



**FLORIDA DEPARTMENT OF TRANSPORTATION DISTRICT VI**  
**TRANSPORTATION ALTERNATIVES**  
**APPLICATION FOR FISCAL YEAR 2026/2027**  
**2021 Application Cycle**

**A. APPLICANT INFORMATION**

<b>AGENCY (Local Agency PROJECT SPONSOR):</b> City of North Miami	
<b>APPLICATION CONTACT PERSON:</b> Mohammad Ayub Zaid	<b>TITLE:</b> Transportation Manager
<b>ADDRESS:</b> 1855 NE 142 Street	<b>CITY / STATE / ZIP:</b> North Miami, FL 33181
<b>PHONE:</b> 305-895-9883	<b>EMAIL:</b> mzaid@northmiamifl.gov

**PROJECT SPONSOR'S LOCAL AGENCY PROGRAM (LAP) CERTIFICATION STATUS** <sup>1</sup> *Select one response*

Full Certification: *Click here to enter text.* Responsible Charge: Mohammad Ayub Zaid  
 Phone: 305-895-9883

Project Specific Certification: *Click here to enter text.* Responsible Charge: *Click here to enter text.*  
 Phone: *Click here to enter text.*

Not Certified, Local Agency has attached a Certification Schedule \*

Not Certified, Local Agency does not have a Certification Schedule\*

**B. PROJECT INFORMATION**

<b>PROJECT TITLE:</b> PEDESTRIAN BRIDGE REPLACEMENT OVER C-8 CANAL (BISCAYNE CANAL)
<b>PROJECT LOCATION:</b> Over C-8 Canal at approximately 1,400-feet south of the existing N.E. 135th Street bridge.
<b>ROADWAY NAME AND/OR NUMBER:</b> N/A
<b>PURPOSE OF PROJECT:</b> Replacement of Pedestrian Bridge
<b>PROJECT BRIEF DESCRIPTION:</b> Replace the existing Pedestrian Bridge over the South Florida Water Management District C-8 canal (Biscayne Canal). The existing bridge is located between N.E. 2nd Avenue and Griffing Boulevard, approximately 1,400-feet south of the existing N.E. 135th Street vehicular bridge.

**Note:** All questions on the application **must** have a response. Failure to respond **to all** questions will result in a **disqualification** of the application. Should you feel that a question is not applicable to your project, please respond "not applicable."

FOR FDOT USE ONLY		
Application Complete	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Project Eligible	<input type="checkbox"/> YES	<input type="checkbox"/> NO

<sup>1</sup> All Agencies shall be certified according to the Local Agency Program Manual Chapter 2, for more details contact the Local Programs office at (305) 470-5141 [https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/lap/manual/final-ch2-20190319.pdf?sfvrsn=a03958a9\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/lap/manual/final-ch2-20190319.pdf?sfvrsn=a03958a9_2)

## C. TA QUALIFYING ACTIVITIES - PROJECT CRITERIA

Select the Transportation Alternative activity that the proposed project will address. Please select one activity that represents most of the work proposed. Eligible activities must be consistent with details described under 23 U.S.C. 101(a) (29) and 213(b). (Note: selecting more than one activity does not ensure or increase eligibility.)

1.  Construction of on-road and off-road trail facilities for pedestrians, bicyclists, and other non-motorized forms of transportation, including sidewalks, bicycle infrastructure, pedestrian and bicycle signals, traffic calming techniques, lighting and other safety - related infrastructure, and transportation projects to achieve compliance with the Americans with Disabilities Act of 1990
2.  Construction, planning, and design of infrastructure-related projects and systems that will provide safe routes or for non-drivers, including children, older adults, and individuals with disabilities to access daily needs
3.  Conversion and use of abandoned railroad corridors for trails for pedestrians, bicyclists, or other non-motorized Transportation users
4.  Construction of turnouts, overlooks, and viewing areas
5.  Community improvement activities, which include but are not limited to:
  - a)  Inventory, control, or removal of outdoor advertising
  - b)  Historic preservation and rehabilitation of historic transportation facilities
  - c)  Vegetation management practices in transportation rights-of-way to improve roadway safety, prevent against invasive species, and provide erosion control
  - d)  Archaeological activities relating to impacts from implementation of a transportation project eligible under Title 23
6.  Any environmental mitigation activity, including pollution prevention and pollution abatement activities and mitigation to:
  - a)  Address storm water management, control, and water pollution prevention or abatement related to highway construction or due to highway runoff, including activities described in sections 133(b) (11), 328(a), and 329 of Title 23; or
  - b)  Reduce vehicle-caused wildlife mortality or restore and maintain connectivity among terrestrial or aquatic habitats
7.  SRTS program-eligible projects and activities listed in section 1404(f) of the SAFETEA-LU:
  - a)  Infrastructure-related projects
  - b)  Non-infrastructure-related projects
  - c)  Safe Routes to School Coordinator
8.  Planning, designing, and constructing boulevards<sup>2</sup> and other roadways largely in the Right-of-Way of former Interstate System routes or other divided highways
9.  Recreational trails program<sup>3</sup>

<sup>2</sup> A boulevard is defined as a walkable, low speed (35 mph or less) divided arterial thoroughfare in urban environments designed to carry both through and local traffic, pedestrians and bicyclists. Boulevards may be long corridors, typically four lanes but sometimes wider, serve longer trips, provide pedestrian access to land, may be high ridership transit corridors, are primary emergency response routes and use vehicular and pedestrian access management techniques. Curb parking is encouraged.

<sup>3</sup> [https://www.fhwa.dot.gov/environment/transportation\\_alternatives/guidance/guidance\\_2016.cfm#RecreationalTrails](https://www.fhwa.dot.gov/environment/transportation_alternatives/guidance/guidance_2016.cfm#RecreationalTrails)

## D. PROJECT DETAILS

### 1. Roadway Classification:

- State Roadway
  Federal Aid Roadway
  Local Roadway
  Other

### 2. Project Termini:

**Begin:** N. E 2nd Avenue

**End:** Griffing Boulevard

**Project Length:** 500 feet

If the project has various locations, include an attachment specifying each termini and project length.

Attachment included?

- Yes
  No

### 3. Location maps and aerials are attached: REQUIRED

- Yes
  No

**4. Provide the Scope of Work:** The city of North Miami has determined the need to replace the existing Pedestrian Bridge over the South Florida Water Management District C-8 canal (Biscayne Canal). The existing bridge is located between N.E. 2nd Avenue and Griffing Boulevard, approximately 1,400-feet south of the existing N.E. 135th Street vehicular bridge. The existing pedestrian bridge carries both pedestrians and utilities. The new pedestrian bridge will replace the existing pedestrian bridge in its entirety. All existing abandoned utilities currently mounted to the bridge will be removed and no allowance for future utilities will be accommodated on the new bridge. The bridge length will be of approximate 150 feet.

A detailed scope of work is attached

- Yes
  No

Conceptual plans are attached

- Yes
  No

Typical section drawings are attached

- Yes
  No

### 5. Identify the project stakeholders: [Click here to enter text.](#)

Has the Local Agency received input from stakeholders?

- Yes
  No

Briefly explain [Click here to enter text.](#)

### 6. Has the Local Agency performed public awareness activities or held community meetings? Yes No

If yes, provide a brief description and attach supporting documentation: We plan to initiate a public awareness activities and meet with neighborhood associations to discuss the scope of the project and construction activities.

### 7. Is there public and/or private support for the project? Yes No

If yes, provide a brief description and attach supporting documentation (e.g. petitions, written endorsements, resolutions, letters of support, etc.): Resolutions and support letters are attached.

## E. PROJECT IMPLEMENTATION PLAN

### 1. Select the project phase(s) the local agency is applying for in this application:

- |  |   |
|--|---|
| <input type="checkbox"/> Planning Activities                             | <input type="checkbox"/> Project Development & Environment <sup>4</sup>         |
| <input checked="" type="checkbox"/> Preliminary Engineering/Final Design | <input type="checkbox"/> Right of Way <sup>5</sup>                              |
| <input checked="" type="checkbox"/> Construction                         | <input checked="" type="checkbox"/> Construction Engineering & Inspection (CEI) |

*NOTE: Local agencies are not eligible to be certified in PD&E and/or ROW; therefore, funds cannot be requested to self-administer PD&E and/or ROW phase (s).*

### 2. Select who will execute the project phase (s) identified in the question above. Check all applicable boxes:

PLANNING	PD&E	DESIGN	ROW	CONSTRUCTION	CEI
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<sup>4</sup> Refer to LAP Manual Chapter 11

<sup>5</sup> Refer to LAP Manual Chapter 12

<input type="checkbox"/> Local Agency Staff	<input type="checkbox"/> FDOT	<input checked="" type="checkbox"/> Local Agency Staff	<input checked="" type="checkbox"/> FDOT	<input checked="" type="checkbox"/> Contractor	<input checked="" type="checkbox"/> Local Agency Staff <sup>6</sup>
<input type="checkbox"/> Consultant	<input checked="" type="checkbox"/> Not Applicable	<input checked="" type="checkbox"/> Consultant	<input checked="" type="checkbox"/> Not Applicable	<input type="checkbox"/> FDOT	<input checked="" type="checkbox"/> Consultant
<input checked="" type="checkbox"/> Not Applicable		<input type="checkbox"/> FDOT		<input type="checkbox"/> Not Applicable	<input type="checkbox"/> FDOT
		<input type="checkbox"/> Not Applicable			<input type="checkbox"/> Not Applicable

**Note:** Chapter 337.14 Florida Statutes was amended by HB 905, effective July 1, 2019 prohibiting an entity from performing both design services and construction engineering and inspection services for a project wholly or partially funded by the Department of Transportation and administered by a local governmental entity.

