

CITY OF CORPUS CHRISTI

ADA Master Plan

City Project No. 6485

September 2012

Submitted to:



City of Corpus Christi
Department of Engineering Services
PO Box 9277
Corpus Christi, TX 78469-9277

Prepared by:

LNV

engineers | architects | contractors

TBPE Firm No. F-366

801 Navigation, Suite 300
Corpus Christi, TX 78408
(361) 883-1984



Ordinance amending the Comprehensive Plan of the City of Corpus Christi by adoption of the Corpus Christi ADA Master Plan; providing for repeal of conflicting ordinances; and providing for severance.

WHEREAS, in accordance with proper notice to the public, a public hearing was held on September 26, 2012, during a meeting of the Planning Commission, and on November 13, 2012, during a meeting of the City Council, during which all interested persons were allowed to appear and be heard regarding the proposed Corpus Christi ADA Master Plan;

WHEREAS, under the laws of the State of Texas and the City Charter of the City of Corpus Christi, the City Council shall adopt the Comprehensive Plan and amendments to the Comprehensive Plan by ordinance; and

WHEREAS, the City Council has determined that the adoption of the Corpus Christi ADA Master Plan, an element of the Comprehensive Plan of the City of Corpus Christi, would best serve the public health, necessity, convenience and general welfare of the City of Corpus Christi and its citizens.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CORPUS CHRISTI, TEXAS:

SECTION 1. The Comprehensive Plan of the City of Corpus Christi, Texas, is amended by the adoption of the Corpus Christi ADA Master Plan. A copy of the ADA Master Plan is on file with the Office of the City Secretary.

SECTION 2. The ADA Master Plan adopted by this ordinance supplements the ADA Title II Comprehensive Evaluation and Transition Plan adopted on February 11, 2003.

SECTION 3. The ADA Master Plan establishes the City of Corpus Christi's policies for implementing Americans with Disabilities Act improvements for curb ramps, sidewalks, and connectivity improvements to public facilities and includes a design standard for ADA improvements. The ADA Master Plan is a portion of the Comprehensive Plan of the City of Corpus Christi.

SECTION 4. All ordinances or parts of ordinances in conflict with this ordinance are hereby expressly repealed. Where any provision of this ordinance, or the plan adopted under this ordinance, imposes standards or restrictions different from those imposed by any other provision of the any other City of Corpus Christi ordinance, rule, or regulation, the provisions of, and plan adopted under, this ordinance control.

SECTION 5. If for any reason any section, paragraph, subdivision, clause, phrase, word or provision of this ordinance shall be held invalid or unconstitutional by final judgment of a court of competent jurisdiction, it shall not affect any other section, paragraph, subdivision, clause, phrase, word or provision of this ordinance, for it is the definite intent of this City Council that every section, paragraph, subdivision, clause, phrase, word or provision hereof be given full force and effect for its purpose.

029691

INDEXED

The foregoing ordinance was read for the first time and passed to its second reading on this the 20th day of November, 2012, by the following vote:

Kelly Allen	<u>Aye</u>	Nelda Martinez	<u>Aye</u>
Rudy Garza	<u>Aye</u>	Colleen McIntyre	<u>Aye</u>
Priscilla Leal	<u>Aye</u>	Lillian Riojas	<u>Aye</u>
David Loeb	<u>Aye</u>	Mark Scott	<u>Aye</u>
Chad Magill	<u>Aye</u>		

The foregoing ordinance was read for the second time and passed finally on this the 11th day of December, 2012, by the following vote:

Kelly Allen	<u>Aye</u>	Nelda Martinez	<u>Aye</u>
Rudy Garza	<u>Aye</u>	Colleen McIntyre	<u>Aye</u>
Priscilla Leal	<u>Aye</u>	Lillian Riojas	<u>Aye</u>
David Loeb	<u>Aye</u>	Mark Scott	<u>Aye</u>
Chad Magill	<u>Aye</u>		

PASSED AND APPROVED this the 11th day of December, 2012.

ATTEST:

Armando Chapa
Armando Chapa
City Secretary

Nelda Martinez
Nelda Martinez
Mayor

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1-8
SECTION 1 – INTRODUCTION	1-2
1.1 Authorization	1
1.2 Scope of Work.....	1
1.3 Project Background.....	1
1.4 Stakeholder Involvement	2
1.5 Design Objective for Public and Private Development	2
SECTION 2 – INVENTORY OF EXISTING CONDITIONS	3-5
2.1 Methodology	3
2.2 Summary of Existing Conditions	4
SECTION 3 – PROPOSED ADA ACCESSIBLE ROUTES.....	6-10
3.1 Methodology	6
3.2 Prioritization	7
SECTION 4 – CONSTRUCTION ESTIMATE, PHASING/SCHEDULING & POTENTIAL FUNDING OPTIONS	11-17
4.1 Estimated Construction Costs.....	11
4.2 Construction Phasing/ Scheduling.....	12
4.3 Potential Funding Options	15
SECTION 5 – MAPPING OF ADA ACCESSIBLE ROUTES	18-19
5.1 AutoCAD.....	18
5.2 Geographic Information System (GIS)	18
SECTION 6 – PLAN POLICIES.....	20-21

APPENDICES

APPENDIX A – City of Corpus Christi ADA Master Plan STREET LIST AND LIMITS

APPENDIX B – City of Corpus Christi ADA Master Plan MAP BOOK

APPENDIX C – City of Corpus Christi ADA Master Plan PEDESTRIAN CURB RAMP STANDARDS

APPENDIX D – City of Corpus Christi ADA Master Plan ARCGIS FILES (CD)

CITY OF CORPUS CHRISTI

ADA MASTER PLAN

For Pedestrian Infrastructure Improvements
In Compliance with the Americans with Disabilities Act (ADA)

EXECUTIVE SUMMARY

Background:

The **ADA Master Plan** (Project No. 6485) was developed to address the City's pedestrian infrastructure needs as mandated by the Americans with Disabilities Act and ADA Title II. As part of the Federal mandate, local governments were obligated to conduct a self-evaluation of their pedestrian infrastructure facilities, and create a Transition Plan to address the issues discovered in the self-evaluation. In February of 2003, the City adopted its *ADA Title II Comprehensive Evaluation and Transition Plan*, which provided the ground work for future curb ramp improvements, but failed to map or quantify proposed ADA accessible routes within the city, and did not include sidewalks in the evaluation.

The purpose of the ADA Master Plan is to continue the progress that has been completed in the City's Transition Plan. Specifically, the ADA Master Plan includes the mapping of proposed ADA accessible routes interconnecting locations of interest across the city, an existing condition inventory of curb ramps, sidewalks and other pedestrian elements along the proposed ADA accessible routes, identification of ADA deficiencies along those routes, projected construction costs to address the identified deficiencies, a proposed schedule for the construction of the pedestrian infrastructure improvements, and identification of potential funding sources to fund the improvements.

Project Scope:

This project consists of the development of the City of Corpus Christi ADA Master Plan for the long-range planning, prioritization, construction and maintenance of future pedestrian infrastructure improvements within the City's street rights-of-way. The plan includes an inventory of existing conditions, an implementation schedule with proposed funding and prioritization requirements, and the mapping of ADA accessible routes. When adopted, the final plan will be incorporated into the City's Geographic Information System (GIS). For the purposes of this ADA Master Plan, only arterial and collector street corridors within the City of Corpus Christi were considered.

Summary of Existing Conditions:

Approximately 224 miles of city streets were included in the pedestrian infrastructure evaluations along proposed ADA accessible routes. In general, the existing curb ramps along the proposed accessible routes were found to be in poor condition, with only approximately 36% of the curb ramps being compliant at the time of evaluation, where curb ramps existed. At approximately 40% of the total number of locations evaluated, no curb ramps existed at all. Sidewalks were found to be in generally fair condition. Where sidewalk existed along the proposed accessible routes, approximately 63% of the total length was determined to be usable. However, at approximately 27% of the total length of pedestrian routes evaluated, no sidewalk existed at all. The following tables summarize the findings for curb ramps and sidewalks along the proposed ADA accessible routes:

Condition of Existing Curb Ramp Locations Along Proposed ADA Accessible Routes	
Compliant Curb Ramp Locations (Ea)	1,283
Non-Compliant Curb Ramps Locations (Ea)	2,248
Locations with No Curb Ramps (Ea)	2,326
Total Number of Locations Evaluated (Ea)	5,857

Condition of Existing Sidewalks Paths Along Proposed ADA Accessible Routes	
Usable Sidewalk Path (miles)	163.5
Unusable Sidewalk Path (miles)	94.6
No Sidewalk Path (miles)	97.3
Total Length of Pedestrian Routes Evaluated (miles)	355.4

At signalized intersections along the proposed ADA accessible routes, an inventory of existing pedestrian signals and crosswalks was taken. The presence or lack of pedestrian signals and crosswalks was documented for each direction across the intersection (four possible movements). The findings for pedestrian signals and crosswalks along the proposed ADA accessible routes are summarized in the following tables:

Condition of Existing Pedestrian Signals at Signalized Intersections Along Proposed ADA Accessible Routes	
Locations (Directions) with Pedestrian Signal Present (Ea)	385
Locations (Directions) with No Pedestrian Signal (Ea)	259
Total Locations (Directions) with Pedestrian Signals Evaluated (Ea)	644

Condition of Existing Crosswalks at Signalized Intersections Along Proposed ADA Accessible Routes	
Locations (Directions) with Crosswalk Present (Ea)	442
Locations (Directions) with No Crosswalk (Ea)	202
Total Locations (Directions) with Crosswalks Evaluated (Ea)	644

Proposed ADA Accessible Routes

The proposed ADA accessible routes were selected based on the interconnectivity they provide between various places of interest within the City, ranked by:

1. City/ State/ Public Buildings
2. Major Transportation Routes
3. Places of Public Accommodation

The intent of the selected routes is to allow for interconnectivity between the listed locations. This allows access for a person confined to the use of a wheelchair to travel between the various places of interest, once the entire system of ADA accessible routes is constructed.

Construction Estimate & Phasing/Scheduling

Estimated construction costs for all improvements within the ADA Master Plan are summarized in the following table:

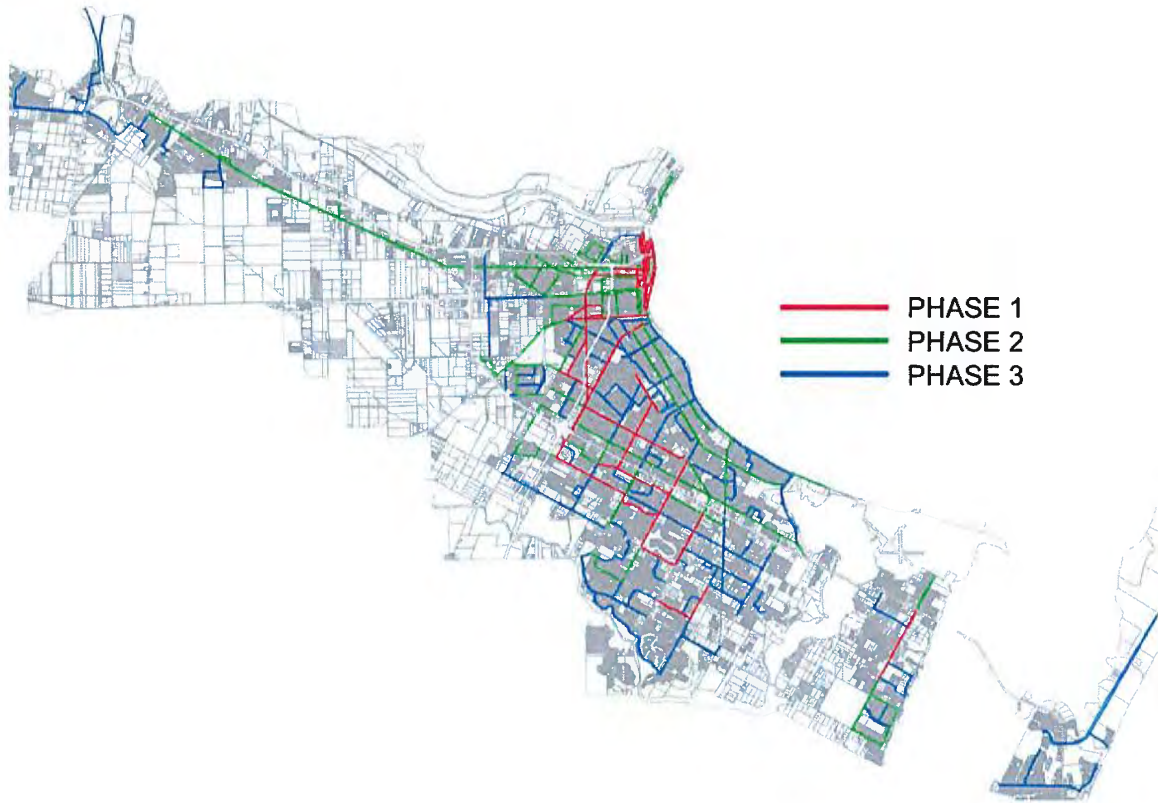
Estimated Construction Costs For All Improvements Identified in ADA Master Plan			
Item	Quantity	Unit Cost	Total Cost
Non-Compliant Curb Ramps (Ea)	2,248	\$7,800	\$17,534,400
Non-Existent Curb Ramps (Ea)	2,326	\$7,800	\$18,142,800
Unusable Sidewalk (LF)	499,520*	\$36	\$8,991,300
Non-Existent Sidewalk (LF)	513,876	\$36	\$18,499,500
Pedestrian Signals (Ea)	259	\$6,250	\$1,618,900
Crosswalks (Ea)	202	\$3,900	\$787,800
Total Estimated Project Costs (2012 Dollars) =			\$65,574,700

* Note that, of the entire length of unusable sidewalk in each phase of the ADA Master Plan, improvements to approximately 50% of the length will improve the sidewalk to a usable condition. Therefore, only 50% of the length is used in the cost calculation.

