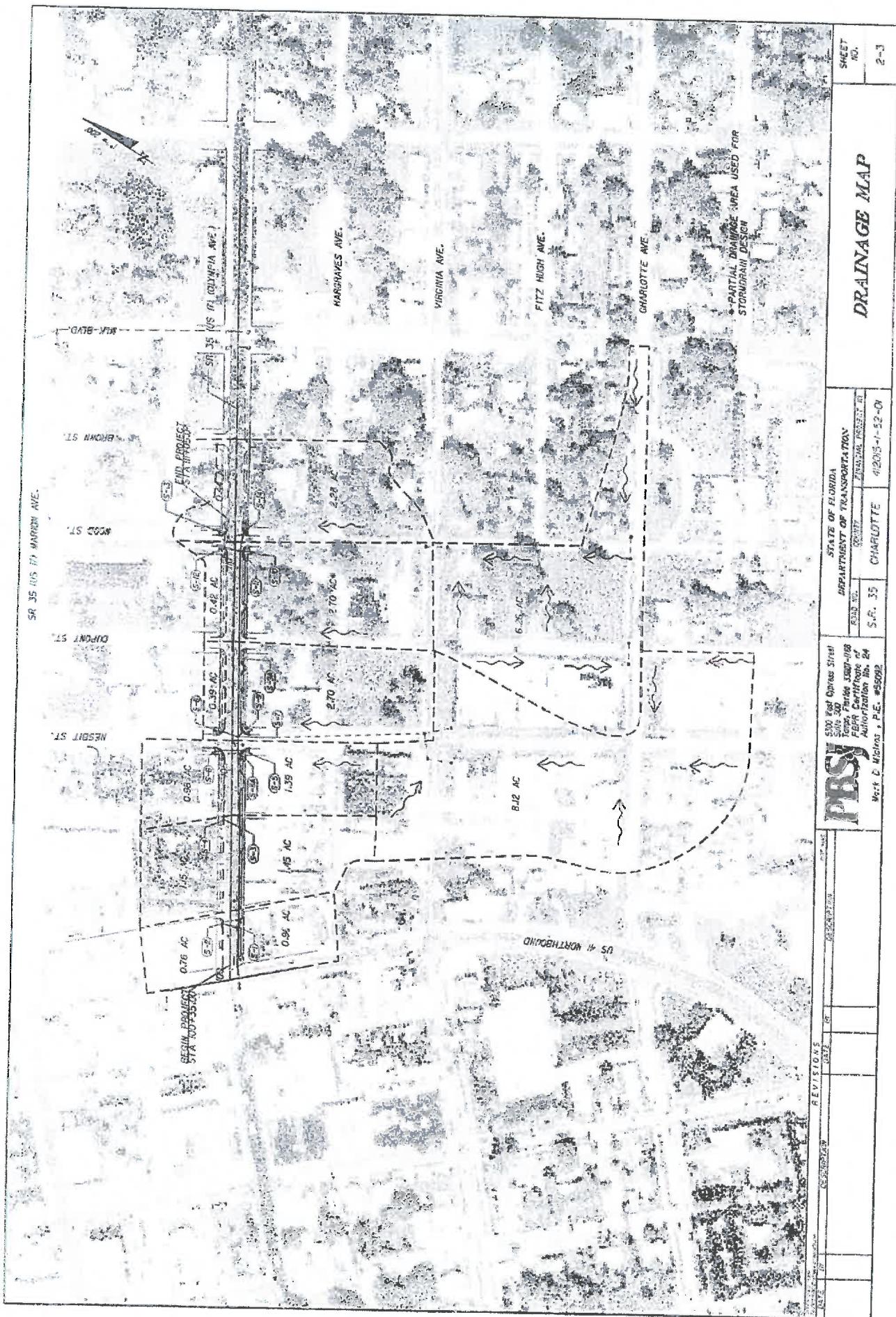
Typical Section Notes

THE WITNESS & REFORMER 17

16 SPECIALLY PLANTED SECTION USE

2. SEE PLAN SHEETS FOR SIDEWALK REPLACEMENT

— **RIGHT SIDE.**



PAY ITEM FOOTNOTES

SUMMARY OF HAY BALES			
LOCATION	SIZE	QUANTITY (EA)	REFERENCE
S-1	F-F	0	
S-2	F-F	0	
S-3	F-F	0	
S-4	F-F	0	
S-5	F-F	0	
S-6	F-F	0	
S-7	F-F	0	
S-8	F-F	0	
S-9	F-F	0	
S-10	F-F	0	
S-11	F-F	0	
S-12	F-F	0	
S-13	F-F	0	
S-14	F-F	0	
			GRAND TOTAL

SUMMARY OF QUANTITIES						SHEET NO.
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION						
		ROAD NO.	ROUTE NO.	COMPT.	ENGR'D. PROJ.	
		S.R. 25		CHARLOTTE	4B1CR-1-52-B	
West Nights, P.E. #5002						
P.B.S.I.						
DATE	REVISIONS	RECEIVED	RECEIVED	RECEIVED	RECEIVED	
1-31-58						

SUMMARY OF DRAINAGE STRUCTURES

C S/N No.	STATION	SIDE	DESCRIPTION	H	S	L	STRUCTURE NO. MAINTENANCE		DNR MILES	REPAIRS
							C	I		
1 52	B03500 - R1	M	BRIDGE	22	08	00			1-8	L-5
2 53	B03500 - R1	M	BRIDGE	22	08	00			1-9	L-5
3 54	B03500 - R1	M	BRIDGE	22	08	00			1-10	L-5
4 55	B03500 - R1	M	BRIDGE	22	08	00			1-11	L-5
5 56	B03500 - R1	M	BRIDGE	22	08	00			1-12	L-5
6 57	B03500 - R1	M	BRIDGE	22	08	00			1-13	L-5
7 58	B03500 - R1	M	BRIDGE	22	08	00			1-14	L-5
8 59	B03500 - R1	M	BRIDGE	22	08	00			1-15	L-5
9 60	B03500 - R1	M	BRIDGE	22	08	00			1-16	L-5
10 61	B03500 - R1	M	BRIDGE	22	08	00			1-17	L-5
11 62	B03500 - R1	M	BRIDGE	22	08	00			1-18	L-5
12 63	B03500 - R1	M	BRIDGE	22	08	00			1-19	L-5
13 64	B03500 - R1	M	BRIDGE	22	08	00			1-20	L-5
14 65	B03500 - R1	M	BRIDGE	22	08	00			1-21	L-5
15 66	B03500 - R1	M	BRIDGE	22	08	00			1-22	L-5
16 67	B03500 - R1	M	BRIDGE	22	08	00			1-23	L-5
17 68	B03500 - R1	M	BRIDGE	22	08	00			1-24	L-5
18 69	B03500 - R1	M	BRIDGE	22	08	00			1-25	L-5
19 70	B03500 - R1	M	BRIDGE	22	08	00			1-26	L-5
20 71	B03500 - R1	M	BRIDGE	22	08	00			1-27	L-5
21 72	B03500 - R1	M	BRIDGE	22	08	00			1-28	L-5
22 73	B03500 - R1	M	BRIDGE	22	08	00			1-29	L-5
23 74	B03500 - R1	M	BRIDGE	22	08	00			1-30	L-5
24 75	B03500 - R1	M	BRIDGE	22	08	00			1-31	L-5
25 76	B03500 - R1	M	BRIDGE	22	08	00			1-32	L-5
26 77	B03500 - R1	M	BRIDGE	22	08	00			1-33	L-5
27 78	B03500 - R1	M	BRIDGE	22	08	00			1-34	L-5
28 79	B03500 - R1	M	BRIDGE	22	08	00			1-35	L-5
29 80	B03500 - R1	M	BRIDGE	22	08	00			1-36	L-5
30 81	B03500 - R1	M	BRIDGE	22	08	00			1-37	L-5
31 82	B03500 - R1	M	BRIDGE	22	08	00			1-38	L-5
32 83	B03500 - R1	M	BRIDGE	22	08	00			1-39	L-5
33 84	B03500 - R1	M	BRIDGE	22	08	00			1-40	L-5
34 85	B03500 - R1	M	BRIDGE	22	08	00			1-41	L-5
35 86	B03500 - R1	M	BRIDGE	22	08	00			1-42	L-5
36 87	B03500 - R1	M	BRIDGE	22	08	00			1-43	L-5
37 88	B03500 - R1	M	BRIDGE	22	08	00			1-44	L-5
38 89	B03500 - R1	M	BRIDGE	22	08	00			1-45	L-5
39 90	B03500 - R1	M	BRIDGE	22	08	00			1-46	L-5
40 91	B03500 - R1	M	BRIDGE	22	08	00			1-47	L-5
41 92	B03500 - R1	M	BRIDGE	22	08	00			1-48	L-5
42 93	B03500 - R1	M	BRIDGE	22	08	00			1-49	L-5
43 94	B03500 - R1	M	BRIDGE	22	08	00			1-50	L-5
44 95	B03500 - R1	M	BRIDGE	22	08	00			1-51	L-5
45 96	B03500 - R1	M	BRIDGE	22	08	00			1-52	L-5
46 97	B03500 - R1	M	BRIDGE	22	08	00			1-53	L-5
47 98	B03500 - R1	M	BRIDGE	22	08	00			1-54	L-5
48 99	B03500 - R1	M	BRIDGE	22	08	00			1-55	L-5
49 100	B03500 - R1	M	BRIDGE	22	08	00			1-56	L-5
50 101	B03500 - R1	M	BRIDGE	22	08	00			1-57	L-5
51 102	B03500 - R1	M	BRIDGE	22	08	00			1-58	L-5
52 103	B03500 - R1	M	BRIDGE	22	08	00			1-59	L-5
53 104	B03500 - R1	M	BRIDGE	22	08	00			1-60	L-5
54 105	B03500 - R1	M	BRIDGE	22	08	00			1-61	L-5
55 106	B03500 - R1	M	BRIDGE	22	08	00			1-62	L-5
56 107	B03500 - R1	M	BRIDGE	22	08	00			1-63	L-5
57 108	B03500 - R1	M	BRIDGE	22	08	00			1-64	L-5
58 109	B03500 - R1	M	BRIDGE	22	08	00			1-65	L-5
59 110	B03500 - R1	M	BRIDGE	22	08	00			1-66	L-5
60 111	B03500 - R1	M	BRIDGE	22	08	00			1-67	L-5
61 112	B03500 - R1	M	BRIDGE	22	08	00			1-68	L-5
62 113	B03500 - R1	M	BRIDGE	22	08	00			1-69	L-5
63 114	B03500 - R1	M	BRIDGE	22	08	00			1-70	L-5
64 115	B03500 - R1	M	BRIDGE	22	08	00			1-71	L-5
65 116	B03500 - R1	M	BRIDGE	22	08	00			1-72	L-5
66 117	B03500 - R1	M	BRIDGE	22	08	00			1-73	L-5
67 118	B03500 - R1	M	BRIDGE	22	08	00			1-74	L-5
68 119	B03500 - R1	M	BRIDGE	22	08	00			1-75	L-5
69 120	B03500 - R1	M	BRIDGE	22	08	00			1-76	L-5
70 121	B03500 - R1	M	BRIDGE	22	08	00			1-77	L-5
71 122	B03500 - R1	M	BRIDGE	22	08	00			1-78	L-5
72 123	B03500 - R1	M	BRIDGE	22	08	00			1-79	L-5
73 124	B03500 - R1	M	BRIDGE	22	08	00			1-80	L-5
74 125	B03500 - R1	M	BRIDGE	22	08	00			1-81	L-5
75 126	B03500 - R1	M	BRIDGE	22	08	00			1-82	L-5
76 127	B03500 - R1	M	BRIDGE	22	08	00			1-83	L-5
77 128	B03500 - R1	M	BRIDGE	22	08	00			1-84	L-5
78 129	B03500 - R1	M	BRIDGE	22	08	00			1-85	L-5
79 130	B03500 - R1	M	BRIDGE	22	08	00			1-86	L-5
80 131	B03500 - R1	M	BRIDGE	22	08	00			1-87	L-5
81 132	B03500 - R1	M	BRIDGE	22	08	00			1-88	L-5
82 133	B03500 - R1	M	BRIDGE	22	08	00			1-89	L-5
83 134	B03500 - R1	M	BRIDGE	22	08	00			1-90	L-5
84 135	B03500 - R1	M	BRIDGE	22	08	00			1-91	L-5
85 136	B03500 - R1	M	BRIDGE	22	08	00			1-92	L-5
86 137	B03500 - R1	M	BRIDGE	22	08	00			1-93	L-5
87 138	B03500 - R1	M	BRIDGE	22	08	00			1-94	L-5
88 139	B03500 - R1	M	BRIDGE	22	08	00			1-95	L-5
89 140	B03500 - R1	M	BRIDGE	22	08	00			1-96	L-5
90 141	B03500 - R1	M	BRIDGE	22	08	00			1-97	L-5
91 142	B03500 - R1	M	BRIDGE	22	08	00			1-98	L-5
92 143	B03500 - R1	M	BRIDGE	22	08	00			1-99	L-5
93 144	B03500 - R1	M	BRIDGE	22	08	00			1-100	L-5
94 145	B03500 - R1	M	BRIDGE	22	08	00			1-101	L-5
95 146	B03500 - R1	M	BRIDGE	22	08	00			1-102	L-5
96 147	B03500 - R1	M	BRIDGE	22	08	00			1-103	L-5
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111 162	B03500 - R1	M	BRIDGE	22	08	00			1-118	L-5
112 163	B03500 - R1	M	BRIDGE	22	08	00			1-119	L-5
113 164	B03500 - R1	M	BRIDGE	22	08	00			1-120	L-5
114 165	B03500 - R1	M	BRIDGE	22	08	00			1-121	L-5
115 166	B03500 - R1	M	BRIDGE	22	08	00			1-122	L-5
116 167	B03500 - R1	M	BRIDGE	22	08	00			1-123	L-5
117 168	B03500 - R1	M	BRIDGE	22	08	00			1-124	L-5
118 169	B03500 - R1	M	BRIDGE	22	08	00			1-125	L-5
119 170	B03500 - R1	M	BRIDGE	22	08	00			1-126	L-5
120 171	B03500 - R1	M	BRIDGE	22	08	00			1-127	L-5
121 172	B03500 - R1	M	BRIDGE	22	08	00			1-128	L-5
122 173	B03500 - R1	M	BRIDGE	22	08	00			1-129	L-5
123 174	B03500 - R1	M	BRIDGE	22	08	00			1-130	L-5
124 175	B03500 - R1	M	BRIDGE	22	08	00			1-131	L-5
125 176	B03500 - R1	M</td								

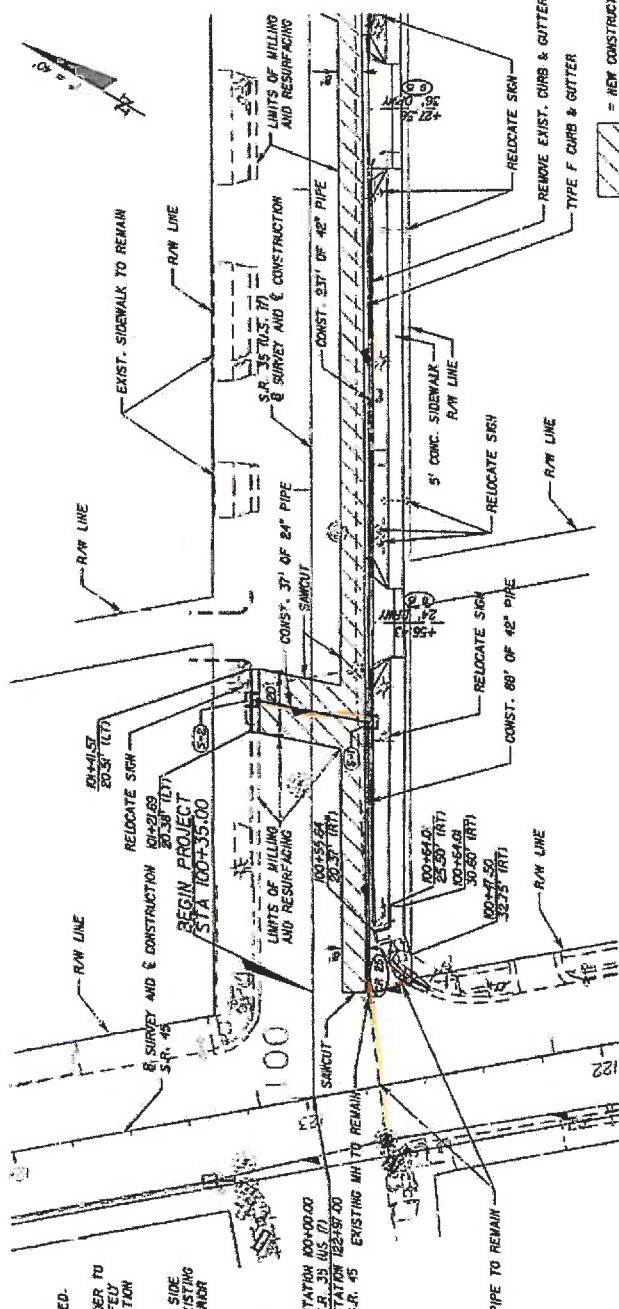
GENERAL NOTES

1. EXISTING DRAINAGE STRUCTURES WITHIN DRAINAGE MODIFICATION CONSTRUCTION LIMITS SHALL BE REMOVED UNLESS OTHERWISE NOTED.