**3. Is this project related to other FDOT funded phase(s) that are complete, underway or in FDOT's 5-year Work Program?**  Yes  No

If yes, provide the associated 11-digit Financial Management number(s): [Click here to enter text.](#)

**4. Are signed and sealed design plans available for the project associated with this application?**  Yes  No

- a. If yes, are design plans updated to current standards and existing conditions?  Yes  No
1. Specify the date of design plans developed? [Click here to enter text.](#)
  2. Enter Engineer of Record contact information: [Click here to enter text.](#)
- b. If no, identify status of design plans
- No plans
  - 30%
  - 60%
  - 90%
  - Other Describe: [Click here to enter text.](#)

**5. Attach a project schedule (dates may be tentative)** [Click here to enter text.](#)

Include (as applicable):

- Consultant acquisition & award  Yes  No
- Contractor acquisition & award  Yes  No
- Project schedule and production dates  Yes  No
- Plans preparation & review submittal (FDOT 30 days review)  Yes  No
- Environmental Assessments  Yes  No
- Permit Acquisition  Yes  No

**6. Identify permits required: South Florida Water Management District**

Copies of permits are attached to this application  Yes  No

**7. Is a maintenance plan proposed?**  Yes  No

Describe: [Click here to enter text.](#)

**8. Attach documents requested as exhibits to this application. List exhibits:** Project Schedule .

## **F. RIGHT OF WAY**

**1. Is the project within the Local Agency's right of way?**  Yes  No

If yes, describe the project's existing Right-of-Way ownership as it relates to the project. (i.e. plats, deeds, prescriptions, certified surveys, easements). City of North Miami owns the right of way.

If no, describe the existing ROW conditions.

<sup>6</sup> Work done by local agency staff requires prior FDOT approval in any phase identified

**2. Is Right-of-Way acquisition proposed in this application?**  Yes  No

If yes, describe the proposed acquisition and provide a ROW map [Click here to enter text.](#)

Identify entity acquiring and retaining ownership of proposed Right-of-Way<sup>7</sup>: [Click here to enter text.](#)

Will temporary construction easements be required?  Yes  No

If yes, please describe: [Click here to enter text.](#)

## **G. ENVIRONMENTAL EVALUATION**

*Coordination with the Federal Highway Administration and the State Historic Preservation Officer will be required by Section 106 of the National Historic Preservation Act.*

**A. Has the Local Agency performed an environmental assessment for the project?**  Yes  No

List the environmental assessments performed: [Click here to enter text.](#)

**B. Does the Local Agency have a historic preservation planner?**  Yes  No

If yes, provide contact information: [Click here to enter text.](#)

**C. Is the proposed project located adjacent to a locally designated historic property or a National Register of Historic places-listed historic site?**  Yes  No

If yes, have any historic properties/places received Florida Department of State Historic Preservation Grant funds?

Yes  No

If yes, attach preservation agreements, covenants, or easements.

**D. Are archeological sites or Native American sensitive sites located within proximity to or adjacent to the project?**  Yes  No

If yes, provide a brief description: [Click here to enter text.](#)

**E. Has the Local Agency coordinated with any Federal or State Agencies for this project?**  Yes  No

If yes, provide a brief description and submit supporting documentation: [Click here to enter text.](#)

**F. Are parks, recreation areas or wildlife or waterfowl refuges in close proximity to the project?**  Yes  No

If yes, provide a brief description: [Click here to enter text.](#)

**G. Are there any navigable waterways adjacent or near the project?**  Yes  No

If yes, provide a brief description: [Click here to enter text.](#)

**H. Does the project have any wetland impacts?**  Yes  No

If yes, will wetlands mitigation be needed?

Yes  No

If yes, provide a brief description: [Click here to enter text.](#)

**I. Has the Local Agency reviewed the project for potential protected species/ critical habitat impacts?**  Yes  No

If yes, provide a brief description: [Click here to enter text.](#)

**J. Has the Local Agency reviewed the project for potential contamination that could affect the area?**  Yes  No

<sup>7</sup> All right-of-way acquisitions must comply with State and Federal rules, regulations and procedures.

If yes, provide a brief description: [Click here to enter text.](#)

**K. Are there noise sensitive areas?**

Yes  No

If yes, provide a brief description: [Click here to enter text.](#)

**H. COST ESTIMATE**

1. For projects that have not been designed, an opinion of probable cost **must be** submitted with this application. Utilize the FDOT’s Basis of Estimates Manual<sup>8</sup> to develop a **detailed** estimate with FDOT pay items for construction phase estimates. **If the project has been designed, then, a detailed engineer cost estimate must be submitted with this application.**

The opinion of probable cost or engineers cost estimate is attached to this application  Yes  No

**2. Provide a summary of the estimated costs for the proposed work in the table below**

A project cost estimate **must** be attached to this application

Activities	Total Cost	Local Funds	TA Funds
Planning Activities	<a href="#">\$Click here to enter text.</a>	<a href="#">\$Click here to enter text.</a>	<a href="#">\$Click here to enter text.</a>
Project Development & Environmental Study	<a href="#">\$Click here to enter text.</a>	<a href="#">\$Click here to enter text.</a>	<a href="#">\$Click here to enter text.</a>
Design Costs/ Plans Preparation	\$101,170.73	\$101,170.73	0.00
Environmental Assessment(s) associated with the design phase	<a href="#">\$Click here to enter text.</a>	<a href="#">\$Click here to enter text.</a>	<a href="#">\$Click here to enter text.</a>
Permits associated with the design phase (including application fees, mitigation, and permit acquisition work)	<a href="#">\$Click here to enter text.</a>	<a href="#">\$Click here to enter text.</a>	<a href="#">\$Click here to enter text.</a>
Right of Way	<a href="#">\$Click here to enter text.</a>	<a href="#">\$Click here to enter text.</a>	<a href="#">\$Click here to enter text.</a>
Construction	\$600,000	\$ 0.00	\$600,000.00
Construction Engineering and Inspection activities (CEI)	\$100,000.00	\$ 0.00	\$ 100,000.00
Other Costs (describe) <sup>9</sup> <a href="#">Click here to enter text.</a>	<a href="#">\$Click here to enter text.</a>	<a href="#">\$Click here to enter text.</a>	<a href="#">\$Click here to enter text.</a>
<b>Total Estimated Project Cost</b>	<b>\$801,170.73</b>	<b>\$101,107.73</b>	<b>\$700,000.00</b>

**I. PROJECT FUNDING**

<sup>8</sup> Use the following links to access the Basis of Estimates Manual as well as historical cost information for your area:

<http://www.fdot.gov/programmanagement/Estimates/BasisofEstimates/BOEManual/BOEOnline.shtm>

<http://www.fdot.gov/programmanagement/Estimates/HistoricalCostInformation/HistoricalCost.shtm>

<sup>9</sup> FDOT does not allow programming for contingency costs. Any contingency costs should be accounted for using local funds.

TA FUNDS	\$ 700,000.00	PERCENTAGE OF TA FUNDS	100 %
LOCAL FUNDS ALLOCATED	\$ 101,170.73	PERCENTAGE OF LOCAL CONTRIBUTION	100%
<b>TOTAL PROJECT COST</b>	\$ 801,170.73		

Note: The percentage of local contribution indicated above will be greater than or equal to the local contribution to the final contract award.

Example A: A 20% local contribution is indicated for a construction project. The local agency was awarded \$1,000,000. The bid amount is \$1,000,000. The awarded amount would be reduced to \$800,000. The local agency would contribute \$200,000.

Example B: A 20% local contribution is indicated for a construction project. The local agency was awarded \$1,000,000. The bid amount is \$1,400,000. The awarded amount would remain \$1,000,000. The local agency would contribute \$400,000.

**1. Describe in detail how the project will be funded (include funding types and commitment of funds):**

City has funded the project design and construction cost is not funded at this time. We plan to fund construction through state and federal grants.

**2. Provide the funding year for each phase(s) of the project:**

Design phase was funded FY 2020. Construction phase is not funded.

**3. Provide a letter from the Local Agency's Budget Office committing Local Funds to the project.**

A copy of the letter is included with this application.

Yes  No

**J. Project Sponsorship Certification**

I hereby certify that the proposed project herein described is supported by City of North Miami (Local Agency, county, state or federal agency, or tribal council) and that said entity will: (1) provide any required funding match; (2) enter into a maintenance agreement with the Florida Department of Transportation (FDOT); (3) comply with the Federal Uniform Relocation Assistance and Acquisition Policies Act for any Right of Way actions required for the project, (4) Comply with Local Agency Program Manual during all phases of the project, (5) comply with the NEPA process prior to construction, which may involve coordination with the State Historic and Preservation Office (SHPO) prior to construction, and (6) support other actions necessary to fully implement the proposed project.

I further certify that the estimated costs are reasonable and understand that City of North Miami (Local Agency, county, state or federal agency, or tribal council) will bear all expenses in excess of the total cost of the project. Upon notification of project award, I further certify that the aforementioned entity will work with the FDOT to ensure the associated contracts are executed in the fiscal year programmed. Project deferrals are highly discouraged and are subject to fund availability.