The ADA Master Plan Pedestrian Infrastructure Improvements are divided into three (3) phases, corresponding to the ranking system shown below:

- **Phase 1-** ADA Accessible Routes interconnecting **City/ State/ Public Buildings**
- **Phase 2-** ADA Accessible Routes interconnecting **Major Transportation Routes**
- **Phase 3-** ADA Accessible Routes interconnecting **Places of Public Accommodation**

The locations of these ADA Accessible Routes are graphically illustrated below:



Estimated construction costs for each of the three ADA Master Plan Phases are summarized in the following tables:

Estimated Construction Costs For Phase 1- ADA Accessible Routes for City/ State/ Public Buildings			
Item	Quantity	Unit Cost	Total Cost
Non-Compliant Curb Ramps (Ea)	636	\$7,800	\$4,960,800
Non-Existent Curb Ramps (Ea)	474	\$7,800	\$3,697,200
Unusable Sidewalk (LF)	131,560*	\$36	\$2,368,100
Non-Existent Sidewalk (LF)	37,970	\$36	\$1,366,900
Pedestrian Signals (Ea)	61	\$6,250	\$381,300
Crosswalks (Ea)	81	\$3,900	\$315,900
Phase 1 Total Estimated Project Costs (2012 Dollars) =			\$13,090,200

Estimated Construction Costs For Phase 2- ADA Accessible Routes for Major Transportation Routes			
Item	Quantity	Unit Cost	Total Cost
Non-Compliant Curb Ramps (Ea)	768	\$7,800	\$5,990,400
Non-Existent Curb Ramps (Ea)	1001	\$7,800	\$7,807,800
Unusable Sidewalk (LF)	194,440*	\$36	\$3,499,900
Non-Existent Sidewalk (LF)	192,516	\$36	\$6,930,600
Pedestrian Signals (Ea)	117	\$6,250	\$731,300
Crosswalks (Ea)	92	\$3,900	\$358,800
Phase 2 Total Estimated Project Costs (2012 Dollars) =			\$25,318,800

Estimated Construction Costs For Phase 3- ADA Accessible Routes for Places of Public Accommodation			
Item	Quantity	Unit Cost	Total Cost
Non-Compliant Curb Ramps (Ea)	844	\$7,800	\$6,583,200
Non-Existent Curb Ramps (Ea)	851	\$7,800	\$6,637,800
Unusable Sidewalk (LF)	173,520*	\$36	\$3,123,300
Non-Existent Sidewalk (LF)	283,390	\$36	\$10,202,000
Pedestrian Signals (Ea)	81	\$6,250	\$506,300
Crosswalks (Ea)	29	\$3,900	\$113,100
Phase 3 Total Estimated Project Costs (2012 Dollars) =			\$27,165,700

* Note that, of the entire length of unusable sidewalk in each phase of the ADA Master Plan, improvements to approximately 50% of the length will improve the sidewalk to a usable condition. Therefore, only 50% of the length is used in the cost calculation.

Each of the three phases of the ADA Master Plan has been further prioritized and subdivided into project packages. Phase 1 has been subdivided into project packages of approximately \$1,000,000 each, and Phases 2 and 3 have been subdivided into project packages of approximately \$5,000,000 each. These divisions have been made to prioritize the construction of the pedestrian infrastructure improvements within each phase, and to keep project costs within manageable funding budgets. Projects for Phase 1 are divided into smaller packages since it is anticipated that this phase can be funded within the next few years. Projects for Phases 2 and 3 are divided into larger packages since it is anticipated that these phases will be funded beyond a 5-year timeframe.

The detailed project packages are included in Appendix A.

Potential Funding Options

There are several potential funding sources for the ADA Master Plan pedestrian infrastructure improvements, including:

- City of Corpus Christi Bond Program
- Partnership/ Funding Agreements with Nueces County
- Partnership/ Funding Agreements with the Regional Transportation Authority (RTA)
- Community Development Block Grants (CDBG)
- Coordinated Efforts with the Corpus Christi Metropolitan Planning Organization (MPO) and/or the Texas Department of Transportation (TxDOT), Federal Grants including Safe Routes to School Program and/or Enhancement Projects
- Indirect Funding through the selection of Street Improvement Projects along Proposed ADA Accessible Routes

Recommendations and Plan Implementation

The proposed improvements in the ADA Master Plan should be immediately taken into consideration in the City's planning and budgeting processes. Given the amount of funds required to fully fund the entire Master Plan (approximately \$65M), it is recommended that a systematic funding approach be implemented, with the main source of funding being the City's Bond Program. At a minimum, the City should strive to fund \$14M of ADA Master Plan improvements every cycle of the four-year Bond Program (\$3.5 million per year). This will allow for fully funding all phases of the ADA Master Plan over the next 20 years.

There are several other potential funding sources which may further reduce the timeframe needed to fully fund the ADA Master Plan. The City should continue to work closely with the Regional Transportation Authority (RTA) to create and maintain funding agreements that are

of benefit to both parties. Additionally, the City should aggressively pursue and apply for Federal funding for portions of the ADA Master Plan through Community Development Block Grants (CDBG), the Safe Routes to School Program, and the Transportation Enhancement Program. Coordinating these efforts with the Corpus Christi Metropolitan Planning Organization (MPO) and the Texas Department of Transportation (TxDOT) is prudent. One other possible funding source for the City consider is funding portions of the ADA Master Plan through its Capital Improvement Program (CIP).

As an indirect funding mechanism, the City should continue to fund and construct ADA pedestrian improvements in association with Street Improvement Projects, utilizing the ADA Master Plan as a tool for identifying ADA accessible routes.

The City may utilize the GIS shapefiles included in Appendix D of this ADA Master Plan as an integral tool in all future pedestrian infrastructure planning, design, and construction. The City should require all A/E consultants to adhere to the Pedestrian Curb Ramp Standards in Appendix C and other requirements contained in this ADA Master Plan in order to standardize the design and construction of pedestrian infrastructure elements within the City of Corpus Christi that will be maintained by the City.

As improvements identified in the ADA Master Plan are planned, funded, designed and constructed, the need for updating of the GIS shapefiles and map books will be necessary. All GIS shapefiles should be updated periodically to track the progress of the ADA Master Plan improvements. Updates can be prepared by in-house personnel or via consultant contracts through the use of record (as-built) drawings for projects that include construction of public pedestrian infrastructure improvements.

CITY OF CORPUS CHRISTI

ADA MASTER PLAN

For Pedestrian Infrastructure Improvements
In Compliance with the Americans with Disabilities Act (ADA)

SECTION 1 – INTRODUCTION

- 1.1. Authorization – LNV, Inc. was engaged by the City of Corpus Christi to investigate, inventory, evaluate, and provide master planning services for pedestrian infrastructure along arterial and collector street corridors within the City. Notice to Proceed was issued on November 25, 2009 with the approval of a Large A/E contract by the City Council on November 17, 2009 (Motion No. M2009-323).
- 1.2. Scope of Work – This project consists of the development of the City of Corpus Christi ADA Master Plan for the long-range planning, prioritization, construction and maintenance of future pedestrian infrastructure improvements within the City’s street rights-of-way. The plan includes an inventory of existing facilities and condition assessment, an implementation schedule with proposed funding and prioritization requirements, and the mapping of ADA accessible routes. The final plan will be incorporated into the City’s Geographic Information System (GIS). For the purposes of this phase of the ADA Master Plan, the scope of work was defined to include only arterial and collector streets, streets that provide access to public buildings, major transportation routes, and places of public accommodation within the City of Corpus Christi. The narrowing of the scope of work was necessary in order to develop an achievable pedestrian infrastructure improvement plan. As this phase of the ADA Master Plan becomes successfully funded and implemented, local (neighborhood) streets may be added as a subsequent phase.
- 1.3. Project Background – The Americans with Disabilities Act (ADA), a broad based civil rights legislation that ensures equal opportunities in the areas of employment, state and local government services, public accommodations and telecommunications, was enacted on July 26, 1990, with ADA Title II becoming effective on January 26, 1992. In accordance with ADA and Title II, local governments were obligated to conduct a self-evaluation of their facilities, programs and services, and in doing so create a Transition Plan to address the issues discovered in the self-evaluation. On February 11, 2003, the City of Corpus Christi adopted its *ADA Title II Comprehensive Evaluation and Transition Plan*. As it relates to this project, the City of Corpus Christi ADA Transition Plan

provided a generalized count of the total number of curb ramps within the City, including estimated construction costs. It included a Short-Range Outlook identifying specific ADA infrastructure projects, and accounted for annual funding of curb ramp improvements over a several year period, but did not identify specific projects beyond the 10-year timeframe. The Transition Plan did not identify nor map ADA accessible routes, and sidewalks were not included in the report.

The purpose of this ADA Master Plan is to continue the progress that was accomplished in the City's ADA Transition Plan. Specifically, the ADA Master Plan includes mapping of proposed ADA accessible routes interconnecting locations of interest across the city, an existing condition inventory of curb ramps, sidewalks, and other pedestrian elements along the proposed ADA accessible routes, identification of ADA deficiencies along those routes, projected construction costs to address the identified deficiencies, a proposed schedule for the construction of the pedestrian infrastructure improvements, and identification of potential funding sources to fund the improvements. The proposed accessible routes were selected based on criteria and methodology discussed in Section 3.1, and prioritization of these routes was based on criteria discussed in Section 3.2. The plan is presented in this text report and mapped in AutoCAD and ArcGIS electronic files.

- 1.4. Stakeholder Involvement – The input from several people, organizations, and entities was included in the development of the ADA Master Plan. Monthly meetings between LNV, City Staff, the Regional Transportation Authority (RTA), the Metropolitan Planning Organization (MPO), the Texas Department of Transportation (TxDOT), and the Committee for Persons with Disabilities (CFPWD) were conducted throughout the duration of the project. At these meetings, input related to the prioritization of ADA accessible routes, locations to be included for interconnectivity, and the overall consensus for the direction of the ADA Master Plan was collected and incorporated into the final product.
- 1.5. Design Objective for Public and Private Development – Upon adoption of the ADA Master Plan, all new development and/or reconstruction of existing development of public and private facilities must meet the requirements of the City of Corpus Christi ADA Master Plan, the City of Corpus Christi Pedestrian Curb Ramp Standards, and the Americans with Disabilities Act. This is further defined in the City of Corpus Christi Unified Development Code.

CITY OF CORPUS CHRISTI

ADA MASTER PLAN

For Pedestrian Infrastructure Improvements
In Compliance with the Americans with Disabilities Act (ADA)

SECTION 2 – INVENTORY OF EXISTING CONDITIONS

2.1. Methodology – LNV engineers conducted in-field training courses for the data collection teams. The training courses consisted of visual and physical inspections of curb ramps and sidewalks, utilizing current Texas Department of Transportation (TxDOT) Pedestrian Facilities Standards (PED-05) as the governing documents to determine ADA compliance or non-compliance of curb ramps. For sidewalks, engineering judgment was used to determine whether a section of sidewalk would be usable or unusable to a person in a wheelchair. As a general rule, sections of existing sidewalk with severe architectural barriers (abrupt vertical changes in grade greater than 1", cross slopes greater than 4%, missing sections of sidewalk along a pedestrian path, severely broken sidewalk, etc.) were inventoried as unusable. Sidewalks with characteristics less severe than these general thresholds were considered usable. The data collection teams consisted of two persons—a designer and an engineering technician—and a total of four teams were utilized to inventory the data for the project. Quality control on the data collected was subsequently provided by a professional engineer.

The data collection teams were provided with a set of map sheets showing proposed ADA accessible routes (the determination of which is discussed in Section 3). At each intersection along those routes, the teams performed a visual inspection of the existing curb ramps, consisting of looking for obvious non-compliance of the curb ramps (no curb ramp, lack of adequate landing areas, severe slopes, lack of truncated domes, etc.). If an existing curb ramp passed the visual inspection, the team performed a physical inspection of the curb ramp, including taking measurements of all pertinent dimensions and slopes. Using these methods, each curb ramp was determined to be in compliance or non-compliance with the current TxDOT Pedestrian Facilities Standards. For sidewalks, the same visual inspection/ physical inspection method was utilized, and each section of sidewalk was determined to be usable or unusable as described in the paragraph above. If any portion of sidewalk within a City block (intersection to intersection along a proposed accessible route) was determined to be unusable, the entire section of sidewalk along that block was inventoried as such, since a person in a

wheelchair cannot traverse that City block due to the architectural barrier along the path. For construction cost estimating purposes, field notes (stating reasons for sidewalks determined to be unusable due to only a portion of the total length) were documented. Utilizing those notes, it was estimated that improvements to approximately 50% of the total length of sidewalk inventoried as unusable will improve those sections of sidewalk to a usable condition. In addition to determining the existing condition of the curb ramps and sidewalks along the proposed ADA accessible routes, LNV also inventoried the existing condition of several other pedestrian features, including the direction of travel of the curb ramps, the presence or non-presence (and direction) of pedestrian signals at signalized intersections, and the presence or non-presence of crosswalks at signalized intersections. A series of symbols and line types were drawn onto the map sheets corresponding to the existing condition of the curb ramps, sidewalks, pedestrian signals, and crosswalks. All data was transferred from the field map sheets into AutoCad, and subsequently into ArcGIS.

