

December 29, 2022

Addendum #2

**Re: Webb County Drainage District
Project 2023-001 Maintenance Contract**

All contractors, holders of plans and specifications, and all interested parties to the referenced project are hereby notified of the following revisions to the plans and/or specifications of the above referenced project:

I. Revision to Maintenance plans

- 1) Replace the following sheets with ones provided herein:
 - 1.1 Sheet 1 Revised table of contents
 - 1.2 Sheet 10 Added regular mowing cycle legend / updated one time legend;
 - 1.3 Sheet 11 Better defines limits of base bid and one time maintenance;
 - 1.4 Sheet 12 Adds street names;
 - 1.5 Sheet 15 Updated details and notes for one time maintenance;
 - 1.6 Sheet 16 Adds fill and erosion control blanket along maintenance entrance to one time maintenance work;
 - 1.5 Sheet 17 Revises one time maintenance service requirements;
 - 1.6 Sheet 18 Adds erosion control standard details.

**Entire plan set provided for clarity.*

II. Revision to Project Specifications

- 1) Replace Table of Contents with one provided herein;
- 2) Replace Section 4 – Proposal (pgs. 6-10) with one provided herein;
- 3) Add Section 604 Erosion Control Blanket SC250;
- 4) Add Section 610 City of Laredo Seeding;

Addendum #2 is being submitted to all contractors, holders of plans and specifications, plan rooms, and all interested parties to the project and acknowledgement of same is required on the proposal forms. Bid due date of Wednesday, January 18, 2023 at 5:00 p.m. remains unchanged.

Recommended By:

CRANE ENGINEERING CORP.

Firm # F-3353


Edward D. Garza, P.E., CFM
Principal Engineer



Webb County Drainage District No. 1
Project 2023-001
Chacon Creek Tributary 1 Maintenance Contract

Section 4 – Proposal

Bidder Information

Please complete all information requested below and submit with your bid package.

“The undersigned affirms that they are duly authorized to execute this contract, that this company, corporation, firm, partnership, or individual has not prepared this bid in collusion with any other bidder, and that the contents of this bid as to prices, terms or conditions of said bid have not been communicated by the undersigned nor by any employee or agent to any other person engaged in this type of business prior to the official opening of this bid. By submitting this bid the vendor agrees to the Webb County Drainage District No. 1 bid specifications and all terms and conditions stipulated in the bid document.”

Firm Name

Signer's Name (print/type)

Address

Signature of person authorized to sign bid

City, State, Zip

Date

Phone Number

Fax Number

Prompt Payment Discount _____% _____days If no discount is offered, net 30 days will apply.
Indicate Status:

_____ Corporation

_____ Partnership

_____ Sole Proprietorship

_____ Other (specify) _____

State how long under its present name. _____

Tax Identification number _____

Email Address _____

Acknowledgment of Addenda: (Please initial and date)

Addendum #1: _____

Addendum #2: _____

Addendum #3: _____

Webb County Drainage District No. 1
Project 2023-001
Chacon Creek Tributary 1 Maintenance Contract

Bid Schedule

I. Yearly Maintenance – Base Bid

Item #	Description	Cycles	Cost / Cycle	Extended
1	Mowing Cycle at 16 locations as per plans	6	\$	\$
2	Tree Maintenance at 11 locations as per plans	2	\$	\$
3	Joint Sealant at 11 locations as per plans	2	\$	\$
4	One time maintenance at UISD/Garcia Pond	1	\$	\$
5	One time maintenance at Las Misiones Park and Floodplain	1	\$	\$
Total Yearly Maintenance and One Time at 2 Locations				\$

Total Base Bid

I. Yearly Maintenance and One Time at 2 Locations \$_____

Written in words _____

II. Additive Alternate #1 – One Time Maintenance

Item #	Description	Cycles	Cost / Cycle	Extended
6	One time maintenance at Southern Development Phase III Concrete Channel	1	\$	\$
7	One time maintenance at Southern Development Phase 4 Earthen Channel & Wetland	1	\$	\$
8	One time maintenance at Independence Hills Pond	1	\$	\$
9	One time maintenance at Cuatro Vientos Norte Channel	1	\$	\$
10	One time maintenance at Las Misiones Pond	1	\$	\$
11	One time maintenance at Cuatro Vientos X Earthen Channel	1	\$	\$
12	One time maintenance at City of Laredo Summers Pond	1	\$	\$
13	One time maintenance at Concord Hills Pond and Channels	1	\$	\$

Webb County Drainage District No. 1
Project 2023-001
Chacon Creek Tributary 1 Maintenance Contract

Item #	Description	Cycles	Cost / Cycle	Extended
14	One time maintenance at Lago del Valle Dam	1	\$	\$
15	One time maintenance at La Terraza Apartments Channel	1	\$	\$
16	One time maintenance at Merida Pond & Floodplain	1	\$	\$
17	One time maintenance at Los Presidentes Pond	1	\$	\$
18	One time maintenance at Lomas del Sur Pond & Channel	1	\$	\$
19	One time maintenance at Lago Del Valle Phase 2 Pond	1	\$	\$

III. Additive Alternate #2

Item #	Description	Cost / Cycle
20	Clean up cycle per location area less than 5 acres	\$
21	Initial clean up (silt removal) of 40 LF of 24" RCP at UISD Garcia Pond at Lago Del Valle Subdivision	\$
22	Illegal dumping clean-up per location	\$
23	Provide 3-man crew for 8-hour workday to remove trees less than 2" caliper	\$
24	Daily rate to convert clippings into mulch and place around existing tree basins or along trails	\$

Note: WCDD reserves the right to select work items from Additive Alternate #1 individually based on available funding to address the most need.

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Webb County Drainage District No. 1
Project 2023-001
Chacon Creek Tributary 1 Maintenance Contract

Statement of Qualifications

Information from bidders must be completed and submitted with bid proposal

1. Previous Maintenance Projects Completed for Public Entities

1)	Name of Project:	_____
	Value of Contract:	_____
	Contract Duration:	_____
	Owner Contact Info:	_____
2)	Name of Project:	_____
	Value of Contract:	_____
	Contract Duration:	_____
	Owner Contact Info:	_____
3)	Name of Project:	_____
	Value of Contract:	_____
	Contract Duration:	_____
	Owner Contact Info:	_____

Experience Data: Include resume of job Superintendent.

**NOTE: TO BE SUBMITTED UPON REQUEST
IS NOT AN ACCEPTABLE ANSWER**

2. Equipment List

MACHINE	YEAR	OWN/LEASE

Webb County Drainage District No. 1
Project 2023-001
Chacon Creek Tributary 1 Maintenance Contract

3. References

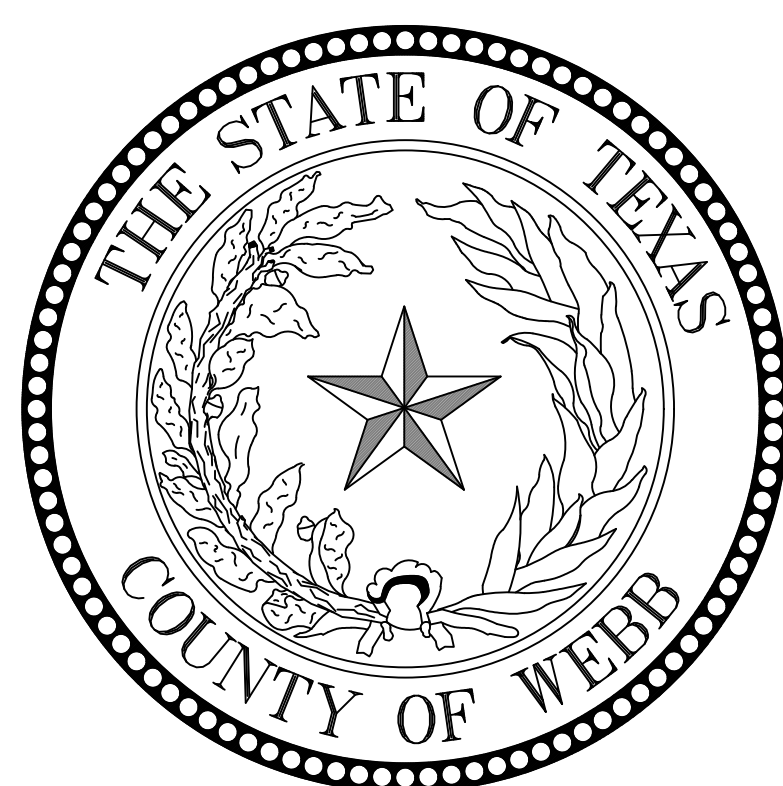
- 1) Name: _____
Title: _____
Phone: _____
Email: _____
- 2) Name: _____
Title: _____
Phone: _____
Email: _____
- 3) Name: _____
Title: _____
Phone: _____
Email: _____

NOTE:

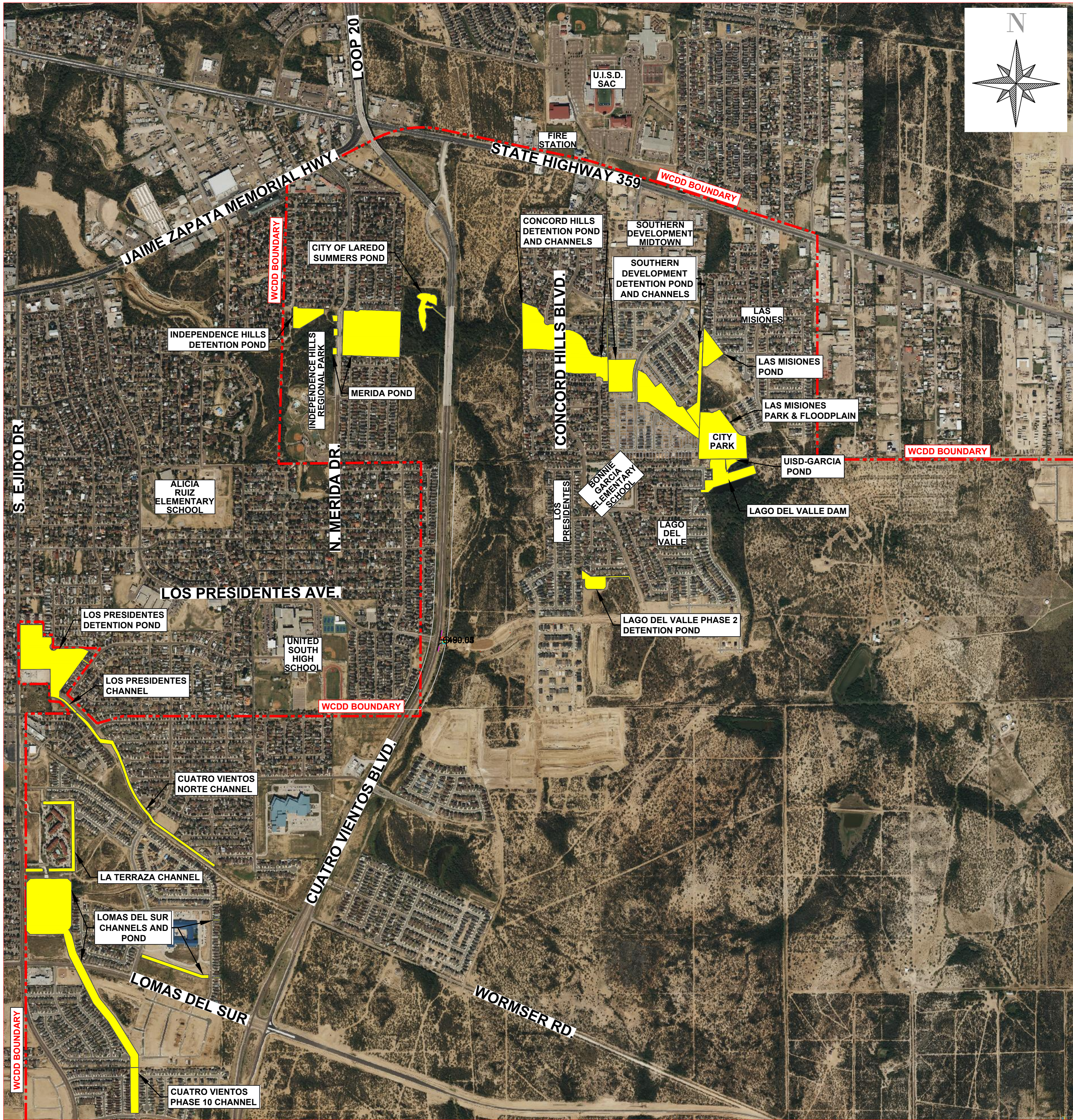
**TO BE SUBMITTED UPON REQUEST
IS NOT AN ACCEPTABLE ANSWER**

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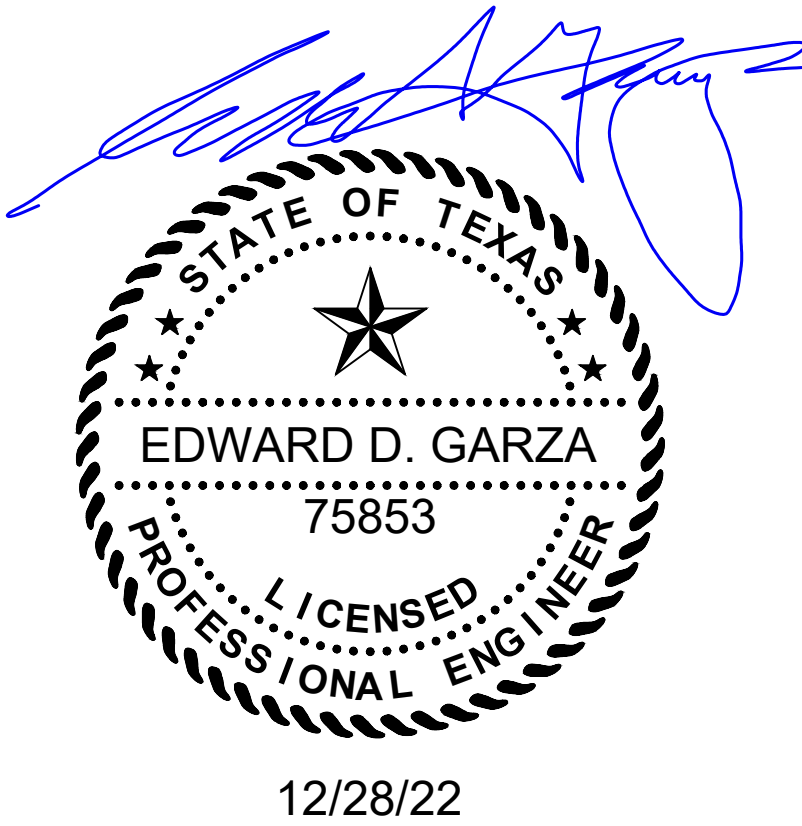
WEBB COUNTY DRAINAGE DISTRICT No. 1
PROJECT 2023-001
CHACON CREEK TRIBUTARY 1 MAINTENANCE CONTRACT
LAREDO, TEXAS