**Name (please type or print):** Theresa Therilus, Esq.

**Title:** City Manager

**Signature:** 

**Date:** 1/28/21





If you have any questions about this application or need assistance, please contact:

**Oscar Camejo**

Miami-Dade Transportation Planning Organization

Phone: (305) 375-1837

Email: [Oscar.Camejo@miamidade.gov](mailto:Oscar.Camejo@miamidade.gov)

**Janene Sclafani**

Monroe County

Phone: (305) 289-2545

Email: [Sclafani-Janene@MonroeCounty-FL.Gov](mailto:Sclafani-Janene@MonroeCounty-FL.Gov)

**Xiomara Nunez**

Florida Department of Transportation District Six

Phone: (305) 470-5404

[xiomara.nunez@dot.state.fl.us](mailto:xiomara.nunez@dot.state.fl.us)

**RESOURCES**

FDOT Local Agency Program Manual

<https://www.fdot.gov/programmanagement/LAP/LAP-TOC.shtm>

FDOT PD&E Manual

<https://www.fdot.gov/environment/pubs/pdeman/pdeman1.shtm>

Basis of Estimates Manual

<http://www.fdot.gov/programmanagement/Estimates/BasisofEstimates/BOEManual/BOEOnline.shtm>

**RESOLUTION NO. \_\_\_\_\_**

**A RESOLUTION OF THE MAYOR AND CITY COUNCIL OF THE CITY OF NORTH MIAMI, FLORIDA, AUTHORIZING THE SUBMITTAL OF A GRANT APPLICATION AND AUTHORIZING THE CITY MANAGER AND CITY ATTORNEY TO NEGOTIATE AND EXECUTE AN AGREEMENT BETWEEN THE CITY OF NORTH MIAMI AND THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) FOR A GRANT FROM THE TRANSPORTATION ALTERNATIVES PROGRAM; PROVIDING FOR AN EFFECTIVE DATE AND FOR ALL OTHER PURPOSES.**

**WHEREAS**, the Mayor and City Council are desirous of applying for and securing a grant from the Florida Department of Transportation's Transportation Alternatives Program; and

**WHEREAS**, the City of North Miami is requesting a grant in the amount of Seven Hundred Thousand Dollars (\$700,000.00) with a required match in the amount of One Hundred One Thousand One Hundred Seventy Dollars and 73/100 (\$101,170.73) for a total project cost of Eight Hundred One Thousand One Hundred Seventy Dollars and 73/100 (\$801,170.73); and

**WHEREAS**, funds will be used to replace the existing pedestrian bridge over the South Florida Water Management District C-8 Canal located between Northeast 2<sup>nd</sup> Avenue and Griffing Boulevard; and

**WHEREAS**, the Mayor and City Council wish to authorize the submittal of a grant application as well as to fully authorize the negotiation and execution of an agreement between the City and the Florida Department of Transportation for the purpose of securing grant funds.

**NOW THEREFORE, BE IT DULY RESOLVED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF NORTH MIAMI, FLORIDA:**

**Section 1. Authorization to Submit Grant Application.** The Mayor and City Council of the City of North Miami, Florida, hereby authorize the submittal of the City of North Miami's application for a grant from the Florida Department of Transportation's Transportation Alternatives Program.

**Section 2. Authority to City Manager and City Attorney.** The City Manager and City Attorney are hereby authorized to negotiate and execute an agreement between the City of North Miami, Florida and the Florida Department of Transportation.

**Section 3. Effective Date.** This Resolution shall become effective immediately upon adoption.

**PASSED AND ADOPTED** by a \_\_\_\_\_ vote of the Mayor and City Council of the City of North Miami, Florida, this \_\_\_\_ day of \_\_\_\_\_, 2021.

\_\_\_\_\_  
PHILIPPE BIEN-AIME  
MAYOR

ATTEST :

\_\_\_\_\_  
VANESSA JOSEPH, ESQ.  
CITY CLERK

APPROVED AS TO FORM  
AND LEGAL SUFFICIENCY:

\_\_\_\_\_  
JEFF P. H. CAZEAU, ESQ.  
CITY ATTORNEY

SPONSORED BY: CITY ADMINISTRATION

Moved by: \_\_\_\_\_

Seconded by: \_\_\_\_\_

**Vote:**

Mayor Philippe Bien-Aime	_____ (Yes)	_____ (No)
Vice Mayor Scott Galvin	_____ (Yes)	_____ (No)
Councilwoman Carol Keys, Esq.	_____ (Yes)	_____ (No)
Councilwoman Mary Estimé-Irvin	_____ (Yes)	_____ (No)
Councilman Alix Desulme, Ed.D.	_____ (Yes)	_____ (No)



# DRAWING INDEX

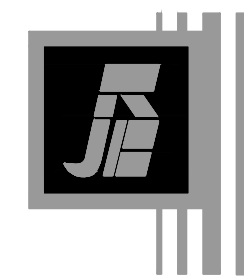
## CIVIL DRAWINGS

SHT. NO.	SHEET DRAWINGS
1	COVER SHEET
2	EXISTING SITE PLAN AND PROFILE
3	PROPOSED SITE PLAN AND PROFILE



# CITY OF NORTH MIAMI PEDESTRIAN BRIDGE REPLACEMENT OVER THE C-8 CANAL (BISCAYNE CANAL)

## CONTRACT PLANS



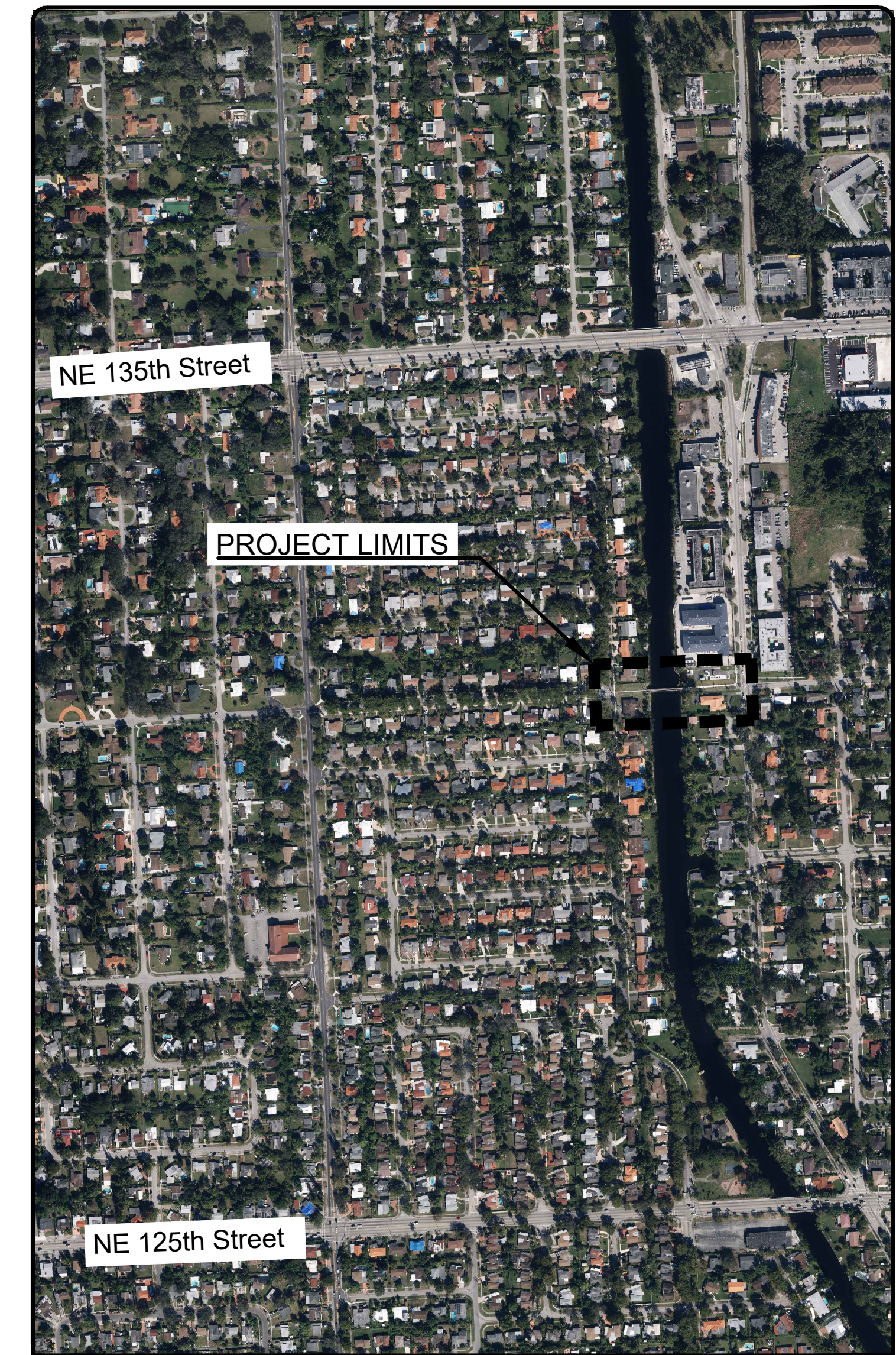
**R.J. Behar & Company, Inc.**  
Engineers • Planners

6861 S.W. 196th Avenue, Suite 302  
Pembroke Pines, Florida • 33332  
(954) 680-7771 • Fax: (954) 680-7781

REVISIONS				
NO.	DATE	BY	CHK'D	DESCRIPTION

The consultant, contractor or other parties associated with this project shall comply with Florida Statutes Chapter 119. These plans are the property of the District and must be secured and maintained in a confidential manner. Review by any unauthorized individual or outside/third party not performing work necessary for this project is prohibited.