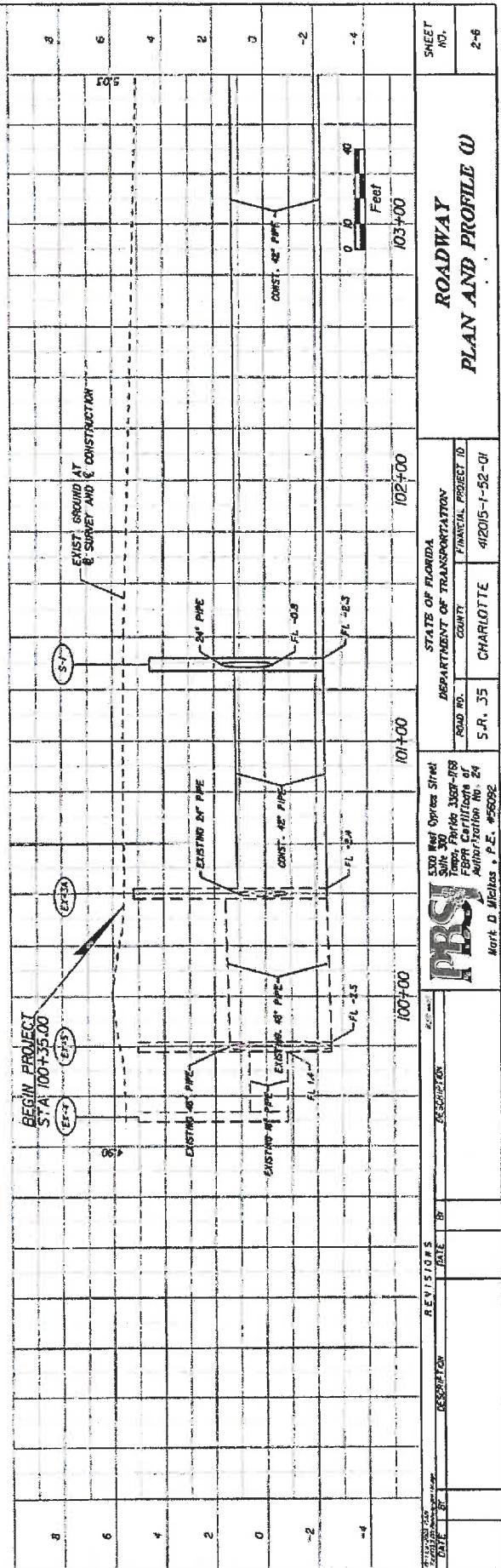
2. ANY LIGHT POLES REQUIRED TO BE TEMPORARILY REMOVED IN ORDER TO CONSTRUCT DRAINAGE IMPROVEMENTS SHALL BE SALVAGED AND SAFELY STORED WITHIN THE EXISTING RIGHT-OF-WAY FOR REINSTALLATION AT OR NEAR EXISTING LOCATIONS.

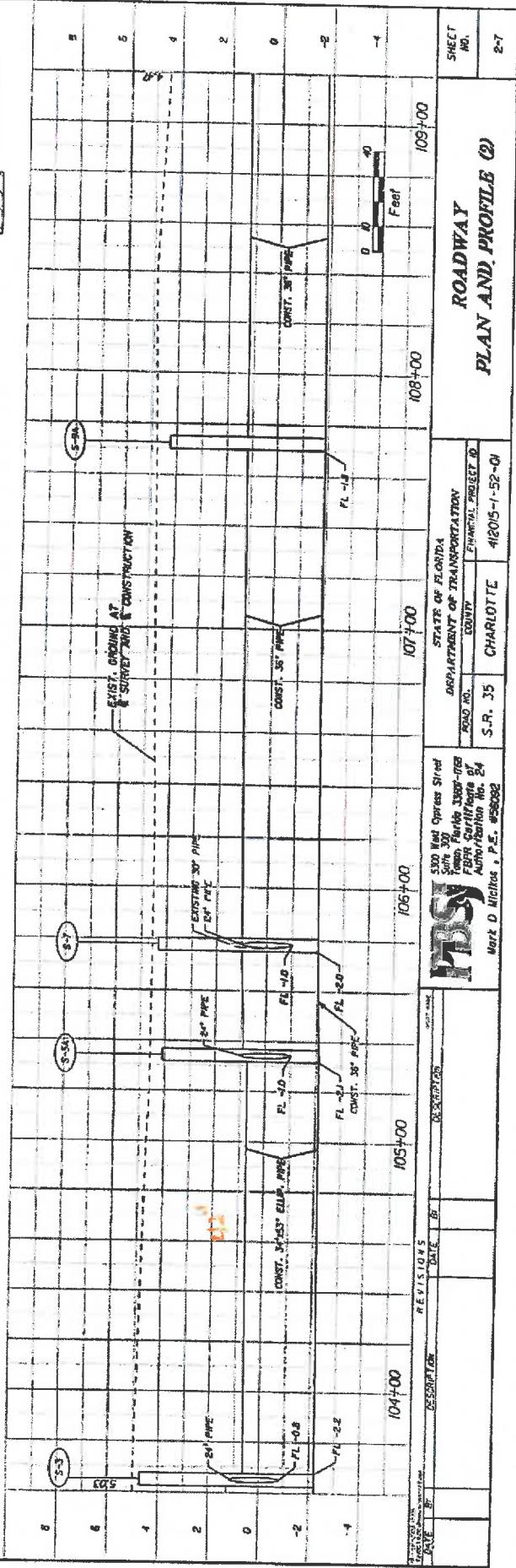
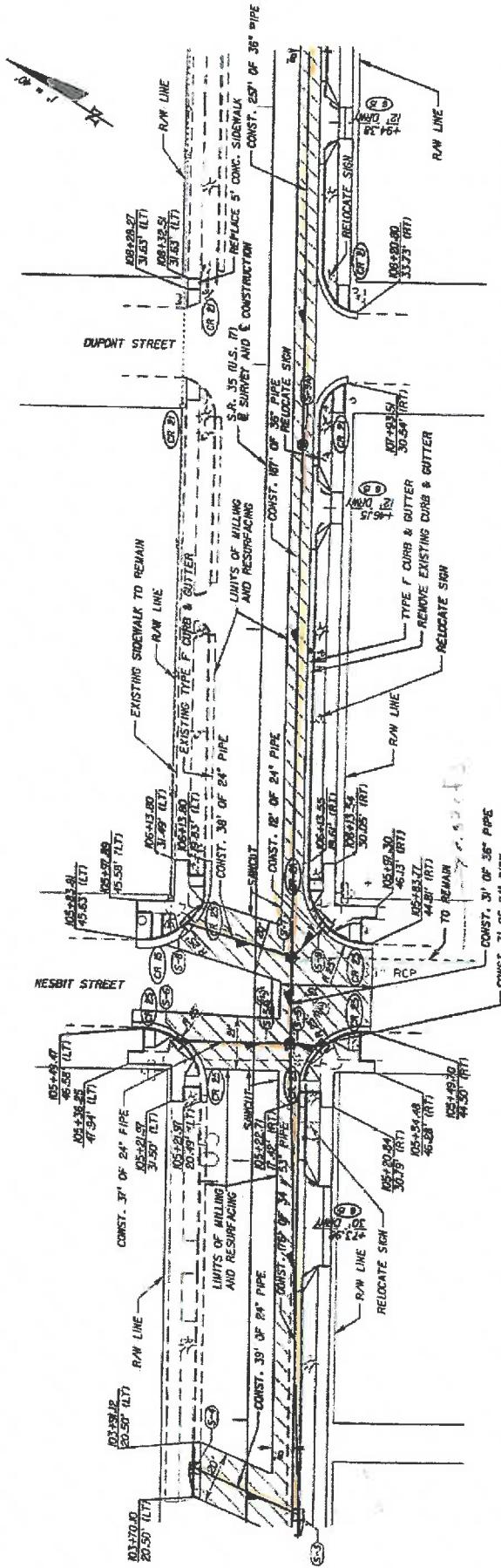
3. THE FINISHED GRADE AND SLOPE OF INLET TOPS ON THE RIGHT SIDE SHALL BE CONFORM WITH THE CROSS SLOPE AND GRADE OF THE EXISTING SIDEWALKS. ALL INLET ELEVATIONS ARE TO BE FIELD VERIFIED PRIOR TO SETTING FINISH GRADE.

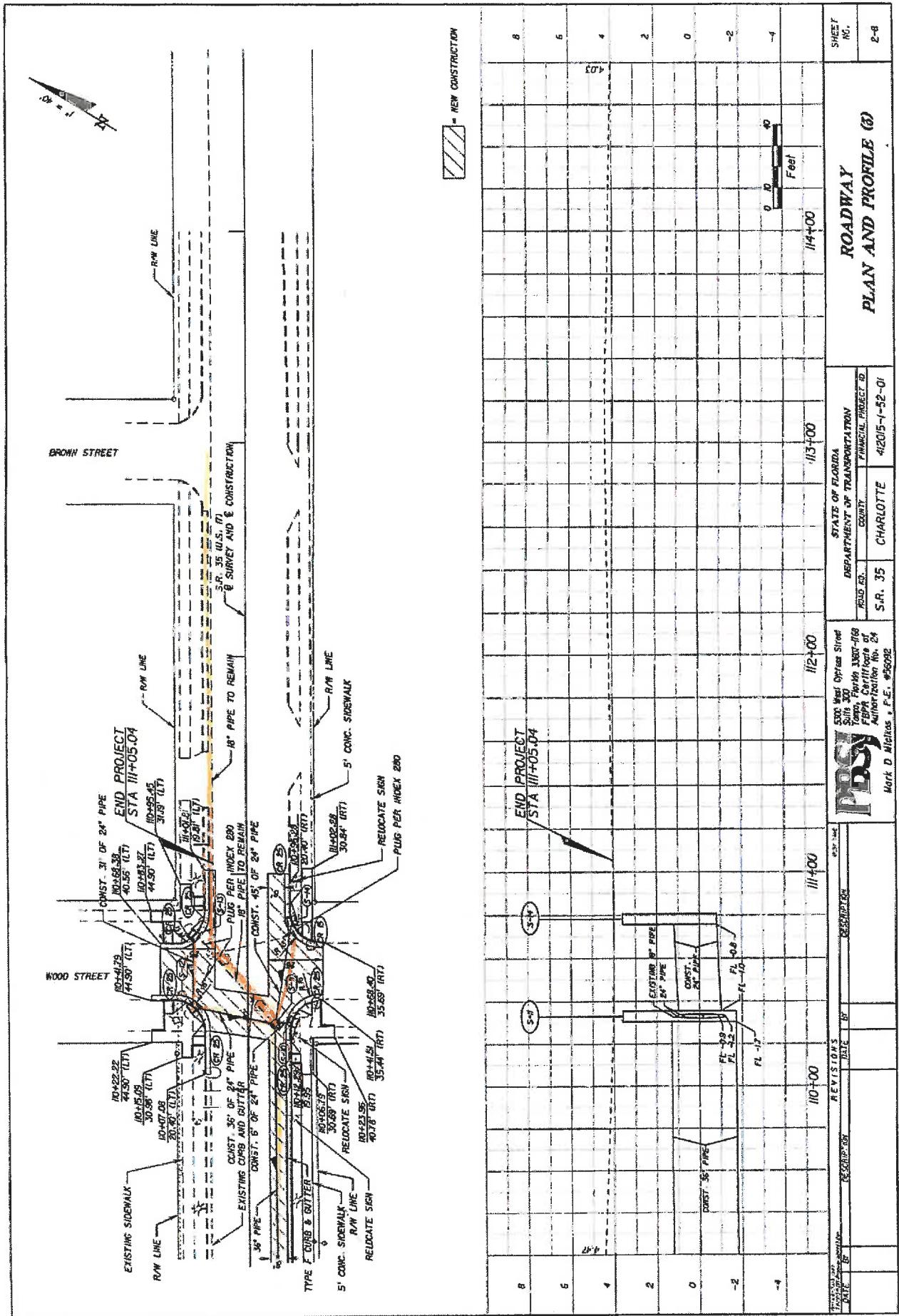
4. SPECIAL ATTENTION IS DIRECTED TO THE FACT THAT BURIED FIBER OPTIC SIGNAL WIRE IS LOCATED WITHIN THE LIMITS OF THIS PROJECT. EXTREME CAUTION WILL BE NECESSARY TO INSTALL THE STORMWATER MELTS AND SEEPES; THE CONTRACTOR SHALL HAND DIG IN THE VICINITY OF THE BURIED CONDUIT UNTIL IT IS SAFELY EXPOSED.