WEBB COUNTY DRAINAGE
DISTRICT No. 1
BOARD MEMBERS
MARGIE ARCE, PRESIDENT
SARA SANCHEZ, TREASURER



Sheet List Table	
Sheet #	Sheet Title
1	TITLE PAGE-LOCATION-SHEET INDEX PLAN
2	CUATRO VIENTOS NORTH CHANNEL
3	LOS PRESIDENTES CHANNEL & POND
4	U.I.S.D. - GARCIA POND
5	LAGO DEL VALLE PHASE 2 POND
6	INDEPENDENCE HILLS POND
7	LAS MISIONES POND
8	CONCORD HILLS CHANNEL & POND
9	LAGO DEL VALLE DAM
10	MERIDA POND & FLOODPLAIN
11	SUMMERS POND
12	LOMAS DEL SUR CHANNEL & POND
13	CUATRO VIENTOS PHASE 10 CHANNEL
14	LA TERRAZA CHANNELS
15	SOUTHERN DEV. PH. IV CHANNEL & POND
16	SOUTHERN DEV. PH. III CONCRETE CHANNEL
17	LAS MISIONES PARK & FLOODPLAIN
18	EROSION CONTROL DETAILS



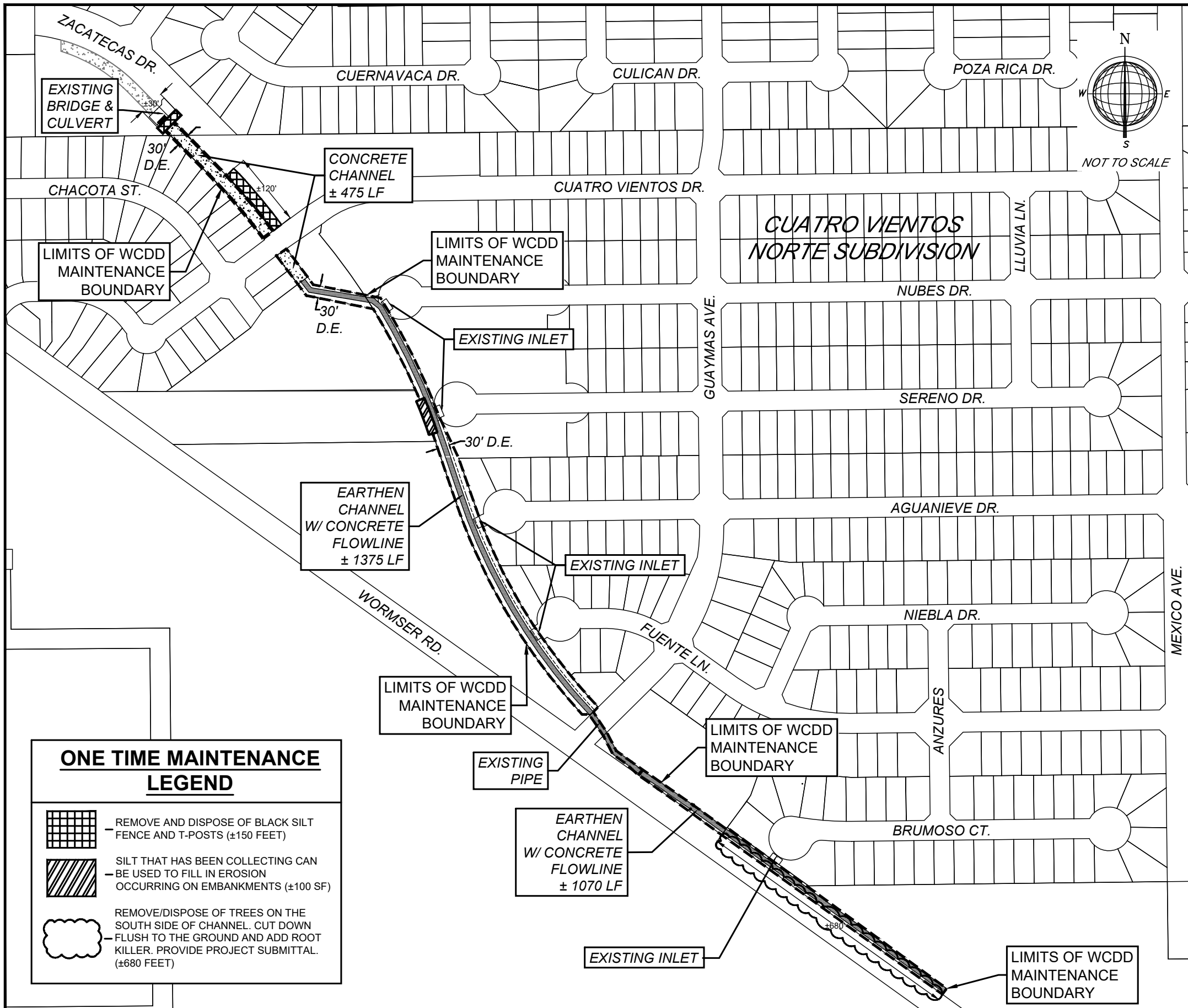
ADDENDUM #2		12/28/22
No.	Revision/Issue	Date

FIRM NAME AND ADDRESS
CRANE ENGINEERING CORP.
1310 JUNCTION DRIVE SUITE B
LAREDO, TX 76041 956-712-1996
FIRM REGISTRATION NO. F-3353

Project Name and Address
WEBB COUNTY DRAINAGE DISTRICT NO. 1
PROJECT 2023-001
CHACON CREEK TRIBUTARY 1
MAINTENANCE CONTRACT

Sheet Title
LOCATION MAP

Date 10/27/2022	Sheet 1
Scale N.T.S.	



- LEGEND**
Base Bid - Yearly Maintenance
Service Requirements:
- Mowing Cycle:** each service cycle shall include the following:
 - Collection of trash, debris, litter, and branches from the areas as specified
 - Mow all growth within the pond and channel flow areas, embankments, slopes of the creeks, channels, and ponds along the walls and fences, and between expansion joints in and around concrete structures and valley gutters within earthen channel
 - Remove any dead limbs from trees
 - Rake up, pick up, and remove all trimmings, clippings, and cuttings
 - Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - These services will be required six (6) times a year between the months of February and November
 - Tree Maintenance:** each service cycle shall include the following:
 - Trim trees to remove dead limbs and establish canopy on live trees to an 8 foot canopy as a minimum. Apply pruning paint to exposed cuts within 15 minutes of cut
 - Rake up, pick up, and remove all trimmings, clippings, and cuttings
 - Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - These services will be required twice a year during the winter months (October - February) and summer months (June-July)
 - Joint Sealant Cycle:** each service cycle shall include the following:
 - Collection of trash, debris, litter, and branches from channel area as necessary
 - Remove silt from concrete channel, remove vegetation growth from all joints and where concrete channel meets with fences
 - Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - Remove existing sealant material and brush or vacuum out the openings to ensure that any pebbles, dirt or loose debris are removed. Apply weed killer to all joint areas
 - Prepare joint with backer rod before applying joint sealant. Backer rod should be 1/8" larger than the width of the joint. Push backer rod down into the joint and leave a minimum joint depth of 1/4" and up to a 1/2" maximum
 - Apply engineer approved joint sealant in a uniform manner
 - A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - These services will be required twice a year at a minimum of six (6) months apart
 - Provide all labor, equipment, and supplies for the above mentioned services
 - The successful contractor shall be required to pay all appropriate landfill fees for the disposal of waste collected

NOTE:

- All base bid service requirements apply throughout the entire maintenance area.
- Existing inlets and concrete flumes at Nubes Dr, Sereno Dr, Aguanieve Dr, Fuente Ln, and Brumoso Ct to be cleaned as part of mowing cycle for this location

ONE TIME MAINTENANCE
LEGEND

- REMOVE AND DISPOSE OF BLACK SILT FENCE AND T-POSTS (±150 FEET)
- SILT THAT HAS BEEN COLLECTING CAN BE USED TO FILL IN EROSION OCCURRING ON EMBANKMENTS (±100 SF)
- REMOVE/DISPOSE OF TREES ON THE SOUTH SIDE OF CHANNEL. CUT DOWN FLUSH TO THE GROUND AND ADD ROOT KILLER. PROVIDE PROJECT SUBMITTAL. (±680 FEET)

DATE: 10/27/2022

N.T.S.



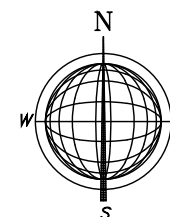
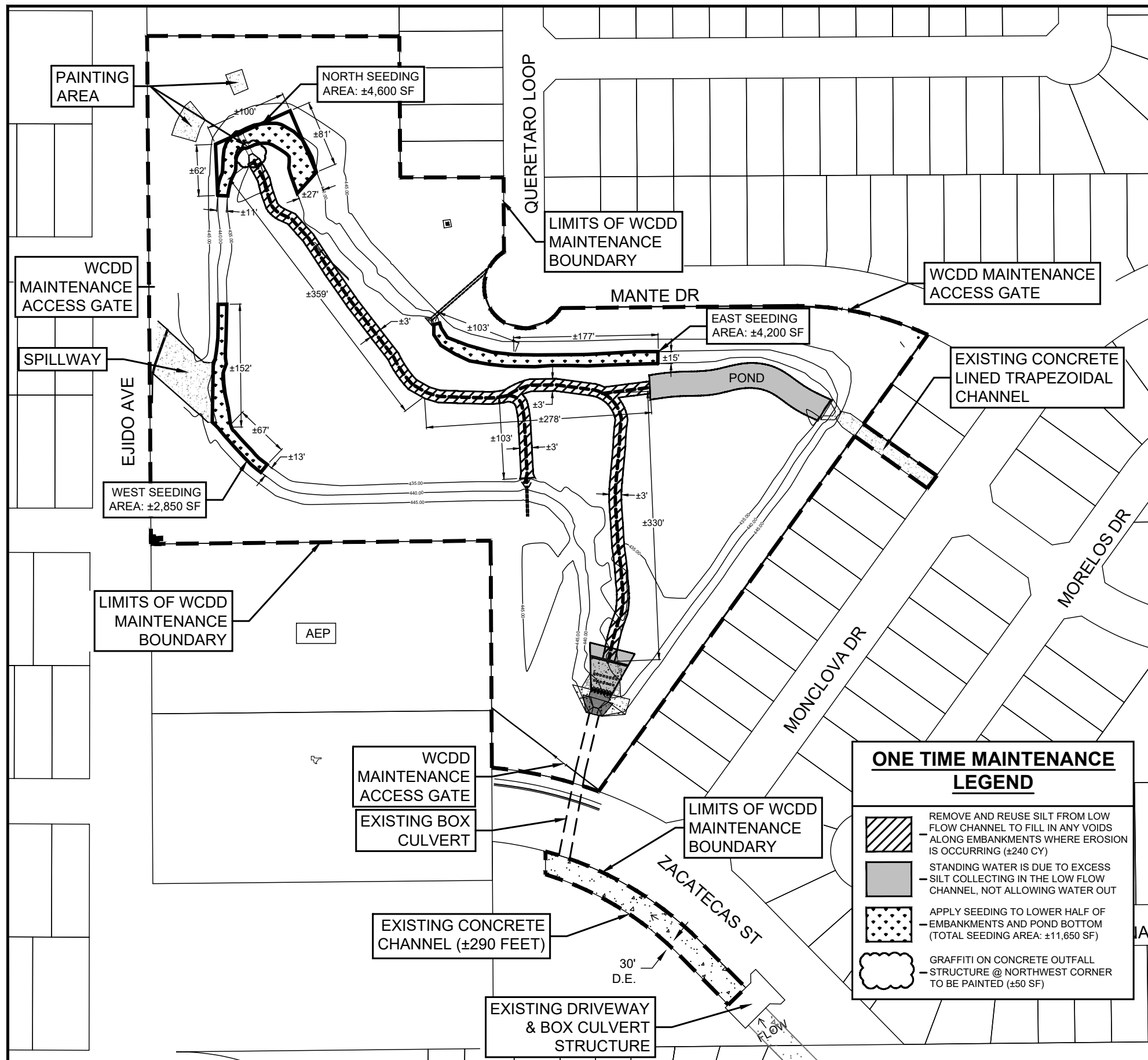
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FIRM REGISTRATION NO. F-3353

Webb County Drainage District
Maintenance Contract

Cuatro Vientos Norte Subdivision
Existing Drainage Channel

SHEET **2**

OF **17**



LEGEND

Base Bid - Yearly Maintenance Service Requirements:

- Mowing Cycle:** each service cycle shall include the following: *NOT TO SCALE*
 - Collection of trash, debris, litter, and branches from the areas as specified
 - Mow all growth within the pond and channel flow areas, embankments, slopes of the creeks, channels, and ponds along the walls and fences, and between expansion joints in and around concrete structures
 - Remove any dead limbs from trees
 - Rake up, pick up, and remove all trimmings, clippings, and cuttings
 - Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - These services will be required six (6) times a year between the months of February and November
- Tree Maintenance:** each service cycle shall include the following:
 - Trim trees to remove dead limbs and establish canopy to an 8 foot canopy as a minimum. Apply pruning paint to exposed cuts within 15 minutes of cut
 - Rake up, pick up, and remove all trimmings, clippings, and cuttings
 - Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - These services will be required twice a year during the winter months (October - February) and summer months (June-July)
- Joint Sealant Cycle:** each service cycle shall include the following:
 - Collection of trash, debris, litter, and branches from channel area as necessary
 - Remove silt from concrete channel, remove vegetation growth from all joints and where concrete channel meets with
 - Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - Remove existing sealant material and brush or vacuum out the openings to ensure that any pebbles, dirt or loose debris are removed. Apply weed killer to all joint areas
 - Prepare joint with backer rod before applying joint sealant. Backer rod should be 1/8" larger than the width of the joint. Push backer rod down into the joint and leave a minimum joint depth of 1/4" and up to a 1/2" maximum
 - Apply engineer approved joint sealant in a uniform manner
 - A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - These services will be required twice a year at a maximum of six (6) months apart
- Provide all labor, equipment, and supplies for the above mentioned services
- The successful contractor shall be required to pay all appropriate landfill fees for the disposal of waste collected

NOTE:

- All base bid service requirements apply throughout the entire maintenance area.
- Painting of graffiti includes cleaning of existing concrete, applying (2) coats of primer and (2) coats of paint; color choice selection by WCDD.

DATE: 10/27/2022

N.T.S.



CRANE ENGINEERING CORP.