2.2. Summary of Existing Conditions – Approximately 180 miles of City streets, arterials and collectors, were included in the evaluation. In general, the existing curb ramps along the proposed accessible routes were found to be in poor condition, with only approximately 36% of the curb ramps being compliant at the time of evaluation, where curb ramps existed. At approximately 40% of the total number of locations evaluated, no curb ramps existed at all. Sidewalks were found to be in fair condition. Where sidewalk existed along the proposed accessible routes, approximately 63% of the total length was determined to be usable. However, at approximately 27% of the total length of sidewalk paths evaluated, no sidewalk existed at all. The following tables summarize the findings for curb ramps and sidewalks along the proposed ADA accessible routes:

Condition of Existing Curb Ramp Locations Along Proposed ADA Accessible Routes	
Compliant Curb Ramp Locations (Ea)	1,283
Non-Compliant Curb Ramps Locations (Ea)	2,248
Locations with No Curb Ramps (Ea)	2,326
Total Number of Locations Evaluated (Ea)	5,857

Condition of Existing Sidewalks Paths Along Proposed ADA Accessible Routes	
Usable Sidewalk Path (miles)	163.5
Unusable Sidewalk Path (miles)	94.6
No Sidewalk Path (miles)	97.3
Total Length of Pedestrian Routes Evaluated (miles)	355.4

At signalized intersections along the proposed ADA accessible routes, an inventory of existing pedestrian signals and crosswalks was taken. The presence or lack of pedestrian signals and crosswalks was documented for each direction across the intersection (four possible movements). The findings for pedestrian signals and crosswalks along the proposed ADA accessible routes are summarized in the following tables:

Condition of Existing Pedestrian Signals at Signalized Intersections Along Proposed ADA Accessible Routes	
Locations (Directions) with Pedestrian Signal Present (Ea)	385
Locations (Directions) with No Pedestrian Signal (Ea)	259
Total Locations (Directions) with Pedestrian Signals Evaluated (Ea)	644

Condition of Existing Crosswalks at Signalized Intersections Along Proposed ADA Accessible Routes	
Locations (Directions) with Crosswalk Present (Ea)	442
Locations (Directions) with No Crosswalk (Ea)	202
Total Locations (Directions) with Crosswalks Evaluated (Ea)	644

CITY OF CORPUS CHRISTI

ADA MASTER PLAN

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In Compliance with the Americans with Disabilities Act (ADA)

SECTION 3 – PROPOSED ADA ACCESSIBLE ROUTES

3.1. Methodology – The proposed ADA accessible routes were chosen based on the interconnectivity they provide between various places of interest within the City, ranked by:

1. City/ State/ Public Buildings
2. Major Transportation Routes
3. Places of Public Accommodation

According to ADA criteria, a “place of public accommodation” is a facility, operated by a private entity, whose operations affect commerce and which falls within at least one of the twelve categories listed below:

1. An inn, hotel, motel, or other place of lodging, except for an establishment located within a building that contains not more than five rooms for rent or hire and that is actually occupied by the proprietor of the establishment as the residence of the proprietor;
2. A restaurant, bar or other establishment serving food or drink;
3. A motion picture house, theater, concert hall, stadium, or other place of exhibition or entertainment;
4. An auditorium, convention center, lecture hall, or other place of public gathering;
5. A bakery, grocery store, clothing store, hardware store, shopping center, or other sales or rental establishment;
6. A laundromat, dry cleaner, bank, barber shop, beauty shop, travel service, shoe repair service, funeral parlor, gas station, office of an accountant or lawyer, pharmacy, insurance office, professional office of a health care provider, hospital, or other service establishment;
7. A terminal, depot, or other station used for specified public transportation;
8. A museum, library, gallery, or other place of public display or collection;
9. A park, zoo, amusement park, or other place of recreation;
10. A nursery, elementary, secondary, undergraduate, or postgraduate private school, or other place of education;

11. A day care center, senior citizen center, homeless shelter, food bank, adoption agency, or other social service center establishment;
12. A gymnasium, health spa, bowling alley, golf course, or other place of exercise or recreation.

The intent of the chosen routes is to allow for a person confined to the use of a wheelchair to access any of the locations listed from any of the other locations listed, once the entire system of ADA accessible routes is constructed. For development of the ADA Master Plan, only arterial and collector street corridors were considered.

- 3.2. Prioritization – By federal mandate in ADA Title II, the City must prepare a schedule for providing curb ramps where pedestrian walkways cross curbs, giving priority to walkways serving State and local government offices and facilities, major transportation routes, places of public accommodation, and lowest priority is walkways serving other areas. The prioritization rankings developed for the City's ADA Master Plan reflect this federal mandate. Therefore, as it pertains to this phase of the ADA Master Plan, walkways serving other areas (such as residential developments) were not included.

Accordingly, the ADA Master Plan is divided into addressing the City's pedestrian infrastructure needs, and interconnecting ADA accessible routes in the following three Phases:

- **Phase 1- City/ State/ Public Buildings**
- **Phase 2- Major Transportation Routes**
- **Phase 3- Places of Public Accommodation**

Within each of these three phases, several factors were used to determine which routes require a higher priority, including consideration of the incorporation of the City's existing Transition Plan, the volume of use along the routes, the density of existing special needs near the routes, and bus ridership along the routes. To project an image of being a pedestrian friendly city, also taken into consideration was addressing pedestrian infrastructure needs in areas where high volumes of non-local visitors are expected.

Each of the three phases is further divided into smaller packages for funding purposes, which are discussed in Section 4 of this ADA Master Plan.

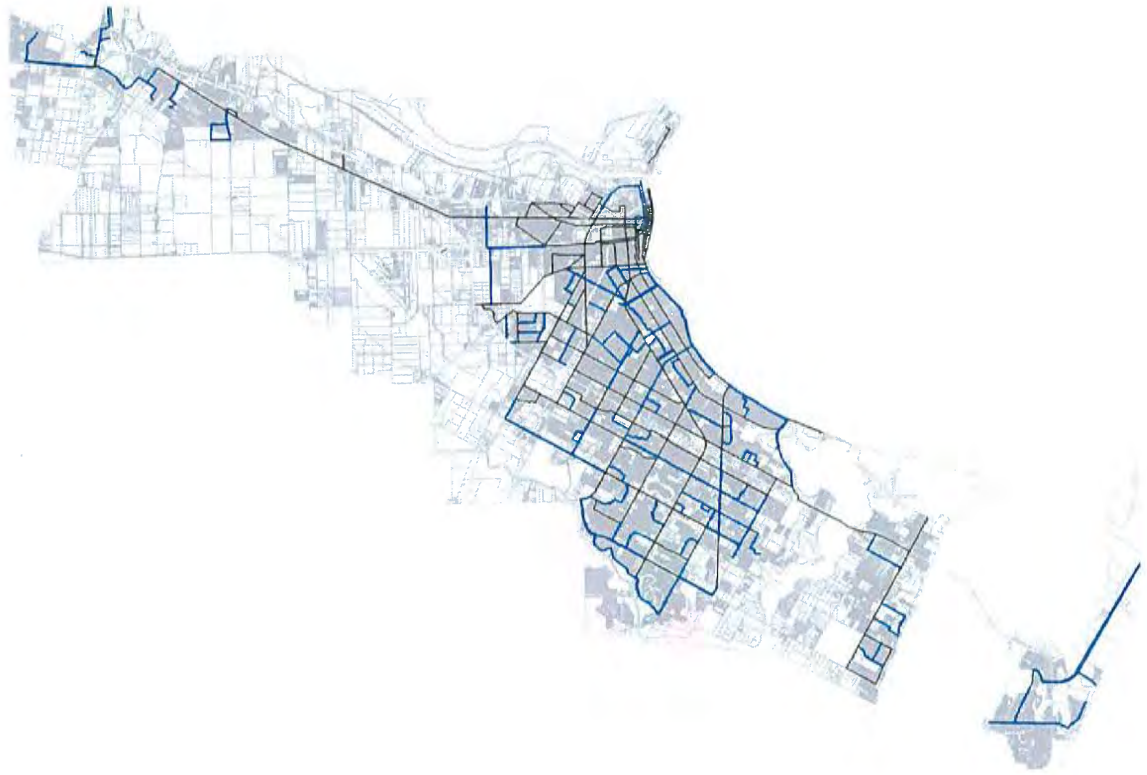
The identified ADA accessible routes for each Phase are illustrated below.



PHASE 1 – ADA ACCESSIBLE ROUTES



PHASE 2 – ADA ACCESSIBLE ROUTES



PHASE 3 – ADA ACCESSIBLE ROUTES

CITY OF CORPUS CHRISTI

ADA MASTER PLAN

For Pedestrian Infrastructure Improvements
In Compliance with the Americans with Disabilities Act (ADA)

SECTION 4 – CONSTRUCTION ESTIMATE, PHASING/SCHEDULING & POTENTIAL FUNDING OPTIONS

- 4.1. Estimated Construction Costs – Based on the information collected for developing this ADA Master Plan, as discussed in Section 2, estimated construction costs were determined (2012 dollars). Recent City of Corpus Christi bid tabulations were used for estimating unit costs for curb ramps, sidewalks, pedestrian signals and crosswalks, which are detailed below. Since these construction costs will be utilized for budgeting purposes, all unit costs include a 25% construction contingency and a 25% markup for contract administration, which yield total estimated Project Costs in 2012 dollars.

A unit cost of \$7,800 per corner of an intersection (\$5,000 plus contingencies and contract administration) was used for estimating curb ramp costs. Included in this cost are demolition and removal of existing sidewalk and curb & gutter (where present), and the construction of the new curb ramp(s) (including all flatwork, curb & gutter, pavement repair, saw cuts, detectable warning surfaces, and sidewalk tie-ins), at one corner of an intersection—which includes two curb ramps at signalized or 4-way stop intersections, and one curb ramp at all other intersections.

A unit cost of \$36 per linear foot (\$23 plus contingencies and contract administration) was used for estimating sidewalk costs. Included in this cost are demolition and removal of existing sidewalk (where present) and the construction of the new concrete sidewalk (4 inches in thickness and 5 feet in width).

A unit cost of \$6,250 per each (\$4,000 plus contingencies and contract administration) was used for estimating pedestrian signal costs. Included in this cost are a pedestrian signal head, pole, foundation, push button unit, and all related conduit, wiring, and timing adjustments for each direction of pedestrian traffic inventoried as non-existent during the field inspections.

A unit cost of \$3,900 per each (\$2,500 plus contingencies and contract administration) was used for estimating crosswalk costs. Included in this cost are obliteration of

existing pavement markings and placement of new reflective thermoplastic pavement markings (12" longitudinal stripes spaced 8 feet apart with 24" cross bar stripes spaced 2 feet apart) at all signalized intersections where crosswalks were inventoried as non-existent during the field inspections.

The following table summarizes the estimated construction costs for all infrastructure improvements identified in the ADA Master Plan:

Estimated Construction Costs For All Improvements Identified in ADA Master Plan			
Item	Quantity	Unit Cost	Total Cost
Non-Compliant Curb Ramps (Ea)	2,248	\$7,800	\$17,534,400
Non-Existent Curb Ramps (Ea)	2,326	\$7,800	\$18,142,800
Unusable Sidewalk (LF)	499,520*	\$36	\$8,991,300
Non-Existent Sidewalk (LF)	513,876	\$36	\$18,499,500
Pedestrian Signals (Ea)	259	\$6,250	\$1,618,900
Crosswalks (Ea)	202	\$3,900	\$787,800
Total Estimated Project Costs (2012 Dollars) =			\$65,574,700

* Note that, of the entire length of unusable sidewalk in each phase of the ADA Master Plan, improvements to approximately 50% of the length will improve the sidewalk to a usable condition. Therefore, only 50% of the length is used in the cost calculation.

4.2. Construction Phasing/Scheduling – The pedestrian infrastructure improvements identified in the ADA Master Plan have been divided into three (3) Phases, corresponding to the prioritization rankings described in Section 3:

Phase 1 consists of proposed improvements along the identified ADA accessible routes interconnecting **City, State, and Public Buildings**.

Phase 2 consists of proposed improvements along the identified ADA accessible routes interconnecting **Major Transportation Routes** within the City.

Phase 3 consists of proposed improvements along the identified ADA accessible routes interconnecting **Places of Public Accommodation**, as defined in Section 3.

The following tables summarize the estimated construction costs for each Phase of the ADA Master Plan:

Estimated Construction Costs For Phase 1- ADA Accessible Routes for City/ State/ Public Buildings			
Item	Quantity	Unit Cost	Total Cost
Non-Compliant Curb Ramps (Ea)	636	\$7,800	\$4,960,800
Non-Existent Curb Ramps (Ea)	474	\$7,800	\$3,697,200
Unusable Sidewalk (LF)	131,560*	\$36	\$2,368,100
Non-Existent Sidewalk (LF)	37,970	\$36	\$1,366,900
Pedestrian Signals (Ea)	61	\$6,250	\$381,300
Crosswalks (Ea)	81	\$3,900	\$315,900
Phase 1 Total Estimated Project Costs (2012 Dollars) =			\$13,090,200

Estimated Construction Costs For Phase 2- ADA Accessible Routes for Major Transportation Routes			
Item	Quantity	Unit Cost	Total Cost
Non-Compliant Curb Ramps (Ea)	768	\$7,800	\$5,990,400
Non-Existent Curb Ramps (Ea)	1001	\$7,800	\$7,807,800
Unusable Sidewalk (LF)	194,440*	\$36	\$3,499,900
Non-Existent Sidewalk (LF)	192,516	\$36	\$6,930,600
Pedestrian Signals (Ea)	117	\$6,250	\$731,300
Crosswalks (Ea)	92	\$3,900	\$358,800
Phase 2 Total Estimated Project Costs (2012 Dollars) =			\$25,318,800

Estimated Construction Costs For Phase 3- ADA Accessible Routes for Places of Public Accommodation			
Item	Quantity	Unit Cost	Total Cost
Non-Compliant Curb Ramps (Ea)	844	\$7,800	\$6,583,200
Non-Existent Curb Ramps (Ea)	851	\$7,800	\$6,637,800
Unusable Sidewalk (LF)	173,520*	\$36	\$3,123,300
Non-Existent Sidewalk (LF)	283,390	\$36	\$10,202,000
Pedestrian Signals (Ea)	81	\$6,250	\$506,300
Crosswalks (Ea)	29	\$3,900	\$113,100
Phase 3 Total Estimated Project Costs (2012 Dollars) =			\$27,165,700

* Note that, of the entire length of unusable sidewalk in each phase of the ADA Master Plan, improvements to approximately 50% of the length will improve the sidewalk to a usable condition. Therefore, only 50% of the length is used in the cost calculation.

Each of the three Phases of the ADA Master Plan has been further prioritized and subdivided into project packages. Phase 1 has been subdivided into project packages of approximately \$1,000,000 each, and Phases 2 and 3 have been subdivided into project packages of approximately \$5,000,000 each. These divisions have been made to prioritize the construction of the pedestrian infrastructure improvements within each phase, and to keep project costs within manageable funding budgets. Projects for Phase 1 are divided into smaller packages since it is anticipated that this phase can be funded within the next few years. Projects for Phases 2 and 3 are divided into larger packages since it is anticipated that these phases will be funded beyond a 5-year timeframe. It is recommended that these latter two phases be studied, and that project packages be further subdivided once the Phase 1 improvements have been completed.

The project packages for each Phase of the ADA Master Plan are included in Appendix A.

- 4.3. Potential Funding Options – While no specific project package in the ADA Master Plan is currently funded, there are several potential funding sources for these proposed infrastructure improvements. These include direct funding through:

The City of Corpus Christi's Bond Program – For the past several years, the City has sought voter approval in 4-year increments for city-wide infrastructure improvements. ADA Master Plan project packages should be included on the project lists for any future Bond Program infrastructure improvements. The City's Bond Program provides the best potential for funding the improvements identified in the ADA Master Plan.