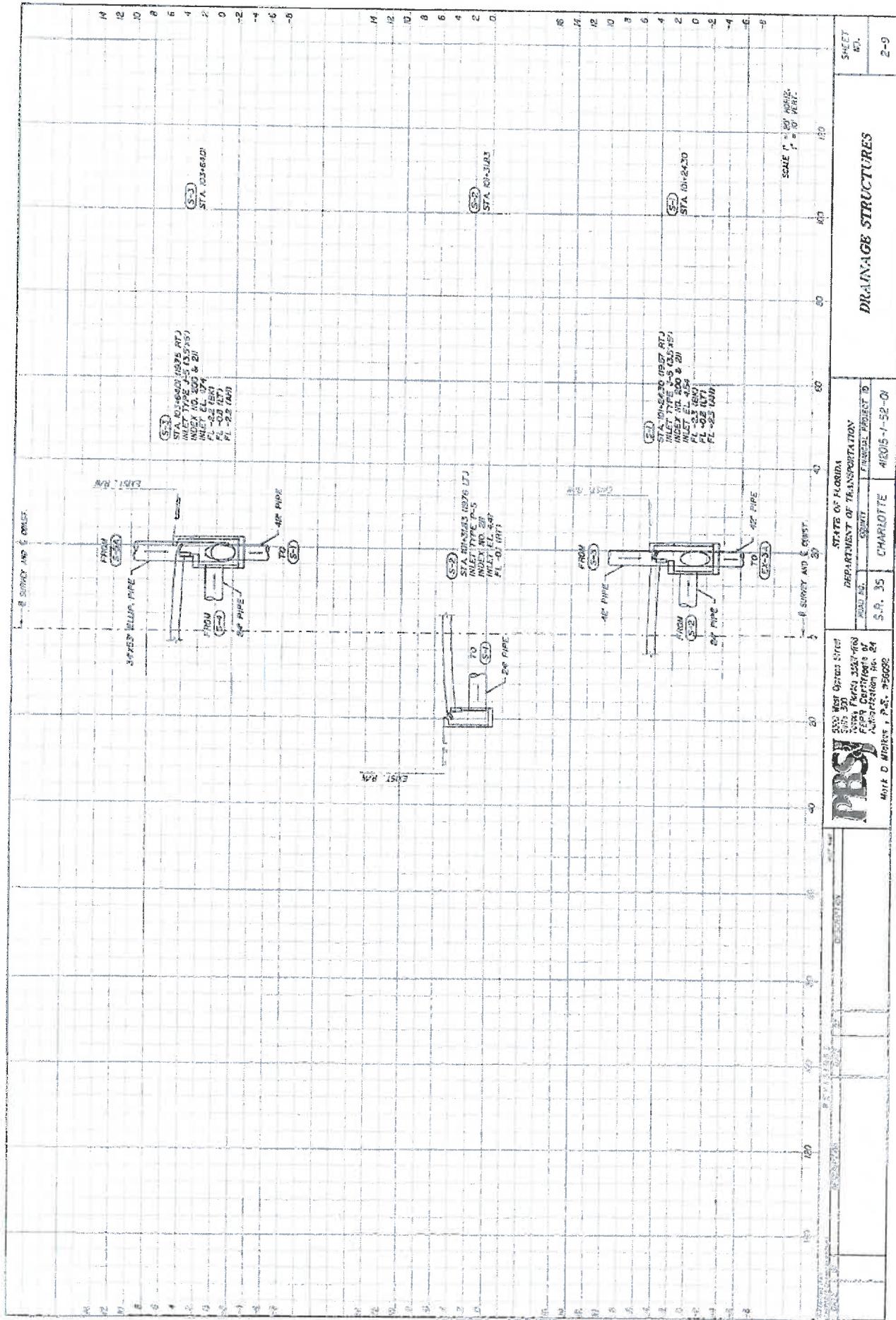


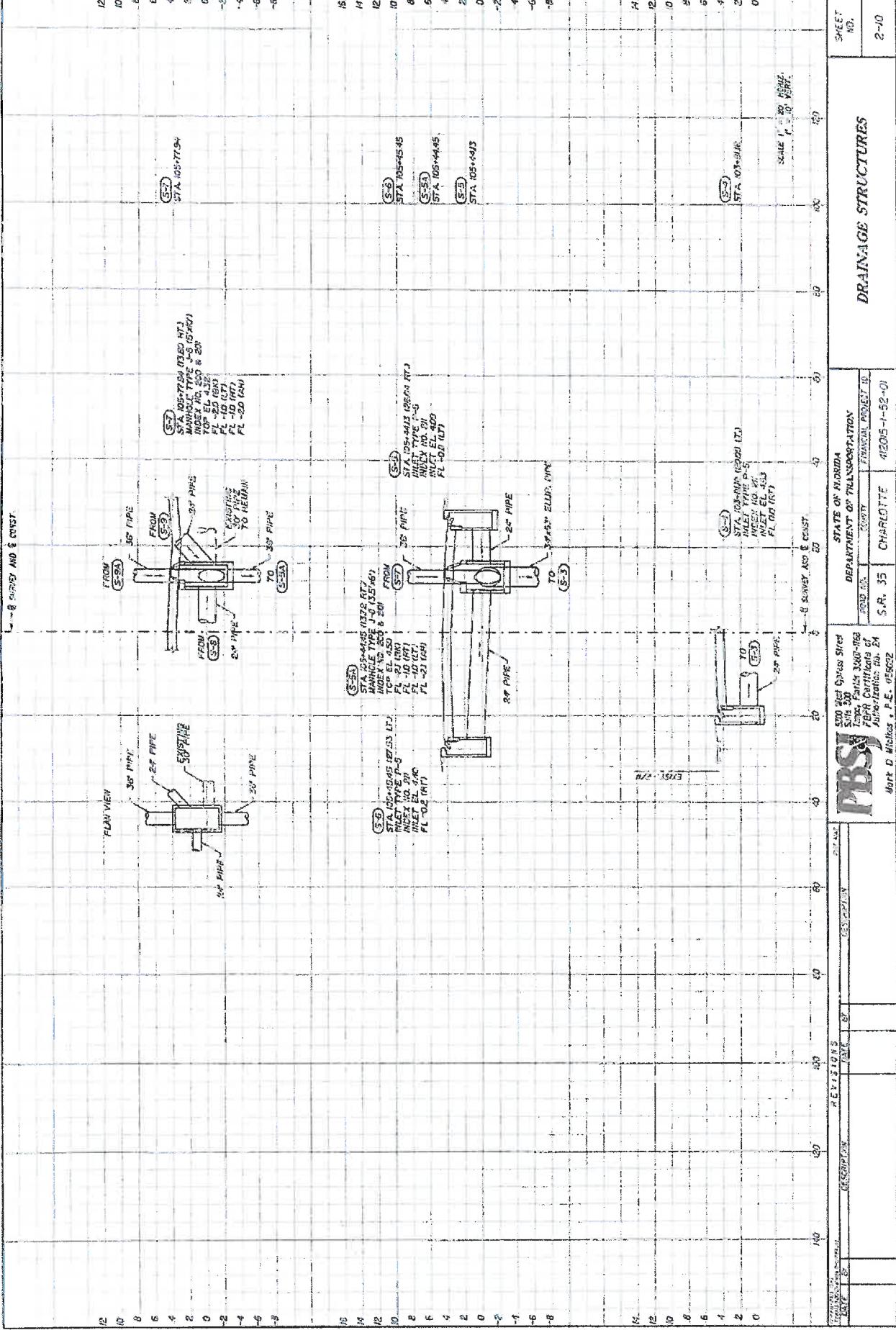
109



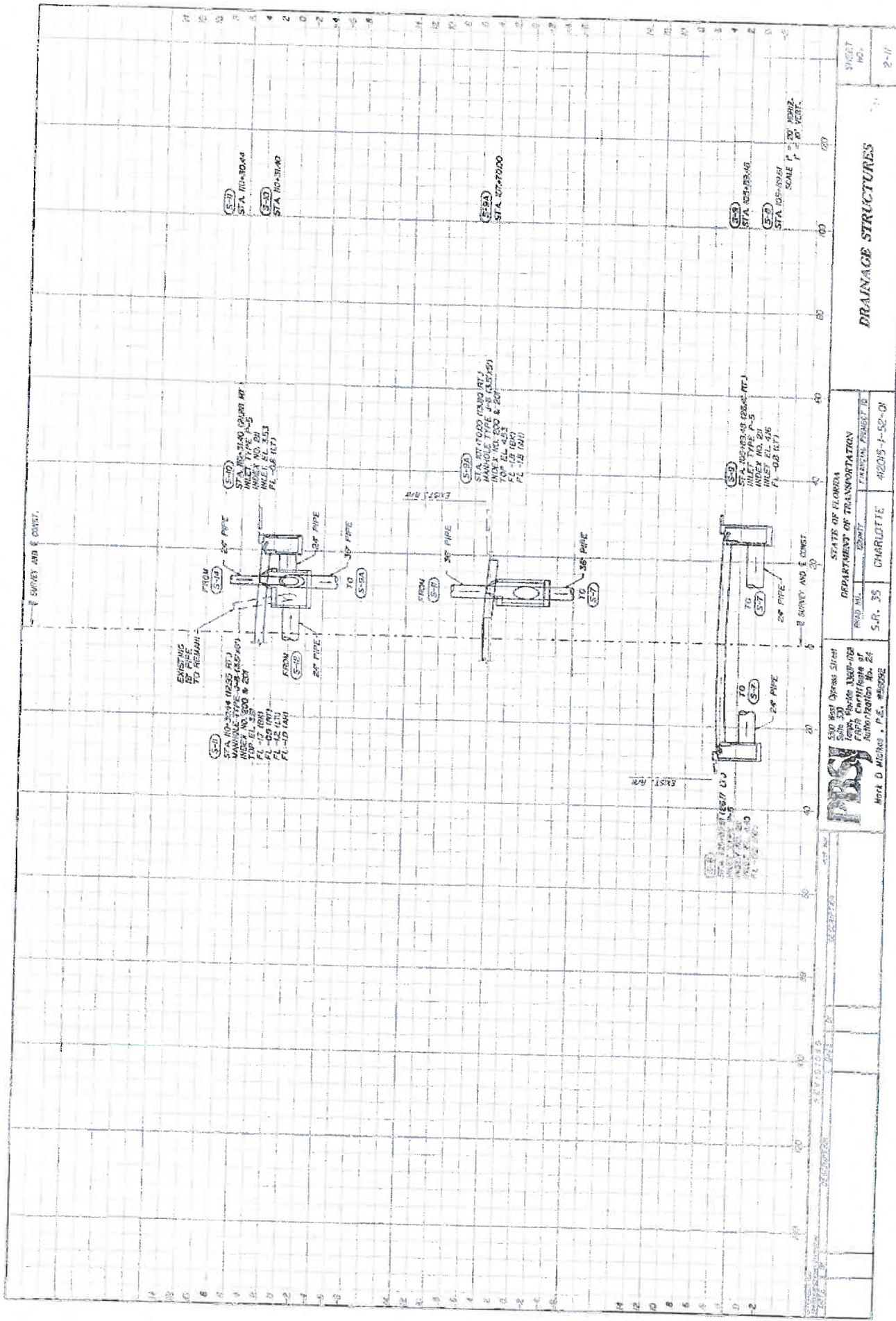




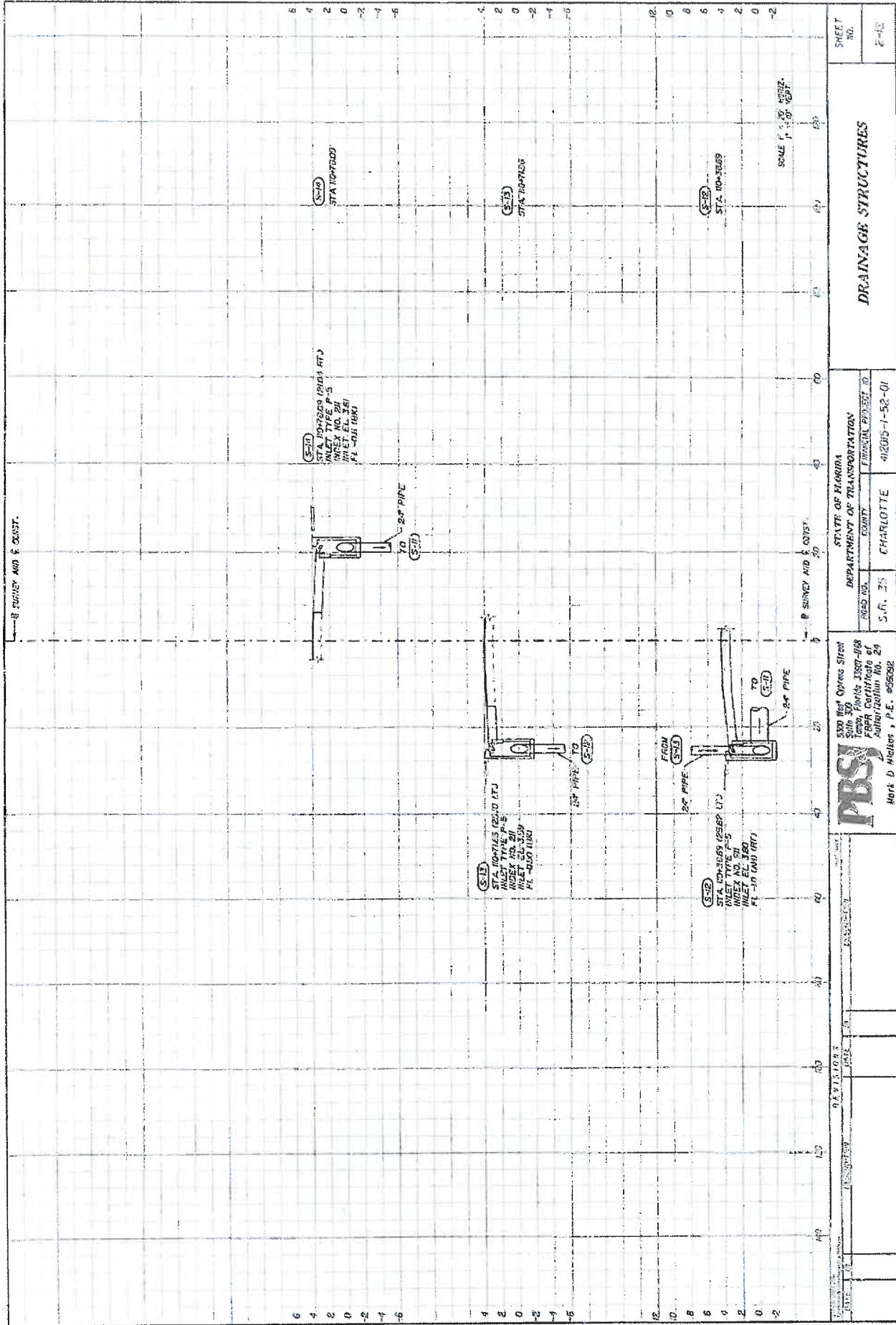




SOCIETY AND ECONOMY



→ E SURVEY AND CUST.



GENERAL NOTES:

1. WORK PERFORMED IN THE ROADWAY PLANS SECTION TWO SET SHALL BE COMPLETED PRIOR TO PLACING THE PRACTICUM COURSE AS DIRECTED IN THE PRACTICUM PLANS SECTION ONE SET.
2. CONSTRUCTION THAT REQUIRES TRAFFIC TO BE MAINTAINED ON ONE-LANE SHALL BE PERFORMED DURING PEAK HOURS, FOR LANE CLOSURE RESTRICTIONS, SEE SHEET XX OF THE ROADWAY PLANS SECTION ONE SET.
3. ALL DRIVERS OPERATING SHALL REMAIN IN SERVICE DURING CONSTRUCTION, THE CONTRACTOR SHALL PERFORM ALL CONSTRUCTION ACROSS DIVERTED TRAFFIC DURING PEAK HOURS.
4. CONSTRUCTION IN AREAS OF THE WORK ZONE THAT ARE NOT PROTECTED BY TEMPORARY GATEWAY WALLS SHALL BE PERFORMED WHILE ACHIEVING THE LENGTHS OF PEAK FREQURENTS IN ACCORDANCE WITH WHEY ECO.
5. ALL PHASES OF CONSTRUCTION SHALL MAINTAIN PEDESTRIAN CONTROL FOR CLOSURE OF SIDEWALKS, PER WHEY ECO.
6. A REDIRECTIVE CRASH CUSHION SHALL BE PLACED AT THE LEADING END OF EACH GATEWAY WALL SECTION IN THE DIRECTION OF APPROACHING TRAFFIC.
7. POSTED SPEED IS 35 MPH.

CONSTRUCTION PHASING PLAN

PHASE IA

THE PURPOSE OF THIS PHASE IS TO INSTALL THE MAINLINE STORMDRAIN SYSTEM, TYPE F CURB AND GUTTER, AND SIDEWALK ALONG THE RIGHT SIDE OF THE ROADWAY.

- STEP 1
SET UP LANE CLOSURE PER DETAIL 1 AND SUMMARY.
INSTALL MAINLINE STORMDRAIN SYSTEM, TYPE F CURB AND GUTTER, AND SIDEWALK ALONG THE RIGHT SIDE OF THE ROADWAY AT LOCATIONS WHERE LATERAL CROSSINGS ARE TO BE CONSTRUCTED, CONSTRUCT PARTIAL SIDEWALKS THAT WILL BE EXTENDED IN PHASE II.
- NOTE:
THE CONTRACTOR SHALL CONSTRUCT AND BACKFILL THE MAINLINE STORMDRAIN FROM STA 10+00 TO STA 10+35 WITHIN THE SAME WORK PERIOD. SIMILARLY, THE CONTRACTOR SHALL CONSTRUCT AND BACKFILL THE MAINLINE STORMDRAIN FROM STA 10+35 TO THE END OF THE PROJECT WITHIN THE SAME WORK PERIOD.

PHASE 1A

THE PURPOSE OF THIS PHASE IS TO CONSTRUCT THE MAINLINE STORMDRAIN ACROSS THE SIDE STREETS AT NEARBY STREETS, BURGESS STREET, AND WOOD STREET.

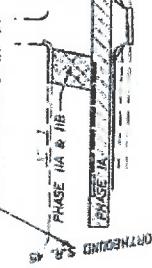
- STEP 1
SET UP LANE CLOSURE PER DETAIL 1 AND WOOD STREET PHASE 1A DETAIL.

WOOD STREET - DURING OFF PEAK HOURS SHIFT TRAFFIC TO SINGLE 12' LANE AND ONE LANE AT A TIME, INSTALL STORMDRAIN ACROSS CLOSED LANE.

BURGESS STREET - DIVISION OF PEAK HOURS SHIFT TRAFFIC TO SINGLE 12' LANE AND ONE LANE AT A TIME, INSTALL STORMDRAIN ACROSS CLOSED LANE.

- NOTE:
THE CONTRACTOR SHALL CONSTRUCT ONLY THAT AMOUNT OF PIPE THAT CAN BE BACKFILLED AND SAFELY RE-OPENED TO TRAFFIC WITHIN THE SAME WORK PERIOD.

PHASE 1B



PHASE 1A

THE PURPOSE OF THIS PHASE IS TO INSTALL THE RIGHT SIDE OF THE STORMDRAIN LATENT CROSSINGS.

- STEP 1
SET UP LANE CLOSURE PER DETAIL WHEN WITHIN 200' OF INTERSECTION TO CLOSE THE RIGHT LANE AND CENTER LANES ON SR 45 WEST OF NORTHBOUND SR 45. SHIFT TRAFFIC TO THE LEFT LANE CONFIGURATION SHOWN IN THE PHASE II TYPICAL SECTION.

- STEP 2
CONSTRUCT PIPE FROM THE DRAINS STRUCTURES ALONG THE MAINLINE STORMDRAIN (S-1, S-2, S-3, S-4, S-5, S-6, AND S-7) TO THE CENTERLINE AS SHOWN IN THE PHASE II TYPICAL SECTION.

- STEP 3
COMPLETE NEW CONSTRUCTION FOR TYPICAL SECTION ENCLOSING THE FRONTOUR COURSE.

- NOTE:
THE CONTRACTOR SHALL CONSTRUCT ONLY THAT AMOUNT OF PIPE THAT CAN BE BACKFILLED AND SAFELY RE-OPENED TO TRAFFIC WITHIN THE SAME WORK PERIOD.

PHASE 1B

THE PURPOSE OF THIS PHASE IS TO INSTALL THE LEFT SIDE OF THE STORMDRAIN LATENT CROSSINGS.

- STEP 1
SET UP LANE CLOSURE PER DETAIL WHEN WITHIN 200' OF INTERSECTION TO CLOSE THE LEFT LANE AND CENTER LANES ON SR 45 WEST OF NORTHBOUND SR 45. SHIFT TRAFFIC TO THE RIGHT LANE CONFIGURATION SHOWN IN THE PHASE II TYPICAL SECTION.

- STEP 2
CONSTRUCT PIPE FROM THE CENTERLINE TO THE DRAINS STRUCTURES ALONG THE LEFT SIDE OF THE RAILS (S-8, S-9, S-10, S-11, AND S-12) AS SHOWN IN THE PHASE II TYPICAL SECTION.

- NOTE:
THE CONTRACTOR SHALL CONSTRUCT ONLY THAT AMOUNT OF PIPE THAT CAN BE BACKFILLED AND SAFELY RE-OPENED TO TRAFFIC WITHIN THE SAME WORK PERIOD.

PHASE 1C

COMPLETE WALKING AND RESURFACING AND FRICITION COARSE APPLICATION PER PHASING ON ROADWAY PLANS SECTION ONE, SEE SHEET NUMBER XX.

PHASE II

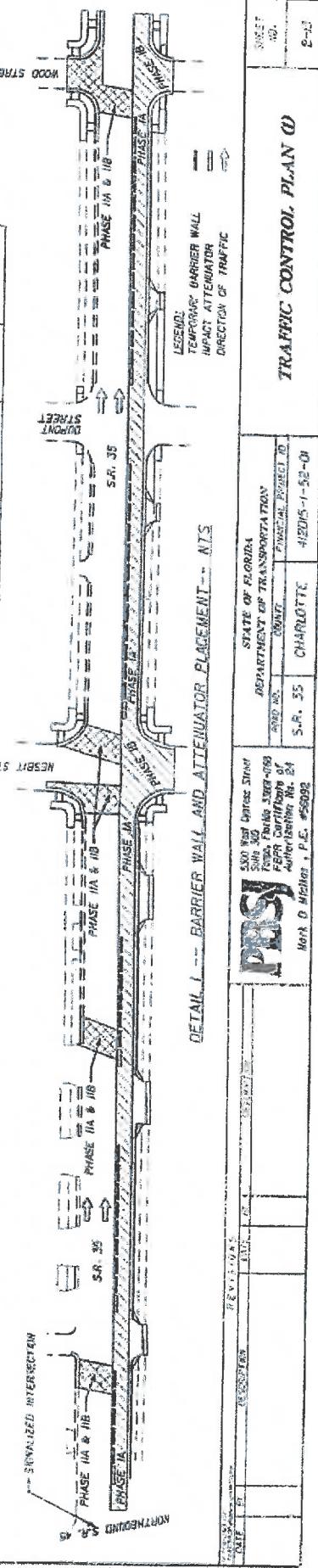
THE PURPOSE OF THIS PHASE IS TO COMPLETE THE MAINLINE STORMDRAIN SYSTEM, SECTION ONE, AND SIDEWALKS, PER WHEY ECO.