1310 JUNCTION DRIVE
LAREDO, TX 78041
FIRM REGISTRATION NO. F-3353

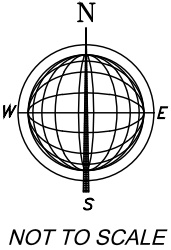
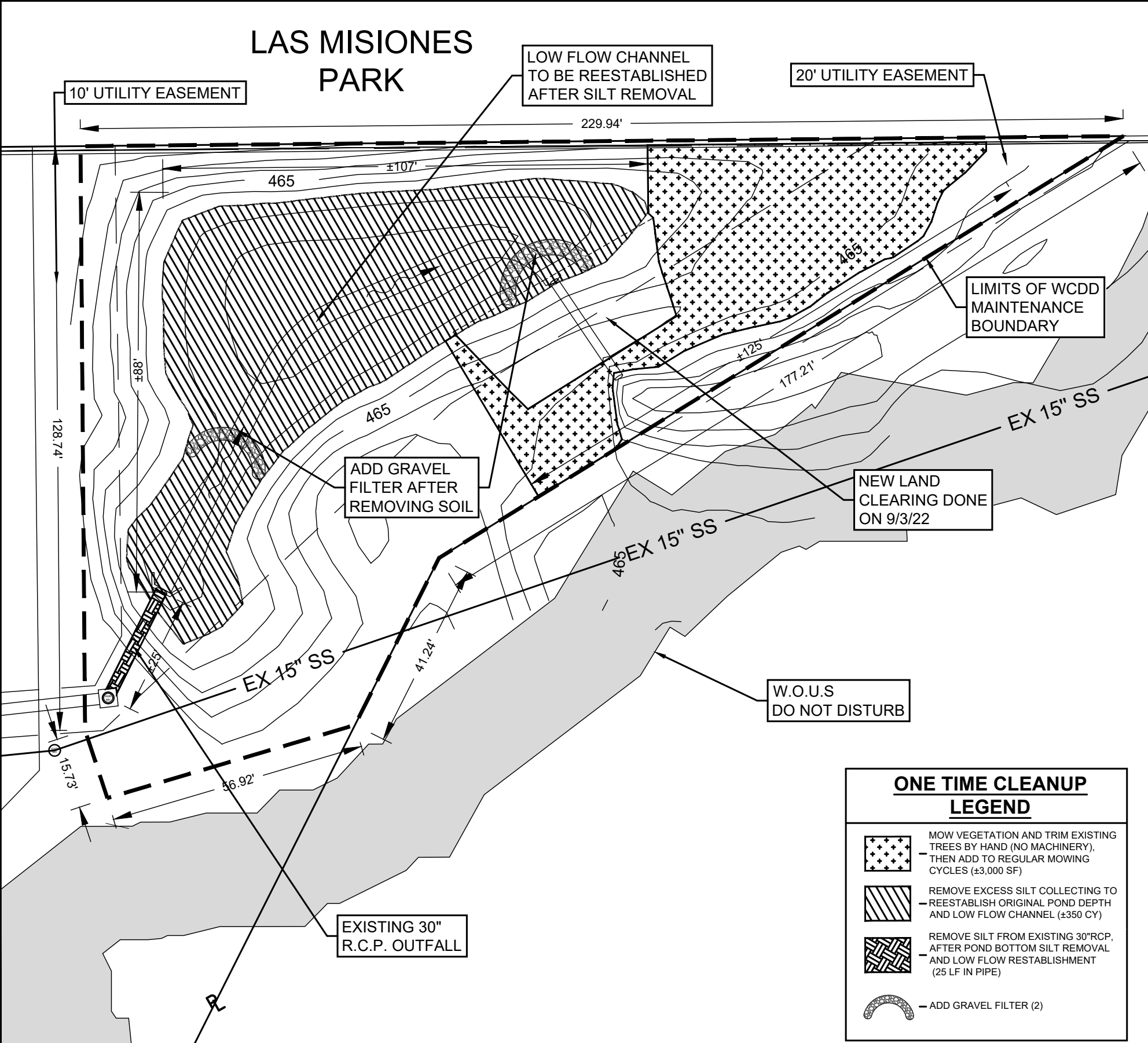
SUITE B
956-712-1996

Webb County Drainage District
Maintenance Contract

Los Presidentes Pond & Channel

SHEET **3**

OF **17**



LEGEND
Base Bid - Yearly Maintenance
Service Requirements:

- Mowing Cycle:** each service cycle shall include the following:
 - Collection of trash, debris, litter, and branches from the areas as specified
 - Mow all growth within the pond and channel flow areas, embankments, slopes of the creeks, channels, and ponds along the walls and fences, and between expansion joints in and around concrete structures
 - Remove any dead limbs from trees
 - Rake up, pick up, and remove all trimmings, clippings, and cuttings
 - Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - These services will be required six (6) times a year between the months of February and November
- Tree Maintenance:** each service cycle shall include the following:
 - Trim trees to remove dead limbs and establish canopy to a 8 foot canopy as a minimum. Apply pruning paint to exposed cuts within 15 minutes of cut
 - Rake up, pick up, and remove all trimmings, clippings, and cuttings
 - Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - These services will be required twice a year during the winter months. (October - February) and summer months (June - July)
- Provide all labor, equipment, and supplies for the above mentioned services
- The successful contractor shall be required to pay all appropriate landfill fees for the disposal of waste collected

NOTE:

- All base bid service requirements apply throughout the entire maintenance area.

DATE: 10/27/2022

N.T.S.

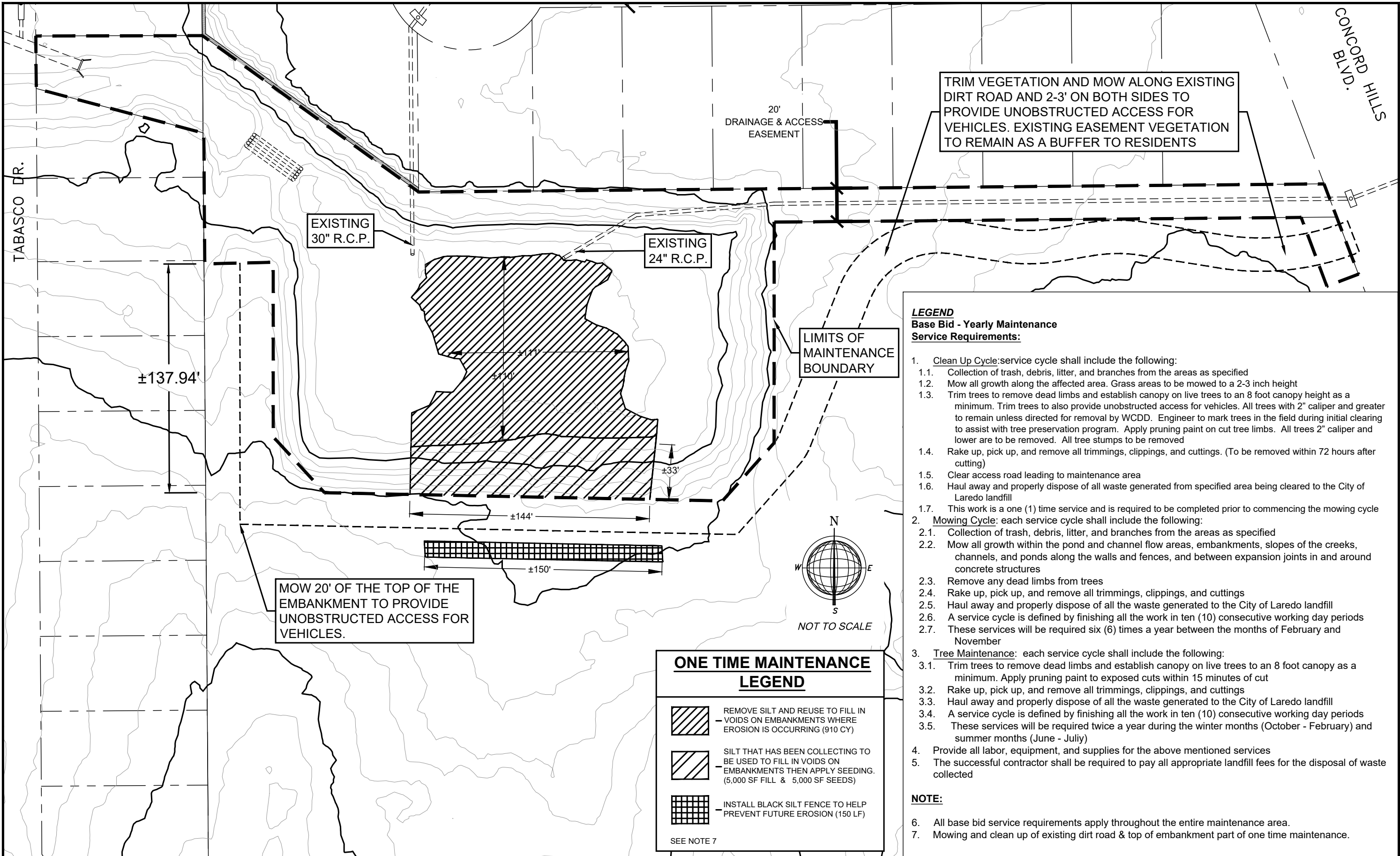


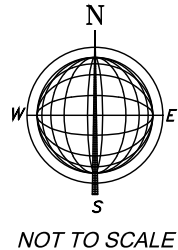
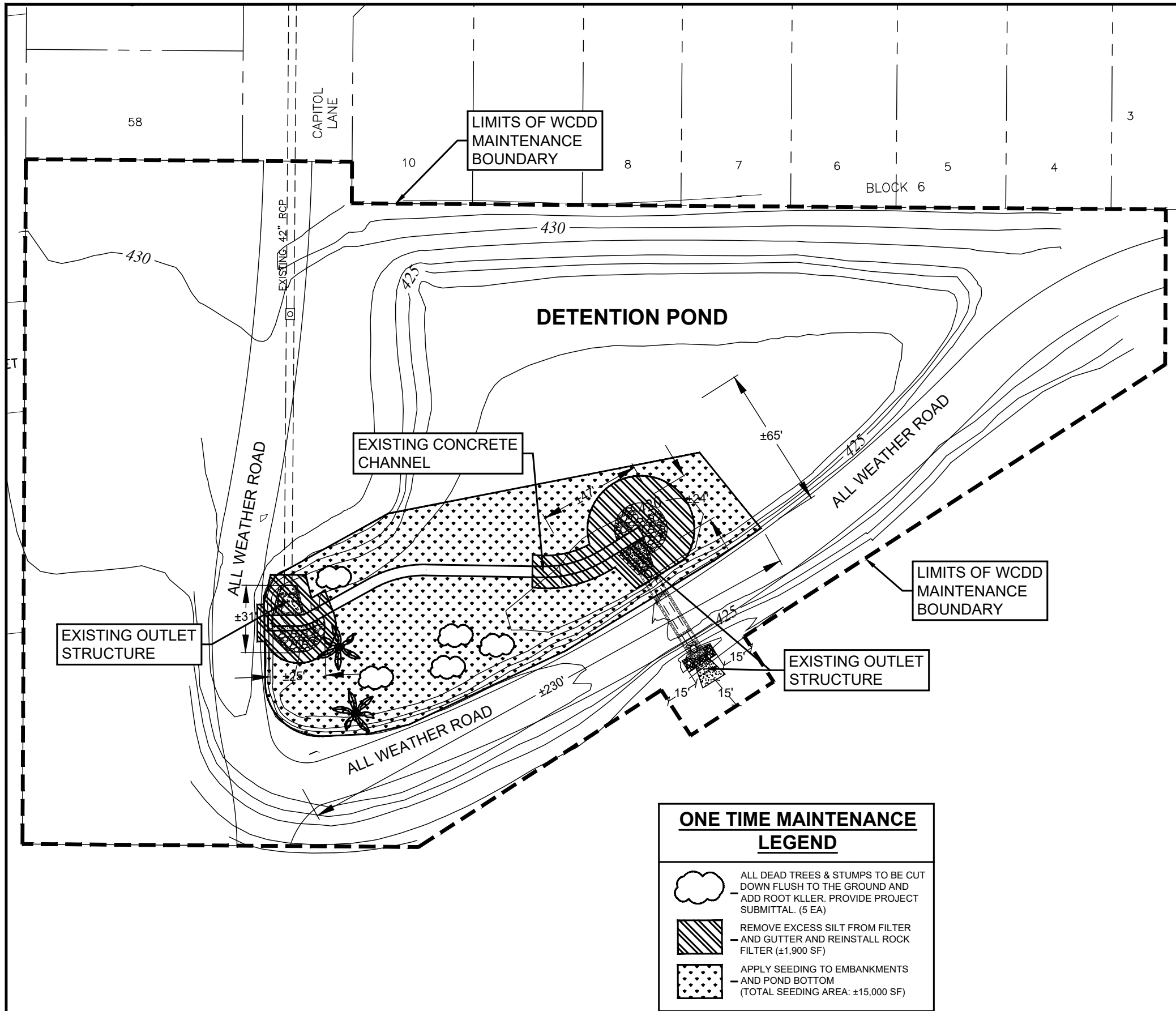
CRANE ENGINEERING CORP.
1310 JUNCTION DRIVE SUITE B
LAREDO, TX 78041 956-712-1996
FIRM REGISTRATION NO. F-3353

Webb County Drainage District
Maintenance Contract

UISD-Garcia Off-site Pond

SHEET **4**
OF **17**





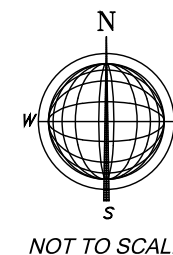
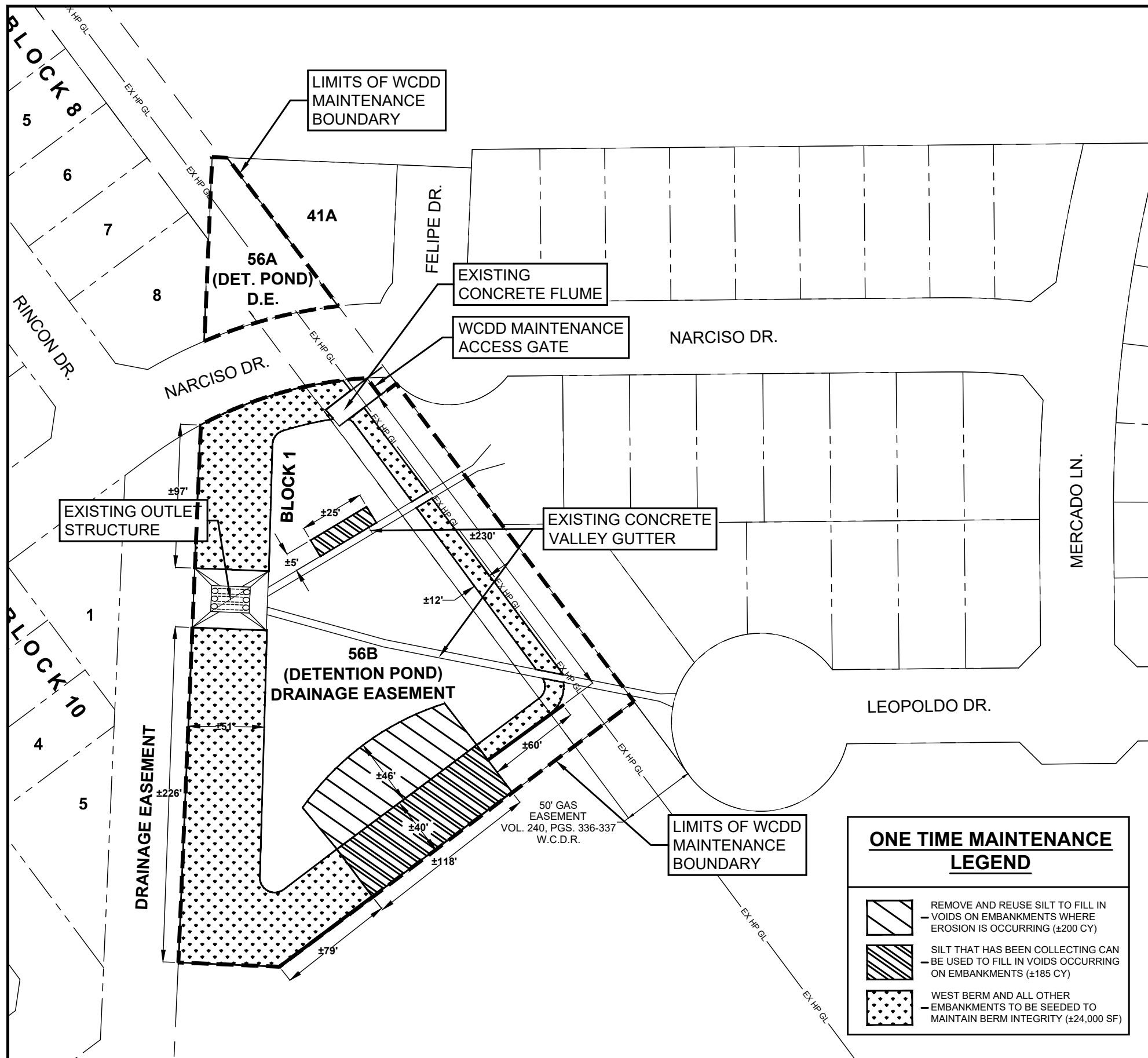
LEGEND