Regional Transportation Authority (RTA) – In recent years, the City and the RTA have developed an excellent working relationship. Currently, the RTA provides \$500,000 per year for special projects, which allows for the construction of bus stops on new City street improvement projects. Additionally, the RTA has included improvements to the City's pedestrian infrastructure, in the form of newly constructed curb ramps and sidewalks, while improving their bus stop facilities. As a major part of the ADA Master Plan, the City is proposing pedestrian infrastructure improvements along Major Transportation Routes, which will encompass all of the RTA's bus routes along arterial and collector streets within the City. With the City and the RTA envisioning many of the same goals related to pedestrian infrastructure, these two entities should continue to partner towards those goals in creating and maintaining funding agreements that will benefit both parties.

Community Development Block Grants (CDBG) – Federal funding through CDBG may be available for portions of the proposed ADA Master Plan improvements within certain areas of the City. In areas currently designated as CDBG eligible, the City should actively pursue and apply for CDBG funding for ADA Master Plan improvements, either as stand-alone ADA projects or as part of other CDBG projects.

Texas Department of Transportation (TxDOT) and/or Corpus Christi Metropolitan Planning Organization (MPO) – Federal and/or State funding for portions of the proposed ADA Master Plan improvements may be available through TxDOT and/or the Corpus Christi MPO. Federal programs such as *Safe Routes to School*, and state administered federal programs such as the *Transportation Enhancement Program* may be available as potential funding sources. City planners should work together with TxDOT and MPO to pursue and apply for federal funding through these programs.

Within the ADA Master Plan there are some proposed ADA accessible routes along TxDOT-owned and maintained roadways. For the pedestrian infrastructure improvements along these routes, the City should pursue direct funding from TxDOT. If funding is not available in a timely manner, the City could pursue a joint funding agreement with TxDOT.

The City of Corpus Christi's Capital Improvement Program (CIP) – Historically, the City's CIP has not been the preferred source for specific pedestrian infrastructure improvements. However, with the ADA Master Plan adopted and in place, the City should consider CIP funding for high visibility portions of the ADA Master Plan.

Indirect Funding through Street Improvement Projects Selection – The ADA Master Plan infrastructure improvements can also be indirectly funded through the selection of City Street Improvement Projects along the proposed ADA accessible routes. City planners should not only evaluate the condition of the roadway itself, but also the condition of the pedestrian elements along the roadway during the street improvement project selection process. The ADA Master Plan Maps provide detailed information on the existing condition of pedestrian elements along arterial and collector street corridors within the City, and can serve as a tool for City planners during street improvement project selection.

As future street projects are selected and constructed along proposed ADA accessible routes, the City can assure that the projects meet the ADA Master Plan requirements. The City should require all A/E consultants preparing plans for City projects—as well as development projects that will be dedicated to the City and maintained by the City—to adhere to all elements and design criteria identified in the ADA Master Plan. In addition, the City must require that all future street projects address ADA needs in a manner consistent with current ADA guidelines and City Standards.

CITY OF CORPUS CHRISTI

ADA MASTER PLAN

For Pedestrian Infrastructure Improvements
In Compliance with the Americans with Disabilities Act (ADA)

SECTION 5 – MAPPING OF ADA ACCESSIBLE ROUTES

- 5.1. AutoCAD – All data collected for development of the ADA Master Plan was mapped using AutoCAD 2010. As described in Section 2, all data collected for the ADA Master Plan was gathered through field inspections by data collection teams. This data was then manually transferred into AutoCAD. Utilizing the City’s geo-referenced street basemap as the background, the existing condition inventory produced by the data collection teams was spatially mapped into AutoCAD. Various symbols and line types were used to show the existing condition of all data inventoried for the ADA Master Plan. The use of AutoCAD's features to separate information was then used to determine pedestrian infrastructure quantities, and to isolate areas of information to develop the phasing of the ADA Master Plan. With the capabilities of AutoCAD, designers created a citywide map of all information obtained during the field investigations. With this information, a scaled set of plan sheets was then created to show the detail of all the information gathered by the data collection teams.

- 5.2. Geographic Information System (GIS) – From the AutoCAD files described in Section 5.1 above, the data was transferred into ArcGIS. Several shapefiles were created to allow for an array of pedestrian infrastructure information to be viewed by the City’s ArcGIS users. The shapefiles include: existing condition of ADA curb ramps, existing condition of sidewalks, existing pedestrian signals, existing crosswalks, existing special needs, and existing bus stops. The shapefiles are based on the City’s coordinate system, and any additional shapefiles can be viewed in conjunction with the ADA Master Plan shapefiles. Each shapefile contains several attribute fields that identify the characteristics of the pedestrian infrastructure data collected, including location, condition (compliant or non-compliant for curb ramps, and usable or unusable for sidewalks), phase of construction (prioritization), and actual construction date (to be entered as construction is completed).

The GIS form of the ADA Master Plan is a very powerful tool. It was integral to the planning, prioritization and phasing portions of the ADA Master Plan. Several additional uses for the information contained within the shapefiles are available to the City, including but not limited to, the ability to generate quantities for reports, locate citizen pedestrian infrastructure complaints relative to the proposed improvements and phasing, and the ability to track construction progress of the ADA Master Plan projects. The electronic ArcGIS files for the ADA Master Plan are attached in Appendix D (on compact disc).

CITY OF CORPUS CHRISTI

ADA MASTER PLAN

For Pedestrian Infrastructure Improvements
In Compliance with the Americans with Disabilities Act (ADA)

SECTION 6 – PLAN POLICIES

6.1. **The City will pursue an annual funding goal of 3.5 million dollars per year to implement this Plan.** An annual funding item for ADA Master Plan improvements shall be placed in the City's Three Year Capital Budget/Capital Improvement Plan. Funding of the Plan will be through future bond programs, grants or other sources that become available. Annual funding in the amount of 3.5 million dollars per year will allow for implementation of the Plan within 20 years.

The City will pursue funding partnerships with various agencies as a means to achieve the annual funding goal. These funding partnerships may include, but are not limited to:

- The Regional Transportation Authority (RTA);
- Nueces County;
- Texas Department of Transportation (TxDOT);
- The Metropolitan Planning Organization (MPO);
- Department of Housing and Urban Development (HUD) / Community Development Block Grants (CDBG); and
- Area School Districts in Corpus Christi.

6.2. All infrastructure improvement projects, public or private, within the City's jurisdiction shall be constructed in conformity with this Plan. This includes all infrastructure improvements within public rights-of-way and public easements, and also includes any private infrastructure improvements to be dedicated to the City for ownership or maintenance. Pedestrian accessibility routes along public streets shall be designed in accordance with the Curb Ramp Standards illustrated in Appendix C, and shall meet or exceed the most current Texas Accessibility Standards (TAS). The City Engineer shall not approve designs which are in conflict with this Plan, unless it can be demonstrated that the design exceeds the design requirements in Appendix C and the Texas Accessibility Standards, or where there is no practicable alternative.

- 6.3. The ADA Master Plan shall be made available to all citizens, contractors, developers, engineers, and City Officials through a posting of the Plan on the City's website.
- 6.4. The City shall create a process for tracking ADA Master Plan improvements through its Geographic Information System. The process shall include all public-maintained pedestrian infrastructure improvements.
- 6.5. The City shall periodically update and revise this ADA Master Plan to meet or exceed the most current Texas Accessibility Standards (TAS) as these standards are revised to reflect changes in federal and state legislative or administrative requirements.

APPENDIX A

City of Corpus Christi ADA Master Plan

Street List and Limits



ADA MASTER PLAN STREET LIST AND LIMITS

Note: Construction is prioritized by Phase. Within each Phase, individual project packages can be constructed in the order determined by City of Corpus Christi Staff/ Planners. The following is a suggested construction phasing.

Phase 1 - Construction Packages for Proposed ADA Accessible Routes Interconnecting City/ State/ Public Buildings		
PACKAGE	STREET	LIMITS
Package A	N. Shoreline Blvd.	from Hughes St. to Craig St.
Package A	N. Water St.	from Resaca St. to Belden St.
Package A	S. Water St.	from Kinney St. to Craig St.
Package A	N. Chaparral St.	from Interstate 37 to Cooper's Alley
Package A	S. Chaparral St.	from Cooper's Alley to S. Upper Broadway
Package A	Mann St.	from N.Chaparral St. to N. Shoreline Blvd.
Package A	Kinney Ave.	from S. Chaparral St. to S. Water St.
Package B	Lipan St.	from N. Port Ave. to Carancahua St.
Package B	Tancahua St.	from Leopard St. to Kinney St.
Package B	S. Carancahua St.	from Cooper's Alley to Laredo St.
Package B	Cooper's Alley	from S. Tarancahua St. to N. Chaparral St.
Package B	Laredo St.	from S. Carrizo St. to S. Upper Broadway St.
Package B	Hospital Blvd.	from 25th St. to 19th St.
Package B	Mac Arthur St.	from S. Port Ave. to Horne Rd.
Package C	N. Chaparral St.	from Hirsch St. to U.S. 181
Package C	Mesquite St.	from Hirsch St. to Cooper's Alley
Package C	Peoples St.	from Broadway St. to N. Chaparral St.
Package C	Lepoard St.	from N. Brownlee Blvd. to N. Upper Broadway
Package C	Broadway St.	from Brewster St. to John Sartain St.
Package D	S. Staples St.	from Deforrest St. to Brawner Pkwy.
Package D	Carroll Ln.	from Staples St. to Gollihar Rd.
Package D	Gollihar Rd.	from Kostoryz Rd. to S. Staples St.
Package E	Carroll Ln.	from Gollihar Rd. to Tiger Ln.
Package E	Tiger Ln.	from Kostoryz Rd. to Flynn Pkwy.
Package E	Corona St.	from Flynn Pkwy. to Everhart Rd.
Package F	Highland Ave.	from Morgan Ave. to S. Port Ave.
Package F	Ruth St.	from S. Port Ave. to 19th St.
Package F	Ayers St.	from Santa Fe St. to Horne Rd.
Package G	Morgan Ave.	from Osage St. to Ocean Dr.
Package H	Horne Rd.	from Greenwood Dr. to Ayers St.
Package H	Ayers St.	from Horne Rd. to Holly Rd.
Package H	Gollihar Rd.	from Ayers St. to Kostoryz Dr.
Package H	Everhart Rd.	from S. Staples St. to South Padre Island Dr.
Package I	Holly Rd.	from Ayers St. to Weber Rd.
Package I	Weber Rd.	from Holly Rd. to Schanen Blvd.
Package I	Schanen Blvd.	from Weber Rd. to Everhart Rd.
Package I	Everhart Rd.	from Holly Rd. to South Padre Island Dr.
Package J	Everhart Rd.	from Holly Rd. to Saratoga Blvd
Package J	Saratoga Blvd.	from Everhart Rd. to S. Staples St.
Package J	Cimarron Blvd.	from Saratoga Blvd. to Lipes Blvd.
Package J	Lipes Blvd.	from Cimarron Blvd. to S. Staples St.
Package J	Waldron Rd.	from South Padre Island Dr. to Glenoak Dr.
Package K	S. Port Ave.	from Leopard St. to Ayers St.

**Phase 2 - Construction Packages for Proposed ADA Accessible Routes
Interconnecting Major Transportation Routes**

PACKAGE	STREET	LIMITS
Package A	Antelope St.	from N. Tanchua St. to Broadway St.
Package A	Agnes St.	from 19th St. to N. Tanchua St.
Package A	N. Tanchua St.	from Antelope St. to Leopard St.
Package A	Taylor St.	from N. Chaparral St. to N. Shoreline Blvd.
Package A	Starr St.	from N. Chaparral St. to N. Shoreline Blvd.
Package A	Schatzell St.	from N. Chaparral St. to N. Water St.
Package A	Lawrence St.	from N. Chaparral St. to N. Water St.
Package A	William St.	from N. Chaparral St. to N. Shoreline Blvd.
Package A	John Sartain St.	from N. Chaparral St. to N. Shoreline Blvd.
Package A	Cooper's Alley	from N. Chaparral St. to N. Shoreline Blvd.
Package A	Comanche St.	from 19th St. to N. Tanchua St.
Package A	S. Tanchua St.	from Kinney St. to Hancock St.
Package A	S. Carancahua St	from Kinney St. to Hancock St.
Package A	3rd St.	from Hancock St. to Morgan Ave.
Package A	Santa Fe St.	from Hancock St. to Ayers St.
Package A	19th St.	from Morgan Ave. to Comanche St.
Package A	S. Brownlee Blvd.	from Morgan Ave. to Agnes St.
Package A	Laredo St.	from 19th St. to Carrizo St.
Package A	Ocean Dr.	from Craig St. to Ayers St.
Package A	S. Alameda St.	from Ayers St. to Ennis Joslin Rd
Package A	Ocean Dr.	from Ennis Joslin Rd. to Sand Dollar Blvd.
Package A	S. Staples St.	from Everhart Rd. to Williams Dr.
Package A	N. Staples St.	from Comanche St. to Lipan St.
Package A	Corona St.	from Everhart Rd. to Williams Dr.
Package A	Williams Dr.	from Corona St. to Airline Rd.
Package A	Mc Ardle Rd.	from Staples St. to Airline Rd.
Package A	Airline Rd.	from Mc Ardle Rd. to South Padre Island Dr.
Package A	Rodd Field Rd.	from Mc Ardle Rd. to Williams Dr.
Package A	Mc Ardle Rd.	from Rodd Field Rd. to Ennis Joslin Rd.
Package A	Ennis Joslin Rd.	from Mc Ardle Rd. to South Padre Island Dr.

Package B	Beach Ave.	from E. Causway Blvd. to Surfside Blvd.
Package B	Timon Blvd.	from Beach Ave. to E. Causway Blvd.
Package B	Surfside Blvd.	from Beach Ave. to Breakwater Ave.
Package B	Palm Dr.	from John St. to Hulbirt St.
Package B	John St.	from Palm Dr. to Kennedy Ave.
Package B	Kennedy Ave.	from John St. to Leopard St.
Package B	Winnebago St.	from Kennedy St. to Sam Rankin St.
Package B	Sam Rankin St.	from Winnebago St. to Lobo St.
Package B	Lobo St.	from Sam Rankin St. to N. Staples St.
Package B	N. Staples St.	from Lobo St. to Leopard St.
Package B	Nueces Bay Blvd.	from Hulbirt St. to Leopard St.
Package B	Hulbirt St.	from Nueces Bay Blvd. to Kennedy Ave.
Package B	Buddy Lawrence Dr.	from Interstate 37 to Nueces Bay Blvd.
Package B	Up River Rd.	from Interstate 37 to Palm Dr.
Package B	Omaha Dr.	from Interstate 37 to Leopard St.
Package B	Villa Dr.	from Up River Rd. to Baldwin Blvd.
Package B	Cantwell Dr.	from Leopard St. to Baldwin Blvd.
Package B	Baldwin Blvd.	from Catwell Dr. to Russell Dr.
Package B	Russell Dr.	from Baldwin Blvd. to Old Robstown Rd.
Package B	Old Robstown Rd.	from Russell Dr. to Up River Rd.
Package B	Lipan St.	from Palm Dr. to N. Port Ave.
Package B	Enterprize Pkwy.	from Bear Ln. to Old Brownsville Rd.
Package B	Old Brownsville Rd.	from Enterprize Pkwy. to S. Navigation Blvd./Horne Rd.
Package B	Horne Rd.	from Old Brownsville Rd. to Greenwood Dr.
Package B	Molina Dr.	from Horne Rd. to West Point Rd.
Package B	West Point Rd.	from Molina Dr. to Greenwood Dr.
Package B	Gollihar Rd.	from Greenwood Dr. to Ayers St.
Package B	Greenwood Dr.	from Trojan Dr. to Hala Pit Rd.