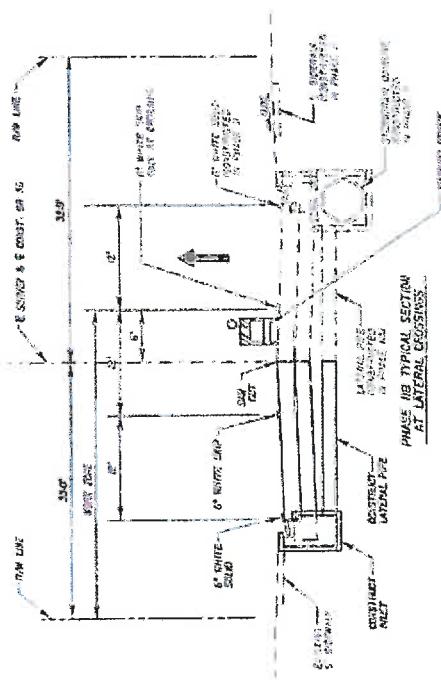
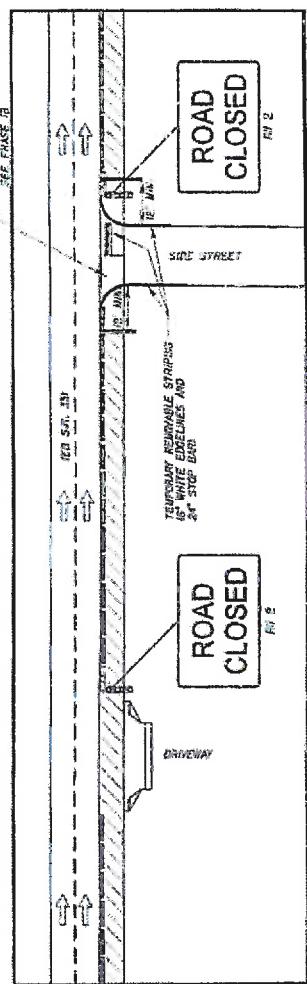
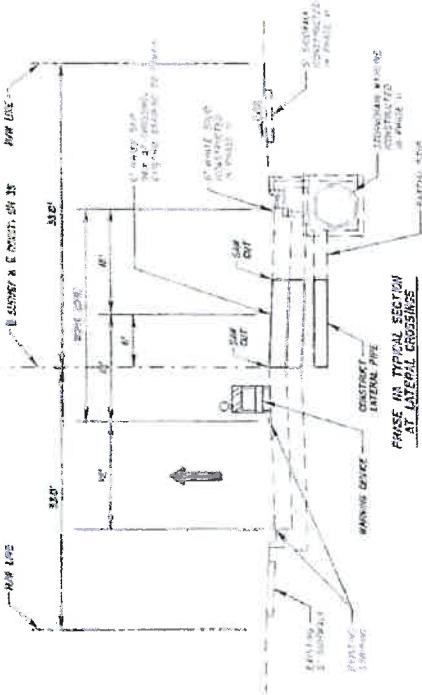
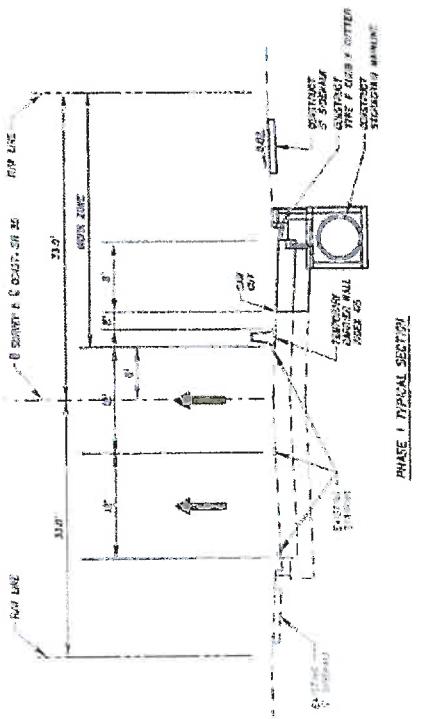
- STEP 1
SET UP LANE CLOSURE PER DETAIL 2 AND SUMMARY.

- STEP 2
INSTALL MAINLINE STORMDRAIN SYSTEM, TYPE F CURB AND GUTTER, AND SIDEWALK ALONG THE RIGHT SIDE OF THE ROADWAY AT LOCATIONS WHERE LATERAL CROSSINGS ARE TO BE CONSTRUCTED, CONSTRUCT PARTIAL SIDEWALKS THAT WILL BE EXTENDED IN PHASE III.

- NOTE:
THE CONTRACTOR SHALL CONSTRUCT AND BACKFILL THE MAINLINE STORMDRAIN FROM STA 10+00 AND BACKFILL THE STORM DRAIN FROM STA 10+35 TO THE END OF THE PROJECT WITHIN THE SAME WORK PERIOD.

SUMMARY OF TEMPORARY BARRIER WALL AND ATTENUATORS			
STATION TO STATION	LENGTH	ATTENUATORS	
STA 100+45.00 TO STA 100+55.00	50 FEET	1	
STA 100+45.00 TO STA 100+60.00	100 FEET	1	
STA 105+45.00 TO STA 105+60.00	55 FEET	1	
STA 105+60.00 TO STA 107+00.00	160 FEET	1	
STA 108+55.00 TO STA 109+00.00	165 FEET	1	

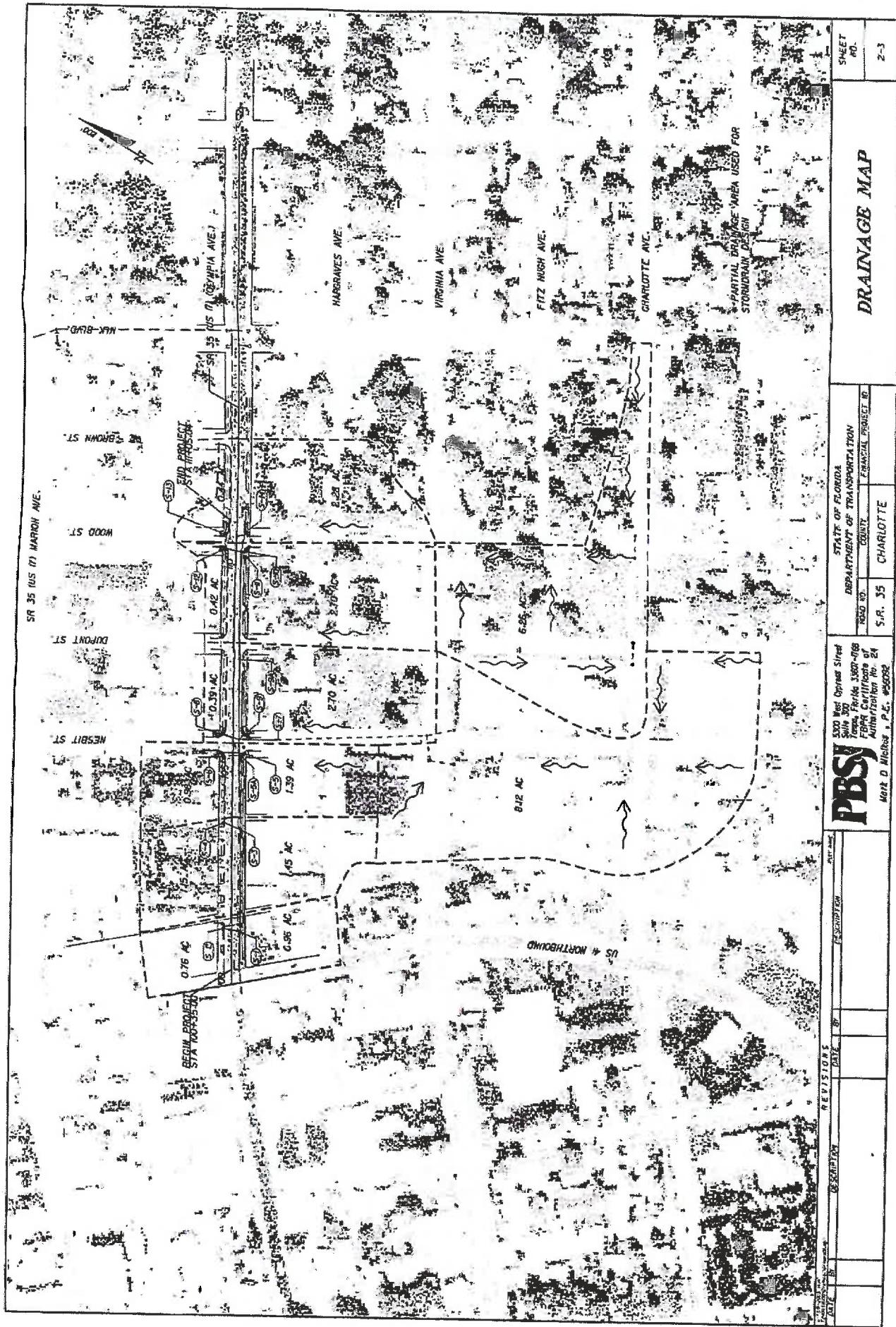




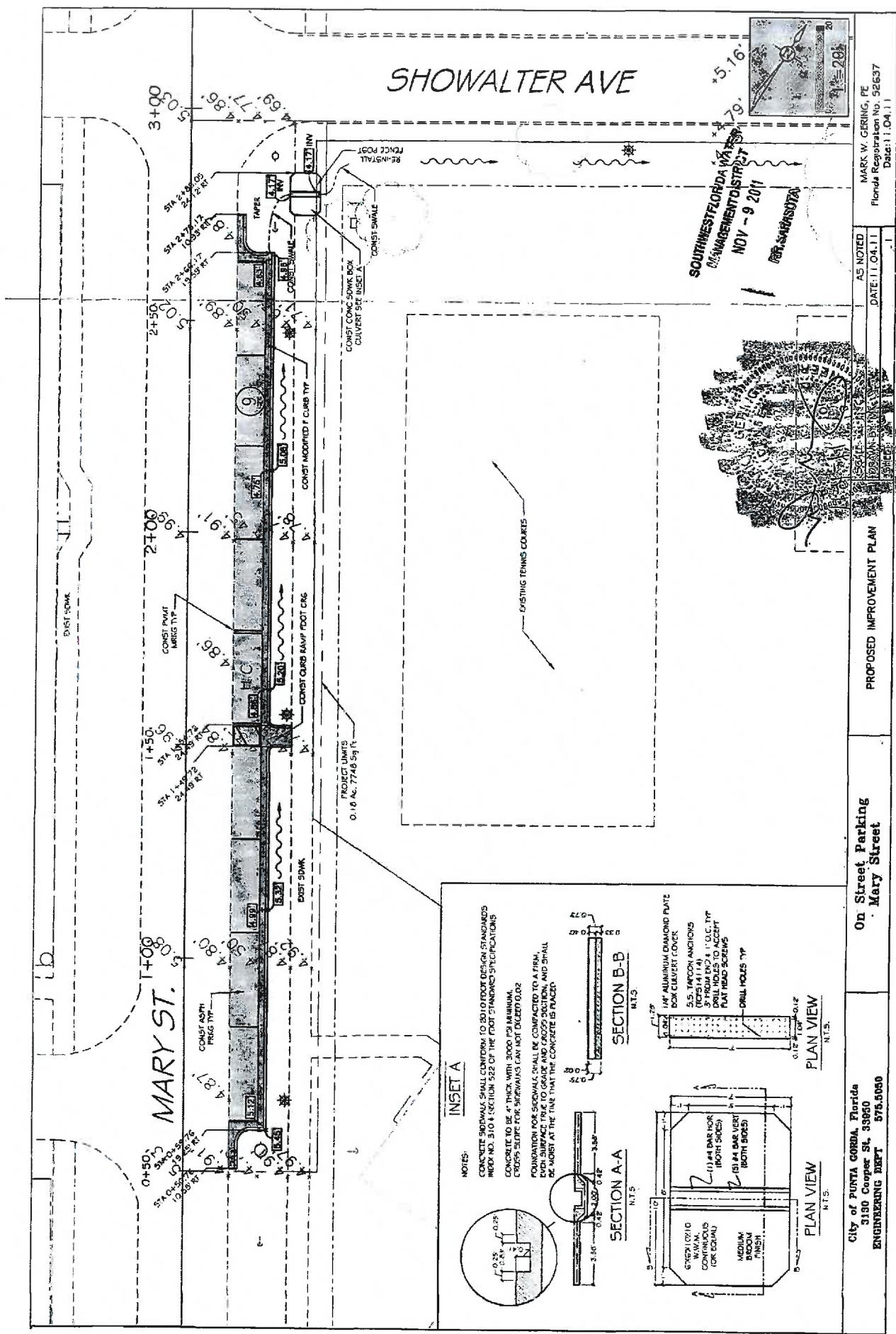
DETAIL 2 -- TYPICAL DRIVEAWAY AND SIDE STREET OPENINGS WITHIN THE WORK ZONE
PHASE I CONSTRUCTION

PBSI		STATE OF FLORIDA		DEPARTMENT OF TRANSPORTATION		TRAFFIC CONTROL PLAN (2)	
FILE NUMBER	DATE	FILE NUMBER	DATE	FILE NUMBER	DATE	FILE NUMBER	DATE
2-14		2-14		2-14		2-14	





SHOWALTER AVE



CITY OF PUNTA GORDA

MARTIN LUTHER KING JR. BLVD.
Phase II & III
SEC. 6 TWP. 41S RGE 23E

PROJECT
LOCATION



CITY STAFF
LAURENCE A. BURMAN, Mayor
ALBERT GOLDBERG, Vice Mayor
CHARLES WALLACE
MARION S. SMITH-MCGINNIS
BILL AUBREY

CITY MANAGER
CHRISTOPHER KORKE

PUBLIC WORKS
ROBERT C. KEENEY, Director
MARK SPRING, PE, City Engineer

INDEX OF DRAWINGS	
TYPE	TRUE SHEET INDEX OF DRAWINGS
PG. 1	ROAD & DRAINAGE
PG. 2	CURRENT CONDITIONS
GN. 1	GENERAL NOTES / EROSION CONTROL
GP. 1	CONSTRUCTION DETAILS
TOM. 1	DIMENSIONS

CITY OF PUNTA GORDA
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
750 W 7TH, ESPLANADE
PUNTA GORDA, FLORIDA 33950
941-575-5256



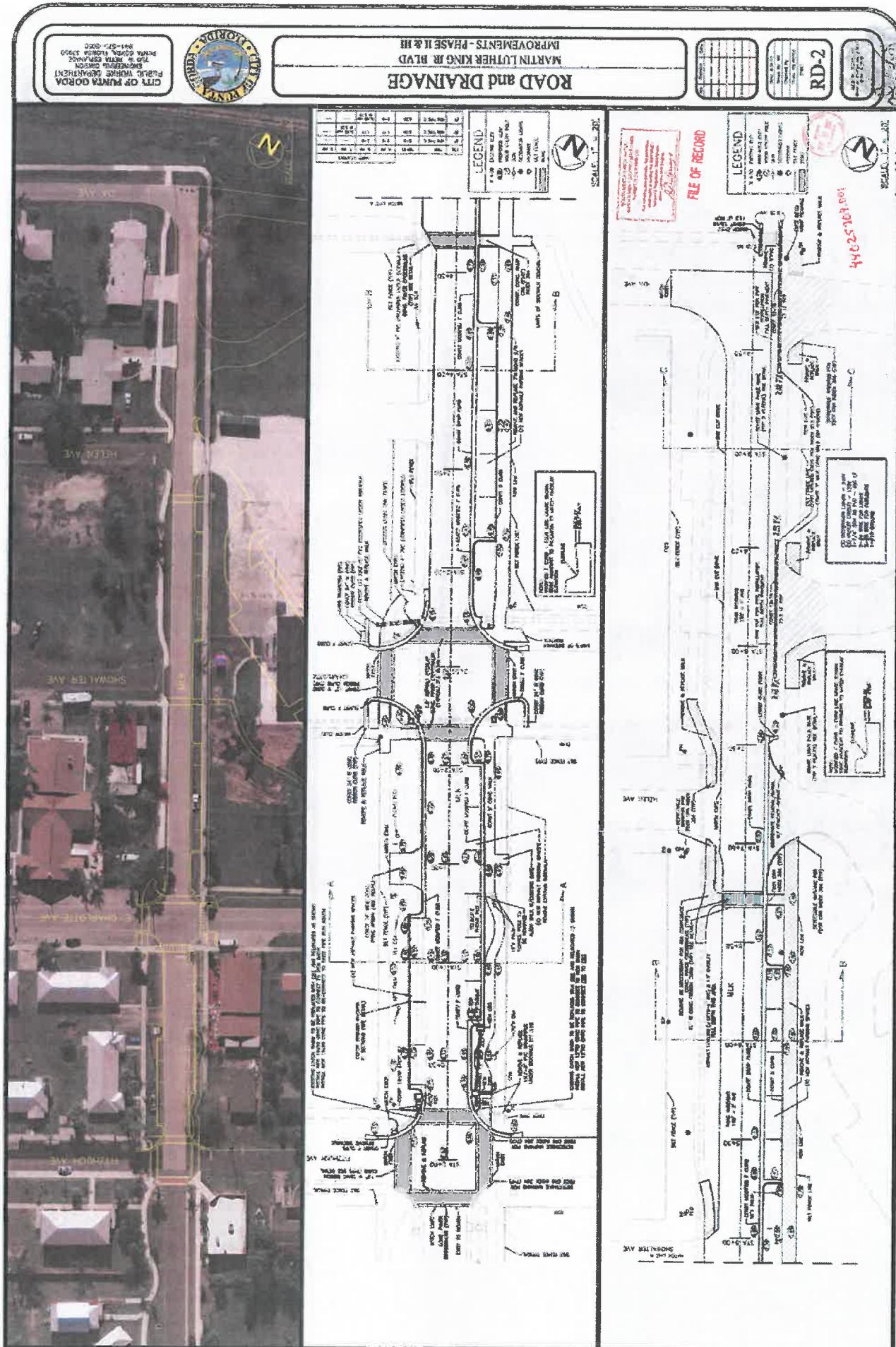
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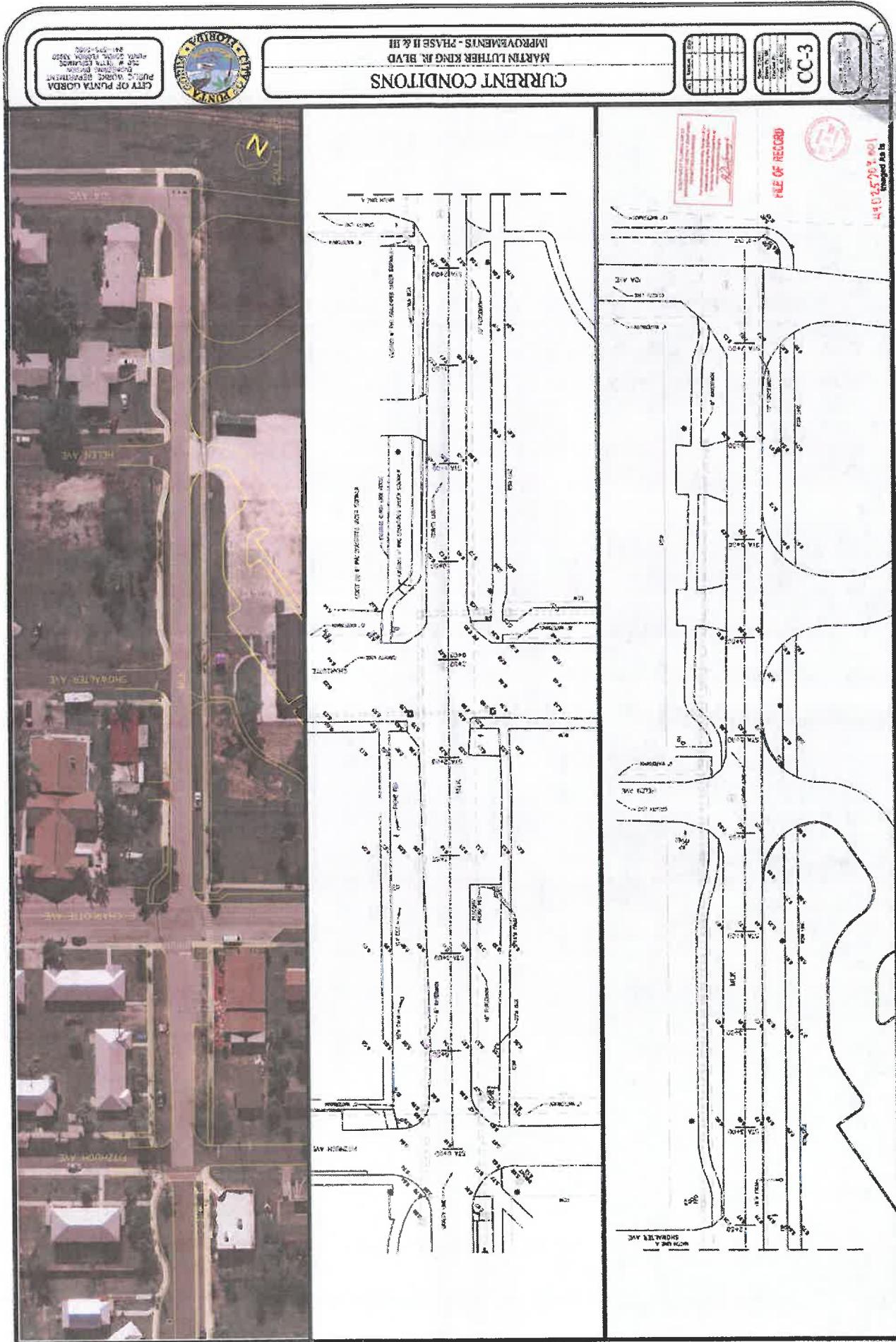
Scanned As Is