**Base Bid - Yearly Maintenance
Service Requirements:**

1. **Mowing Cycle:** each service cycle shall include the following:
 - 1.1. Collection of trash, debris, litter, and branches from the areas as specified
 - 1.2. Mow all growth within the pond and channel flow areas, embankments, slopes of the creeks, channels, and ponds along the walls and fences, and between expansion joints in and around concrete structures
 - 1.3. Remove any dead limbs from trees
 - 1.4. Rake up, pick up, and remove all trimmings, clippings, and cuttings
 - 1.5. Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - 1.6. A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - 1.7. These services will be required six (6) times a year between the months of February and November
2. **Tree Maintenance:** each service cycle shall include the following:
 - 2.1. Trim trees to remove dead limbs and establish canopy to a 8 foot canopy as a minimum. Apply pruning paint to exposed cuts within 15 minutes of cut
 - 2.2. Rake up, pick up, and remove all trimmings, clippings, and cuttings
 - 2.3. Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - 2.4. A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - 2.5. These services will be required twice a year during the winter months (October - February) and summer months (June - July)
3. **Joint Sealant Cycle:** each service cycle shall include the following:
 - 3.1. Collection of trash, debris, litter, and branches from channel area as necessary
 - 3.2. Remove silt from concrete channel, remove vegetation growth from all joints and where concrete channel meets with fences
 - 3.3. Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - 3.4. Remove existing sealant material and brush or vacuum out the openings to ensure that any pebbles, dirt or loose debris are removed. Apply weed killer to all joint areas
 - 3.5. Prepare joint with backer rod before applying joint sealant. Backer rod should be 1/8" larger than the width of the joint. Push backer rod down into the joint and leave a minimum joint depth of 1/4" and up to a 1/2" maximum
 - 3.6. Apply engineer approved joint sealant in a uniform manner
 - 3.7. A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - 3.8. These services will be required twice a year at a minimum of six (6) months apart
4. Provide all labor, equipment, and supplies for the above mentioned services
5. The successful contractor shall be required to pay all appropriate landfill fees for the disposal of waste collected

NOTE:

6. All base bid service requirements apply throughout the entire maintenance area.
7. Mowing cycles applies to outlet structures as well



LEGEND




Base Bid - Yearly Maintenance Service Requirements:

1. **Mowing Cycle:** each service cycle shall include the following:
 - 1.1. Collection of trash, debris, litter, and branches from the areas as specified
 - 1.2. Mow all growth within the pond and channel flow areas, embankments, slopes of the creeks, channels, and ponds along the walls and fences, and between expansion joints in and around concrete structures and valley gutters within pond
 - 1.3. Remove any dead limbs from trees
 - 1.4. Rake up, pick up, and remove all trimmings, clippings, and cuttings
 - 1.5. Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - 1.6. A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - 1.7. These services will be required six (6) times a year between the months of February and November
2. **Tree Maintenance:** each service cycle shall include the following:
 - 2.1. Trim trees to remove dead limbs and establish canopy on live trees to an 8 foot canopy as a minimum. Apply pruning paint to exposed cuts within 15 minutes of cut
 - 2.2. Rake up, pick up, and remove all trimmings, clippings, and cuttings
 - 2.3. Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - 2.4. A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - 2.5. These services will be required twice a year during the winter months (October - February) and summer months (June - July)
3. Provide all labor, equipment, and supplies for the above mentioned services
4. The successful contractor shall be required to pay all appropriate landfill fees for the disposal of waste collected

NOTE:

5. All base bid service requirements apply throughout the entire boundary area.

ONE TIME MAINTENANCE LEGEND

-  REMOVE AND REUSE SILT TO FILL IN VOIDS ON EMBANKMENTS WHERE EROSION IS OCCURRING (±200 CY)
-  SILT THAT HAS BEEN COLLECTING CAN BE USED TO FILL IN VOIDS OCCURRING ON EMBANKMENTS (±185 CY)
-  WEST BERM AND ALL OTHER EMBANKMENTS TO BE SEEDED TO MAINTAIN BERM INTEGRITY (±24,000 SF)

DATE: 10/27/2022

N.T.S.



CRANE ENGINEERING CORP.

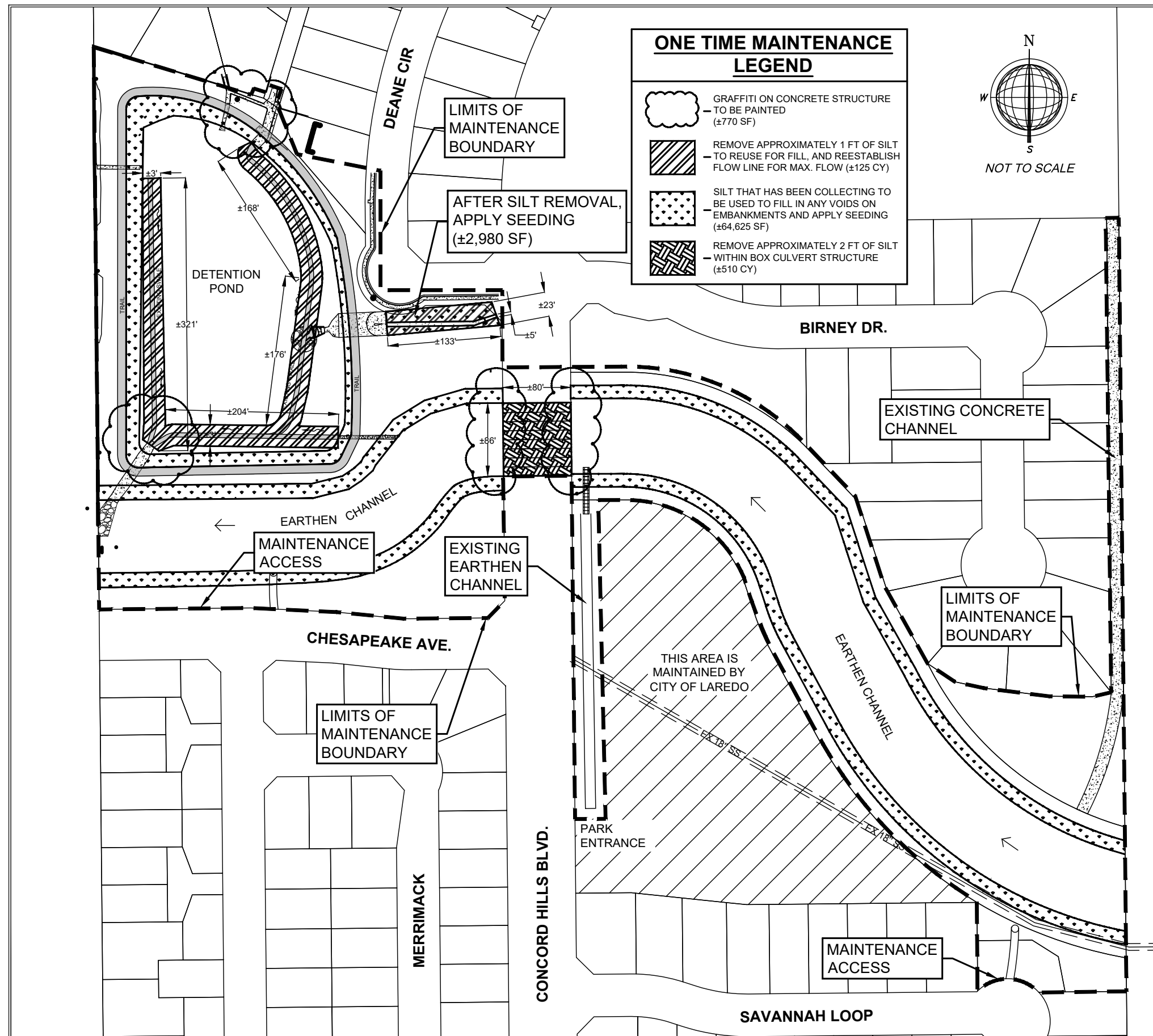
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LAREDO, TX 78041 956-712-1996
FIRM REGISTRATION NO. F-3353

Webb County Drainage District
Maintenance Contract

Las Misiones Pond

SHEET **7**

OF **17**



LEGEND

Base Bid - Yearly Maintenance

Service Requirements:

- Mowing Cycle:** each service cycle shall include the following:
 - Collection of trash, debris, litter, and branches from the areas as specified
 - Mow all growth within the pond and channel flow areas, embankments, slopes of the creeks, channels, and ponds along the walls and fences, and between expansion joints in and around concrete structures and valley gutters within the pond
 - Remove any dead limbs from trees
 - Rake up, pick up, and remove all trimmings, clippings, and cuttings
 - Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - These services will be required six (6) times a year between the months of February and November
- Tree Maintenance:** each service cycle shall include the following:
 - Trim trees to remove dead limbs and establish canopy on live trees to an 8 foot canopy as a minimum. Apply pruning paint to exposed cuts within 15 minutes of cut
 - Rake up, pick up, and remove all trimmings, clippings, and cuttings
 - Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - These services will be required twice a year during the winter months (October - February) and summer months (June - July)
- Joint Sealant Cycle:** each service cycle shall include the following:
 - Collection of trash, debris, litter, and branches from channel area as necessary
 - Remove silt from concrete channel, remove vegetation growth from all joints and where concrete channel meets with fences
 - Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - Remove existing sealant material and brush or vacuum out the openings to ensure that any pebbles, dirt or loose debris are removed. Apply weed killer to all joint areas
 - Prepare joint with backer rod before applying joint sealant. Backer rod should be 1/8" larger than the width of the joint. Push backer rod down into the joint and leave a minimum joint depth of 1/4" and up to a 1/2" maximum
 - Apply engineer approved joint sealant in a uniform manner
 - A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - These services will be required twice a year at a minimum of six (6) months apart
- Provide all labor, equipment, and supplies for the above mentioned services
- The successful contractor shall be required to pay all appropriate landfill fees for the disposal of waste collected

NOTE:

- All base bid service requirements apply throughout the entire maintenance boundary area.
- Removal of vegetation within sidewalks along Deane CIR, Birney Dr, and Chesapeake Ave. included with mowing cycle for this pond
- Painting of graffiti includes cleaning of existing concrete, applying (2) coats of primer and (2) coats of paint; color choice selection by WCDD.

DATE: 10/27/2022

N.T.S.



CRANE ENGINEERING CORP.

1310 JUNCTION DRIVE
LAREDO, TX 78041
FIRM REGISTRATION NO. F-3353

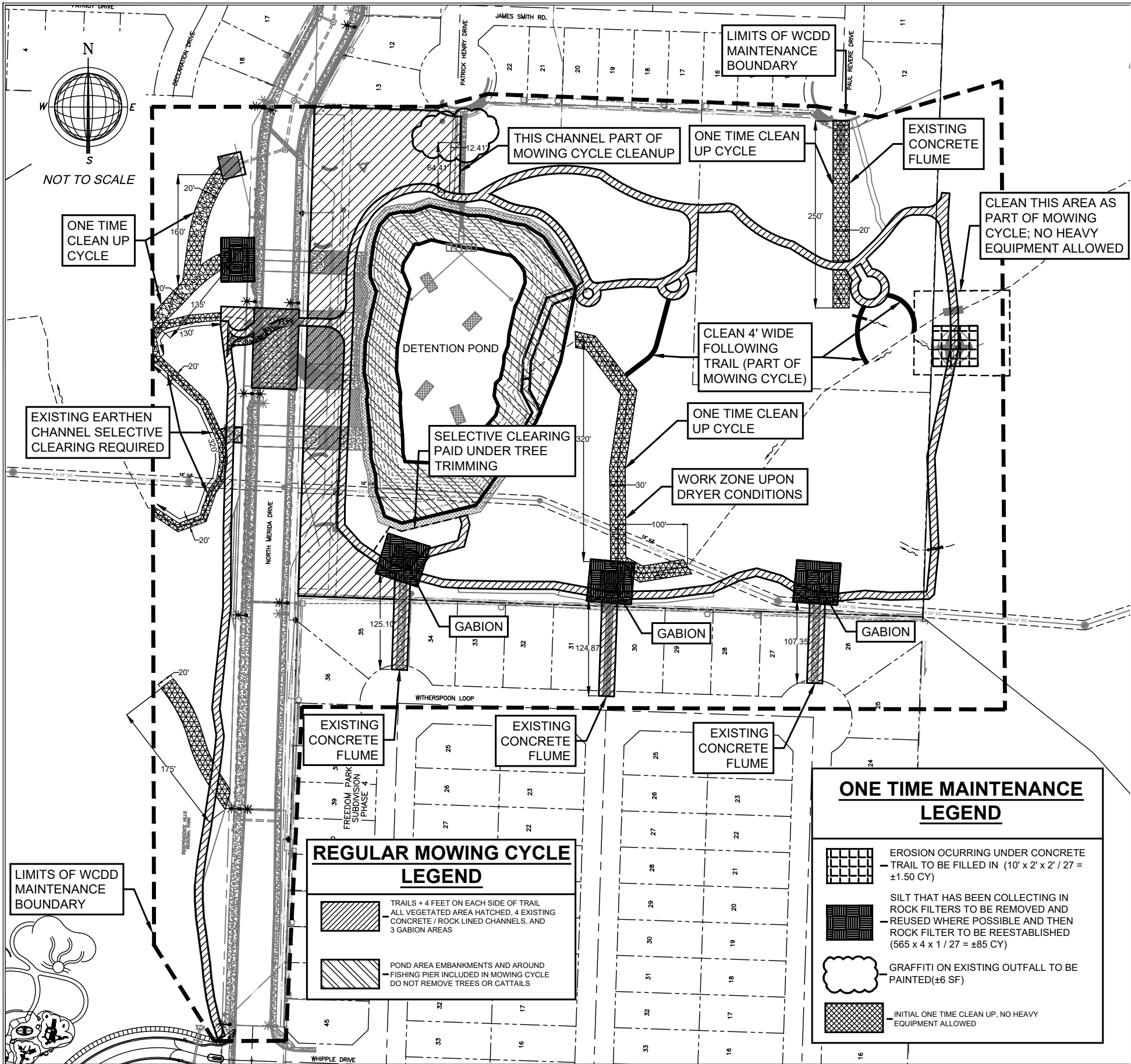
SUITE B
956-712-1996

Webb County Drainage District Maintenance Contract

Concord Hills Pond & Drainage Channels

SHEET **8**

OF **17**



LEGEND
Base Bid - Yearly Maintenance
Service Requirements:

- Clean up cycle:** service cycle shall include the following:
 - Collection of trash, debris, litter, and branches from the areas as specified
 - Mow all growth along the channels. Grass areas to be mowed to a 2-3 inch height
 - Trim trees to remove dead limbs and establish canopy on live trees to an 8 foot canopy height as a minimum. All trees with 2" caliper and greater to remain unless directed for removal by WCDD. Engineer to mark trees in the field during initial clearing to assist with tree preservation program. Apply pruning paint on cut tree limbs. All trees 2" caliper and lower are to be removed. All tree stumps to be removed
 - Prepare circular basin around each tree with a caliper of 2" and greater, as needed
 - Rake up, pick up, and remove all trimmings, clippings, and cuttings. (To be removed within 72 hours after cutting)
 - Convert clippings to mulch and place in tree basin and around vegetated areas
 - Remove silt from gravel filters / embankment
 - Haul away and properly dispose of all waste generated from specified area being cleared to the City of Laredo landfill
 - This work is a one (1) time service and is required to be completed prior to commencing the mowing cycle
- Mowing Cycle:** each service cycle shall include the following:
 - Collection of trash, debris, litter, and branches from the areas as specified
 - Mow all growth within the pond and channel flow areas, embankments, slopes of the creeks, channels, ponds along the walls and fences, between expansion joints in and around concrete structures, and walking trail
 - Remove any dead limbs from trees
 - Rake up, pick up, and remove all trimmings, clippings, and cuttings
 - Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - These services will be required six (6) times a year between the months of February and November
- Tree Maintenance:** each service cycle shall include the following:
 - Trim trees to remove dead limbs and establish canopy on live trees to an 8 foot canopy as a minimum. Apply pruning paint to exposed cuts within 15 minutes of cut
 - Rake up, pick up, and remove all trimmings, clippings, and cuttings
 - Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - These services will be required twice a year during the winter months (October - February) and summer months (June - July)
- Joint Sealant Cycle:** each service cycle shall include the following:
 - Collection of trash, debris, litter, and branches from channel area as necessary
 - Remove silt from concrete channels and concrete flumes remove vegetation growth from all joints and where concrete channel meets with fence
 - Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - Remove existing sealant material and brush or vacuum out the openings to ensure that any pebbles, dirt or loose debris are removed. apply weed killer to all joint areas
 - Prepare joint with backer rod before applying joint sealant. Backer rod should be 1/8" larger than the width of joint. Push backer rod down into the joint and leave a minimum joint depth of 1/4" and up to a 1/2" maximum
 - Apply engineer approved joint sealant in a uniform manner
 - A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - These services will be required twice a year at a minimum of six (6) months apart
- Provide all labor, equipment, and supplies for the above mentioned services
- The successful contractor shall be required to pay all appropriate landfill fees for the disposal of waste collected

NOTE:

- All base bid service requirements apply throughout the entire maintenance area.
- Joint sealant cycle applies to all concrete flumes
- Painting of graffiti includes cleaning of existing concrete, applying (2) coats of primer and (2) coats of paint; color choice selection by WCDD.

DATE: 10/27/2022
N.T.S.
ADDENDUM #2
12/27/22

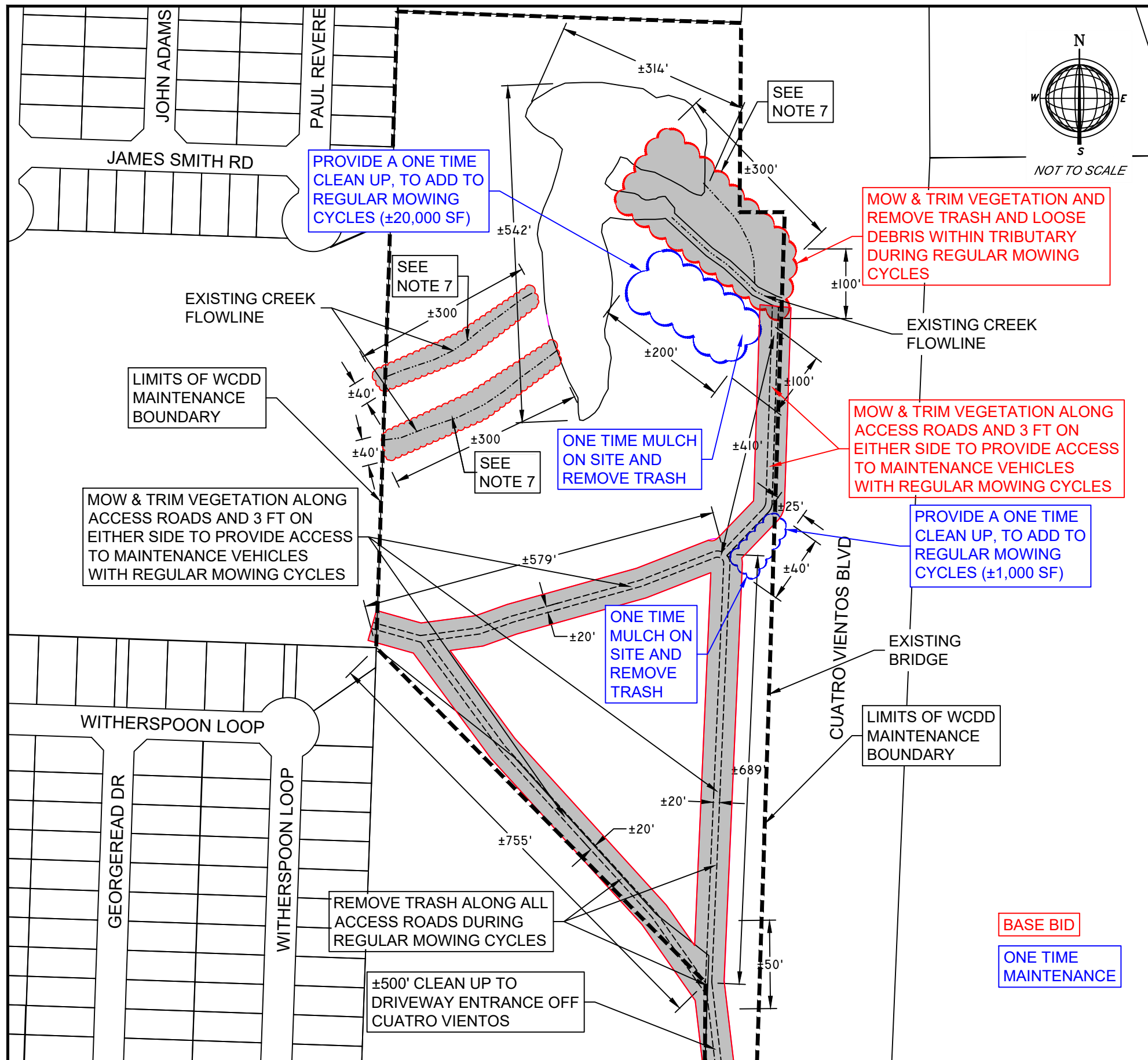


CRANE ENGINEERING CORP.
1310 JUNCTION DRIVE
LAREDO, TX 78041
FIRM REGISTRATION NO. F-3353

SUITE B
956-712-1996

Webb County Drainage District
Maintenance Contract

Merida Pond & Floodplain



LEGEND

Base Bid - Yearly Maintenance

Service Requirements:

1. **Clean up cycle:** service cycle shall include the following:
 - 1.1. Collection of trash, debris, litter, and branches from the areas as specified
 - 1.2. Mow all growth along the pond. Grass areas to be mowed to a 2-3 inch height
 - 1.3. Trim trees to remove dead limbs and establish canopy on live trees to an 8 foot canopy height as a minimum. All trees with 2" caliper and greater to remain unless directed for removal by WCDD. Engineer to mark trees in the field during initial clearing to assist with tree preservation program. Apply pruning paint on cut tree limbs. All trees 2" caliper and lower are to be removed. All tree stumps to be removed
 - 1.4. Prepare circular basin around each tree with a caliper of 2" and greater, as needed
 - 1.5. Rake up, pick up, and remove all trimmings, clippings, and cuttings. (To be removed within 72 hours after cutting)
 - 1.6. Convert clippings to mulch and place in tree basin and around vegetated areas
 - 1.7. Clear access road leading to maintenance area
 - 1.8. Haul away and properly dispose of all waste generated from specified area being cleared to the City of Laredo landfill
 - 1.9. This work is a one (1) time service and is required to be completed prior to commencing the mowing cycle
2. **Mowing Cycle:** each service cycle shall include the following:
 - 2.1. Collection of trash, debris, litter, and branches from the areas as specified
 - 2.2. Mow all growth within the pond
 - 2.3. Remove any dead limbs from trees
 - 2.4. Rake up, pick up, and remove all trimmings, clippings, and cuttings
 - 2.5. Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - 2.6. A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - 2.7. These services will be required two (2) times a year between the months of February and November
3. **Tree Maintenance:** each service cycle shall include the following:
 - 3.1. Trim trees to remove dead limbs and establish canopy on live trees to an 8 foot canopy as a minimum. Apply pruning paint to exposed cuts within 15 minutes of cut
 - 3.2. Rake up, pick up, and remove all trimmings, clippings, and cuttings
 - 3.3. Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - 3.4. A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - 3.5. These services will be required twice a year during the winter months (October - February) and summer months (June - July)
4. Provide all labor, equipment, and supplies for the above mentioned services
5. The successful contractor shall be required to pay all appropriate landfill fees for the disposal of waste collected

NOTE:

6. All base bid service requirements apply throughout the entire maintenance area.
7. (A) Remove/Dispose all dead limbs, trash, debris on the ground from this area.
(B) Trim trees by removing dead limbs and low lying tree limbs and create a canopy of 10 feet from the ground.
(C) Do not disturb creek, waterways, existing vegetation, or wildlife.
(D) No heavy equipment allowed.

DATE: 10/27/2022

N.T.S.

ADDENDUM #2

12/27/22



CRANE ENGINEERING CORP.

1310 JUNCTION DRIVE
LAREDO, TX 78041
FIRM REGISTRATION NO. F-3353

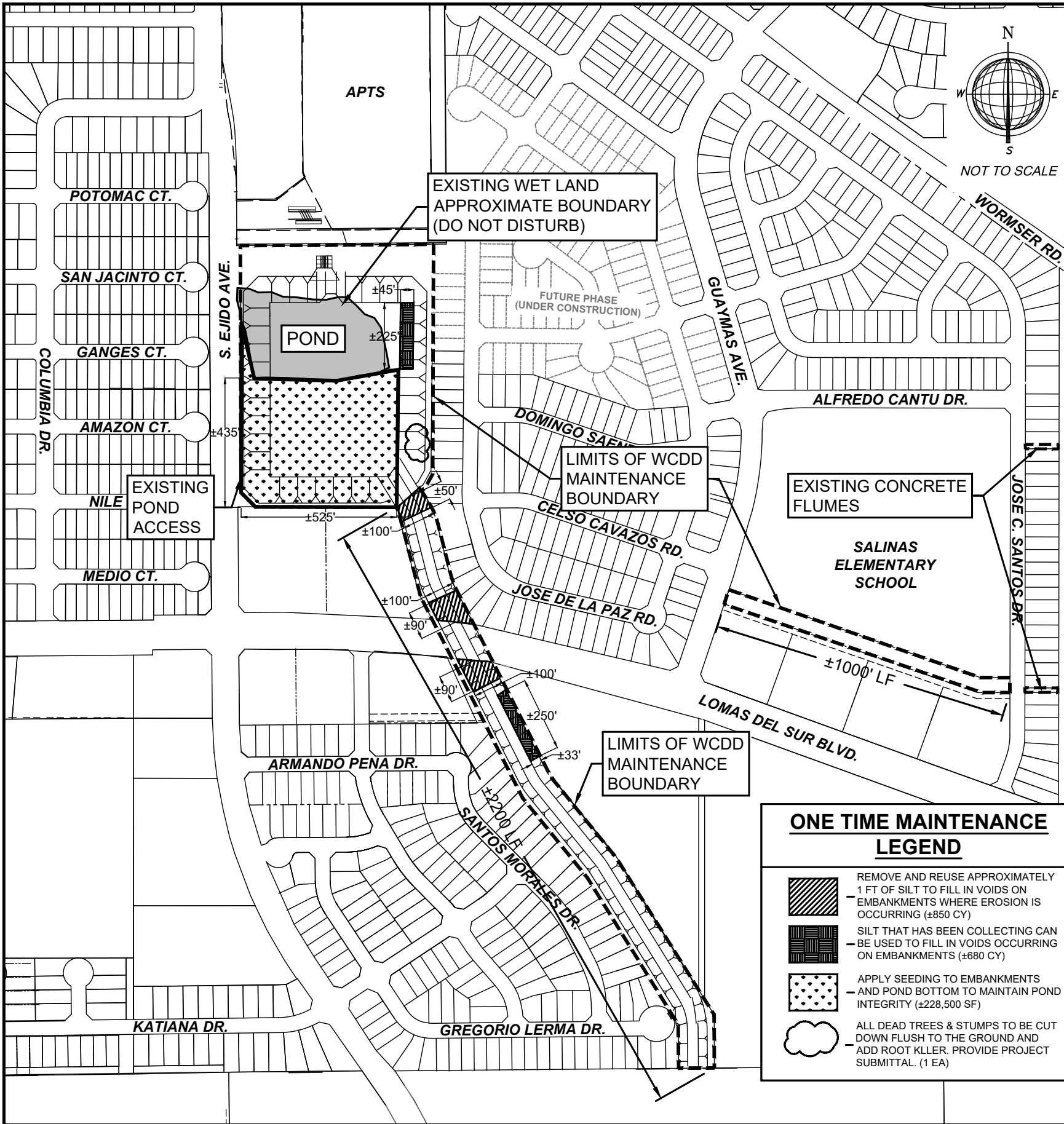
SUITE B
956-712-1996

Webb County Drainage District
Maintenance Contract

Summers Pond

SHEET **11**

OF **17**



LEGEND
Base Bid - Yearly Maintenance
Service Requirements:

1. **Clean up cycle:** service cycle shall include the following:
 - 1.1. Collection of trash, debris, litter, and branches from the areas as specified
 - 1.2. Mow all growth along the channels. Grass areas to be mowed to a 2-3 inch height
 - 1.3. Trim trees to remove dead limbs and establish canopy on live trees to an 8 foot canopy height as a minimum. All trees with 2" caliper and greater to remain unless directed for removal by WCDD. Engineer to mark trees in the field during initial clearing to assist with tree preservation program. Apply pruning paint on cut tree limbs. All trees 2" caliper and lower are to be removed. All tree stumps to be removed
 - 1.4. Prepare circular basin around each tree with a caliper of 2" and greater, as needed
 - 1.5. Rake up, pick up, and remove all trimmings, clippings, and cuttings. (To be removed within 72 hours after cutting)
 - 1.6. Convert clippings to mulch and place in tree basin and around vegetated areas
 - 1.7. Remove silt from gravel filters / embankment
 - 1.8. Haul away and properly dispose of all waste generated from specified area being cleared to the City of Laredo landfill
 - 1.9. This work is a one (1) time service and is required to be completed prior to commencing the mowing cycle
2. **Mowing Cycle:** each service cycle shall include the following:
 - 2.1. Collection of trash, debris, litter, and branches from the areas as specified
 - 2.2. Mow all growth within the pond and channel flow areas, embankments, slopes of the creeks, channels, ponds along the walls and fences, between expansion joints in and around concrete structures, and walking trail
 - 2.3. Remove any dead limbs from trees
 - 2.4. Rake up, pick up, and remove all trimmings, clippings, and cuttings
 - 2.5. Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - 2.6. A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - 2.7. These services will be required six (6) times a year between the months of February and November
3. **Tree Maintenance:** each service cycle shall include the following:
 - 3.1. Trim trees to remove dead limbs and establish canopy on live trees to an 8 foot canopy as a minimum. Apply pruning paint to exposed cuts within 15 minutes of cut
 - 3.2. Rake up, pick up, and remove all trimmings, clippings, and cuttings
 - 3.3. Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - 3.4. A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - 3.5. These services will be required twice a year during the winter months (October - February) and summer months (June - July)
4. **Joint Sealant Cycle:** each service cycle shall include the following:
 - 4.1. Collection of trash, debris, litter, and branches from channel area as necessary
 - 4.2. Remove silt from concrete channels, concrete structures (outlets) and concrete flumes remove vegetation growth from all joints and where concrete channel meets with fence
 - 4.3. Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - 4.4. Remove existing sealant material and brush or vacuum out the openings to ensure that any pebbles, dirt or loose debris are removed. apply weed killer to all joint areas
 - 4.5. Prepare joint with backer rod before applying joint sealant. Backer rod should be 1/8" larger than the width of joint. Push backer rod down into the joint and leave a minimum joint depth of 1/4" and up to a 1/2" maximum
 - 4.6. Apply engineer approved joint sealant in a uniform manner
 - 4.7. A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - 4.8. These services will be required twice a year at a minimum of six (6) months apart
5. Provide all labor, equipment, and supplies for the above mentioned services
6. The successful contractor shall be required to pay all appropriate landfill fees for the disposal of waste collected