This item has been electronically signed and sealed by José A. Peña on the date adjacent to the seals, using SHA-1 authentication codes. Printed copies of this document are not considered signed and sealed and the SHA-1 authentication codes must be verified on any electronic copies.



 **LOCATION SKETCH** (SCALE: N.T.S.)

CITY OF NORTH MIAMI  
UTILITIES & ENGINEERING  
DEPARTMENT

### CITY OF NORTH MIAMI OFFICIALS

PHILIPPE BIEN-AIME	MAYOR
SCOTT GALVIN	DISTRICT 1 COUNCILMAN
CAROL KEYS, ESQ.	DISTRICT 2 COUNCILWOMAN
MARY ESTIME-IRVIN	DISTRICT 3 COUNCILWOMAN
ALIX DESILME, Ed.D.	DISTRICT 4 COUNCILMAN

ENGINEER OF RECORD:

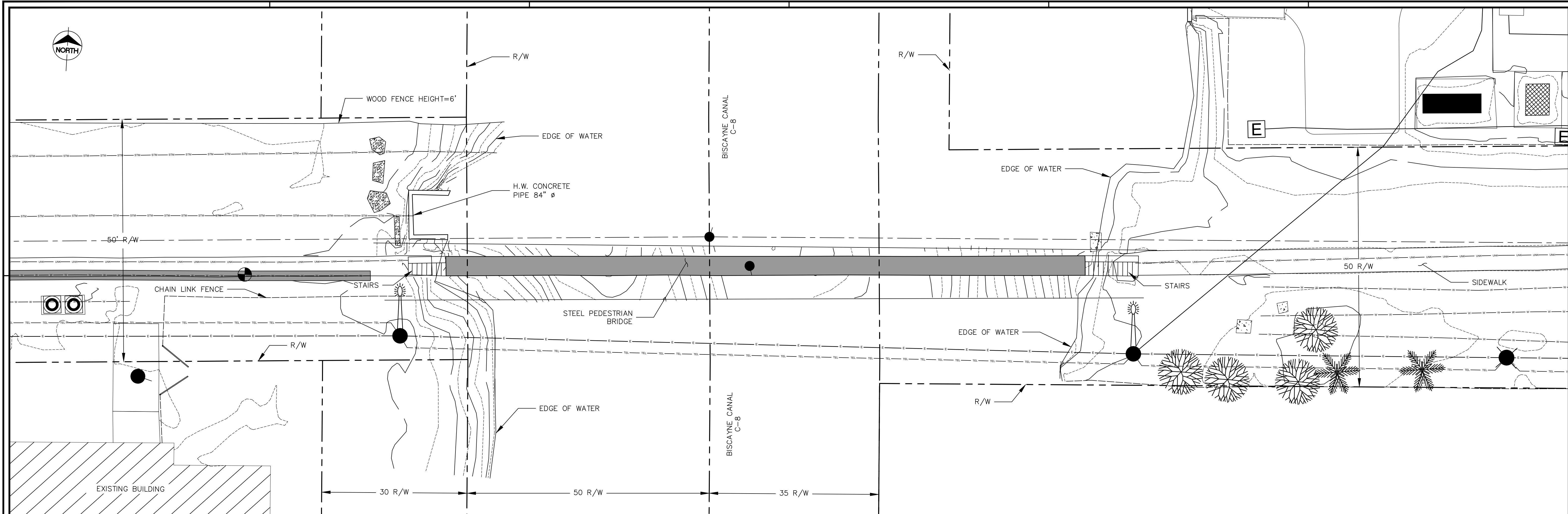
JOSE A. PEÑA, P.E.      DATE:  
LICENSE NO. 67863

DATE: ---

SHEET NAME: G001

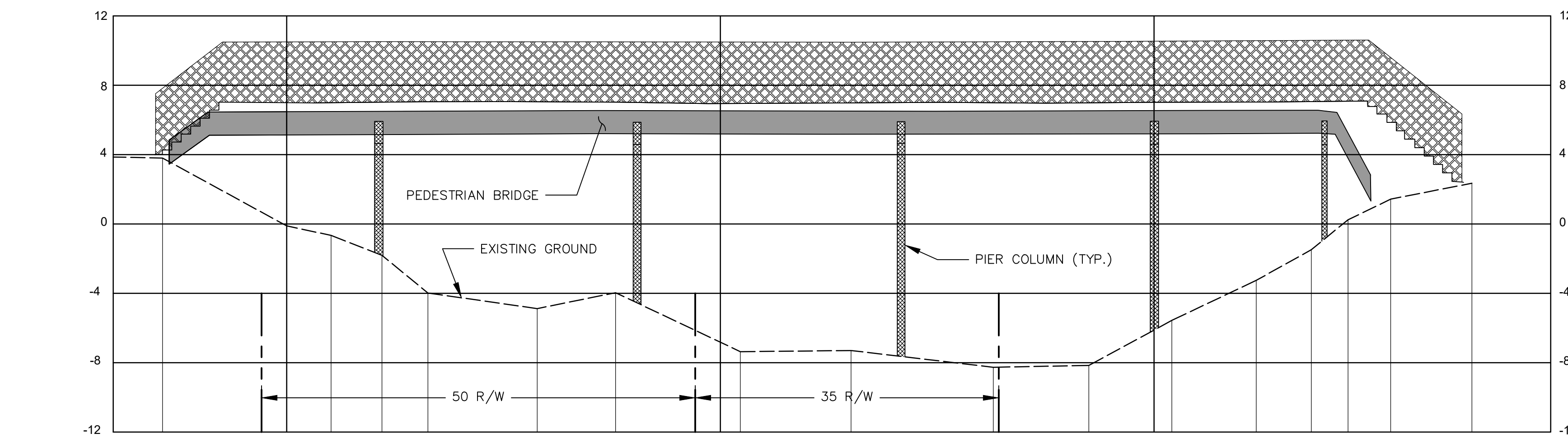
R.J. BEHAR PROJECT No.: 20039

## CONCEPTUAL PRELIMINARY



**PLAN VIEW**

SCALE: 1" = 10'



ELEVATION	3.86	3.80	-0.11	-0.66	-1.81	-3.88	-4.88	-3.96	-7.36	-7.30	-8.26	-8.16	-6.12	-5.56	-3.25	-1.48	0.24	1.43	2.35
STATION	0+80	0+85.69	1+00	1+05.12	1+10.99	1+16.29	1+28.89	1+37.92	1+52.31	1+65.07	1+81.47	1+92.47	2+00	2+02.05	2+11.78	2+18.13	2+22.36	2+27.28	2+36.64

**PROFILE**

SCALE: 1" = 10' H/ 1" = 5' V

**NOTE:**  
THE ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).  
NGVD29 = NAVD88 + 1.603 FOR THIS LOCATION.

The consultant, contractor or other parties associated with this project shall comply with Florida Statutes Chapter 119. These plans are the property of the District and must be secured and maintained in a confidential manner. Review by any unauthorized individual or outside/third party not performing work necessary for this project is prohibited.

This item has been electronically signed and sealed by José A. Peña on the date adjacent to the seals, using SHA-1 authentication codes. Printed copies of this document are not considered signed and sealed and the SHA-1 authentication codes must be verified on any electronic copies.

ENGINEER OF RECORD: JOSE A. PEÑA  
FLORIDA P.E. LICENSE NO.: 67863  
(SEAL)  
DATE: ---

**R.J.Behar & Company, Inc.**  
Engineers • Planners  
6881 SW 180TH AVENUE, SUITE 302  
PENSACOLA, FL 32532  
PHONE: 904-880-7771, FAX: 904-880-7781



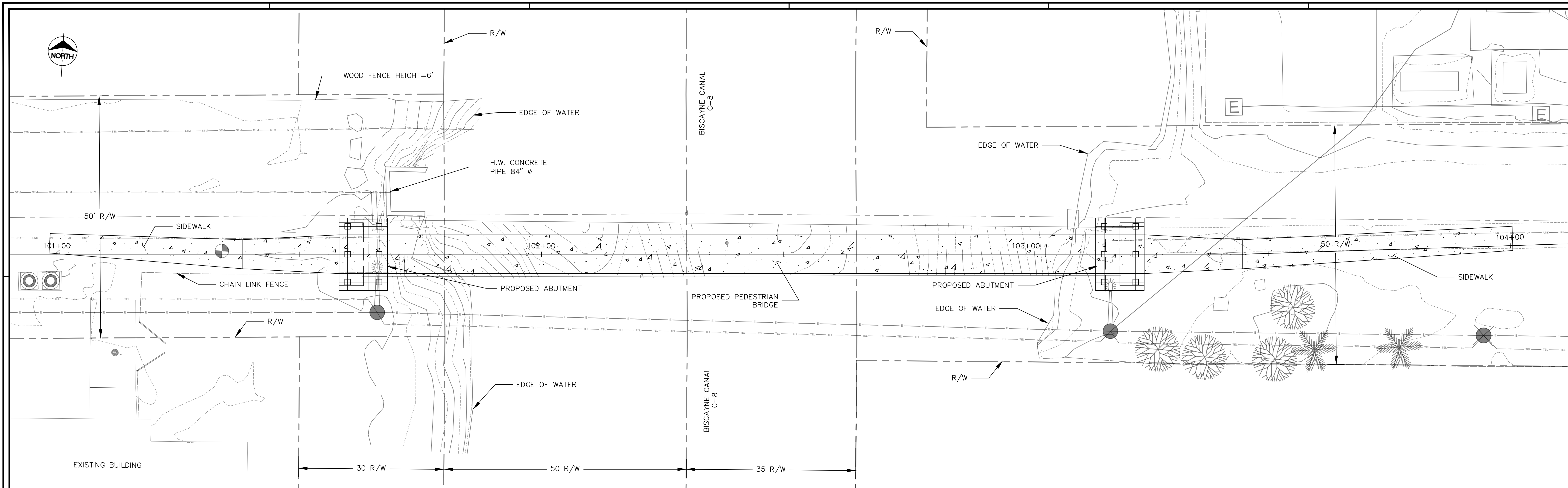
**PEDESTRIAN BRIDGE REPLACEMENT  
OVER THE C-8 CANAL  
CITY OF NORTH MIAMI  
MIAMI DADE COUNTY, FL**