FILE OF RECORD









GENERAL NOTES / EROSION CONTROL

560-512-5959
1000 N. BROAD ST., SUITE 300
PHILADELPHIA, PA. 19101
FAX: 215-546-2224

MARTIN LUTHER KING JR BLVD IMPROVEMENTS - PHASE II & III

三



FILE OF RECORD

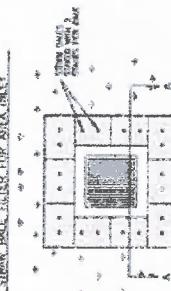
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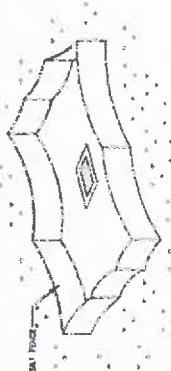


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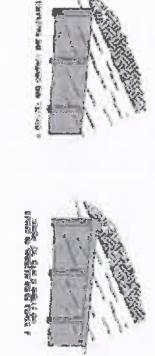
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ALL WHICH IS TO BE COMPUTED IN ACCORDANCE WITH ALL LOCAL, COUNTY, STATE AND FEDERAL REQUIREMENTS AND
REGULATIONS.

SECTION A-A (ELEVATION)

99

ALL CIRCLES & CURE & CURVING TYPES PER INDEX PAGE FIGS



SECTION A-A (PROPOSED)

99



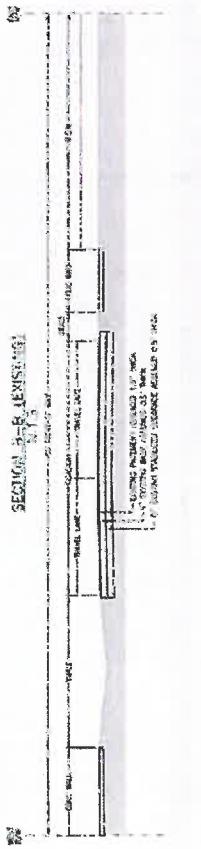
SECTION B-B (ELEVATION)

99



SECTION B-B (PROPOSED)

99



SECTION C-C (PROPOSED)

99



SECTION D-D (ELEVATION)

99



SECTION D-D (PROPOSED)

99



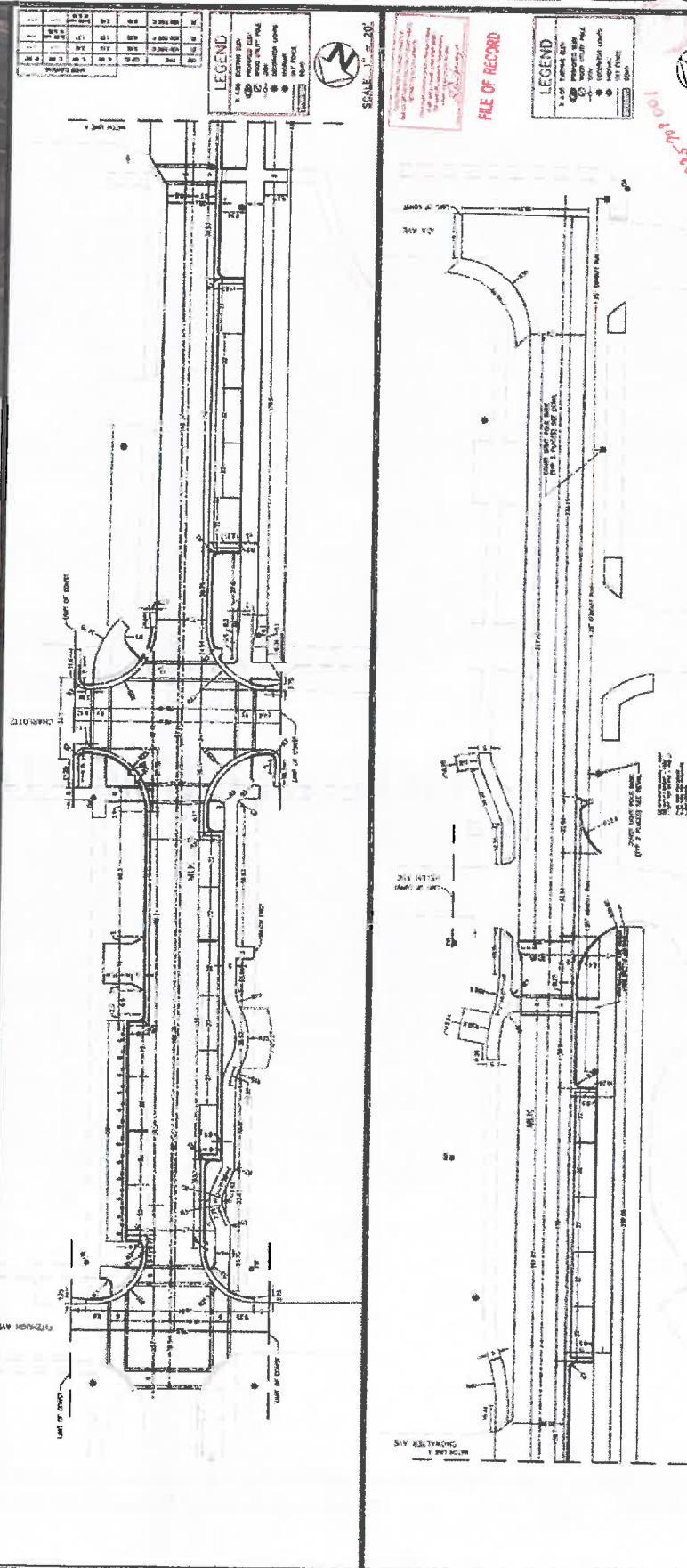
CONSTRUCTION DETAILS

MARTIN LUTHER KING JR BLVD
IMPROVEMENTS - PHASE II & IIICITY OF EL CAJON
GENERAL PLANNING & DEVELOPMENT
DEPARTMENT
1440 El Cajon Boulevard
El Cajon, California 92020
(619) 441-2525FILE OF RECORD
10/1/2010

CD-5

Filing Fee

\$150.00



APPENDIX B

FIELD INVESTIGATION



PROJECT NUMBER		DATE		CITY OF PUNTA GORDA	
7319 Merchant Court, Suite B		Sarasota FL 34204		CLIPPER	
Phone: (941) 366-1818		Fax: (941) 366-1819		PROJECT NUMBER	
Email: info@solition.com		Solition Services Inc.		PROJ. NO.	
				PTG001	
				OWNER	
				WIC	
				DATE	
				OCT 2018	
				SCALE	
				1" = 50'	
				DRAFTS	
				CA-02	
				TRADE	
				2 OF 5	

MATCH LINE - SEE SHEET CA-03



MATCH LINE - SEE SHEET CA-04

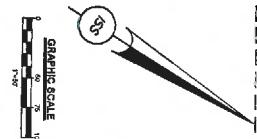


MATCH LINE - SEE SHEET CA-02



PROJECT NO.: PTG001 DATE: OCT 2018 SCALE: 1" = 50' SHEET NO.: CA-04 PAGE NO.: 4 OF 5	DRAWING TITLE: AERIAL MAP QUADRANT THREE HISTORIC DISTRICT INFRASTRUCTURE INITIATIVE ENGINEERING ANALYSIS CUSTOMER: CITY OF PUNTA GORDA	ISS INFRASTRUCTURE SOLUTION SERVICES 7319 Merchant Court, Suite B Sarasota, FL 34240 Phone: (321) 526-0813 www.infrastructuress.com	<table border="1"><tr><td> </td><td> </td></tr><tr><td>3</td><td>—</td></tr><tr><td>2</td><td>—</td></tr><tr><td>1</td><td>—</td></tr><tr><td>NO.</td><td>DATE</td><td>DESCRIPTION</td><td>REVISIONS</td></tr></table>			3	—	2	—	1	—	NO.	DATE	DESCRIPTION	REVISIONS
3	—														
2	—														
1	—														
NO.	DATE	DESCRIPTION	REVISIONS												

MATCH LINE - SEE SHEET CA-04

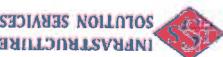


DRAWING TITLE:	AERIAL MAP QUADRANT FOUR HISTORIC DISTRICT INFRASTRUCTURE INITIATIVE ENGINEERING ANALYSIS
PROJECT NO.:	PI-0001
PROJ. NAME:	MMW
DATE:	OCT 2018
SCAL:	WC
SCALE:	1" = 50'
REVISION:	C
REVISION:	CA-05
REVISION:	TEZAR
REVISION:	5 OF 5

	INFRASTRUCTURE SOLUTION SERVICES
7319 Merchant Court, Suite B Sarasota, FL 34240 Phone: (941) 526-0813 www.infrastructuress.com	

NO.	DATE	DESCRIPTION	REVISIONS
1			
2			
3			





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Existing Complicant Slidewalk Ramps
Historic District Infrastructure Initiative
Slidewalk, Drainage, and Lighting Engineering Analysis
City of Punta Gorda, Florida

2







APPENDIX C

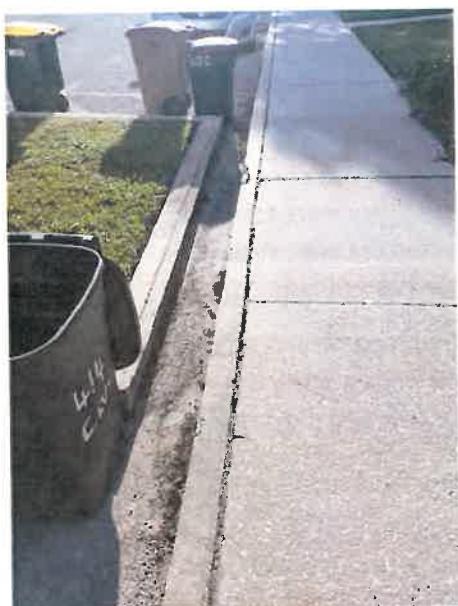
EXISTING CONDITIONS

PHOTOGRAPHS

REPRESENTATIVE PHOTOGRAPHS

The following photographs are presented as a general representation of the conditions observed during data acquisition. These photographs are compiled for informational purposes. They were taken of existing amenities, including all failing accessible ramps, sidewalk, each collected drainage structure; along with representative photos of the general corridor, drainage, and lighting conditions.

Georeferenced data was collected of existing accessible ramps, drainage infrastructure, and lighting facilities. Photographs were cross referenced to the georeferenced data as provided to the City in GIS format. The photographs are not individually entitled since they are specifically linked directly to the GIS database for the associated entity they represent and should be accessed as part of the GIS function.





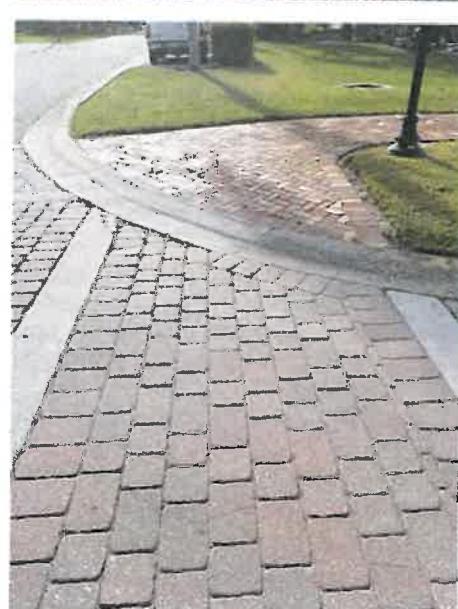
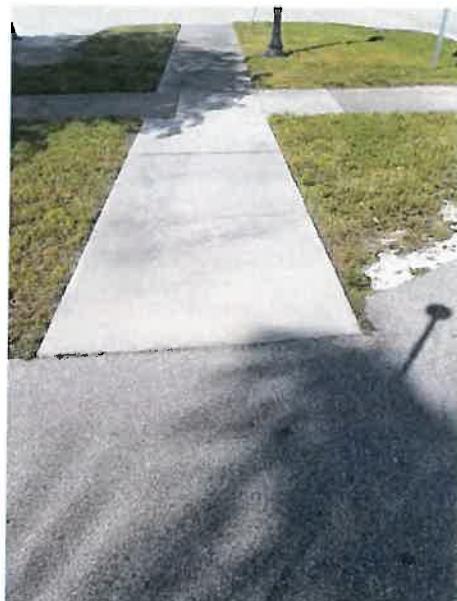














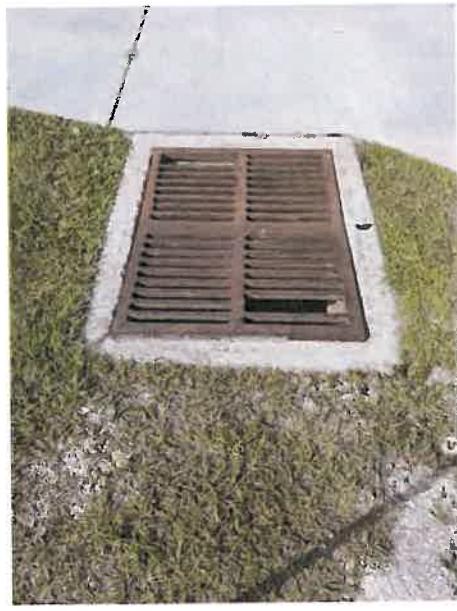




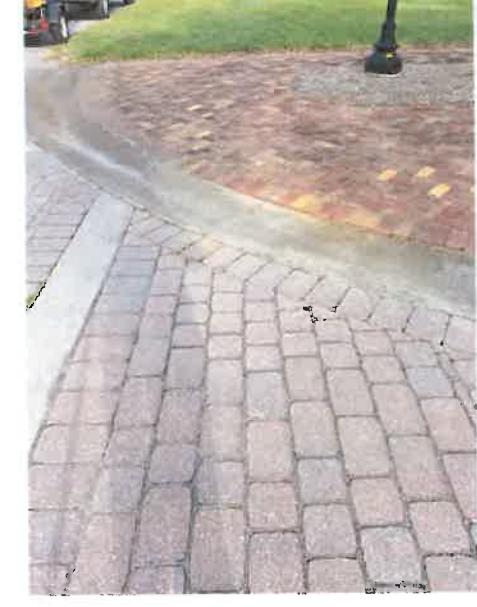
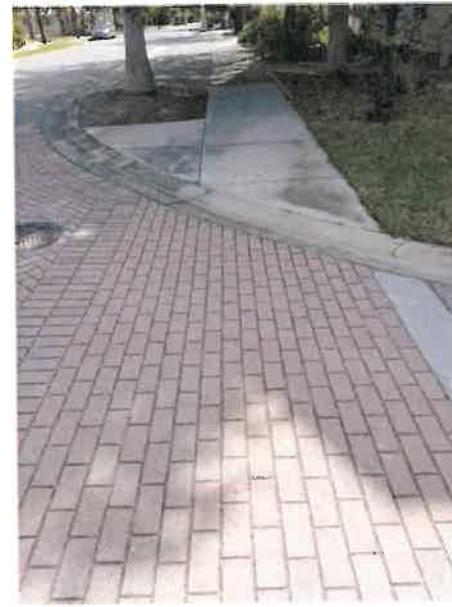