NOTE:

7. All base bid service requirements apply throughout the entire maintenance area.
8. Joint sealant cycle applies to all concrete flumes

DATE: 10/27/2022
N.T.S.
ADDENDUM #2
12/27/2022

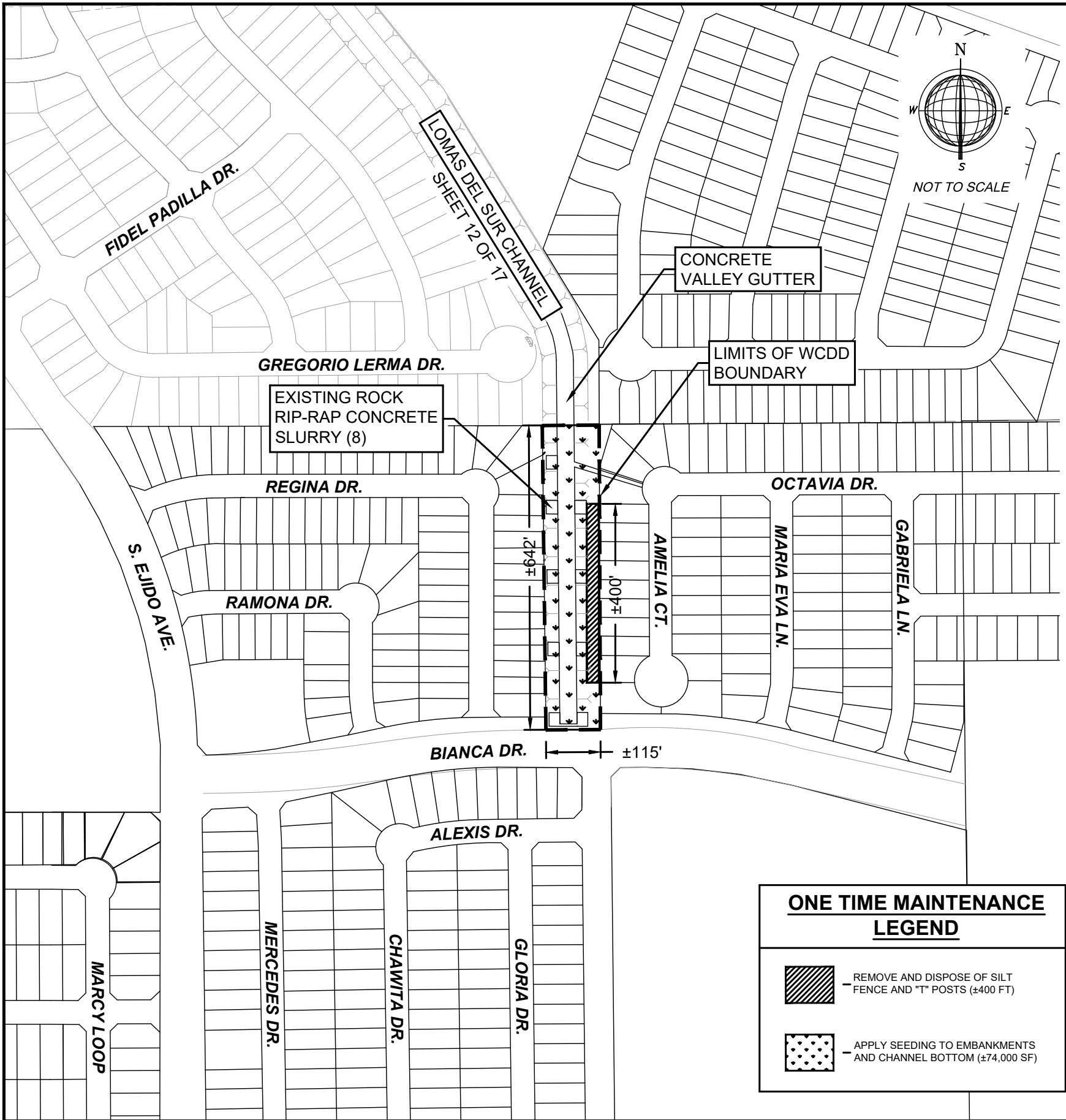


CRANE ENGINEERING CORP.
1310 JUNCTION DRIVE
LAREDO, TX 78041
FIRM REGISTRATION NO. F-3353

SUITE B
956-712-1996

Webb County Drainage District
Maintenance Contract

Lomas Del Sur Pond
& Drainage Channels



**ONE TIME MAINTENANCE
LEGEND**



REMOVE AND DISPOSE OF SILT
FENCE AND "T" POSTS (±400 FT)



APPLY SEEDING TO EMBANKMENTS
AND CHANNEL BOTTOM (±74,000 SF)

LEGEND

**Base Bid - Yearly Maintenance
Service Requirements:**

1. **Clean up cycle:** service cycle shall include the following:
 - 1.1. Collection of trash, debris, litter, and branches from the areas as specified
 - 1.2. Mow all growth along the channels. Grass areas to be mowed to a 2-3 inch height
 - 1.3. Trim trees to remove dead limbs and establish canopy on live trees to an 8 foot canopy height as a minimum. All trees with 2" caliper and greater to remain unless directed for removal by WCDD. Engineer to mark trees in the field during initial clearing to assist with tree preservation program. Apply pruning paint on cut tree limbs. All trees 2" caliper and lower are to be removed. All tree stumps to be removed
 - 1.4. Prepare circular basin around each tree with a caliper of 2" and greater, as needed
 - 1.5. Rake up, pick up, and remove all trimmings, clippings, and cuttings. (To be removed within 72 hours after cutting)
 - 1.6. Convert clippings to mulch and place in tree basin and around vegetated areas
 - 1.7. Remove silt from gravel filters / embankment
 - 1.8. Haul away and properly dispose of all waste generated from specified area being cleared to the City of Laredo landfill
 - 1.9. This work is a one (1) time service and is required to be completed prior to commencing the mowing cycle
2. **Mowing Cycle:** each service cycle shall include the following:
 - 2.1. Collection of trash, debris, litter, and branches from the areas as specified
 - 2.2. Mow all growth within the pond and channel flow areas, embankments, slopes of the creeks, channels, ponds along the walls and fences, between expansion joints in and around concrete structures, and walking trail
 - 2.3. Remove any dead limbs from trees
 - 2.4. Rake up, pick up, and remove all trimmings, clippings, and cuttings
 - 2.5. Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - 2.6. A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - 2.7. These services will be required six (6) times a year between the months of February and November
3. **Tree Maintenance:** each service cycle shall include the following:
 - 3.1. Trim trees to remove dead limbs and establish canopy on live trees to an 8 foot canopy as a minimum. Apply pruning paint to exposed cuts within 15 minutes of cut
 - 3.2. Rake up, pick up, and remove all trimmings, clippings, and cuttings
 - 3.3. Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - 3.4. A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - 3.5. These services will be required twice a year during the winter months (October - February) and summer months (June - July)
4. **Joint Sealant Cycle:** each service cycle shall include the following:
 - 4.1. Collection of trash, debris, litter, and branches from channel area as necessary
 - 4.2. Remove silt from concrete channels, concrete structures (outlets) and concrete flumes remove vegetation growth from all joints and where concrete channel meets with fence
 - 4.3. Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - 4.4. Remove existing sealant material and brush or vacuum out the openings to ensure that any pebbles, dirt or loose debris are removed. apply weed killer to all joint areas
 - 4.5. Prepare joint with backer rod before applying joint sealant. Backer rod should be 1/8" larger than the width of joint. Push backer rod down into the joint and leave a minimum joint depth of 1/4" and up to a 1/2" maximum
 - 4.6. Apply engineer approved joint sealant in a uniform manner
 - 4.7. A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - 4.8. These services will be required twice a year at a minimum of six (6) months apart
5. Provide all labor, equipment, and supplies for the above mentioned services
6. The successful contractor shall be required to pay all appropriate landfill fees for the disposal of waste collected

NOTE:

7. All base bid service requirements apply throughout the entire maintenance area.
8. Joint sealant cycle applies to all concrete flumes

DATE: 10/27/22

N.T.S.



CRANE ENGINEERING CORP.

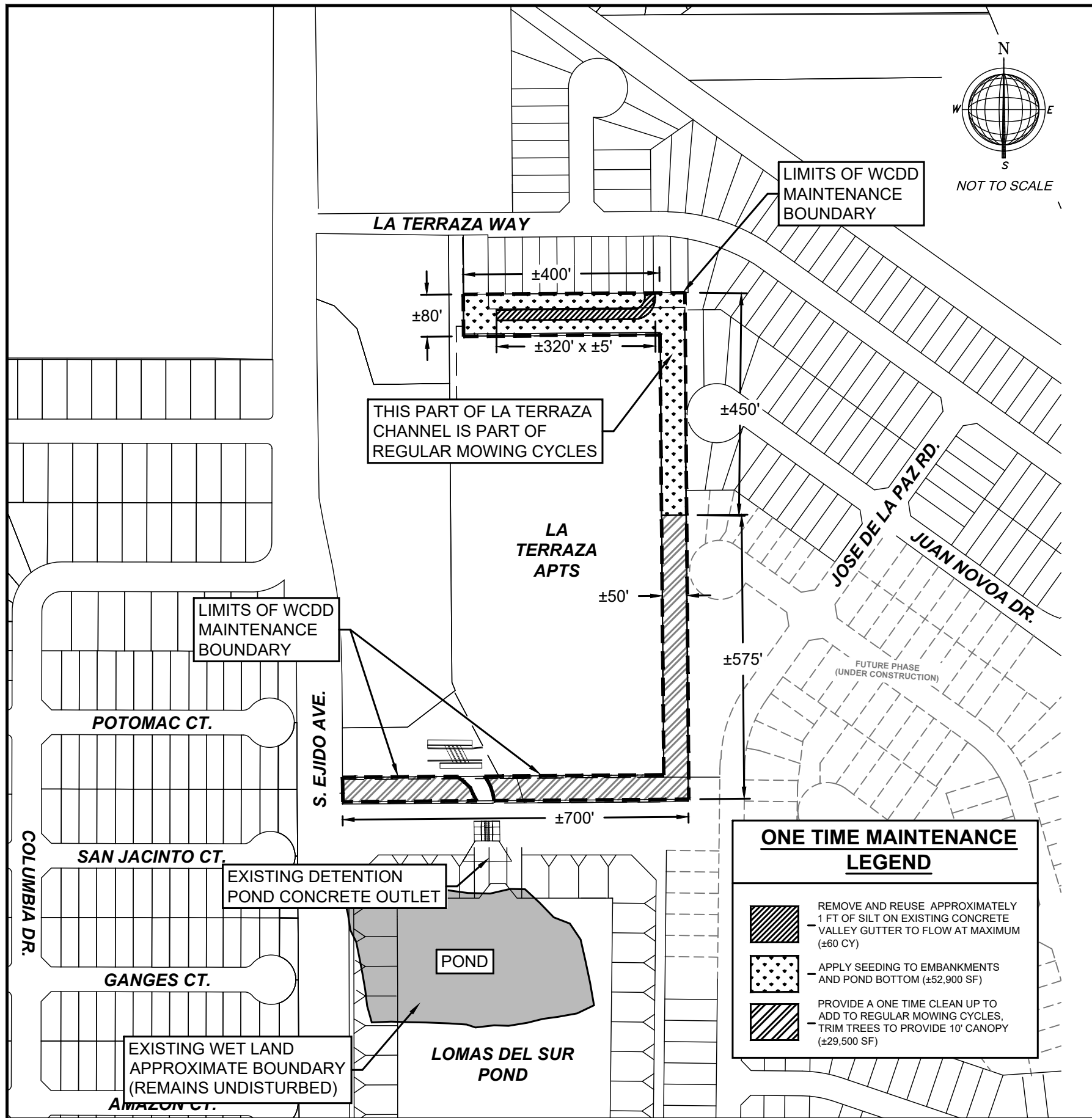
1310 JUNCTION DRIVE SUITE B
LAREDO, TX 78041 956-712-1996
FIRM REGISTRATION NO. F-3353

Webb County Drainage District
Maintenance Contract

Cuatro Vientos PH.10
Drainage Channel

SHEET **13**

OF **17**



LEGEND
Base Bid - Yearly Maintenance
Service Requirements:

1. **Clean up cycle:** service cycle shall include the following:
 - 1.1. Collection of trash, debris, litter, and branches from the areas as specified
 - 1.2. Mow all growth along the channels. Grass areas to be mowed to a 2-3 inch height
 - 1.3. Trim trees to remove dead limbs and establish canopy on live trees to an 8 foot canopy height as a minimum. All trees with 2" caliper and greater to remain unless directed for removal by WCDD. Engineer to mark trees in the field during initial clearing to assist with tree preservation program. Apply pruning paint on cut tree limbs. All trees 2" caliper and lower are to be removed. All tree stumps to be removed
 - 1.4. Prepare circular basin around each tree with a caliper of 2" and greater, as needed
 - 1.5. Rake up, pick up, and remove all trimmings, clippings, and cuttings. (To be removed within 72 hours after cutting)
 - 1.6. Convert clippings to mulch and place in tree basin and around vegetated areas
 - 1.7. Remove silt from gravel filters / embankment
 - 1.8. Haul away and properly dispose of all waste generated from specified area being cleared to the City of Laredo landfill
 - 1.9. This work is a one (1) time service and is required to be completed prior to commencing the mowing cycle
2. **Mowing Cycle:** each service cycle shall include the following:
 - 2.1. Collection of trash, debris, litter, and branches from the areas as specified
 - 2.2. Mow all growth within the pond and channel flow areas, embankments, slopes of the creeks, channels, ponds along the walls and fences, between expansion joints in and around concrete structures, and walking trail
 - 2.3. Remove any dead limbs from trees
 - 2.4. Rake up, pick up, and remove all trimmings, clippings, and cuttings
 - 2.5. Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - 2.6. A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - 2.7. These services will be required six (6) times a year between the months of February and November
3. **Tree Maintenance:** each service cycle shall include the following:
 - 3.1. Trim trees to remove dead limbs and establish canopy on live trees to an 8 foot canopy as a minimum. Apply pruning paint to exposed cuts within 15 minutes of cut
 - 3.2. Rake up, pick up, and remove all trimmings, clippings, and cuttings
 - 3.3. Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - 3.4. A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - 3.5. These services will be required twice a year during the winter months (October - February) and summer months (June - July)
4. **Joint Sealant Cycle:** each service cycle shall include the following:
 - 4.1. Collection of trash, debris, litter, and branches from channel area as necessary
 - 4.2. Remove silt from concrete channels, concrete structures (outlets) and concrete flumes remove vegetation growth from all joints and where concrete channel meets with fence
 - 4.3. Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - 4.4. Remove existing sealant material and brush or vacuum out the openings to ensure that any pebbles, dirt or loose debris are removed. apply weed killer to all joint areas
 - 4.5. Prepare joint with backer rod before applying joint sealant. Backer rod should be 1/8" larger than the width of joint. Push backer rod down into the joint and leave a minimum joint depth of 1/4" and up to a 1/2" maximum
 - 4.6. Apply engineer approved joint sealant in a uniform manner
 - 4.7. A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - 4.8. These services will be required twice a year at a minimum of six (6) months apart
5. Provide all labor, equipment, and supplies for the above mentioned services
6. The successful contractor shall be required to pay all appropriate landfill fees for the disposal of waste collected

NOTE:

7. All base bid service requirements apply throughout the entire maintenance area.
8. Joint sealant cycle applies to all concrete flumes

DATE: 10/27/2022

N.T.S.