**CONCEPTUAL**

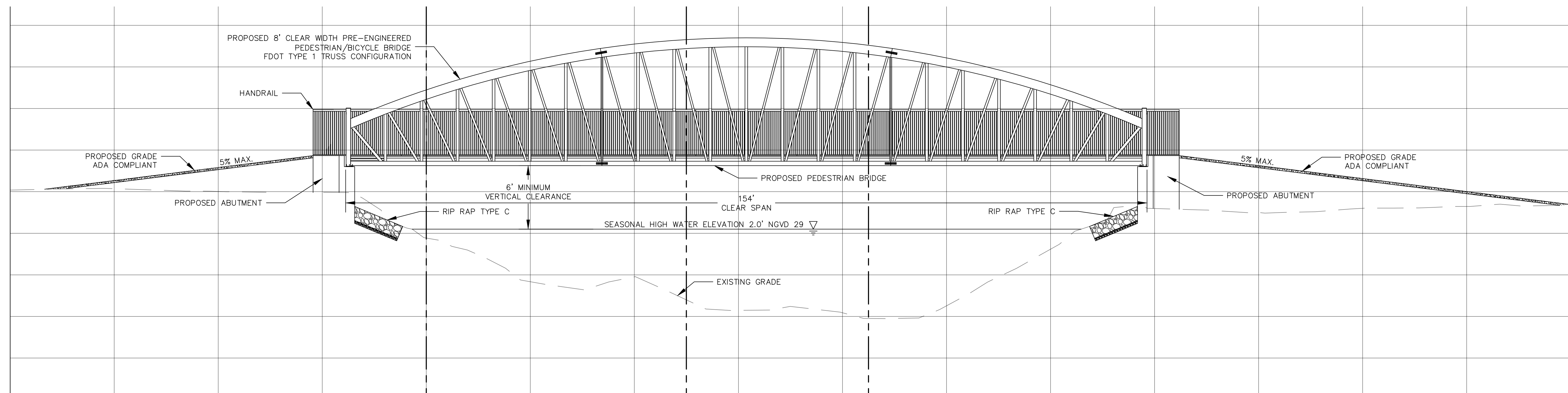
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REVISIONS:


SHEET NAME:  
**EXISTING SITE  
CONDITIONS**  
DRAWING NUMBER  
**C001**  
SHEET  
**2 OF 3**



**PLAN VIEW**  
SCALE: 1" = 10'



**PROFILE**  
SCALE: 1" = 10' H / 1" = 5' V

**NOTE:**  
THE ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).  
NGVD29 = NAVD88 + 1.603 ft. FOR THIS LOCATION.

The consultant, contractor or other parties associated with this project shall comply with Florida Statutes Chapter 119. These plans are the property of the District and must be secured and maintained in a confidential manner. Review by any unauthorized individual or outside/third party not performing work necessary for this project is prohibited.

This item has been electronically signed and sealed by José A. Peña on the date adjacent to the seals, using SHA-1 authentication codes. Printed copies of this document are not considered signed and sealed and the SHA-1 authentication codes must be verified on any electronic copies.

ENGINEER OF RECORD: JOSE A. PEÑA  
FLORIDA P.E. LICENSE NO.: 67863  
(SEAL)  
DATE: ---

**R.J.Behar & Company, Inc.**  
Engineers • Planners  
6881 SW 180TH AVENUE, SUITE 302  
PENSACOLA, FL 32332  
PHONE: 904-880-7771, FAX: 904-880-7781



**PEDESTRIAN BRIDGE REPLACEMENT  
OVER THE C-8 CANAL**  
CITY OF NORTH MIAMI  
MIAMI DADE COUNTY, FL

**CONCEPTUAL**

RJB PROJ No: 20039  
DATE: 10-20-2020  
DESIGN: DRAWN: CHECK:

REVISIONS:


SHEET NAME:  
**PROPOSED  
SITE PLAN**  
DRAWING NUMBER:  
**C002**  
SHEET:  
**3 OF 3**



November 4, 2020

Mr. Mohammad Ayub Zaid  
Transportation Manager  
Public Works  
1855 NE 142<sup>nd</sup> St  
North Miami, FL 33161

RE: **Pedestrian Bridge over Biscayne Canal - Conceptual Design Submittal**  
RJB Project no. 20039

Dear Mr. Zaid:

RJ Behar is presenting the conceptual design submittal for the pedestrian bridge alternatives for the City of North Miami selection.

We have investigated three alternatives considering spans configurations, material types, foundation supports and construction cost for the pedestrian bridge over the C-8 canal (Biscayne Canal).

Please feel free to contact me with any questions or if you require additional information.

Sincerely,  
**R.J. BEHAR & COMPANY, INC.**

*Hans Murzi*

Hans Murzi, PE, CFM  
Project Manager





## **PEDESTRIAN BRIDGE REPLACEMENT OVER THE C-8 CANAL (BISCAYNE CANAL)**

### **CONCEPTUAL DESIGN SUBMITTAL**

#### **I. Introduction**

The city of North Miami has determined the need to replace the existing Pedestrian Bridge over the South Florida Water Management District C-8 canal (Biscayne Canal). The existing bridge is located between N.E. 2nd Avenue and Griffin Boulevard, approximately 1,400-feet south of the existing N.E. 135th Street vehicular bridge. The existing pedestrian bridge carries both pedestrians and utilities. However, the new pedestrian bridge will replace the existing pedestrian bridge in its entirety. All existing abandoned utilities currently mounted to the bridge will be removed and no allowance for future utilities will be accommodated on the new bridge. The bridge length will be refined once survey is completed.

#### **II. Bridge Alternatives**

##### **a. Alternative 1 – Straight Truss Bridge**

**Description:** A single span bridge, approximate 150 feet long and 8 feet wide, composed of two main steel straight trusses and a concrete deck. The bridge will be entirely prefabricated, delivered to the site in three pieces, and erected on site using two cranes positioned on each side of the canal. The bridge installation could be done in one day. Two cast in place concrete abutments, with ADA compliant accessible ramps, will be built at both ends where the bridge will sit. See conceptual plan sheet 1 of 3.

**Construction Duration:** The bridge construction will take approximately 6 to 7 months.

**Conceptual Construction Cost:** \$ 573,807

**Advantage:**

- Minimum permit efforts
- Shortest construction duration
- Lowest construction cost

**Disadvantage:**

- Paint maintenance cost of the steel structure

##### **b. Alternative 2 – Arch Truss Bridge**

**Description:** A single span bridge, approximate 150 feet long and 8 feet wide, composed of two main steel arch trusses and a concrete deck. The bridge will be entirely prefabricated, delivered to the site in three pieces, and erected on site using two cranes positioned on each sides of the canal. The bridge installation could be done in one day.

Two cast in place concrete abutments, with ADA compliant accessible ramps, will be built at both ends where the bridge will sit. See conceptual plan sheet 2 of 3.

**Construction Duration:** The bridge construction will take approximately 6 to 7 months.

**Construction Cost:** \$ 587,307

**Advantage:**

- Minimum permit efforts
- Shortest construction duration
- Low construction cost

**Disadvantage:**

- Paint maintenance cost of the steel structure

**c. Alternative 3 – Concrete Slab Bridge**

**Description:** Three span bridge, each span approximate 50 feet long and 8 feet wide, composed of a substructure of two concrete piers and three concrete slabs. The bridge will be entirely cast in place and will require four piles to be driven in the middle of the canal. Also, two concrete abutments, with ADA compliant accessible ramps, will be built at both ends where two of the bridge slabs will sit. See conceptual plan sheet 3 of 3.

**Construction Duration:** The bridge construction will take approximately 10 to 12 months. **Conceptual Construction Cost:** \$ 609,245

**Advantage:**

- Minor or No maintenance cost

**Disadvantage:**

- More permit efforts
- Longest construction duration
- Highest construction cost

### **III. Bridge Railing Alternatives**

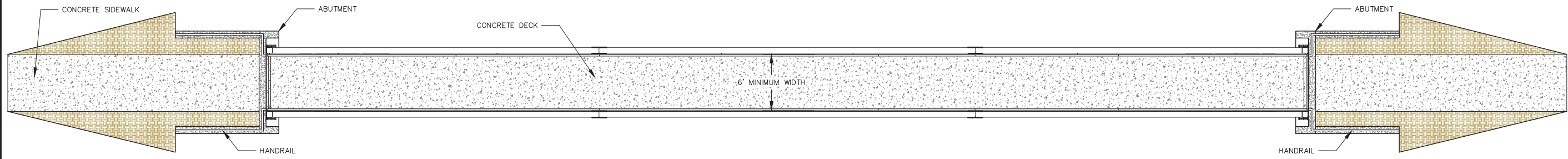
See attached FDOT Standards Plans railing types alternatives.