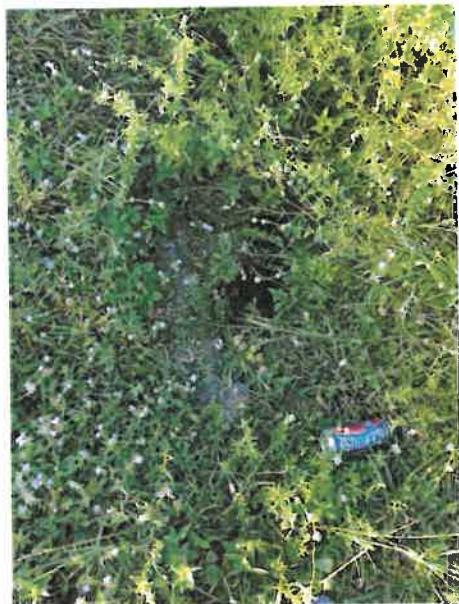








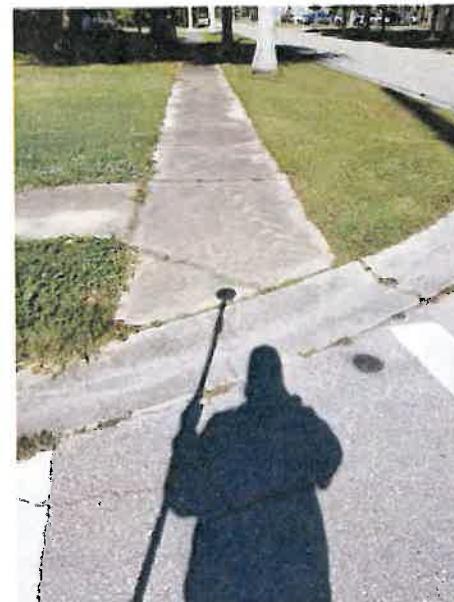












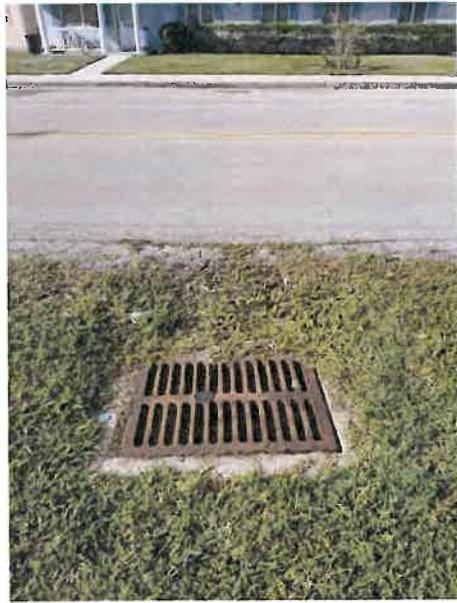


















APPENDIX D

NEIGHBOORHOOD MEETING

INPUT TABULATION



INFRASTRUCTURE SOLUTION SERVICES

U2017102/B2017155/SA1

ENGINEERING ANALYSIS - HISTORIC DISTRICT INFRASTRUCTURE INITIATIVE

2/12/18 Community Meeting Quantitative and Qualitative

"THE INFLUENCE OF DEMOGRAPHIC AND ECONOMIC AND DATA CONNECTIONS ON TABULATION"

ADDRESS NO.	STREET	DISCIPLINE	FORM	MAP	Quad.	COMMENT
	Hargreaves	Other	X			Might add treescaping to reduce glare from Dr's office on Hargreaves
525	Ida	Other	X			Water meter cover missing
	Other	X				4-way stop needed at Charlotte and Virginia
	Other	X				The entire area should include all of Carmelita St and Berky St.
	Other	X				4-way stop needed at MLK and Virginia
	Other	X				"Streetscaping a must"
	Other	X				Decorative palm trees; Historic Markers; Streetscape trees; facade improvements
	Other	X				Chastain between Marion & Olympia is very rough w/pot holes; needs to be bricked in like other streets around it.
425	Dupont	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Needed for Connectivity - between Charlotte and Virginia (east)
	Dupont	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Needed for Connectivity - between Charlotte and Virginia (east)
E. Charlotte	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Ramps Needed - NE quadrant of Dupont/Charlotte	
E. Charlotte	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Ramps Needed - NW quadrant of Wood/Charlotte	
E. Charlotte	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Ramps Needed - NE quadrant of Wood/Charlotte	
E. Virginia	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Ramps Needed - NE quadrant of Dupont/Charlotte	
E. Virginia	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Ramps Needed - NW quadrant of Dupont/Charlotte	
E. Virginia	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Ramps Needed - NW quadrant of Dupont/Charlotte	
E. Virginia	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Ramps Needed - NE quadrant of Dupont/Virginia	
E. Virginia	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Ramps Needed - NW quadrant of Wood/Charlotte	
E. Virginia	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Ramps Needed - NE quadrant of Dupont/Virginia	
E. Virginia	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Ramps Needed - SW quadrant of Dupont/Virginia	
E. Virginia	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Ramps Needed - SE quadrant of Dupont/Virginia	
E. Virginia	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Ramps Needed - between Dupont and Wood (north)	
E. Virginia	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Ramps Needed - between Dupont and Wood (south)	
E. Virginia	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Ramps Needed - NW quadrant of Wood/Virginia	
E. Virginia	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Ramps Needed - NE quadrant of Wood/Virginia	
E. Virginia	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Ramps Needed - SW quadrant of Wood/Virginia	
E. Virginia	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Ramps Needed - SE quadrant of Wood/Virginia	
E. Virginia	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Ramps Needed for Connectivity - between Wood and MLK (south)	
305	Fitzlugh	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Needed for Connectivity
319	Fitzlugh	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Needed for Connectivity
331	Fitzlugh	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Needed for Connectivity
Fitzlugh	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Ramps Needed - NE quadrant of Wood/Fitzlugh	
	Fitzlugh	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Ramps Needed - SE quadrant of Wood/Fitzlugh
323	Hargreaves	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Needed for Connectivity
325	Hargreaves	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Needed for Connectivity
409	Hargreaves	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Needed for Connectivity - north side
409	Hargreaves	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Needed for Connectivity - south side
423	Hargreaves	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Needed for Connectivity - north side

ADDRESS NO.	STREET	DISCIPLINE	FORM	MAP Quad.	MAP Quad.	COMMENT
423	Hargreaves	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Needed for Connectivity - south side
	Wood	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Needed for Connectivity - between Charlotte and Virginia (east)
	Wood	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Needed for Connectivity - between Charlotte and Virginia (east)
	Wood	Sidewalk and ADA Ramps	X	NW	X	Sidewalk Needed for Connectivity - between Charlotte and Virginia (east)
* 550	Mary	Sidewalk and ADA Ramps	X	SE	X	Like sidewalk at community Center
* 525	Wood	Sidewalk and ADA Ramps	X	SW	X	Sidewalk Needed for Connectivity
402	Dupont	Sidewalk and ADA Ramps	X			Finish sidewalk between E. Virginia and Wood; a ramp on this corner and across street
	Hargreaves	Sidewalk and ADA Ramps	X			Add sidewalk along Hargreaves toward Mary.
	Nesbit	Sidewalk and ADA Ramps	X			Parking on Nesbit (Harborwalk Entrance) can't see to exit
	Nesbit	Sidewalk and ADA Ramps	X			Sidewalk needed from Olympia to Pavilions
		Sidewalk and ADA Ramps	X			Sidewalk needs to be extended in NE Quadrant
		Sidewalk and ADA Ramps	X			Sidewalk needed from Milius to Baker (street not mentioned; possibly Ida)
		Sidewalk and ADA Ramps	X			Sidewalk ramps needed at corner of Olympia and Chasteen
		Sidewalk and ADA Ramps	X			Sidewalks needed along Berry south of Marion
		Sidewalk and ADA Ramps	X			Area of observed flooding - in R/W
		Sidewalk and ADA Ramps	X			Area of observed flooding - in R/W
		Sidewalk and ADA Ramps	X			Area of observed flooding - on vacant lot
						Area of observed flooding - on lot
						Area of observed flooding - on lot
						Area of observed flooding - on lot
						Area of observed flooding - on lot
						Area of observed flooding - on lot
						Area of observed flooding - on lot
						Area of observed flooding - on lot
						Area of observed flooding - on lot
						Area of observed flooding - on lot
						The water does not drain, they removed the culvert from the driveway.
						Area of observed flooding - in R/W
						Area of observed flooding - on lot
						Area of observed flooding - in R/W
						Area of observed flooding - on lot
						Area of observed flooding - on lot
						Area of observed flooding - on lot
						Area of observed flooding - on lot
						Roadside ditches are not an acceptable drainage method.
						The church driveway and yard floods
						Flooding has been observed on Gilchrist St. in swales and yards
						Since 325 Hargreaves parking went in flooding occurs toward 311. 315 Hargreaves is flooding
						Roadside ditches are acceptable drainage method.

ADDRESS NO.	STREET	DISCIPLINE	FORM	MAP	Quad.	COMMENT
	Stormwater System	X				Yard floods
	Stormwater System	X				Alley between Helen and Ida floods
	Stormwater System	X				Roadside ditches are not an acceptable drainage method.
	Stormwater System	X				Berry Street flooding constantly, redo the water lines/drainage and also smooth out the bricks
	Stormwater System	X				Flooding on Berry, Dolly, Chastain, Marion, and W. Reitta
515	E. Virginia	Street Lighting	X	NE	X	Inadequate Lighting - (south)
517	E. Virginia	Street Lighting	X	NE	X	Inadequate Lighting - (south)
402	Dupont	Street Lighting	X	NW	X	Inadequate Lighting - (south)
414	Dupont	Street Lighting	X	NW	X	Inadequate Lighting - (east)
425	Dupont	Street Lighting	X	NW	X	Inadequate Lighting - (east)
Dupont	Street Lighting	X	NW	X	Inadequate Lighting - (east)	
E. Charlotte	Street Lighting	X	NW	X	Inadequate Lighting - between Charlotte and Virginia (east)	
301	E. Virginia	Street Lighting	X	NW	X	Inadequate Lighting - between Dupont and Wood (north)
301	E. Virginia	Street Lighting	X	NW	X	Inadequate Lighting - (south)
307	E. Virginia	Street Lighting	X	NW	X	Inadequate Lighting - (east)
308	E. Virginia	Street Lighting	X	NW	X	Inadequate Lighting - (south)
E. Virginia	Street Lighting	X	NW	X	Inadequate Lighting - (north)	
E. Virginia	Street Lighting	X	NW	X	Inadequate Lighting - between Dupont and Wood (north)	
311	Hargreaves	Street Lighting	X	NW	X	Inadequate Lighting - between Dupont and Wood (south)
323	Hargreaves	Street Lighting	X	NW	X	Lighting too Bright - north side of R/W
417	Hargreaves	Street Lighting	X	NW	X	Lighting too Bright - north side of R/W
417	Hargreaves	Street Lighting	X	NW	X	Inadequate Lighting - (north)
414	Helen	Street Lighting	X	SW	X	Inadequate Lighting - (south)
402	Ida	Street Lighting	X	SW	X	Inadequate Lighting - (north)
418	Ida	Street Lighting	X	SW	X	Inadequate Lighting - (south)
439	Ida	Street Lighting	X	SW	X	Inadequate Lighting - (south)
525	Wood	Street Lighting	X	SW	X	Inadequate Lighting - south side of alley
402	Dupont	Street Lighting	X			All around the church and streets are inadequately lighted
Gilchrist	Street Lighting	X				Lighting is too bright near pickleball courts and Gilchrist Park
Gilchrist	Street Lighting	X				Damaged lighting needs repair on Gilchrist St.
Gilchrist	Street Lighting	X				Lighting is too bright at Gilchrist Park
Gilchrist	Street Lighting	X				Gilchrist Park lighting too bright
Ida	Street Lighting	X				All of Ida
515	Milus	Street Lighting	X			Prefer decorative light fixtures.
515	Milus	Street Lighting	X			Milus is dark, replace the bulbs
512	MLK	Street Lighting	X			The MLK lighting doesn't work
512	MLK	Street Lighting	X			More street lights on E. Charlotte Avenue
MLK	Street Lighting	X				MLK and Olympia - 1st light, west side out since Thanksgiving; light links, need others.
MLK	Street Lighting	X				Lighting on MLK needs repair
	Street Lighting	X				Prefer decorative light fixtures.
	Street Lighting	X				Mary Street seems inadequately lit