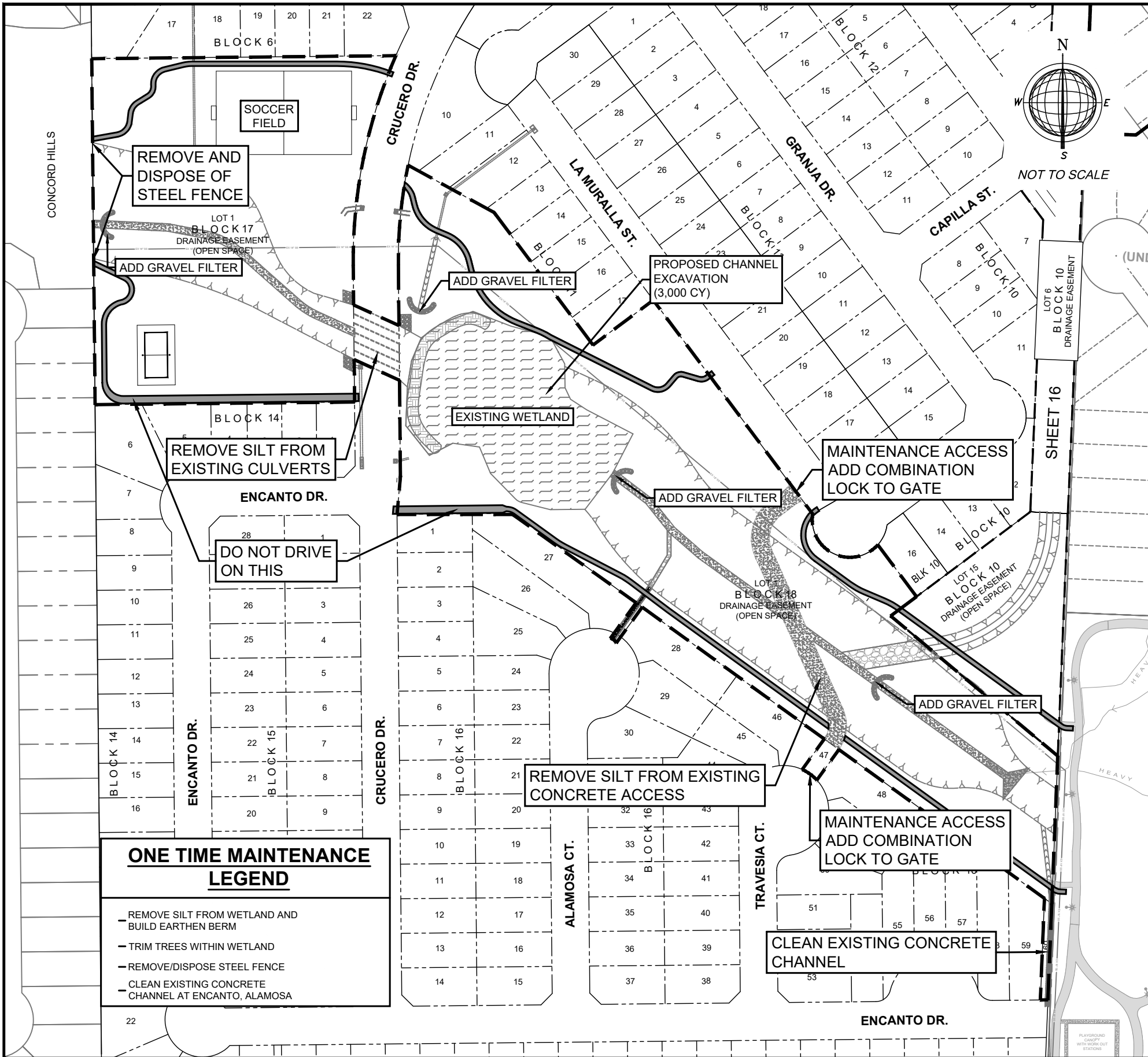


CRANE ENGINEERING CORP.
1310 JUNCTION DRIVE SUITE B
LAREDO, TX 78041 956-712-1996
FIRM REGISTRATION NO. F-3353

Webb County Drainage District
Maintenance Contract

La Terraza
Drainage Channels

SHEET **14**
OF **17**

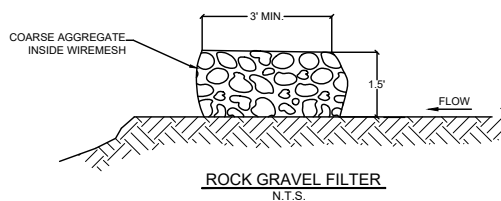
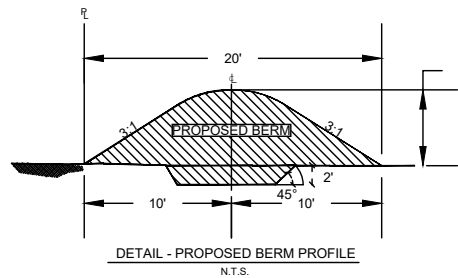
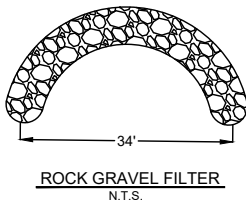


LEGEND
Base Bid - Yearly Maintenance
Service Requirements:

1. **Mowing Cycle:** Mow all growth along the pond, channel and floodplain areas, slopes of the creeks, channels, and ponds along the walls and fences, and between expansion joints in and around concrete channel; and between rock lined area.
2. **Tree Maintenance:** Trim trees to remove dead limbs and establish canopy to a 8-9 foot canopy as a minimum.
 - 2.1. Apply pruning paint to exposed cuts.
3. **Clean Up Cycle:** Collection of trash, debris, litter, and branches from the areas specified.
4. **Joint Sealant Cycle:** Remove existing sealant material and brush or vacuum out the openings to ensure that any pebbles, dirt or loose debris are removed. Apply weed killer to all joint areas.
 - 4.1. Prepare joint with backer rod before applying joint sealant. Backer rod should be 1/8" larger than the width of the joint. Push backer rod down into the joint and leave a minimum joint depth of 1/4" and up to a 1/2" maximum.
 - 4.2. Apply engineer approved joint sealant in a uniform manner.
5. Rake up, pick up and remove all trimmings, clippings, and cuttings.
6. Remove silt from pipes and culverts and place as backfill at necessary areas.
7. Prepare circular basin around each tree with a caliper of 2" and greater, as needed.
8. Convert clippings to mulch and place in tree basin and around vegetated areas.
9. Haul away and properly dispose of all waste generated to the City of Laredo Landfill.

LEGEND
Additive alternate #1 - One Time Maintenance (WETLAND)
Service Requirements:

10. Remove trash, debris, silt from wetland area
11. Stock pile trash & debris and dispose at city landfill
12. Use removed silt to construct a three foot (3') high berm; berm to be twenty feet (20') wide.
13. Add Erosion Control Blanket (588 SY) and Seed Berm. (5292 SF)
14. Add 4 gravel filter as shown on plans.
15. Add combination lock at two gate locations.
16. Mowing along boundary of the pond is required.
17. Tree clippings mulch remaining should be placed on either side of the trail.
18. Remove/disposed steel fence.
19. Clean existing concrete channel at Encanto, Alamosa.



DATE: 10/27/2022

N.T.S.

ADDENDUM #2

12/27/22



CRANE ENGINEERING CORP.

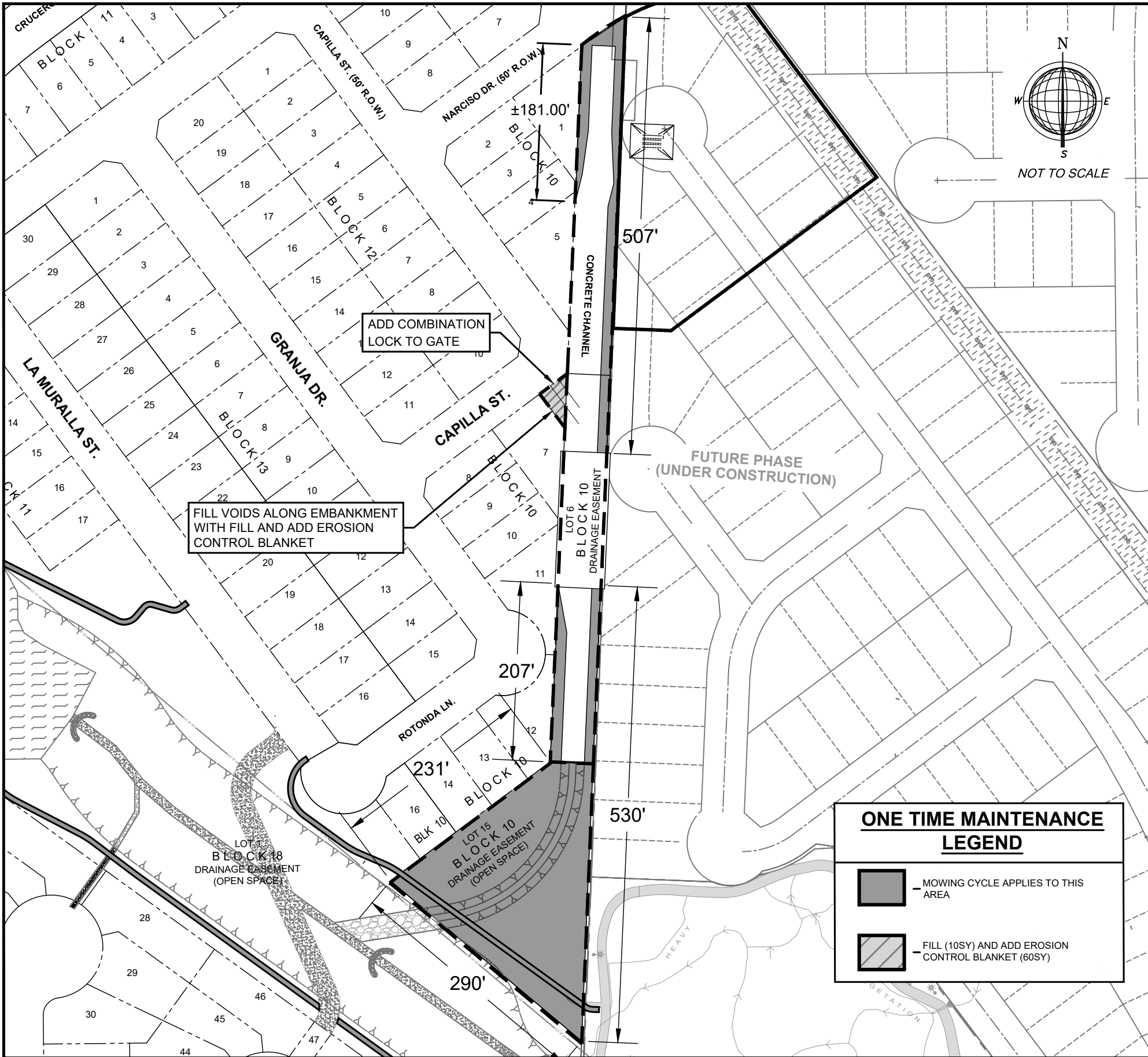
1310 JUNCTION DRIVE SUITE B
LAREDO, TX 78041 956-712-1996
FIRM REGISTRATION NO. F-3353

Webb County Drainage District
Maintenance Contract

Southern Development Phase IV
Channels and Wetland

SHEET **15**

OF **17**





LEGEND
Base Bid - Yearly Maintenance
Service Requirements:

- Clean up cycle:** service cycle shall include the following:
 - 1.1. Collection of trash, debris, litter, and branches from the areas as specified
 - 1.2. Mow all growth along the channels. Grass areas to be mowed to a 2-3 inch height
 - 1.3. Trim trees to remove dead limbs and establish canopy on live trees to an 8 foot canopy height as a minimum. All trees with 2" caliper and greater to remain unless directed for removal by WCDD. Engineer to mark trees in the field during initial clearing to assist with tree preservation program. Apply pruning paint on cut tree limbs. All trees 2" caliper and lower are to be removed. All tree stumps to be removed
 - 1.4. Prepare circular basin around each tree with a caliper of 2" and greater, as needed
 - 1.5. Rake up, pick up, and remove all trimmings, clippings, and cuttings. (To be removed within 72 hours after cutting)
 - 1.6. Convert clippings to mulch and place in tree basin and around vegetated areas
 - 1.7. Remove silt from gravel filters / embankment
 - 1.8. Haul away and properly dispose of all waste generated from specified area being cleared to the City of Laredo landfill
 - 1.9. This work is a one (1) time service and is required to be completed prior to commencing the mowing cycle
- Mowing Cycle:** each service cycle shall include the following:
 - 2.1. Collection of trash, debris, litter, and branches from the areas as specified
 - 2.2. Mow all growth within the pond and channel flow areas, embankments, slopes of the creeks, channels, ponds along the walls and fences, between expansion joints in and around concrete structures, and walking trail
 - 2.3. Remove any dead limbs from trees
 - 2.4. Rake up, pick up, and remove all trimmings, clippings, and cuttings
 - 2.5. Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - 2.6. A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - 2.7. These services will be required six (6) times a year between the months of February and November
- Tree Maintenance:** each service cycle shall include the following:
 - 3.1. Trim trees to remove dead limbs and establish canopy on live trees to an 8 foot canopy as a minimum. Apply pruning paint to exposed cuts within 15 minutes of cut
 - 3.2. Rake up, pick up, and remove all trimmings, clippings, and cuttings
 - 3.3. Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - 3.4. A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - 3.5. These services will be required twice a year during the winter months (October - February) and summer months (June - July)
- Joint Sealant Cycle:** each service cycle shall include the following:
 - 4.1. Collection of trash, debris, litter, and branches from channel area as necessary
 - 4.2. Remove silt from concrete channels, concrete structures (outlets) and concrete flumes remove vegetation growth from all joints and where concrete channel meets with fence
 - 4.3. Haul away and properly dispose of all the waste generated to the City of Laredo landfill
 - 4.4. Remove existing sealant material and brush or vacuum out the openings to ensure that any pebbles, dirt or loose debris are removed. apply weed killer to all joint areas
 - 4.5. Prepare joint with backer rod before applying joint sealant. Backer rod should be 1/8" larger than the width of joint. Push backer rod down into the joint and leave a minimum joint depth of 1/4" and up to a 1/2" maximum
 - 4.6. Apply engineer approved joint sealant in a uniform manner
 - 4.7. A service cycle is defined by finishing all the work in ten (10) consecutive working day periods
 - 4.8. These services will be required twice a year at a minimum of six (6) months apart
- Provide all labor, equipment, and supplies for the above mentioned services
- The successful contractor shall be required to pay all appropriate landfill fees for the disposal of waste collected

NOTE:

7. All base bid service requirements apply throughout the entire maintenance area.
8. Joint sealant cycle applies to all concrete flumes

ONE TIME MAINTENANCE
LEGEND

-  MOWING CYCLE APPLIES TO THIS AREA
-  FILL (10SY) AND ADD EROSION CONTROL BLANKET (60SY)

DATE: 10/27/2022

N.T.S.