PACKAGE	STREET	LIMITS
Package C	Agnes St.	from 19th St. to Airport Rd.
Package C	Balboa St.	from Pine St. to Morgan Ave.
Package C	Pine St.	from Balboa to Hawatha St.
Package C	Huron Dr.	from Hawatha St. to Osage St.
Package C	Ruth St.	from Osage St. to S. Port Ave.
Package C	Morgan Ave.	from Mohawk St. to Airport Rd.
Package C	Greenwood Dr.	from S. Port Ave. to Horne Rd.
Package C	Old Brownsville Rd.	from Airport Rd. to Bear Ln.
Package C	Trojan Dr.	from Greenwood Dr. to Prescott St.
Package C	Mc Ardle Rd.	from Ayers St. to Kostoryz Rd.
Package C	Kostoryz Rd.	from Mc Ardle Rd. to Sokol Dr./Tiger Ln.
Package C	Richter St.	from Sokol Dr. to Sacky Dr.
Package C	Sacky Dr.	from Ayers St. to Richter St.
Package C	Sokol Dr.	from Kostoryz Rd. to Richter St.
Package C	Weber Rd.	from South Padre Island Dr. to Holly Rd.
Package C	Weber Rd.	from Caravelle Pkwy. to Saratoga Blvd.
Package C	Waldron Rd.	from Glenoak Dr. to Yorktown Blvd.
Package C	Caribbean Dr.	from Waldron Rd. to Laguna Shores Rd.

Package D	Santa Fe St.	from Ayers St. to Robert Dr.
Package D	Ocean Dr.	from Robert Dr. to Airline Rd.
Package D	Airline Rd.	from Ocean Dr. to Mc Ardle Rd.
Package D	Mc Ardle Rd.	from S. Staples St. to Kostoryz Rd.
Package D	Mc Ardle Rd.	from Airline Rd. to Rodd Field Rd.
Package D	Greenwood Dr.	from Holly Rd. to Frio St.
Package D	Frio St.	from Greenwood Dr. to Hacala St.
Package D	Dorado St.	from Hacala St. to Martin St.
Package D	Hacala St.	from Frio St. to Dorado St.
Package D	Martin St.	from Dorado St. to Holly Rd.
Package D	Holly Rd.	from Ayers St. to Crosstown Expy.
Package D	Aaron Dr.	from Weber Rd. to Sun Valley Dr.
Package D	Sun Valley Dr.	from Aaron Dr. to Cedar Pass Dr.
Package D	Cedar Pass Dr.	from Sun Valley Dr. to Everhart Rd.
Package D	Everhart Rd.	from Cedar Pass Dr. to Saratoga Blvd.
Package D	N.A.S. Dr.	from Webb St. to Lexington Blvd.
Package D	Waldron Rd.	from N.A.S. Dr./Webb St. to South Padre Island Dr.
Package D	Laguna Shores Rd.	from Caribbean Dr. to Yorktown Blvd.
Package D	Yorktown Blvd.	from Laguna Shores Rd. to Waldron Rd.

Package E	Leopard St.	from Calicoate Rd. to Lantana St.
Package E	Leopard St.	from North Padre Island Dr. to Crosstown Expy.
Package E	N. Harrington Dr.	from McKinzie Rd. to Charles Dr.
Package E	Charles Dr.	from N. Harrington Dr. to Leopard St.
Package E	Tuloso Rd.	from Timberline Dr. to Leopard St.
Package E	McKinzie Rd.	from Leopard St. to N. Harrington Dr.

**Phase 3 - Construction Packages for Proposed ADA Accessible Routes
Interconnecting Places of Public Accommodation**

PACKAGE	STREET	LIMITS
Package A	Elizabeth St.	from S. Brownlee Blvd. to Ocean Dr.
Package A	S. Brownlee Blvd.	from Prescott St. to S. Staples St.
Package A	Prescott St.	from 18th St. to S. Brownlee Blvd.
Package A	18th St.	from S. Staples St. to Prescott St.
Package A	Baldwin Blvd.	from S. Staples St. to Highland Ave.
Package A	Tarlton St.	from Washington St. to Greenwood Dr.
Package A	Carver Dr.	from Tarlton St. to Baldwin Blvd.
Package A	Swantner Dr.	from Texan Trl. to S. Staples St.
Package A	Texan Trl.	from S. Staples St. to Santa Fe St.
Package A	Fort Worth St.	from Brawner Pkwy. to Texan Trl.
Package A	Rosedale Dr.	from S. Staples St. to Fortworth St.
Package A	Brawner Pkwy.	from S. Staples St. to S. Alameda St.
Package A	Airline Rd.	from Saratoga Blvd. to South Padre Island Dr.
Package A	Rodd Field Rd.	from Saratoga Blvd. to Williams Dr.
Package A	Sean Dr.	from Holly Rd. to Thames Dr.
Package A	Thames Dr.	from Hard Wick St. to Williams Dr.
Package A	Cimarron Blvd.	from Saratoga Blvd. to Wooldridge Rd.
Package A	Dewberry Dr.	from Druant Dr. to Wooldridge Rd.
Package A	Scabbard Dr.	from Druant Dr. to Wooldridge Rd.
Package A	Holly Rd.	from Airline Rd. to Rodd Field Rd.
Package A	Wooldridge Rd.	from S. Staples St. to Rodd Field Rd.
Package A	Durant Dr.	from Dewberry Dr. to Scabbard Dr.
Package A	Spohn Dr.	from S. Staples St. to Saratoga Blvd.
Package A	Hardwick St.	from Sean Dr. to Thames Dr.
Package A	Northwese Blvd.	from Woodriver Dr. to Calallen Dr.
Package A	Saratoga Blvd.	from Cimarron Blvd. to Rodd Field Rd.

Package B	Woodriver Dr.	from Northwest Blvd. to Beal Dr.
Package B	River Canyon Dr.	from Teague Ln. to dead end
Package B	Teague Ln.	from River Canyon Dr. to Calallen Dr.
Package B	Calallen Dr.	from Northwest Blvd. to Mountain Trl.
Package B	Mountain Trl.	from Calallen Dr. to Interstate 37
Package B	W. Redbird Ln.	from Calallen Dr. to Interstate 37
Package B	Lott Ave.	from Yellow Oak Ave. to Hearn Rd.
Package B	Hearn Rd.	from Callicoate Rd. to Lott Ave.
Package B	Wandering Creek Dr.	from Turkey Creek Dr. to Leopard St.
Package B	Turkey Creek Dr.	from Wandering Creek Dr. to Cliff Crenshaw St.
Package B	Willowood Creek Dr.	from Woodway Creek Dr. to Cliff Crenshaw St.
Package B	Cliff Crenshaw St.	from Willowood Creek Dr. to Turkey Creek Dr.
Package B	McKinzie Rd.	from Haven Dr. to Leopard St.
Package B	Frontier Dr.	from Rockwood St. to Frontier Dr.
Package B	Haven Dr.	from Warrior Rd. to McKinzie Rd.
Package B	Warrior Rd.	from Haven Dr. to Horseshoe Dr.
Package B	Rockwood St.	from Horseshoe Dr. to Frontier Dr.
Package B	N. Port Ave.	from Interstate 37 to Broadway St.
Package B	Cliff Maus Dr.	from South Padre Island Dr. to Old Brownsville Rd.
Package B	West Point Rd.	from South Padre Island Dr. to Molina Dr.
Package B	Villareal Rd.	from Molina Dr. to Columbia St.
Package B	Bloomington St.	from Molina Dr. to Teresa St.
Package B	Teresa St.	from Bloomington St. to Horne Rd.
Package B	Columbia St.	from West Point Rd. to Horne Rd.
Package B	Trojan Dr.	from Crosstown Expy. to Prescott St.
Package B	Prescott St.	from Trojan Dr. to Horne Rd.
Package B	Belton St.	from MacArthur St. to Greenwood Dr.
Package B	Tarlton St.	from Ayers St. to Crosstown Expy.
Package B	Horne Rd.	from Kostoryz Rd. to Ayers St.
Package B	Ramsey St.	from Horne Rd. to Norton St.
Package B	Norton St.	from Ramsey St. to Casa Linda Dr.
Package B	Kostoryz Rd.	from Gollihar Rd. to S. Staples St.
Package B	Corta St.	from Kostoryz Rd. to Casa Grande Dr.
Package B	Casa Grande Dr.	from Corta St. to Norton St.
Package B	Casa Linda Dr.	from Norton St. to Staples St.
Package B	Delaine Dr.	from Fort Worth St. to S. Alameda St.
Package B	Fort Worth St.	from Carmel Pkwy. to Delaine Dr.
Package B	Carmel Pkwy.	from Fort Worth St. to S. Alameda St.

PACKAGE	STREET	LIMITS
Package C	Kostoryz Rd.	from Saratoga Blvd. to Holly Rd.
Package C	Saratoga Blvd.	from Ayers St. to Kostoryz Rd.
Package C	Masterson St.	from Kostoryz Rd. to White Bird Dr.
Package C	White Bird Dr.	from Masterson St. to Kostoryz Rd.
Package C	Carroll Ln.	from Tiger Ln. to Panama Dr.
Package C	Panama Dr.	from Carroll Ln. to Weber Rd.
Package C	Tripoli Dr.	from Weber Dr. to Philippine Dr.
Package C	Philippine Dr.	from Tripoli Dr. to Flynn Pkwy.
Package C	Flynn Pkwy.	from Bonner Dr. to Tiger Ln.
Package C	Lamont St.	from Weber Rd. to Mable St.
Package C	Mable St.	from Lamont St. to Mc Ardle Rd.
Package C	Gollihar Rd.	from Staples St. to Belmeade Dr.
Package C	Belmeade Dr.	from Gollihar to Airline Rd.
Package C	South Shore Pl.	from Ocean Dr. to Cape Ann Dr.
Package C	Cape Ann Dr.	from South Shore Pl. to Cape Cod Dr.
Package C	Cape Cod Dr.	from Cape Ann Dr. to Kentner St.
Package C	Kentner St.	from Cape Cod Dr. to Parade Dr.
Package C	Parade Dr.	from Kentner St. to Alameda St.
Package C	Rickey Dr.	from Mc Ardle Rd. to Bernice Dr.
Package C	Bernice Dr.	from Rickey Dr. to Delta Dr.
Package C	Woodlawn Dr.	from Mc Ardle Rd. to Bernice Dr.
Package C	Delta Dr.	from Bernice Dr. to Suez Dr.
Package C	Suez Dr.	from Delta Dr. to Clarion Dr.
Package C	Clarion Dr.	from Suez Dr. to Mc Ardle Rd.
Package C	Capital Dr.	from Weber Dr. to Congressional Dr.
Package C	Congressional Dr.	from Capital Dr. to W. Shea Pkwy.
Package C	W. Shea Pkwy.	from Congressional Dr. to Saratoga Blvd.
Package C	Sanders Dr.	from Saratoga Blvd. to Snowgoose Rd.
Package C	Grand Junction Dr.	from Sanders Dr. to Snowgoose Rd.
Package C	Snowgoose Rd.	from Sanders Dr. to Wapentate Dr.
Package C	Wapentate Dr.	from Grand Junction Dr. to Aaron Dr.
Package C	Aaron Dr.	from Wapentate Dr. to Sun Valley Dr.
Package C	Hunt Dr.	from Saratoga Blvd. to Timbergate Dr.
Package C	Timbergate Dr.	from Hunt Dr. to S. Staples St.
Package C	Yorktown Blvd.	from Everhart Rd to S. Staples St.
Package C	Everhart Rd.	from Yorktown Blvd. to Cedar Pass Dr.
Package C	Lipes Blvd.	from Yorktown Blvd. to South Staples St.
Package C	Hustlin Hornet Dr.	from Waldron Rd. to Laguna Shores Rd.
Package C	Laguna Shores Rd.	from Hustlin Hornet Dr. to Glenoak Dr.
Package C	Glenoak Dr.	from Waldron Rd. to Debra Ln.
Package C	Glenoak Dr.	from Debra Ln. to Laguna Shores Rd.
Package C	Debra Ln.	from Glenoak Dr. to Glenoak Dr.
Package D	Ayers St.	from Santa Fe St. to Ocean Dr.
Package D	Ocean Dr.	from Ayers St. to Robert Dr.
Package D	Ocean Dr.	from Airline Rd. to Ennis Joslin Rd.
Package D	Louisiana Ave.	from Ocean Dr. to S. Staples St.
Package D	Kosar St.	from S. Staples St. to Naples St.
Package D	Doddridge St.	from Ocean Dr. South Padre Island Dr.
Package D	Kostoryz Rd.	from Gollihar Rd. to Mc Ardle Rd.
Package D	Kostoryz Rd.	from Sokol Dr. to Holly Rd.
Package D	Civitan Dr.	from Ayers St. to Holly Rd.
Package D	Holly Rd.	from Weber Rd. to Airline Rd.
Package D	Airline Rd.	from South Padre Island Dr. to 460 feet north
Package D	Belmeade Dr.	from Airline Rd. to Gollihar Rd.
Package D	Quebec Dr.	from Wooldridge Rd. to Vancouver Dr.
Package D	Vancouver Dr.	from Quebec Dr. to Canadian Dr.
Package D	Canadian Dr.	from Vancouver Dr. to Oso Pkwy.
Package D	Oso Pkwy.	from Canadian Dr. to Toronto Dr.
Package D	Cimarron Blvd.	from Yorktown Blvd. to Lens Dr.
Package D	Flour Bluff Dr.	from South Padre Island Dr. to Graham Rd.
Package D	Graham Rd.	from Flour Bluff Dr. to Waldron Rd.