ISS TEAM

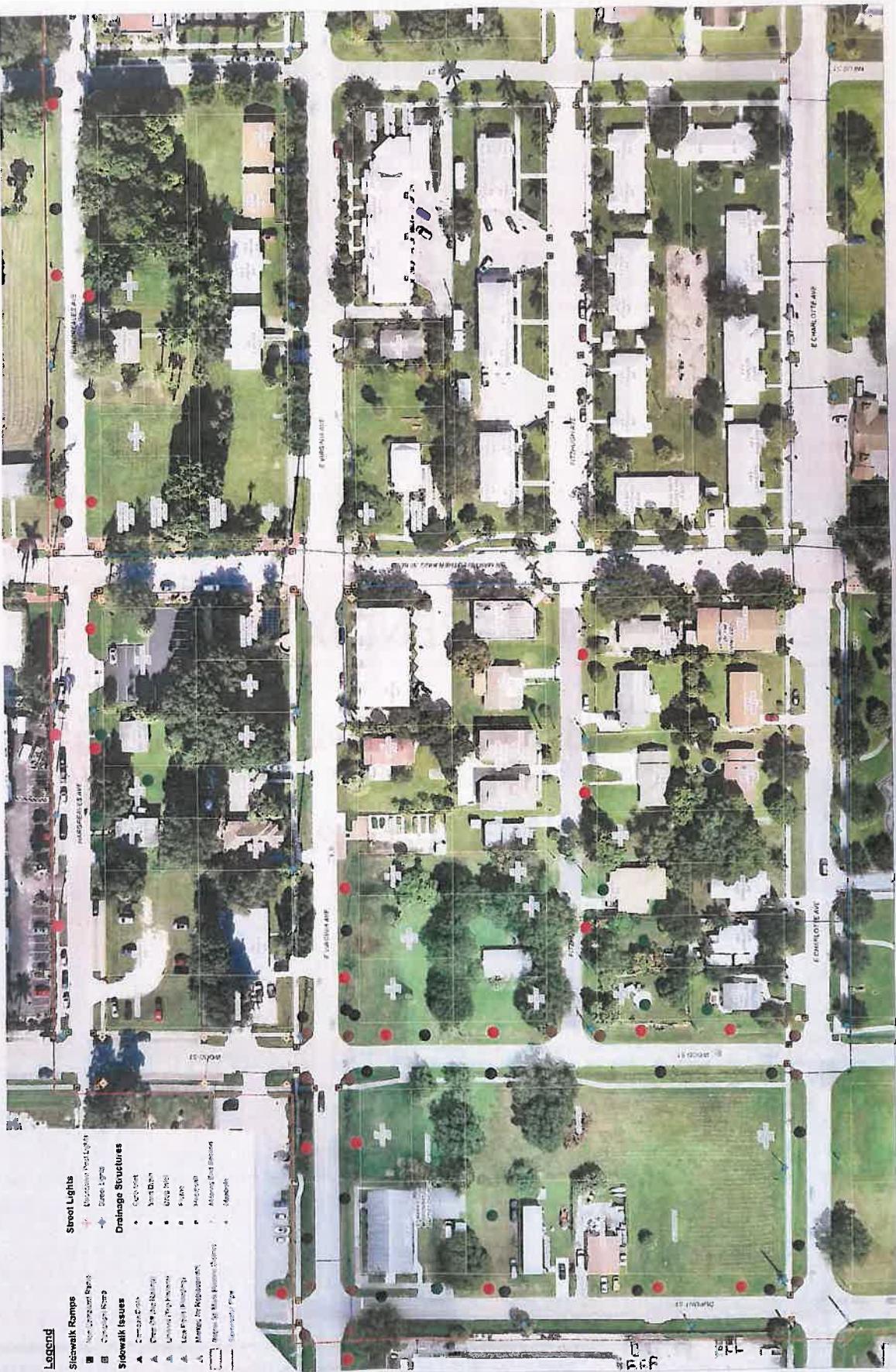
Melbourne ◆ Sarasota

(941) 526-0813
01/03/19

APPENDIX E

NEIGHBOORHOOD MEETING

INPUT BOARDS

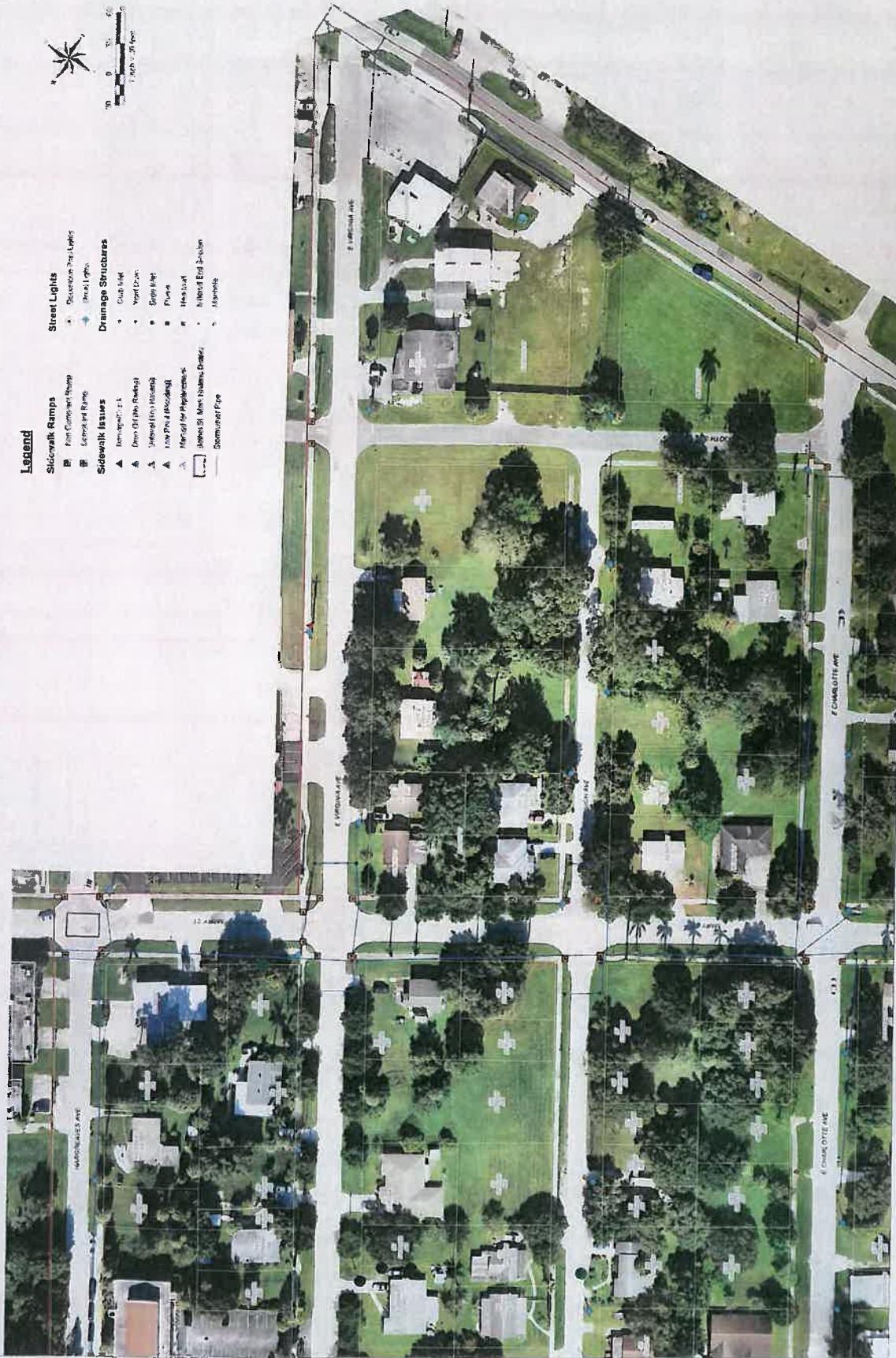


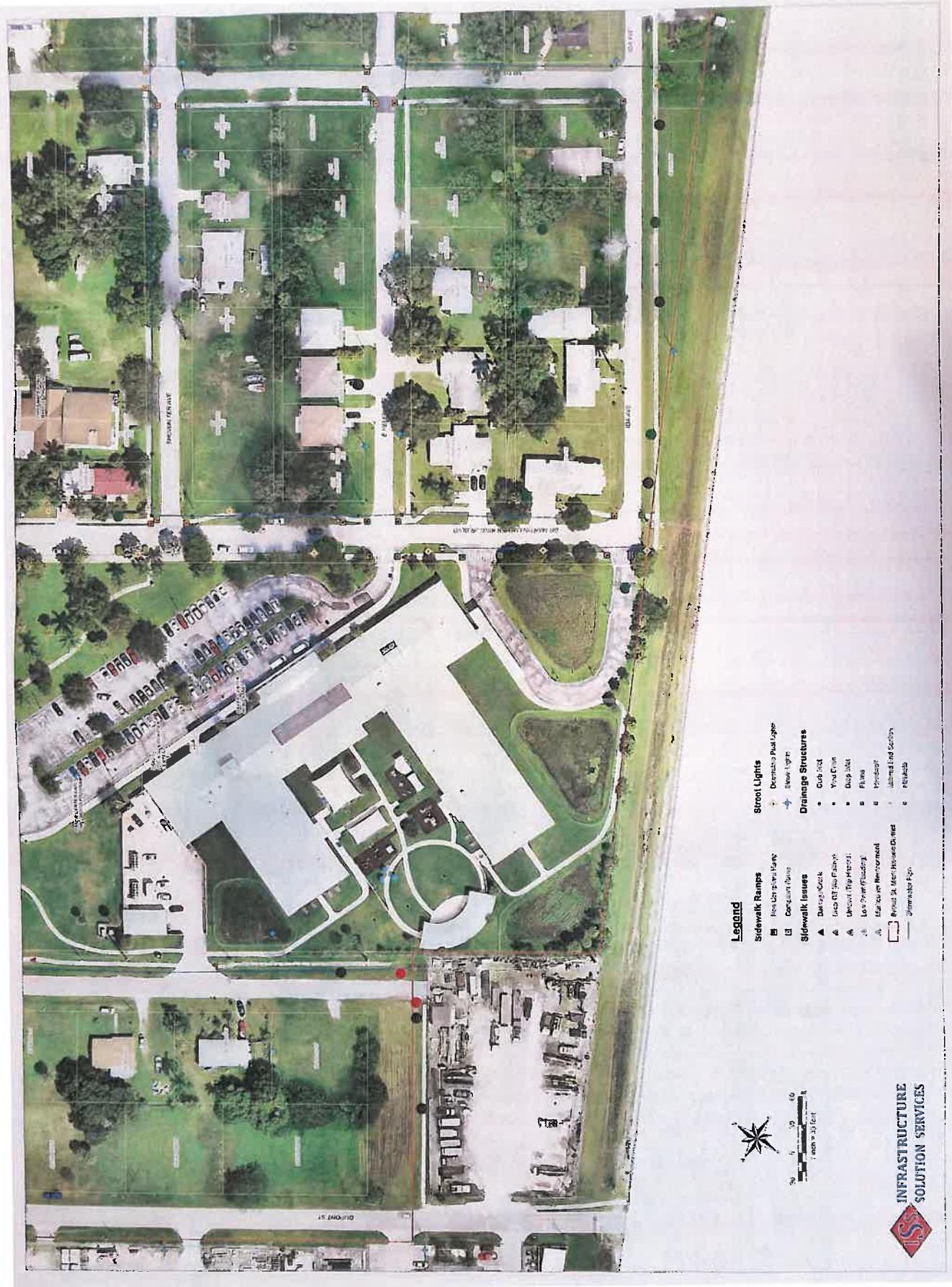


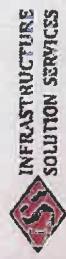
1' NORTH - 20 FEET

Legend

- | | |
|---------------------------------|-------------------------|
| Sidewalk Ramps | Street Lights |
| B From Curb to Street | Residential Post Lights |
| □ Long/In Ramps | Street Lamps |
| Sidewalk Issues | Drainage Structures |
| ▲ Incomplete: 1-1 | Ditch/Well |
| ▲ Down Off The Ramp | Manhole |
| ▲ Missing/In Wrong | Septic |
| ▲ Low Pct (Abnormal) | Park |
| ▲ Missing or Problematic | Hazard |
| □ Street St Mark/Update Desired | Hydrant |
| □ Sidewalk Free | In-Work End Section |







APPENDIX F

EVALUATION MATRIX

CITY OF PUNTA GORDA - HISTORIC DISTRICT INFRASTRUCTURE INITIATIVE



NO.	CONSIDERATION CRITERIA	ROADWAY SEGMENT										INFRASTRUCTURE			
		1	2	3	4	5	6	7	8	9	10	11	12	13	
1	AGENCY COMPLIANCE REQUIREMENTS (Meeting Regulatory Standards)	5	4	3	3	4	4	3	3	2	2	2	2	2	2
2	PUBLIC SAFETY NEED (Non-Compliant or Unsafe Conditions)	5	20	15	20	20	15	15	10	10	10	10	10	10	10
3	INFRASTRUCTURE NEED - SIDEWALK (Inadequate or Missing)	5	5	5	5	5	5	5	5	5	5	5	5	5	5
4	INFRASTRUCTURE NEED - DRAINAGE (Inadequate or Impacted)	3	12	12	12	9	9	6	6	9	9	15	6	6	9
5	INFRASTRUCTURE NEED - LIGHTING (Inadequate or Non-existent)	3	2	3	3	3	3	2	3	3	2	3	3	3	3
6	TYPE AND SEVERITY OF FAILURE	4	1	1	1	2	1	1	1	1	2	1	1	1	2
7	SOCIAL/AESTHETIC NEED	3	2	2	2	2	3	3	2	3	3	3	4	3	2
8	PUBLICALLY REQUESTED (Residents / Neighborhood Meeting)	4	5	4	2	5	5	1	3	1	1	5	1	2	1
9	CAPITAL COSTS (Weighted toward most cost effective)	3	1	2	2	3	1	1	2	3	2	3	3	3	3
10	OPERATION & MAINTENANCE COSTS (weighted toward lowest O&M)	3	3	6	6	9	3	3	6	9	6	3	9	9	9
WEIGHTED TOTAL		81	81	70	87	75	54	65	64	55	77	61	70	61	
Maximum Possible Score:		180													

"Need" Items 1-8; Scale: 1 to 5 for each item
(1=lowest, 3=average, 5=highest)
Weighting Factors and Scoring to be reviewed with by City Staff

"Cost" Items 9-10; Scale: 1 to 3 for each item
(1=highest, 2=average, 3=lowest)
Weighting Factors and Scoring to be reviewed with by City Staff



04/19/19

ISS TEAM

CITY OF PUNTA GORDA - BETHEL ST. MARK INFRASTRUCTURE INITIATIVE



CITY OF PUNTA GORDA INFRASTRUCTURE EVALUATION MATRIX

NO.	CONSIDERATION CRITERIA	ROADWAY SEGMENT								STREET							
		14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
	WEIGHTING FACTOR	E Charlotte Ave	E Charlotte Ave	E Charlotte Ave	E Charlotte Ave	Showalter Ave	Showalter Ave	Showalter Ave	E Helen Ave	E Helen Ave	E Helen Ave	E Helen Ave	Ida Ave	Ida Ave	Dupont St		
1	AGENCY COMPLIANCE REQUIREMENTS (Meeting Regulatory Standards)	5	2	3	2	2	2	3	3	2	3	3	2	2	2	1	
2	PUBLIC SAFETY NEED (Non-Compliant or Unsafe Conditions)	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
3	INFRASTRUCTURE NEED - SIDEWALK (Inadequate or Missing)	3	2	3	3	2	2	2	2	2	2	2	2	2	3	5	
4	INFRASTRUCTURE NEED - DRAINAGE (Inadequate or Impacted)	3	2	2	3	3	3	3	3	3	3	3	3	3	3	4	
5	INFRASTRUCTURE NEED - LIGHTING (Inadequate or Non-existent)	3	3	2	2	3	3	3	3	1	2	3	3	2	3	3	
6	TYPE AND SEVERITY OF FAILURE	4	1	2	2	2	1	1	1	1	1	1	1	1	1	1	
7	SOCIAL/AESTHETIC NEED	3	2	3	3	3	3	2	2	2	2	2	2	2	2	1	
8	PUBLIC (RESIDENTS) REQUESTED	4	3	2	2	2	1	1	1	2	1	1	5	3	3	3	
9	CAPITAL COSTS	3	2	3	1	3	3	3	2	2	3	3	3	3	3	2	
10	OPERATION & MAINTENANCE COSTS	3	2	2	1	2	2	2	2	3	3	3	3	3	3	2	
WEIGHTED TOTAL		63	67	50	59	62	63	60	46	67	66	80	69	70			
Maximum Possible Score:		180															

"Cost" Items 9-10; Scale: 1 to 3 for each item
(1=highest, 2=average, 3=lowest)

"Need" Items 1-8; Scale: 1 to 5 for each item
(1=lowest, 3=average, 5=highest)
Weighting Factors and Scoring to be reviewed with by City Staff

"Cost" Items 9-10; Scale: 1 to 3 for each item
(1=highest, 2=average, 3=lowest)
Weighting Factors and Scoring to be reviewed with by City Staff



03/18/19

ISS TEAM

CITY OF PUNTA GORDA - BETHEL ST. MARK INFRASTRUCTURE INITIATIVE



CITY OF PUNTA GORDA INFRASTRUCTURE EVALUATION MATRIX

NO.	CONSIDERATION CRITERIA	ROADWAY SEGMENT						Dr Martin Luther King Jr Blvd	Millus St					
		27	28	29	30	31	32							
1	AGENCY COMPLIANCE REQUIREMENTS (Meeting Regulatory Standards)	5	2	1	2	1	3	2	3	2	2	3	4	2
2	PUBLIC SAFETY NEED (Non-Compliant or Unsafe Conditions)	5	1	1	1	1	1	1	1	1	1	1	1	10
3	INFRASTRUCTURE NEED - SIDEWALK (Inadequate or Missing)	5	5	3	2	2	2	3	2	2	2	2	2	5
4	INFRASTRUCTURE NEED - DRAINAGE (Inadequate or Impacted)	3	4	3	3	3	2	2	2	2	2	2	2	3
5	INFRASTRUCTURE NEED - LIGHTING (Inadequate or Non-existent)	3	3	3	3	3	1	1	1	1	1	1	1	3
6	TYPE AND SEVERITY OF FAILURE	4	1	1	1	1	1	1	1	1	1	1	1	3
7	SOCIAL/AESTHETIC NEED	3	1	3	3	3	2	2	2	2	2	2	2	9
8	PUBLIC (RESIDENTS) REQUESTED	4	5	2	2	1	1	1	1	1	1	1	1	6
9	CAPITAL COSTS	3	2	3	2	3	2	2	2	2	2	2	2	2
10	OPERATION & MAINTENANCE COSTS	3	2	2	2	1	1	1	2	1	1	1	1	3
WEIGHTED TOTAL		83	60	59	57	48	46	51	53	46	51	56	61	69
Maximum Possible Score:		180												

"Need" Items 1-8, Scale: 1 to 5 for each item
(1=lowest, 3=average, 5=highest)
Weighting Factors and Scoring to be reviewed with by City Staff

"Cost" Items 9-10, Scale: 1 to 3 for each item
(1=highest, 2=average, 3=lowest)
Weighting Factors and Scoring to be reviewed with by City Staff



03/18/19

ISS TEAM

CITY OF PUNTA GORDA - BETHEL ST. MARK INFRASTRUCTURE INITIATIVE



		ROADWAY SEGMENT				44				46				47				48				49				50			
NO.	CONSIDERATION CRITERIA	Millus St	Millus St	Millus St	Millus St	Mary St	Mary St	Mary St	Mary St	Mary St	Mary St	Mary St	Mary St	Mary St	Mary St	Booth St	Booth St	Booth St	Booth St	Booth St	Booth St	Booth St	Booth St	Booth St	Booth St	Booth St	Booth St	Example Baseline Norm	
1	AGENCY COMPLIANCE REQUIREMENTS (Meeting Regulatory Standards)	5	2	2	2	1	2	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	2	1		
2	PUBLIC SAFETY NEED (Non-Compliant or Unsafe Conditions)	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5	
3	INFRASTRUCTURE NEED - SIDEWALK (Inadequate or Missing)	3	5	4	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	5	
4	INFRASTRUCTURE NEED - DRAINAGE (Inadequate or Impacted)	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	
5	INFRASTRUCTURE NEED - LIGHTING (Inadequate or Non-existent)	3	3	2	3	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	3	
6	TYPE AND SEVERITY OF FAILURE	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
7	SOCIAL AESTHETIC NEED	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
8	PUBLIC (RESIDENTS) REQUESTED	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
9	CAPITAL COSTS	3	2	3	3	3	3	3	3	2	3	2	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
10	OPERATION & MAINTENANCE COSTS	3	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
WEIGHTED TOTAL		68	61	61	59	60	57	60	63	63	57	58	58	70	41														
Maximum Possible Score:		180																											

"Cost" Items 9-10: Scale: 1 to 3 for each item

(1=highest, 2=average, 3=lowest)

"Need" Items 1-8: Scale: 1 to 5 for each item
(1=lowest, 3=average, 5=highest)