ADDENDUM #2

12/27/22



CRANE ENGINEERING CORP.

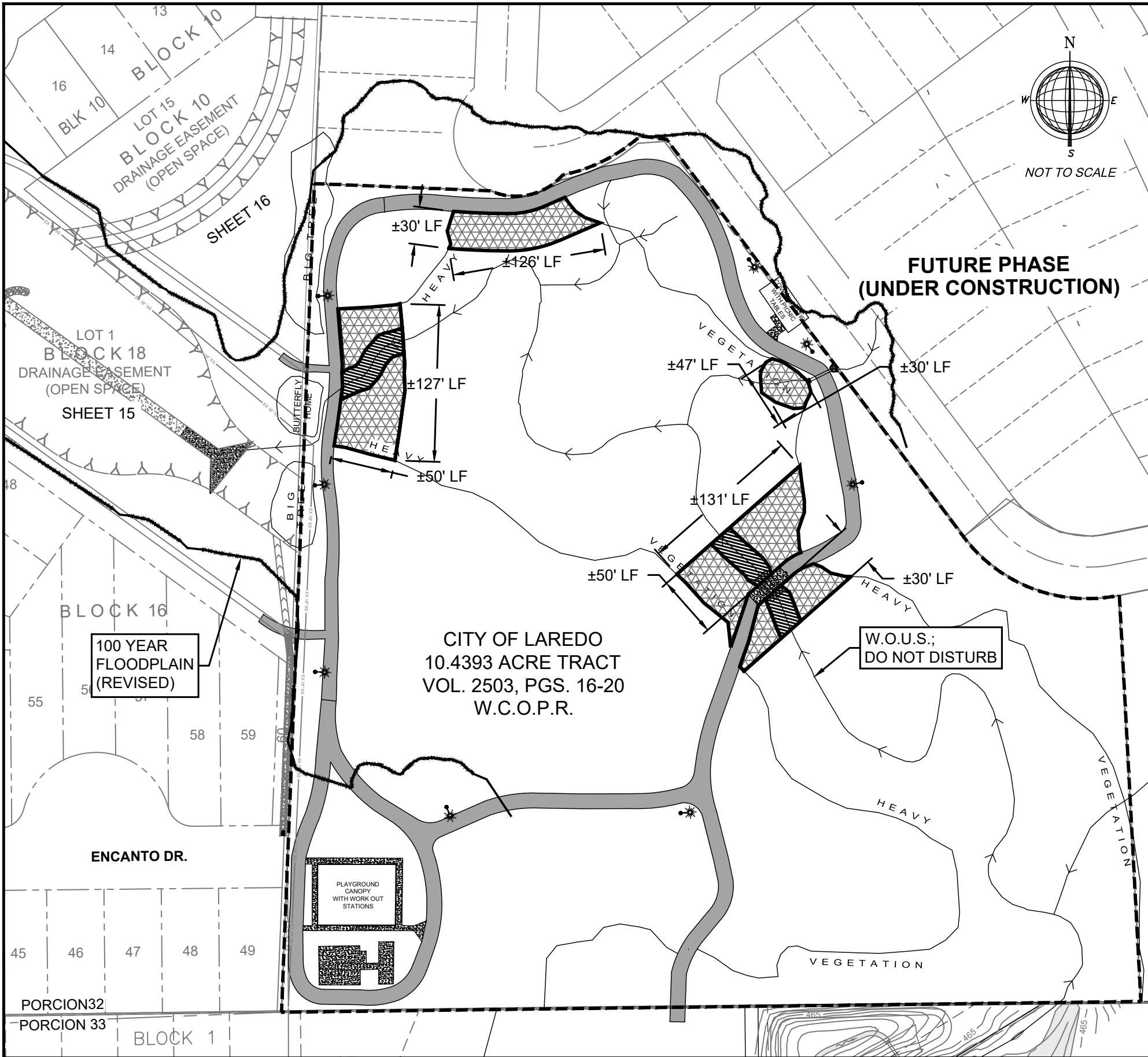
1310 JUNCTION DRIVE SUITE B
LAREDO, TX 78041 956-712-1996
FIRM REGISTRATION NO. F-3353

Webb County Drainage District
Maintenance Contract

Southern Development Phase III
Concrete Lined Channel

SHEET **16**

OF **17**



ONE TIME MAINTENANCE
LEGEND

NEEDS TO BE CUT BY HAND

INITIAL ONE TIME MAINTENANCE

- LEGEND**
Base Bid - Yearly Maintenance
Service Requirements:
1. Mowing Cycle: Mow all growth within the shaded area only; no machinery.

2. Tree Maintenance: Trim trees to remove dead limbs and establish canopy to a 9-10 foot canopy as a minimum.

2.1. Apply pruning paint to exposed cuts within 15 minutes of cut.

3. Clean Up Cycle: Collection of trash, debris, litter, and branches from the areas specified.

4. Rake up, pick up and remove all trimmings, clippings, and cuttings.

5. Remove silt from pipes and culverts and place as backfill at necessary areas.

6. Prepare circular basin around each tree with a caliper of 2" and greater, as needed.

7. Convert clippings to mulch and place in tree basin and around vegetated areas.

8. Haul away and properly dispose of all waste generated to the City of Laredo Landfill.

- LEGEND**
Additive Alternate #1 - One Time Maintenance
Service Requirements:
9. Collection of trash, debris, litter, and branches from the areas specified.

10. Mow all growth within the shaded area; no machinery allowed.

11. Trim trees to remove dead limbs and establish canopy to a 7-8 foot canopy as a minimum. All trees with 1" caliper and greater to remain unless directed for removal by WCDD. Engineer to mark trees in the field during initial clearing to assist with tree preservation program. Apply pruning paint on cut tree limbs.

12. Prepare circular basin around each tree with a caliper of 1" and greater, as needed.

13. Rake up, pick up and remove all trimmings, clippings, and cuttings. (To be removed within 72 hours after cutting)

14. Convert clippings to mulch and place in tree basin and around vegetated areas.

15. Remove silt from pipes and culverts.

16. Fill void areas along channel with collected silt.

17. Haul away and properly dispose of all waste generated from specified area being cleared to the City of Laredo Landfill.

18. This work is a one (1) time service and is required to be completed prior to commencing the mowing cycle.

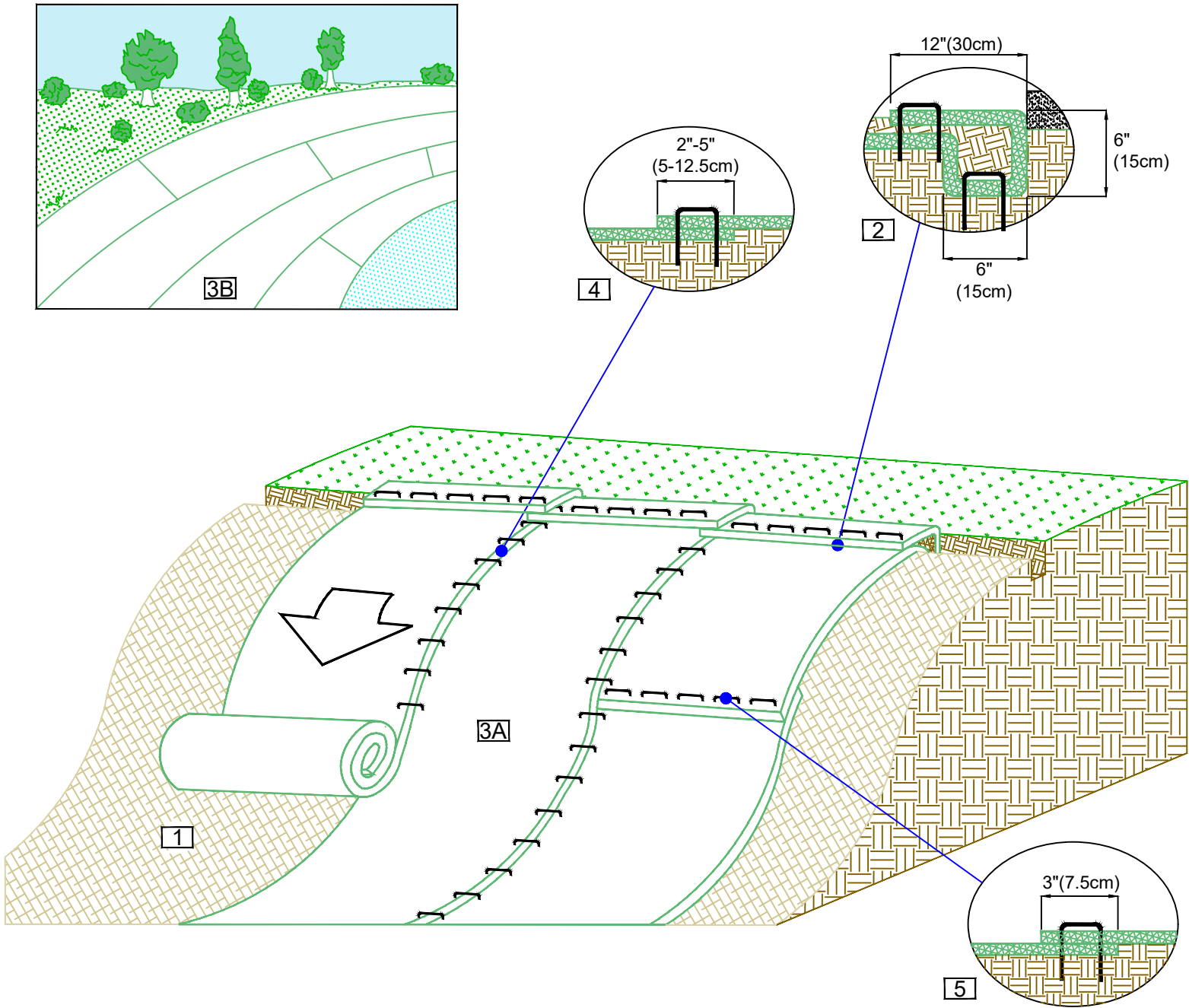
19. Provide all labor, equipment, and supplies for the above mentioned services. Engineer to direct contractor on selective tree cutting.

20. The successful contractor shall be required to pay all appropriate landfill fees for the disposal of waste collected.

- NOTE:**
21. Tree clippings mulch remaining should be utilized on site.

22. Coordinate with engineer before commencing work.

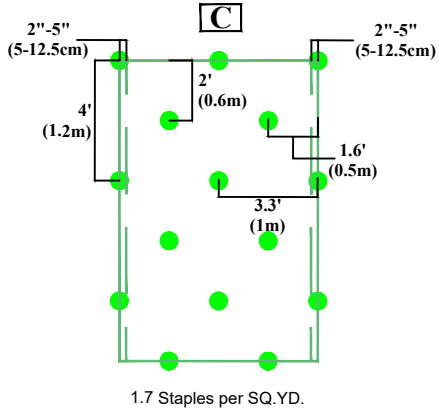
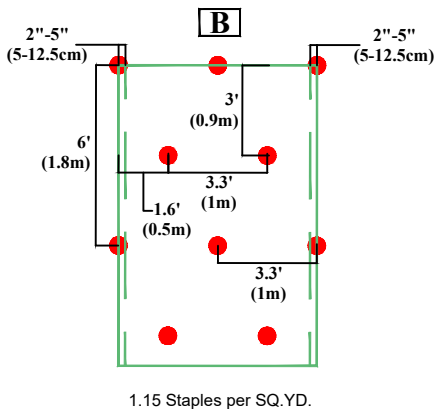
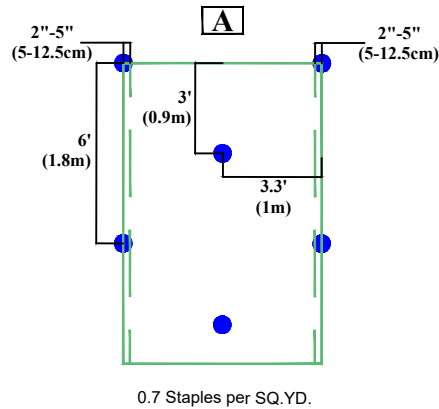
EROSION CONTROL BLANKET SHEET 18.dwg



SLOPE INSTALLATION DETAIL

1. Prepare soil before installing rolled erosion control products (RECPs), including any necessary application of lime, fertilizer, and seed.
2. Begin at the top of the slope by anchoring the RECPs in a 6"(15cm) deep X 6"(15cm) wide trench with approximately 12" (30cm) of RECPs extended beyond the up-slope portion of the trench. Anchor the RECPs with a row of staples/stakes approximately 12" (30cm) apart in the bottom of the trench. Backfill and compact the trench after stapling. Apply seed to the compacted soil and fold the remaining 12"(30cm) portion of RECPs back over the seed and compacted soil. Secure RECPs over compacted soil with a row of staples/stakes spaced approximately 12"(30cm) apart across the width of the RECPs.
3. Roll the RECPs (A) down or (B) horizontally across the slope. RECPs will unroll with appropriate side against the soil surface. All RECPs must be securely fastened to soil surface by placing staples/stakes in appropriate locations as shown in the staple pattern guide.
4. The edges of parallel RECPs must be stapled with approximately 2" - 5" (5-12.5cm) overlap depending on the RECPs type.
5. Consecutive RECPs spliced down the slope must be end over end (Shingle style) with an approximate 3"(7.5cm) overlap. Staple through overlapped area, approximately 12"(30cm) apart across entire RECPs width.

***NOTE:**
In loose soil conditions, the use of staple or stake lengths greater than 6"(15cm) may be necessary to properly secure the RECP's.



STAPLE PATTERN GUIDE

- 4:1 Slopes (A)
- 3:1 Slopes (B)
- 2:1 Slopes (C)

GENERAL NOTES

No.	Revision/Issue	Date

FIRM NAME AND ADDRESS
CRANE ENGINEERING CORP.
1310 JUNCTION DRIVE SUITE B
LAREDO, TX 78041 956-712-1996
FIRM REGISTRATION NO. F-3353



Project Name and Address
WEBB COUNTY DRAINAGE DISTRICT NO. 1
PROJECT 2023-001
CHACON CREEK TRIBUTARY 1
MAINTENANCE CONTRACT

Sheet Title
EROSION CONTROL DETAILS

Date 12/27/22	Sheet 18
Scale N.T.S.	