**CONCEPTUAL CONSTRUCTION COST EVALUATION**

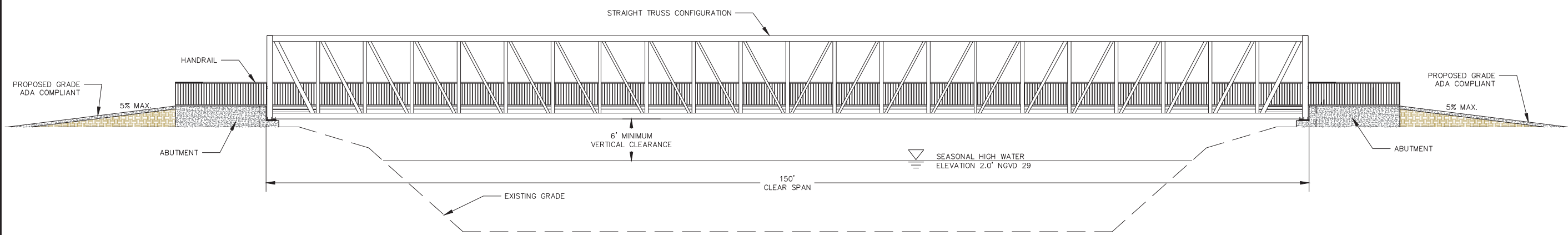
**PEDESTRIAN BRIDGE REPLACEMENT OVER THE C-8 CANAL (BISCAYNE CANAL)**

**CITY OF NORTH MIAMI**

ITEM No.	Item Description	Quantity	Unit	Unit Cost	ALT 1 Straight Truss	ALT 2 Arch Truss	ALT 3 Concrete Slab
<b>MOBILIZATION:</b>							
1	Mobilization (10%)	1	LS	-	\$42,504.22	\$43,504.22	\$65,276.28
	Subtotal (Items 1-1)				\$42,504	\$43,504	\$65,276
<b>BRIDGE SUBSTRUCTURE &amp; SITE:</b>							
2	Clearing and Grubbing	0.1	AC	\$65,300.00	\$6,530	\$6,530	\$6,530
3	Removal of Existing Structures/Bridges	2,572	SF	\$32.00	\$82,304	\$82,304	\$82,304
5	Embankment	98	CY	\$16.00	\$1,564	\$1,564	\$1,564
6	Floating Turbidity Barrier	320	LF	\$17.00	\$5,440	\$5,440	\$5,440
7	Concrete Class II, Substructure (Abutments)	50	CY	\$1,400.00	\$70,000	\$70,000	\$70,000
8	Reinf Steel, Substructure (Abutments)	3,550	LB	\$1.00	\$3,550	\$3,550	\$3,550
9	Concrete Sidewalk, 6" Thick	65	SY	\$52.00	\$3,397	\$3,397	\$3,397
10	Pier Piles (18" SQ)	90	LF	\$130.00	-	-	\$11,700
11	Pier Test Pile - Prestressed Concrete (18" SQ)	30	LF	\$158.00	-	-	\$4,740
12	Pier Pile Cap (Conc Class II, Substructure)	4	CY	\$1,410.00	-	-	\$6,201
13	Pier Pile Cap (Reinf Steel, Substructure)	320	LB	\$1.10	-	-	\$352
14	Plain Neoprene Bearing Pad	1.4	CF	\$1,020.22	\$1,436	\$1,436	-
15	Monitor Existing Structure - Vibration Monitoring	4	EA	\$7,400.00	-	-	\$29,600
16	Template (Pile Installation)	1	LS	\$52,000.00	-	-	\$52,000
	Subtotal (Items 2-16)				\$174,222	\$174,222	\$277,379
<b>BRIDGE SUPERSTRUCTURE:</b>							
17	Ped/Bicycle Railing, Alum. 42" Type 1	305	LF	\$85.00	-	-	\$25,925
18	Steel Trusses (Straight)	1	EA	\$235,000.00	\$235,000	-	-
19	Steel Trusses (Arch)	1	EA	\$245,000.00	-	\$245,000.00	-
20	Deck (Conc Class II, Superstructure)	14	CY	\$775.00	\$10,850	\$10,850	-
21	Deck (Reinforcing Steel - Bridge Superstructure)	497	LB	\$10.00	\$4,970	\$4,970	-
22	Flat Slab (Conc Class II, Superstructure)	85	CY	\$775.00	-	-	\$65,875
23	Flat Slab (Reinforcing Steel - Bridge Superstructure)	6,300	LB	\$10.00	-	-	\$63,000
24	Bridge Deck Expansion Joint, New Construction	28	LF	\$107.00	-	-	\$2,996
	Subtotal (Items 17-24)				\$250,820	\$260,820	\$157,796
<b>OTHER COSTS:</b>							
25	Contingency (25%)	1	LS	-	\$106,260.56	\$108,760.56	\$108,793.79
	<b>GRAND TOTAL</b>				<b>\$573,807</b>	<b>\$587,307</b>	<b>\$609,245</b>



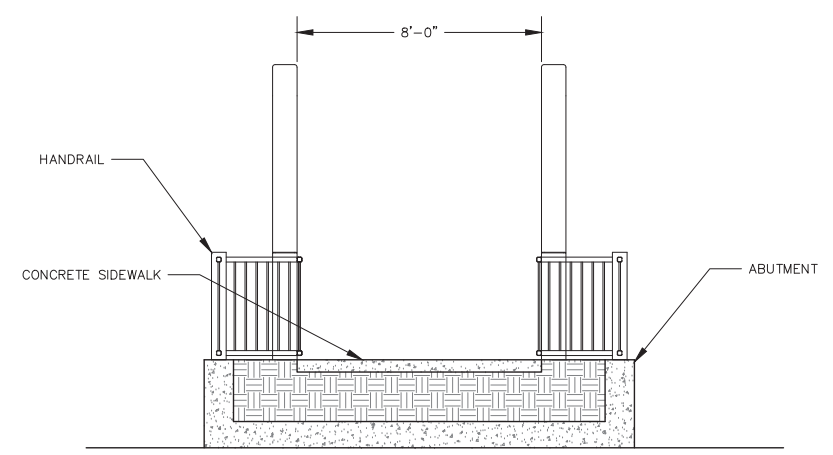
**PLAN**  
SCALE: 1" = 7'



**ELEVATION**  
SCALE: 1" = 7'



**EXAMPLE**  
SCALE: N.T.S.



**SECTION AT ABUTMENT**  
SCALE: 1" = 3'

NOTE:  
1. CONSTRUCTION DURATION: 6-7 MONTHS

**R.J. Behar & Company, Inc.**  
Engineers - Planners  
888 SW 108TH AVENUE, SUITE 302  
PEMBROKE PINES, FL 33332  
PHONE: 954-886-7771, FAX: 954-886-7781



**PEDESTRIAN BRIDGE REPLACEMENT  
OVER THE C-8 CANAL  
CITY OF NORTH MIAMI  
MIAMI DADE COUNTY, FL**

**CONCEPTUAL**

RJB PROJ. No: 20039  
DATE: 10-20-2020

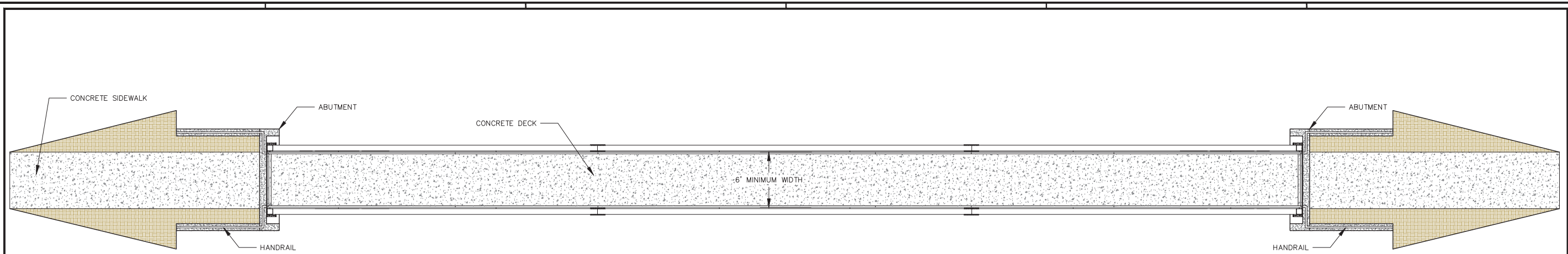
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REVISIONS:

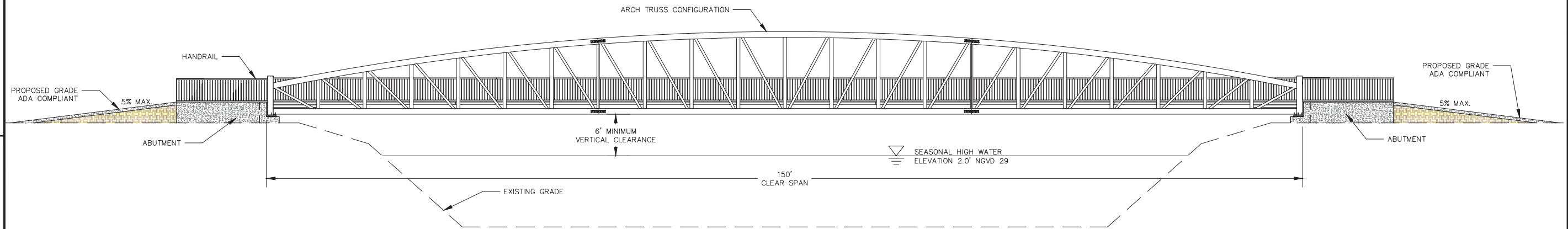

SHEET NAME:

(SEAL)  
DATE

ALTERNATIVE 1 - STRAIGHT TRUSS BRIDGE



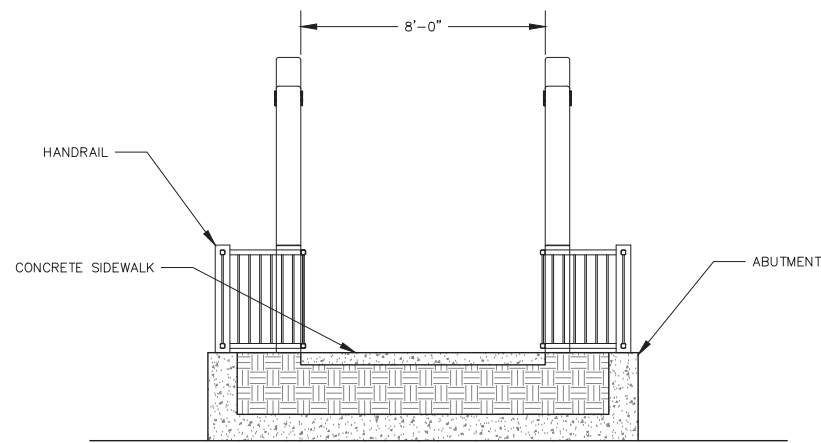
**PLAN**  
SCALE: 1" = 7'



**ELEVATION**  
SCALE: 1" = 7'



**EXAMPLE**  
SCALE: N.T.S.



**SECTION AT ABUTMENT**  
SCALE: 1" = 3'

NOTE:  
1. CONSTRUCTION DURATION: 6-7 MONTHS

**CONCEPTUAL**

RJB PROJ. No: 20039  
DATE: 10-20-2020

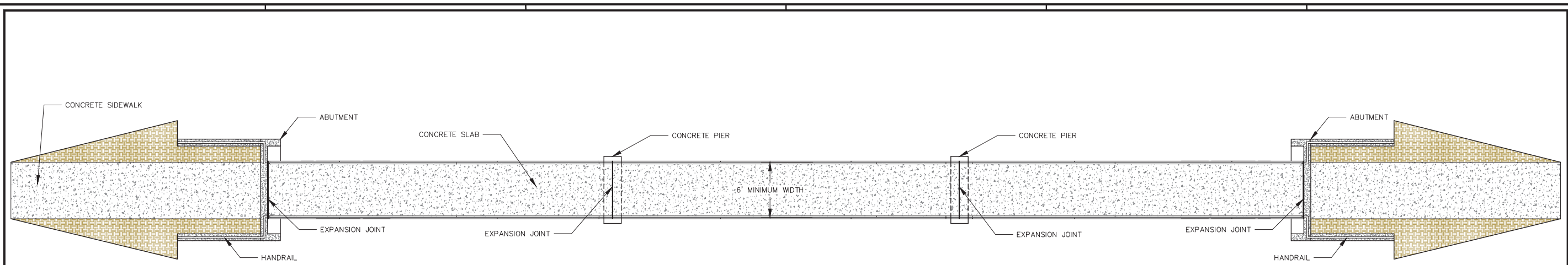
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REVISIONS:

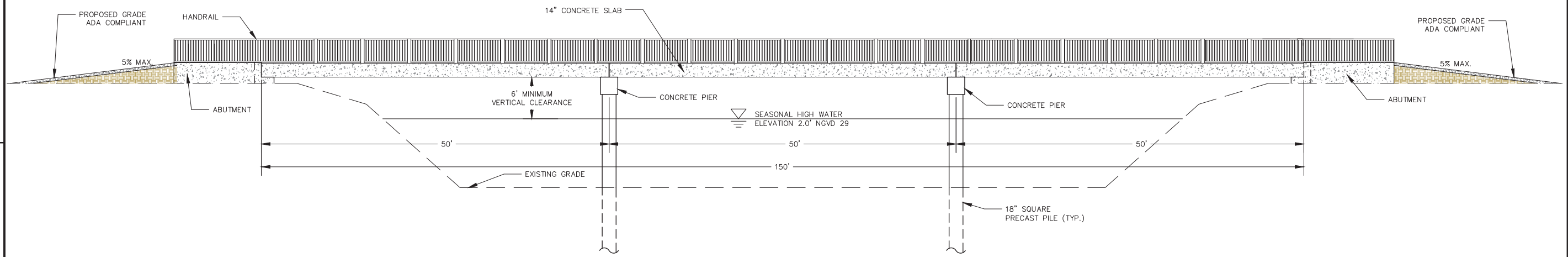
SHEET NAME:

(SEAL)  
DATE

ALTERNATIVE 2 - ARCH TRUSS BRIDGE

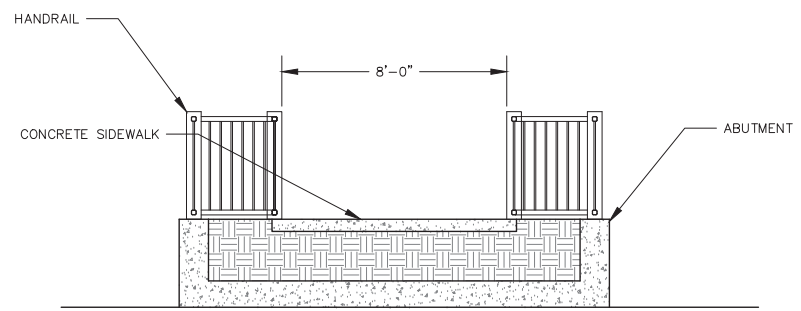


**PLAN**  
 SCALE: 1" = 7'



**ELEVATION**  
 SCALE: 1" = 7'

NOTE:  
 1. CONSTRUCTION DURATION: 10-12 MONTHS



**SECTION AT ABUTMENT**  
 SCALE: 1" = 3'

**PEDESTRIAN BRIDGE REPLACEMENT  
 OVER THE C-8 CANAL  
 CITY OF NORTH MIAMI  
 MIAMI DADE COUNTY, FL**

**CONCEPTUAL**

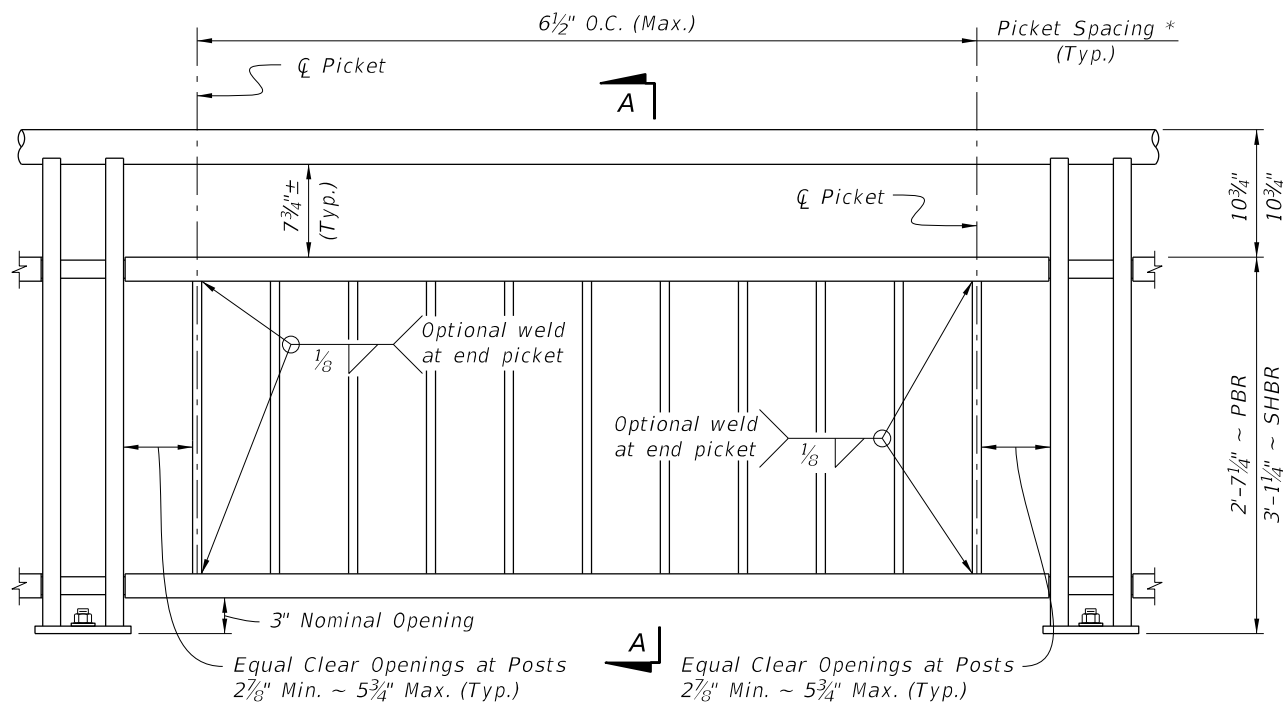
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 DATE: 10-20-2020