PACKAGE	STREET	LIMITS
Package E	Agnes Rd.	from McBride Ln. to Airport Rd.
Package E	Everhart Rd.	from S. Alameda St. to S. Staples St.
Package E	Ennis Joslin Rd.	from Ocean Dr. to Mc Ardle Rd.
Package E	Greenwood Dr.	from Frio St. to Saratoga Blvd.
Package E	Saratoga Blvd.	from Greenwood Dr. to Ayers St.
Package E	Saratoga Blvd.	from Kostoryz Rd. to Weber Rd.
Package E	Weber Rd.	from Aaron Dr. to Yorktown Blvd.
Package E	Yorktown Blvd.	from Weber Rd. to Everhart Rd.
Package E	Oso Pkwy.	from Yorktown Blvd. to Lens Dr.
Package E	Lens Dr.	from Oso Pkwy. to Cimarron Blvd.
Package E	Brockhaption St.	from Lipes Blvd. to Cimarron Blvd.
Package E	Cimarron Blvd.	from Yorktown Blvd. to Lipes Blvd.
Package E	Yorktown Blvd.	from Cimarron Blvd. to Rodd Field Rd.
Package E	Rodd Field Rd.	from Yorktown Blvd. to Airline Rd.
Package E	Rodd Field Rd.	from Saratoga Blvd. to 730 feet past Marble Falls Dr.
Package E	Mediterranean Dr.	from Waldron Rd. to Laguna Shores Rd.
Package E	Jamaica Dr.	from Mediterranean Dr. to Caribbean Dr.
Package E	Commodores Dr.	from Aquarius St. to John F Kennedy Memorial Causway
Package E	Aquarius St.	from Commodores Dr. to Bello Dr.
Package E	Aquarius St.	from Dasmarrinas Dr. to Whitecap Blvd.
Package E	Whitecap Blvd.	from Bonasse Ct. to Windward Dr.
Package E	Windward Dr.	from Whitecap Blvd. to St. Bartholomew Dr.
Package F	McBride Ln.	from Erin Dr. to Agnes St.
Package F	Leopard St.	from Interstate 37 to Hearn Rd.
Package F	Flato Rd.	from Agnus St. to Bear Ln.
Package F	Interstate 37	from Ripple Rd. to approx 1.45 miles north on IH-37
Package F	Hearn Rd.	from Leopard St. to Callicoate Rd.
Package F	Callicoate Rd.	from Hearn Rd. to Leopard St.
Package F	SH 361	from John F Kennedy Memorial Causeway to approx 4.21 miles north on SH 361
Package F	Zahn Rd.	from SH 361 to end of road at beach

APPENDIX B

City of Corpus Christi ADA Master Plan

Map Book

(See Attached Map Book Phases 1, 2 and 3)

APPENDIX C

City of Corpus Christi ADA Master Plan
Pedestrian Curb Ramp Standards



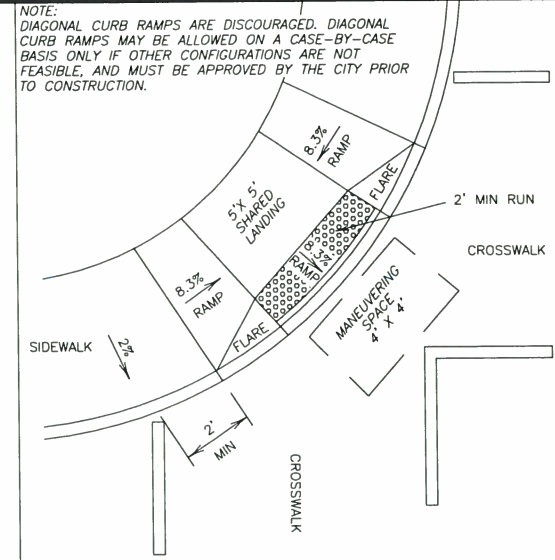
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engineers | architects | contractors
801 NAVIGATION, SUITE 300
CORPUS CHRISTI, TEXAS 78408
PHONE (361) 883-1984
FAX (361) 883-1988
WWW.LNVINC.COM
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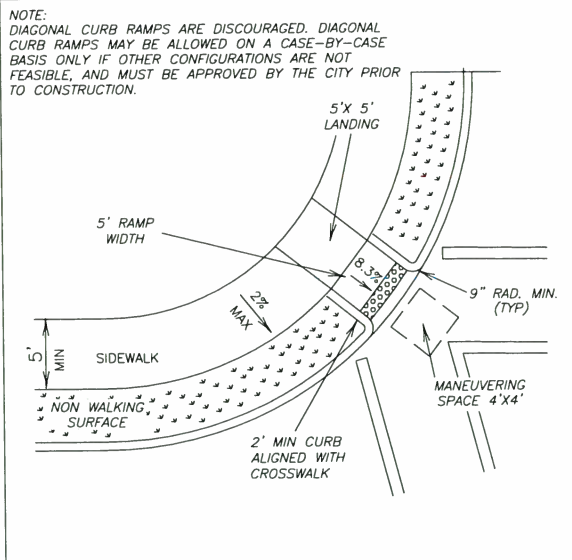
CITY OF CORPUS CHRISTI TEXAS
Department of Engineering Services

CITY OF CORPUS CHRISTI ADA MASTERPLAN
CITY OF CORPUS CHRISTI PEDESTRIAN CURB RAMP STANDARDS
1 OF 4

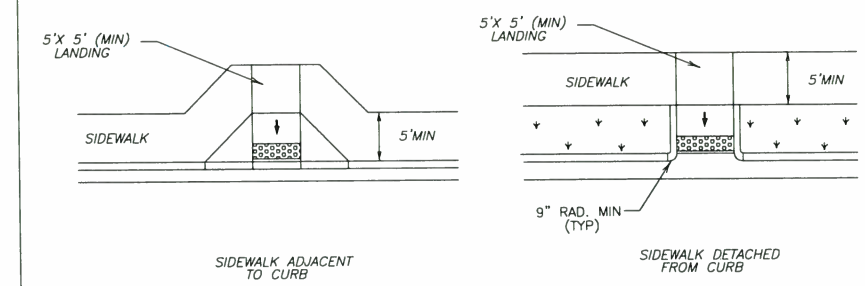
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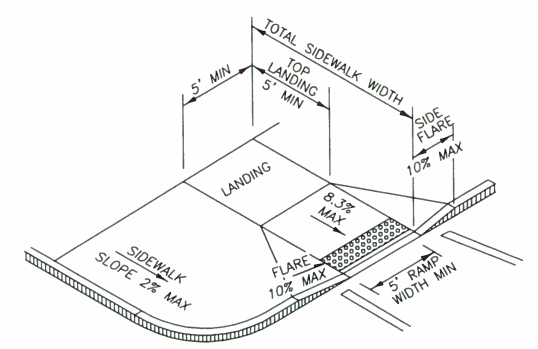
TYPE 4
DIAGONAL COMBINATION CURB RAMP
PERPENDICULAR TO THE TANGENT OF THE CURB RADIUS AND CONTAINED IN CROSSWALK



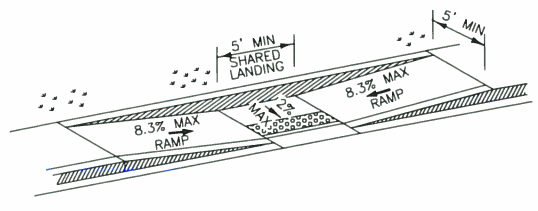
TYPE 7
DIAGONAL CURB RAMP (RETURNED CURB)



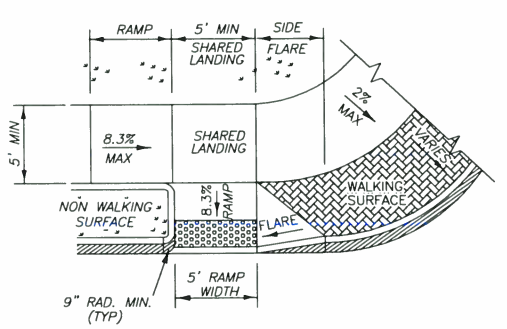
TYPE 10
CURB RAMP MID-BLOCK PLACEMENT
PERPENDICULAR RAMPS



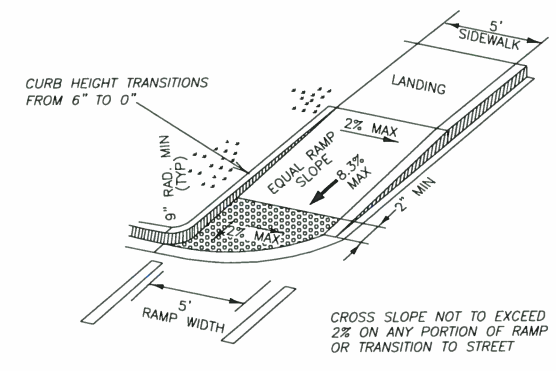
TYPE 1
PERPENDICULAR CURB RAMP
(SIDEWALK ADJACENT TO CURB)



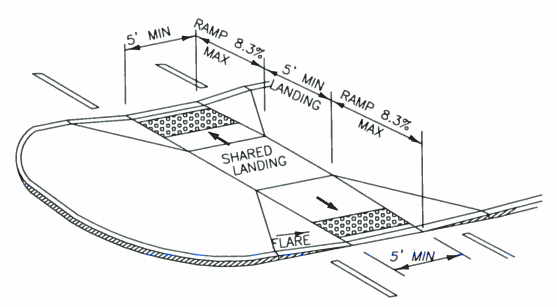
TYPE 2
PARALLEL CURB RAMP WITH SIDEWALK ADJACENT TO CURB
(USE ONLY WHERE WATER WILL NOT POND IN THE LANDING)



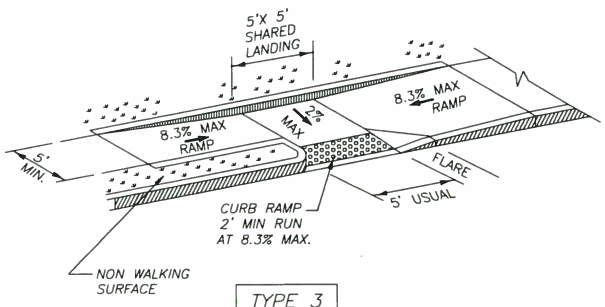
TYPE 5
COMBINATION CURB RAMP



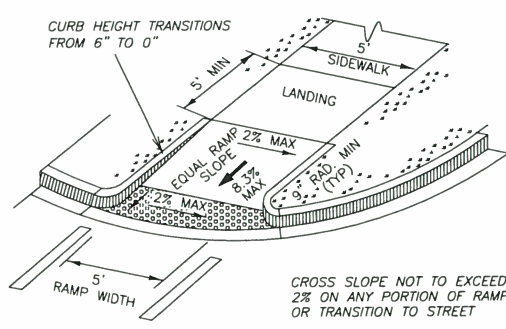
TYPE 8
DIRECTIONAL RAMP WITHIN RADIUS
(SIDEWALK ADJACENT TO CURB)



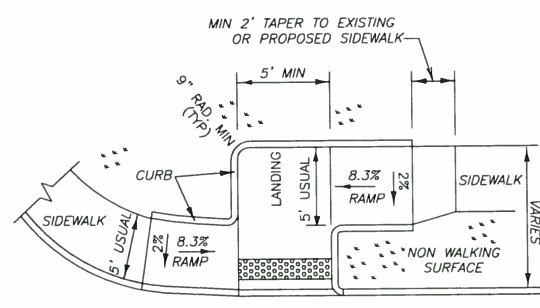
TYPE 11
CURB RAMPS AT MEDIAN ISLAND



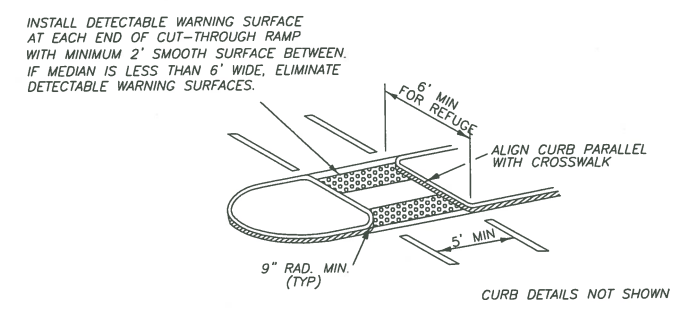
TYPE 3
PARALLEL CURB RAMP



TYPE 6
DIRECTIONAL RAMP WITHIN RADIUS
(SIDEWALK SET BACK FROM CURB)

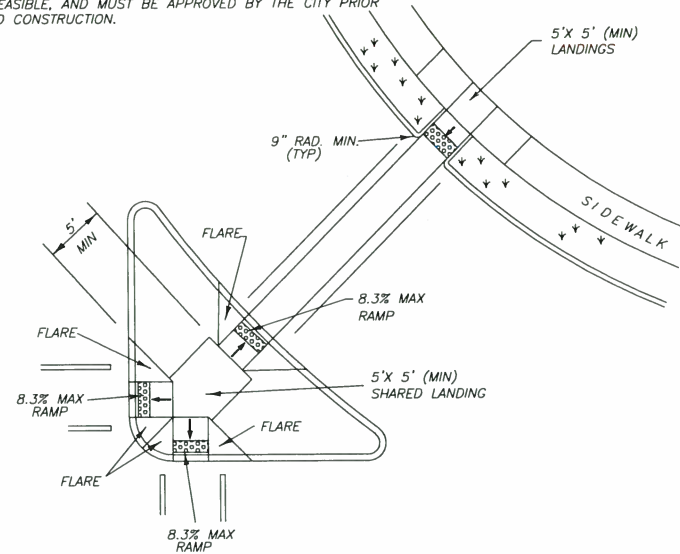


TYPE 9
OFFSET PARALLEL CURB RAMP



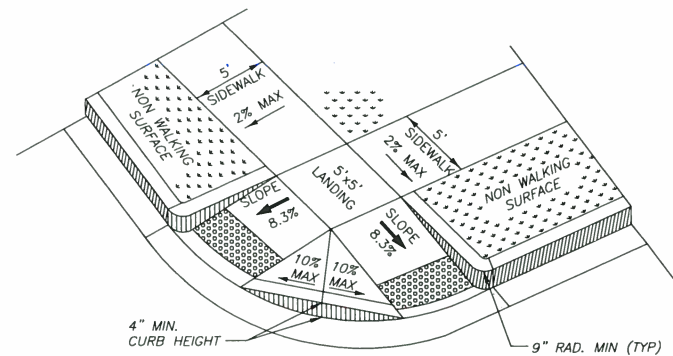
TYPE 12
FLUSH CURB RAMP AT MEDIAN ISLAND OPENING

NOTE:
DIAGONAL CURB RAMPS ARE DISCOURAGED. DIAGONAL CURB RAMPS MAY BE ALLOWED ON A CASE-BY-CASE BASIS ONLY IF OTHER CONFIGURATIONS ARE NOT FEASIBLE, AND MUST BE APPROVED BY THE CITY PRIOR TO CONSTRUCTION.