Weighting Factors and Scoring to be reviewed with by City Staff

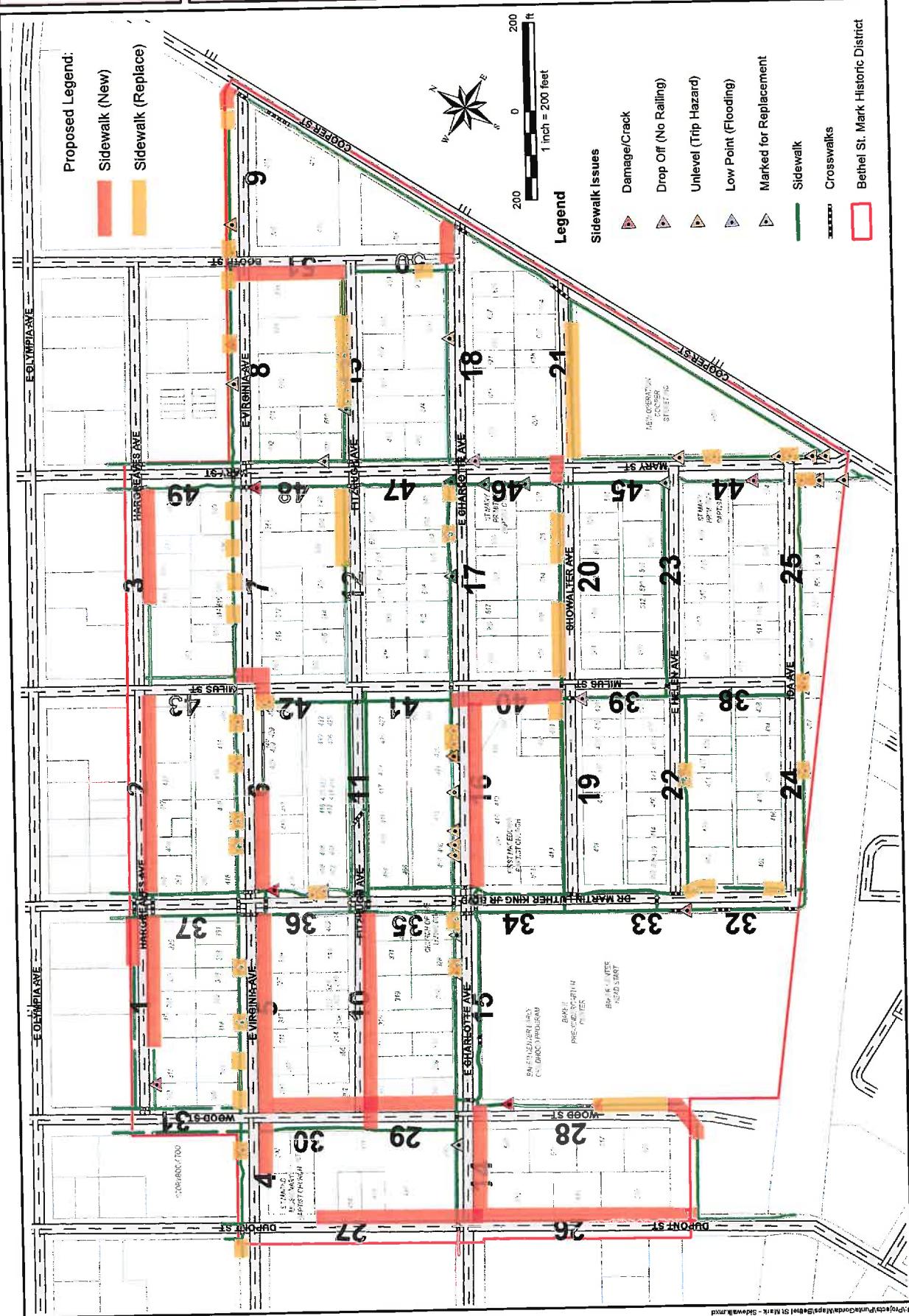


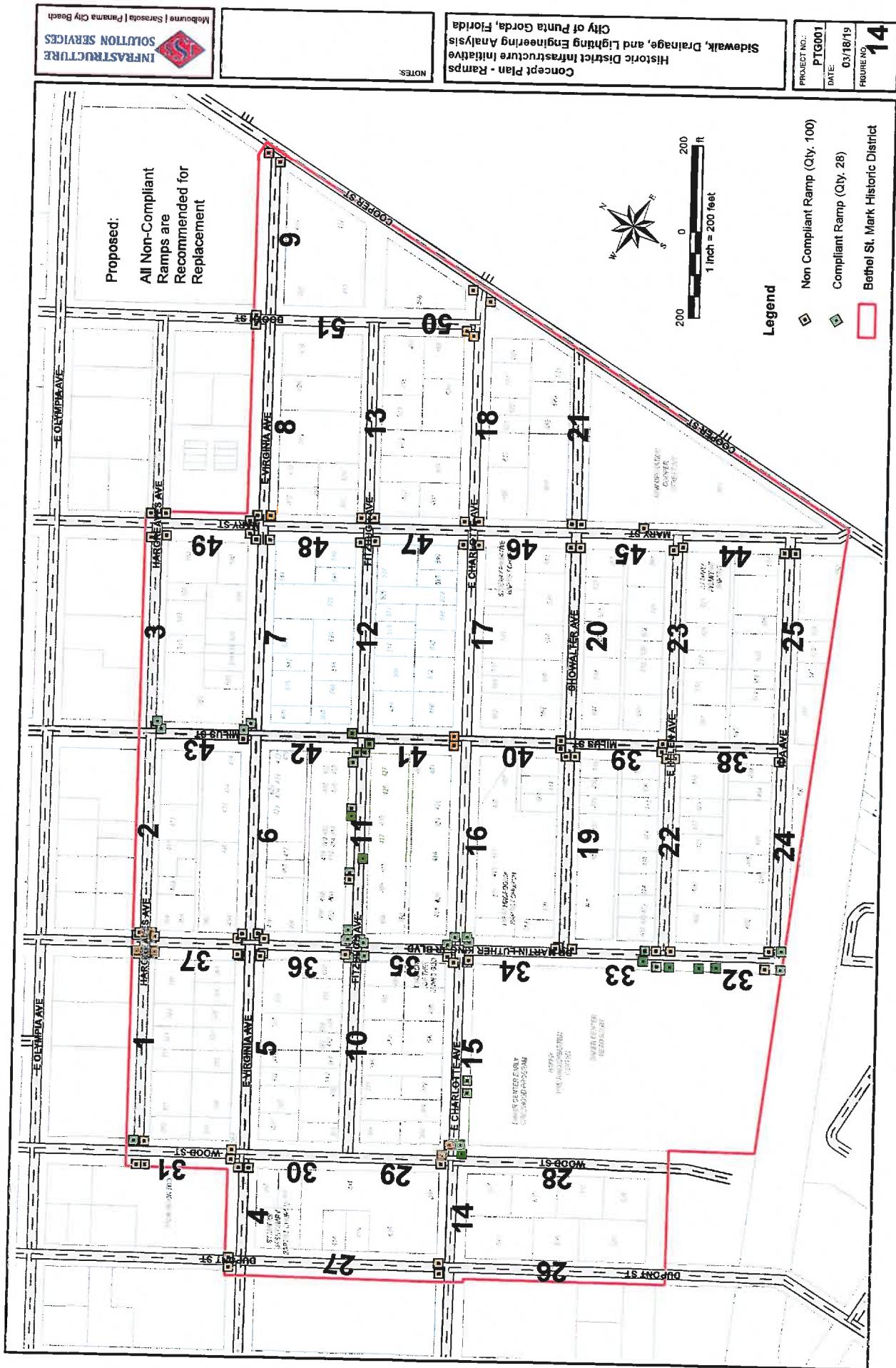
03/18/19

ISS TEAM

APPENDIX G

CONCEPT PLANS







Proposed Legend:

**Lighting (New
Decorative Fixture
Corridor)**

Lighting (New or Enhanced High Mast Fixture Corridor)



Legend

Decorative Post Lights (Qty. 38)

Street Lights (Qty. 71)

Bethel St. Mark Historic District

Proposed Legend:

- Lighting (New or Enhanced High Mast Fixture Corridor)
- Decorative Fixture Corridor

Legend:

- Decorative Post Lights (Qty. 38)
- Street Lights (Qty. 71)
- Bethel St. Mark Historic District

Compass Rose and Scale Bar: N 0 200 ft 1 Inch = 200 Feet

APPENDIX H

OPINION OF PROBABLE COST

INFRASTRUCTURE SOLUTION SERVICES

CITY OF PUNTA GORDA - INFRASTRUCTURE INITIATIVE ANALYSIS
ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST
PHASE 2 - Final Analysis (8/19/19)

ITEM NO.	DESCRIPTION	Segment 1 - Interceptor Ave			Segment 3 - Hargrove Ave			Segment 4 - E. Virginia Ave			Segment 5 - E. Virginia Ave			Segment 6 - E. Virginia Ave			Segment 7 - E. Virginia Ave			Segment 8 - E. Virginia Ave			Segment 9 - E. Virginia Ave			Segment 10 - Pinhook Ave			Segment 11 - Pinhook Ave			Segment 12 - Pinhook Ave			Segment 13 - Pinhook Ave		
		EXT. QTY.	AMOUNT	UNIT PRICE	EXT. QTY.	AMOUNT	UNIT PRICE	EXT. QTY.	AMOUNT	UNIT PRICE	EXT. QTY.	AMOUNT	UNIT PRICE	EXT. QTY.	AMOUNT	UNIT PRICE	EXT. QTY.	AMOUNT	UNIT PRICE	EXT. QTY.	AMOUNT	UNIT PRICE	EXT. QTY.	AMOUNT	UNIT PRICE	EXT. QTY.	AMOUNT	UNIT PRICE	EXT. QTY.	AMOUNT	UNIT PRICE						
1	Environment Control & Monitoring	EA	\$ 250.00	1	\$ 250.00	1	\$ 250.00	1	\$ 250.00	1	\$ 250.00	1	\$ 250.00	1	\$ 250.00	1	\$ 250.00	1	\$ 250.00	1	\$ 250.00	1	\$ 250.00	1	\$ 250.00	1	\$ 250.00	1	\$ 250.00	1	\$ 250.00	1	\$ 250.00				
2	Brake and Sediment Control - Sidewalk (Per Segment)	EA	\$ 800.00	1	\$ 800.00	1	\$ 800.00	1	\$ 800.00	1	\$ 800.00	1	\$ 800.00	1	\$ 800.00	1	\$ 800.00	1	\$ 800.00	1	\$ 800.00	1	\$ 800.00	1	\$ 800.00	1	\$ 800.00	1	\$ 800.00	1	\$ 800.00						
3	Brake and Sediment Control - Drainage (Per Segment)	EA	\$ 75.00	1	\$ 75.00	0	\$ -	0	\$ -	1	\$ 75.00	1	\$ 75.00	1	\$ 75.00	1	\$ 75.00	1	\$ 75.00	1	\$ 75.00	1	\$ 75.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -						
4	Maintenance of Traffic Plan - Stakeout (Per Segment)	EA	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00						
5	Maintenance of Traffic Plan - Drainage (Per Segment)	EA	\$ 1,200.00	1	\$ 1,200.00	1	\$ 1,200.00	1	\$ 1,200.00	1	\$ 1,200.00	1	\$ 1,200.00	1	\$ 1,200.00	1	\$ 1,200.00	1	\$ 1,200.00	1	\$ 1,200.00	1	\$ 1,200.00	1	\$ 1,200.00	1	\$ 1,200.00	1	\$ 1,200.00								
6	Maintenance of Traffic Plan - Lighting (Per Segment)	EA	\$ 800.00	1	\$ 800.00	0	\$ -	0	\$ -	1	\$ 800.00	1	\$ 800.00	1	\$ 800.00	1	\$ 800.00	1	\$ 800.00	1	\$ 800.00	1	\$ 800.00	1	\$ 800.00	1	\$ 800.00	1	\$ 800.00								
7	Mobilization + Shakedown (Per Segment)	EA	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00								
8	Mobileization + Drainage (Per Segment)	EA	\$ 1,000.00	1	\$ 1,000.00	1	\$ 1,000.00	1	\$ 1,000.00	1	\$ 1,000.00	1	\$ 1,000.00	1	\$ 1,000.00	1	\$ 1,000.00	1	\$ 1,000.00	1	\$ 1,000.00	1	\$ 1,000.00	1	\$ 1,000.00	1	\$ 1,000.00	1	\$ 1,000.00								
9	Mobilization + Lighting (Per Segment)	EA	\$ 20.00	1	\$ 20.00	0	\$ -	0	\$ -	1	\$ 20.00	1	\$ 20.00	1	\$ 20.00	1	\$ 20.00	1	\$ 20.00	1	\$ 20.00	1	\$ 20.00	0	\$ -	0	\$ -	0	\$ -								
10	Clearing and Grubbing - General	SF	\$ 15.00	350	\$ 5,250.00	450	\$ 6,750.00	280	\$ 4,200.00	120	\$ 1,800.00	330	\$ 4,500.00	420	\$ 6,300.00	75	\$ 1,125.00	150	\$ 225.00	100	\$ 1,500.00	420	\$ 6,300.00	0	\$ -	100	\$ 1,500.00	100	\$ 1,500.00								
11	Pavement Restoration	SY	\$ 50.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -						
12	THIPOPLASTIC TRAFFIC MARKINGS																																				
13	Pavement Markings - Limited	EA	\$ 200.00	1	\$ 200.00	1	\$ 200.00	1	\$ 200.00	1	\$ 200.00	1	\$ 200.00	1	\$ 200.00	1	\$ 200.00	1	\$ 200.00	0	\$ -	1	\$ 200.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -						
14	Drainage Structure (N/A)	EA	\$ 2,000.00	6	\$ 12,000.00	2	\$ 4,000.00	4	\$ 8,000.00	0	\$ -	4	\$ 8,000.00	0	\$ -	1	\$ 2,000.00	0	\$ -	1	\$ 2,000.00	4	\$ 8,000.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -						
15	Drainage Structure (Major)	EA	\$ 4,500.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	4	\$ 16,000.00	1	\$ 4,000.00	0	\$ -	2	\$ 9,000.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -						
16	Drainage Pipe	LF	\$ 70.00	75	\$ 5,255.00	25	\$ 1,875.00	50	\$ 3,750.00	0	\$ -	125	\$ 9,275.00	310	\$ 26,350.00	50	\$ 3,750.00	0	\$ -	40	\$ 3,000.00	50	\$ 26,350.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -						
17	Soil Stabilization	LF	\$ 200.00	60	\$ 12,000.00	20	\$ 400.00	40	\$ 800.00	150	\$ 3,000.00	150	\$ 3,000.00	20	\$ 900.00	30	\$ 200.00	12	\$ 2,500.00	10	\$ 200.00	50	\$ 1,800.00	0	\$ -	200	\$ 4,000.00	175	\$ 3,500.00								
18	CONCRETE CURB AND GUTTER	LF	\$ 35.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -								
19	CONCRETE SIDEWALKS	LF	\$ 200.00	300	\$ 4,000.00	450	\$ 9,000.00	250	\$ 3,000.00	150	\$ 3,000.00	400	\$ 9,000.00	245	\$ 2,500.00	90	\$ 1,800.00	60	\$ 400.00	60	\$ 1,200.00	400	\$ 4,000.00	0	\$ -	150	\$ 4,000.00	260	\$ 4,000.00								
20	Diversity Areas, Pavement Re-Routing, 6" (Residential)	EA	\$ 1,000.00	2	\$ 2,000.00	1	\$ 1,000.00	2	\$ 2,000.00	0	\$ -	2	\$ 2,000.00	2	\$ 2,000.00	0	\$ -	0	\$ -	3	\$ 3,000.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -						
21	Driveway Areas, Pavement Re-Routing, 6" (Commercial)	EA	\$ 2,000.00	1	\$ 2,000.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	1	\$ 2,000.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -								
22	Access Ramps	EA	\$ 500.00	3	\$ 1,500.00	2	\$ 1,000.00	3	\$ 1,000.00	3	\$ 1,000.00	3	\$ 1,000.00	3	\$ 1,000.00	2	\$ 1,000.00	1	\$ 1,000.00	2	\$ 2,000.00	2	\$ 1,000.00	2	\$ 1,000.00	2	\$ 1,000.00	2	\$ 1,000.00								
23	LIGHTING																																				
24	Lighting Fixture/House Mail Box Pole	EA	\$ 3,000.00	0	\$ -	0	\$ -	0	\$ -	1	\$ 3,000.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -	3	\$ 24,000.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -						
25	Lighting Fixture/House Mail Box Pole Installation Required	EA	\$ 600.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -						
26	ADA Treated Mats	EA	\$ 400.00	3	\$ 1,200.00	2	\$ 800.00	2	\$ 800.00	3	\$ 1,200.00	3	\$ 1,200.00	2	\$ 800.00	2	\$ 800.00	1	\$ 400.00	5	\$ 2,000.00	2	\$ 800.00	2	\$ 800.00	2	\$ 800.00	2	\$ 800.00								
27	SEGMENT SUBTOTAL ITEMS 1 THROUGH 26:		\$ 49,700.00		\$ 25,323.00		\$ 30,050.00		\$ 18,425.00		\$ 44,710.00		\$ 71,875.00		\$ 20,100.00		\$ 11,075.00		\$ 28,750.00		\$ 20,925.00		\$ 14,580.00		\$ 15,050.00		\$ 4,481.25		\$ 10,556.25		\$ 4,338.75		\$ 2,187.50		\$ 2,257.50		
28	15% Contingency	%	15	\$ 7,455.00	15	\$ 4,507.50	15	\$ 2,765.75	15	\$ 10,781.25	15	\$ 3,015.00	15	\$ 1,781.25	15	\$ 1,078.75	15	\$ 616.25	15	\$ 15,662.25	15	\$ 34,356.25	15	\$ 80,951.25	15	\$ 16,732.50	15	\$ 17,307.50	15	\$ 17,307.50							
29	SEGMENT TOTAL ITEMS 1 THROUGH 27:		\$ 57,155.00		\$ 35,223.75		\$ 34,575.00		\$ 21,187.75		\$ 51,462.50		\$ 32,556.25		\$ 23,115.00		\$ 13,662.50		\$ 80,951.25		\$ 34,356.25		\$ 16,732.50		\$ 17,307.50		\$ 17,307.50		\$ 17,307.50								



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OPINION OF PUNTA GORDA - INFRASTRUCTURE INITIATIVE ANALYSIS
ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

OPINION OF PUNTA GORDA - INFRASTRUCTURE INITIATIVE ANALYSIS
ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST



INFRASTRUCTURE SOLUTION SERVICES

**SECTION 3
PROPERTY OF PUNTA GORDA - INFRASTRUCTURE INITIATIVE ANALYSIS
ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST
PAGE 2 - Final Analysis**



INFRASTRUCTURE SOLUTION SERVICES

CITY OF PUNTA GORDA - INFRASTRUCTURE INITIATIVE ANALYSIS
ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST
PHASE 2 - Final Analysis (04/19/19)

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