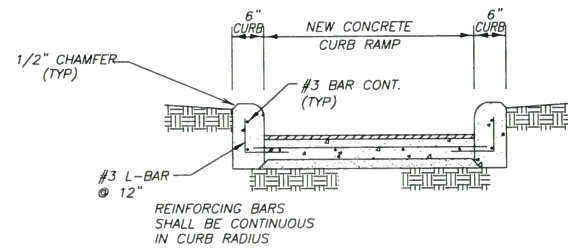
TYPE 13

AT INTERSECTION W/FREE RIGHT TURN & ISLAND COMBINATION ISLAND RAMPS



TYPE 14

PERPENDICULAR CURB RAMPS (BI-DIRECTIONAL)
(SIDEWALK SET BACK FROM CURB)



HEADER CURBS AT CURB RAMP

SUBGRADE PREPARATION:

1. SUBGRADE UNDER CONCRETE SIDEWALKS AND CURB RAMPS SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY.

SIDEWALK NOTES:

1. THE MINIMUM SIDEWALK WIDTH FOR ALL ARTERIAL AND COLLECTOR STREETS IS 5'. WHERE A 5' SIDEWALK CAN NOT BE PROVIDED DUE TO SITE CONSTRAINTS, A MINIMUM 4' SIDEWALK MAY BE PROVIDED. 5'X5' PASSING AREAS SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200' FOR ALL SIDEWALKS LESS THAN 5' IN WIDTH.
2. MAXIMUM ALLOWABLE CROSS SLOPE ON SIDEWALK SURFACE IS 2%.
3. ALL EXPANSION JOINTS TO BE 3/4" THICK WOOD FIBER ASPHALT-IMPREGNATED EXPANSION BOARD, UNLESS OTHERWISE NOTED.
4. ALL CONCRETE TO BE CLASS 'A' $f'_c=3,000$ PSI. ALL REINFORCING STEEL TO BE GRADE 60, $f_y=60,000$ PSI.
5. SIDEWALKS SHALL BE AT LEAST 4" THICK CONCRETE.
6. CONCRETE SURFACE TO RECEIVE BROOM FINISH.
7. TRANSVERSE CONTRACTION JOINTS 1/8" WIDE BY 1/2" DEEP SHALL BE CUT IN ALL SIDEWALKS AT 5'-0" INTERVALS (MAXIMUM).
8. PROVIDE PEDESTRIAN ACCESSIBLE ROUTE WITH DETECTABLE WARNING SURFACE FOR SIDEWALKS THAT INTERSECT CONTROLLED DRIVEWAYS. DETECTABLE WARNING SURFACE SHALL BE A MINIMUM OF 24" IN DEPTH IN THE DIRECTION OF PEDESTRIAN TRAVEL, AND EXTEND THE FULL WIDTH OF THE ACCESSIBLE ROUTE WHERE IT INTERSECTS THE CONTROLLED DRIVEWAY.

CURB RAMP NOTES:

1. PROVIDE CURB RAMPS WHEREVER AN ACCESSIBLE ROUTE CROSSES (PENETRATES) A CURB.
2. SLOPE CRITERIA

RAMPS AND LANDING AREAS

	MAX SLOPE (V:H, %, IN PER FT)
RAMP IN DIRECTION OF TRAVEL	1:12 / 8.03% / 1" PER FT
SIDE SLOPE OF RAMP (FLARE)	1:10 / 10% / 1.2" PER FT
CROSS SLOPE OF RAMP	1:50 / 2% / 0.24" PER FT
LANDING AREA (ALL DIRECTIONS)	1:50 / 2% / 0.24" PER FT

ADJOINING AREAS

SIDEWALK IN DIRECTION OF TRAVEL	1:20 / 5% / 0.60" PER FT
SIDEWALK CROSS SLOPE	1:50 / 2% / 0.24" PER FT
GUTTER IN DIRECTION OF TRAVEL	1:20 / 5% / 0.60" PER FT

A SMOOTH TRANSITION ($S \leq 1:50$) IN DIRECTION OF TRAVEL IS REQUIRED WHERE RAMPS TRANSITION TO THE STREET

3. PROVIDE FLARED SIDES WHERE THE PEDESTRIAN CIRCULATION PATH CROSSES THE CURB RAMP. FLARED SIDES SHALL BE SLOPED AT 10% MAXIMUM, MEASURED PARALLEL TO THE CURB. RETURNED CURBS MAY BE USED ONLY WHERE PEDESTRIANS WOULD NOT NORMALLY WALK ACROSS THE RAMP, EITHER BECAUSE THE ADJACENT SURFACE IS PLANTED, SUBSTANTIALLY OBSTRUCTED, OR OTHERWISE PROTECTED.
4. LANDINGS SHALL BE 5'X5' MINIMUM WITH A MAXIMUM 2% SLOPE IN ANY DIRECTION.
5. CURB RAMP MUST BE WHOLLY CONTAINED WITHIN CROSSWALK MARKINGS, EXCLUDING SIDE FLARES.

CURB RAMP NOTES (CONTINUED):

6. CURB RAMPS, FLARES AND LANDINGS SHALL BE AT LEAST 5" THICK CONCRETE AND EXPANSION JOINTS SHALL TYPICALLY BE USED AT MATCHLINE WITH ADJOINING AREAS.
7. MANEUVERING SPACE AT THE BOTTOM OF CURB RAMPS SHALL BE A MINIMUM OF 4'X4' WHOLLY CONTAINED WITHIN THE CROSSWALK AND WHOLLY OUTSIDE THE PARALLEL VEHICULAR TRAVEL PATH.
8. LAYBACK CURB AND GUTTER MAY BE CONSTRUCTED MONOLITHICALLY WITH CURB RAMPS. PROVIDE NO. 4 X 12" LONG SMOOTH DOWELS @ 12" ON CENTERS IF NOT PLACED MONOLITHICALLY.
9. PROVIDE A SMOOTH TRANSITION WHERE THE CURB RAMPS CONNECT TO THE STREET. 5% MAXIMUM SLOPE IN GUTTER.
10. ADDITIONAL INFORMATION ON CURB RAMP LOCATION, DESIGN, LIGHT REFLECTIVE VALUE AND TEXTURE MAY BE FOUND IN THE CURRENT EDITION OF THE TEXAS ACCESSIBILITY STANDARDS (TAS) AND 16 TAC §68.102.
11. DIAGONAL CURB RAMPS ARE DISCOURAGED. DIAGONAL CURB RAMPS MAY BE ALLOWED ON A CASE-BY-CASE BASIS ONLY IF OTHER CONFIGURATIONS ARE NOT FEASIBLE, AND MUST BE APPROVED BY THE CITY PRIOR TO CONSTRUCTION.
12. FINAL ACCEPTANCE OF THE PROJECT SHALL BE CONTINGENT UPON THE CONTRACTOR PROVIDING THE CITY WITH A FINAL INSPECTION REPORT FROM A CERTIFIED REGISTERED ACCESSIBILITY SPECIALIST (RAS) PER 16 TAC §68.52 STATING THAT ALL ADA (AMERICANS WITH DISABILITIES ACT) HANDICAP IMPROVEMENTS, AS CONSTRUCTED, COMPLY WITH THE TEXAS ACCESSIBILITY STANDARDS (TAS) FOR ELIMINATION OF ARCHITECTURAL BARRIERS PER TEXAS GOVERNMENT CODE CHAPTER 469.

DETECTABLE WARNING SURFACE NOTES:

1. CURB RAMPS MUST CONTAIN A DETECTABLE WARNING SURFACE THAT CONSISTS OF RAISED TRUNCATED DOMES COMPLYING WITH SECTION 705 OF THE TAS. THE SURFACE MUST CONTRAST VISUALLY WITH ADJOINING SURFACES INCLUDING SIDE FLARES.
2. DETECTABLE WARNING SURFACE FOR RAMPS SHALL BE ADA SOLUTIONS, INC. PART NO. 2460REP CAST-IN-PLACE REPLACEABLE TACTILE WARNING SURFACE TILES TRUNCATED DOME, OR APPROVED EQUIVALENT, IN "BRICK RED" COLOR.
3. ALIGN TRUNCATED DOMES IN THE DIRECTION OF PEDESTRIAN TRAVEL WHEN ENTERING THE STREET.
4. DETECTABLE WARNING SURFACES SHALL BE A MINIMUM OF 24" IN DEPTH IN THE DIRECTION OF PEDESTRIAN TRAVEL, AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR LANDING WHERE THE PEDESTRIAN ACCESS ROUTE ENTERS THE STREET.
5. DETECTABLE WARNING SURFACES SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE IS A MINIMUM OF 6" AND A MAXIMUM OF 10" FROM THE EXTENSION OF THE FACE OF CURB. DETECTABLE WARNING SURFACES TO BE CURVED ALONG THE CORNER RADIUS.

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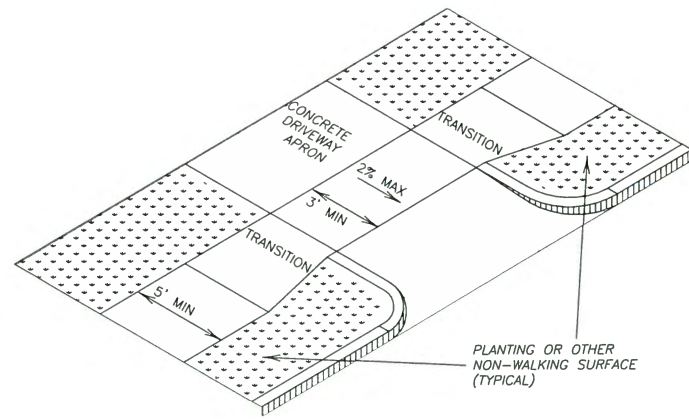
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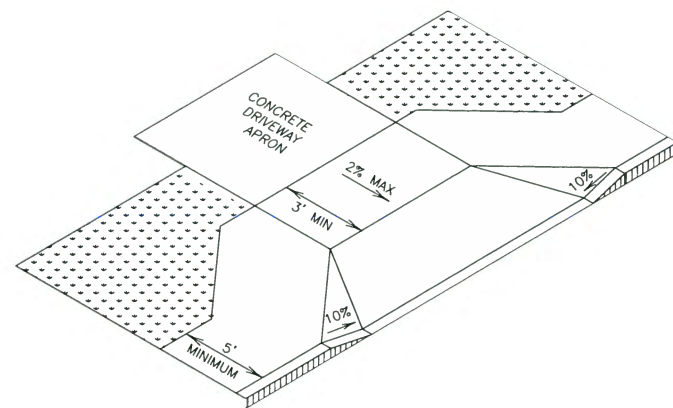
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ADA MASTERPLAN
CITY OF CORPUS CHRISTI PEDESTRIAN
CURB RAMP STANDARDS

SHEET 2 of 4
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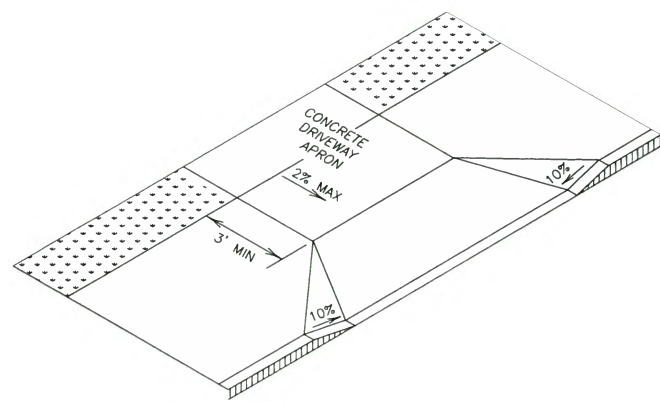
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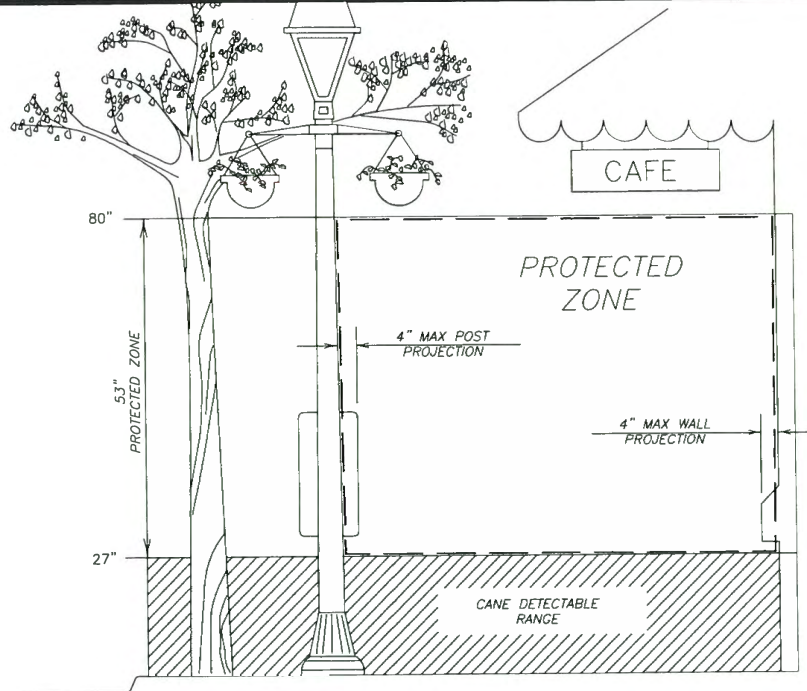
SETBACK SIDEWALK



APRON OFFSET SIDEWALK

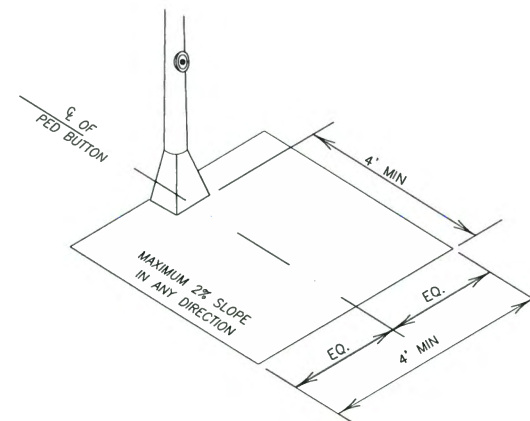


WIDE SIDEWALK
SIDEWALK TREATMENT AT DRIVEWAYS

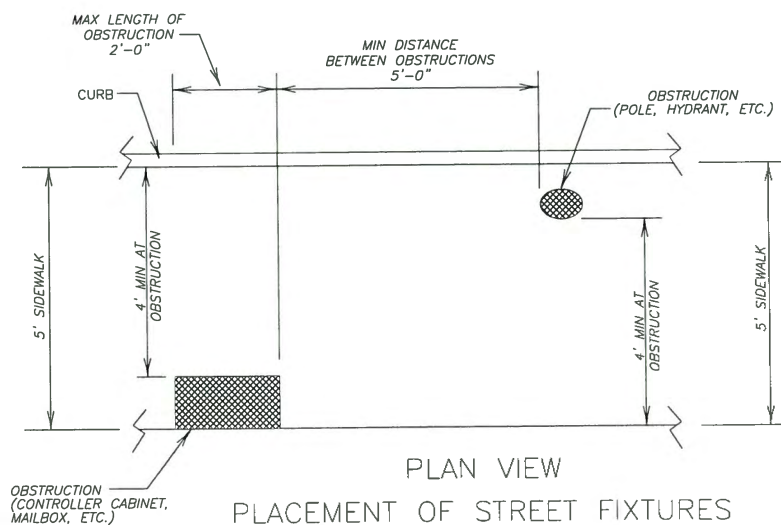


PROTECTED ZONE

IN PEDESTRIAN CIRCULATION AREA, MAXIMUM 4" PROJECTION FOR POST OR WALL MOUNTED OBJECTS BETWEEN 27" AND 80" ABOVE THE SURFACE.

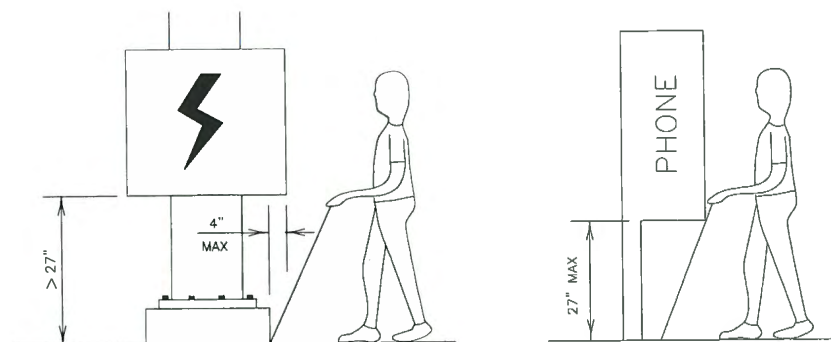


CLEAR GROUND SPACE CENTERED AT PEDESTRIAN PUSH BUTTON



PLAN VIEW
PLACEMENT OF STREET FIXTURES

(ITEMS NOT INTENDED FOR PUBLIC USE. MINIMUM 4' X 4' CLEAR GROUND SPACE REQUIRED AT PUBLIC USE FIXTURES.)



WHEN AN OBSTRUCTION OF A HEIGHT GREATER THAN 27" FROM THE SURFACE WOULD CREATE A PROTRUSION OF MORE THAN 4" INTO THE PEDESTRIAN CIRCULATION AREA, CONSTRUCT ADDITIONAL CURB OR FOUNDATION AT THE BOTTOM TO PROVIDE A MAXIMUM 4" OVERHANG.

PROTRUDING OBJECTS OF A HEIGHT < 27" ARE DETECTABLE BY CANE AND DO NOT REQUIRE ADDITIONAL TREATMENT.

DETECTION BARRIER FOR VERTICAL CLEARANCE < 80"

GENERAL NOTES

1. ALL SLOPES ARE MAXIMUM ALLOWABLE. THE LEAST POSSIBLE SLOPE THAT WILL STILL DRAIN PROPERLY SHOULD BE USED.
2. PLACE TRAFFIC SIGNAL OR ILLUMINATION POLES, GROUND BOXES, CONTROLLER BOXES, SIGNS, DRAINAGE FACILITIES AND OTHER ITEMS SO AS NOT TO OBSTRUCT THE ACCESSIBLE ROUTE OR CLEAR GROUND SPACE.
3. THE MAXIMUM ALLOWABLE SIDEWALK CROSS SLOPE EQUALS 2%.
4. STREET GRADES AND CROSS SLOPES SHALL BE AS SHOWN ELSEWHERE IN THE PLANS.
5. EXISTING FEATURES THAT COMPLY WITH TAS MAY REMAIN IN PLACE UNLESS OTHERWISE SHOWN ON THE PLANS.
6. CHANGES IN LEVEL GREATER THAN 1/4 INCH ARE NOT PERMITTED.
7. THE LEAST POSSIBLE GRADE SHOULD BE USED TO MAXIMIZE ACCESSIBILITY. THE RUNNING SLOPE OF SIDEWALKS AND CROSSWALKS, WITHIN THE PUBLIC RIGHT-OF-WAY, MAY FOLLOW THE GRADE OF THE PARALLEL ROADWAY. WHERE A CONTINUOUS GRADE GREATER THAN 5% MUST BE PROVIDED, HANDRAILS MAY BE DESIRABLE ON ONE OR BOTH SIDES OF THE SIDEWALK TO IMPROVE ACCESSIBILITY. HANDRAILS MAY ALSO BE NEEDED TO PROTECT PEDESTRIANS FROM POTENTIALLY HAZARDOUS CONDITIONS. IF PROVIDED, HANDRAILS MUST COMPLY WITH TAS 4.8.5.
8. HANDRAIL EXTENSIONS SHALL NOT PROTRUDE INTO THE USABLE LANDING AREA OR INTO INTERSECTING PEDESTRIAN ROUTES.
9. SIDEWALK DETAILS ARE SHOWN ELSEWHERE IN THE PLANS.

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090151.00

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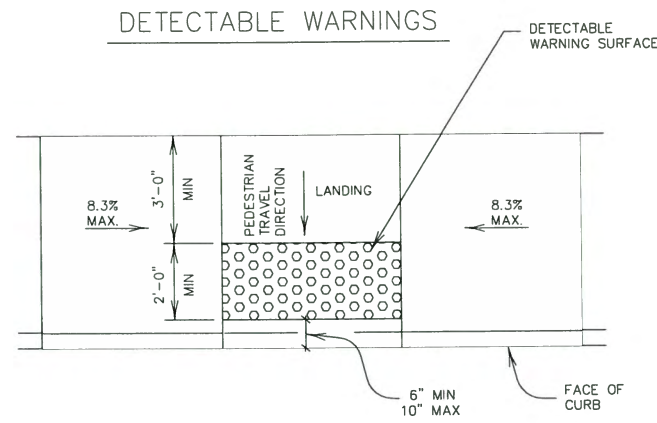
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15400 WASHINGTON BLVD, SUITE 200
CORPUS CHRISTI, TEXAS 78408
PHONE (817) 883-1884
FAX (817) 883-1888
WWW.LNVINC.COM
TYPE FIRM NO. F-388

CITY OF
CORPUS CHRISTI
TEXAS
Department of Engineering Services

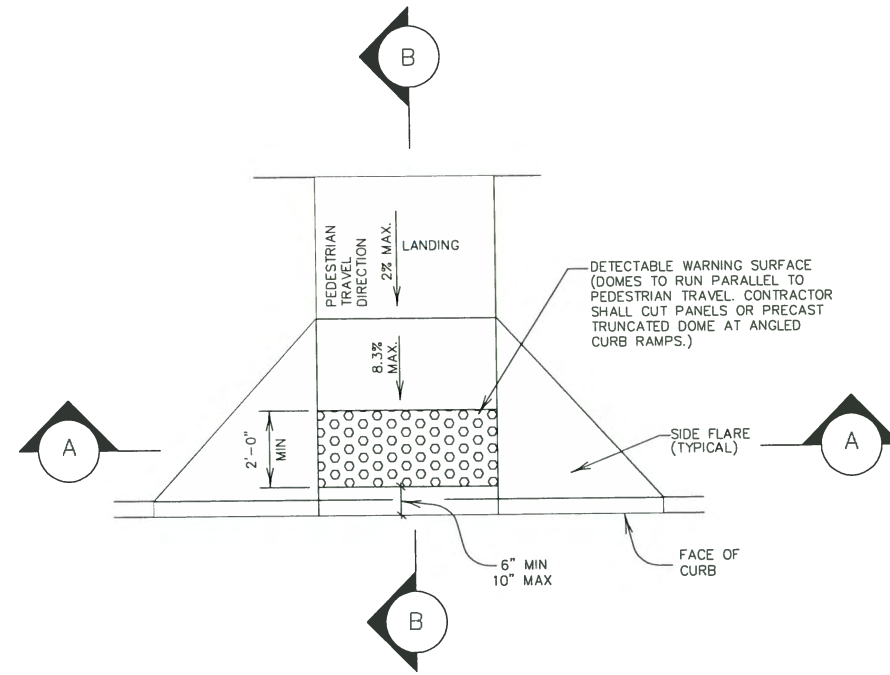
CITY OF CORPUS CHRISTI
ADA MASTERPLAN
CITY OF CORPUS CHRISTI PEDESTRIAN
CURB RAMP STANDARDS
3 OF 4

REVISION NO.	DATE	BY	DESCRIPTION

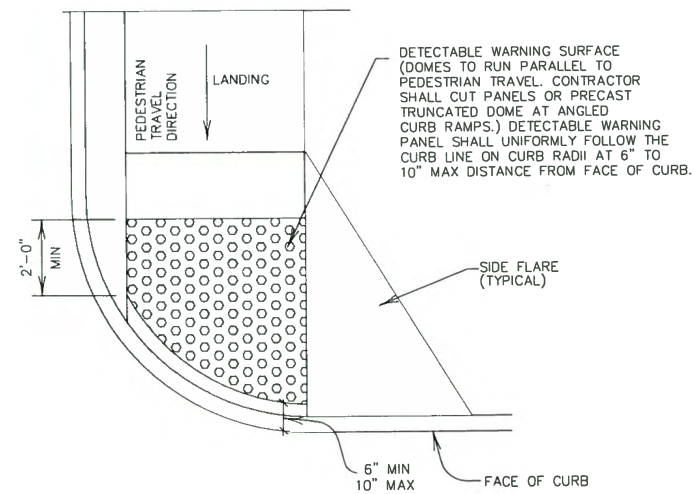
SHEET 3 of 4
RECORD DRAWING NO.
APPENDIX C
CITY PROJECT # 6485



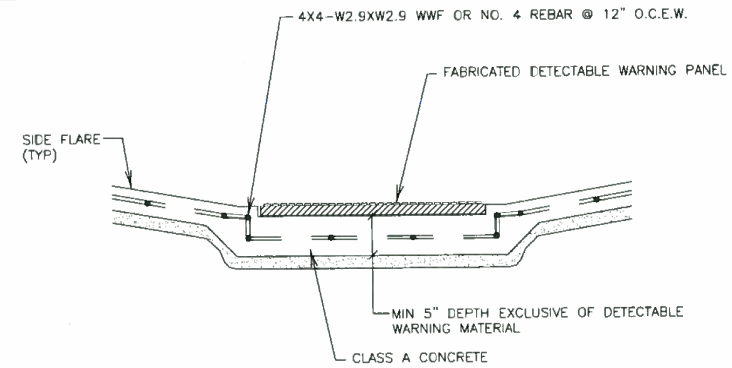
PARALLEL CURB RAMP
TYPICAL PLACEMENT OF DETECTABLE WARNING SURFACE ON LANDING AT STREET EDGE



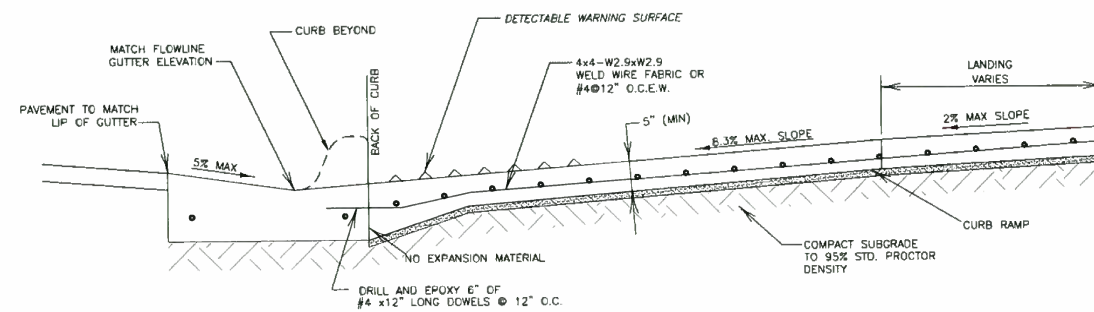
PERPENDICULAR CURB RAMP
TYPICAL PLACEMENT OF DETECTABLE WARNING SURFACE ON SLOPING RAMP RUN



DIRECTIONAL CURB RAMP
TYPICAL PLACEMENT OF DETECTABLE WARNING SURFACE ON SLOPING RAMP RUN AT A RADIUS



SECTION A-A
TYPICAL SECTION THROUGH CURB RAMP



SECTION B-B
CURB RAMP PROFILE

CONSULTANT'S JOB NO.
090151.00

DESIGN, PREPARED BY: DENNIS L. MILLER, P.E. NO. 31503
DRAWN BY: DENNIS L. MILLER, P.E. NO. 31503
CHECKED BY: DENNIS L. MILLER, P.E. NO. 31503
DATE: 9-12-12

LNV
engineers | architects | contractors
504 ASSOCIATION SUITE 200
CORPUS CHRISTI, TEXAS 78408
PH: (817) 885-1884
FAX: (817) 885-1886
WWW.LNVM.COM

CITY OF CORPUS CHRISTI
ADA MASTERPLAN
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SHEET 4 of 4
APPENDIX C
CITY PROJECT # 6485

Department of Engineering Services

REVISION NO.	DATE	DESCRIPTION	BY

APPENDIX D

City of Corpus Christi ADA Master Plan

ArcGIS Files

(See Enclosed CD)