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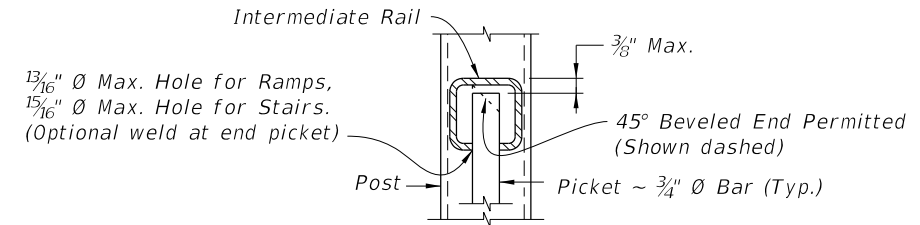
REVISIONS:


SHEET NAME:

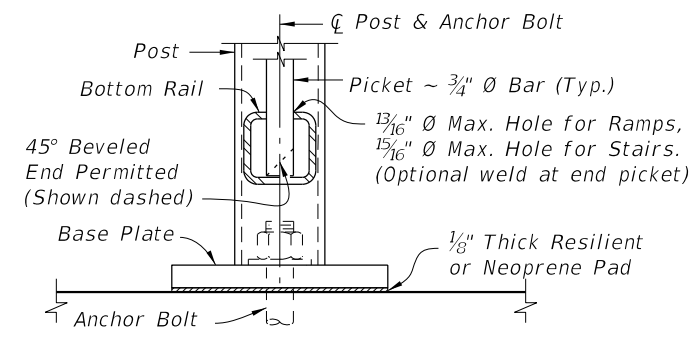
(SEAL)  
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SECTION A-A



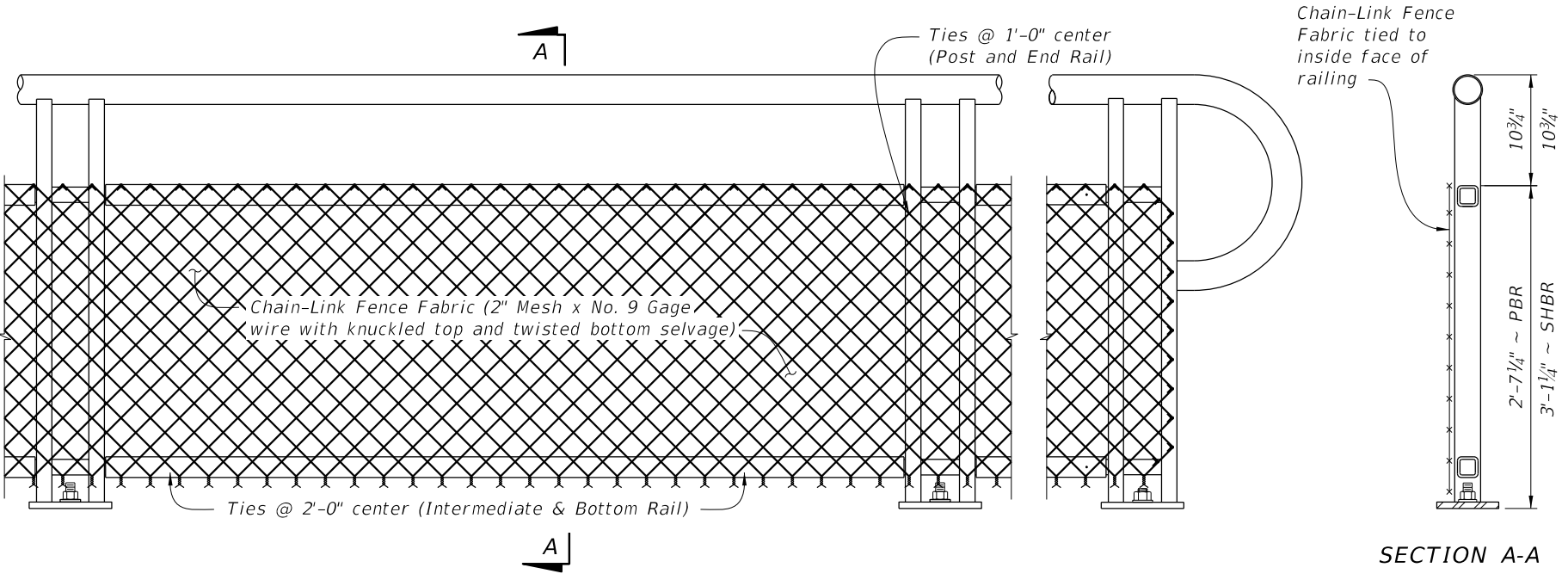
DETAIL "1A"  
(Top of Picket Connection)



DETAIL "1B"  
(Bottom of Picket Connection)

**TYPE 1 - PICKET INFILL PANEL**

**PICKET NOTES:**  
 \* Picket Spacing of 6 1/2" centers is based on a 3/4" Ø Bar for standard applications.  
 When shown in the Contract Plans a 4 1/2" picket spacing may be required. See Note 4 (Sheet 1).



SECTION A-A

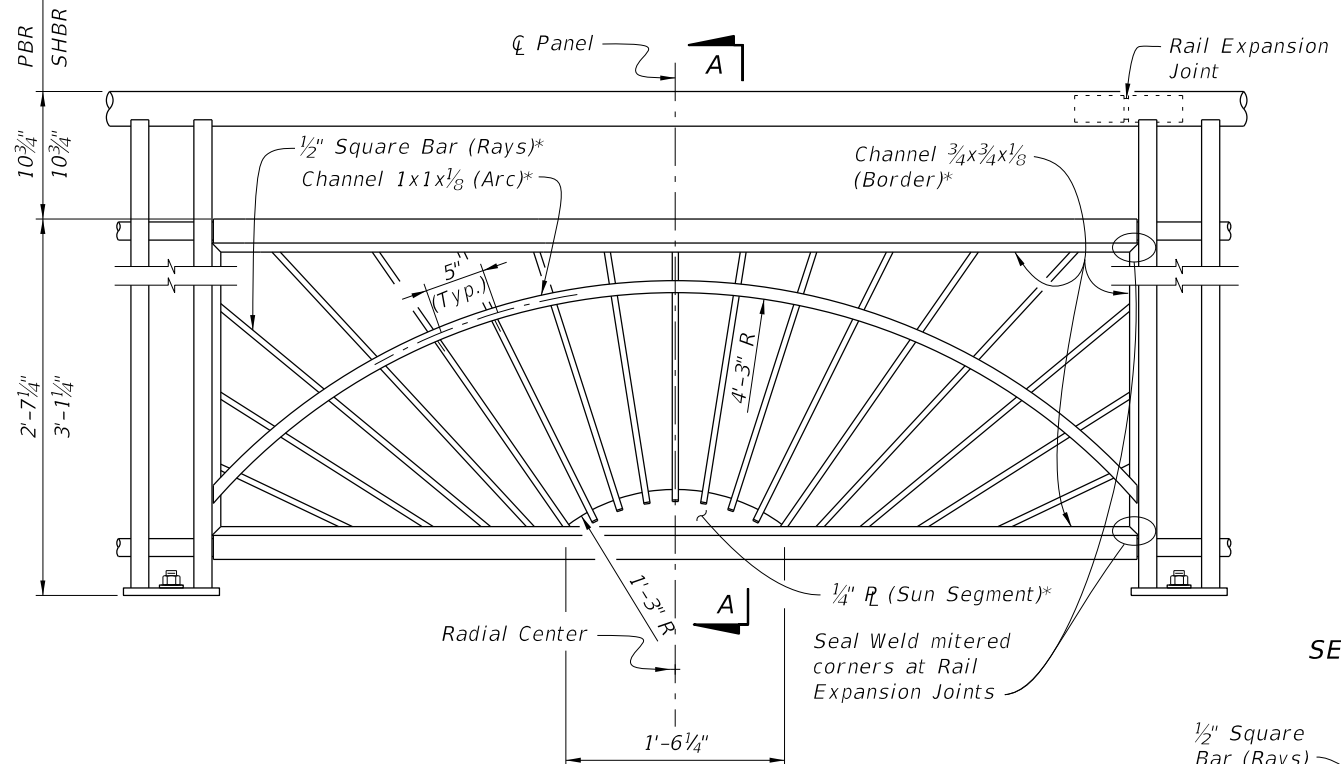
**TYPE 2 - CHAIN-LINK (Continuous Infill Panel)**

**NOTES:**  
 1. See Plans for Infill Panel option required.

TABLE 2 - CHAIN-LINK PANEL COMPONENT MATERIALS		
COMPONENT	ASTM	COMPONENT INFORMATION
Chain-Link Fence Fabric (2" mesh with twisted bottom and knuckled top selvage)	A 392	Zinc-Coated Steel - No. 9 gage (coated wire diameter), Class 2 Coating
	A 491	Aluminum-Coated Steel - No. 9 gage (coated wire diameter)
	F 668	Polyvinyl Chloride (PVC) Coated Steel - No. 9 gage Zinc-Coated Wire (metallic-coated core wire diameter) ~ See Plans for specified color of PVC.
Tie Wires	F 626	Zinc-Coated Steel Wire - No. 9 gage with coating to match Chain-Link Fence Fabric.
Tension Bars	F 626	3/16" (Min. thickness) x 3/4" (Min. width) x 2'-3' (Min. height) Steel Bars
Miscellaneous Fence Components	F 626	Zinc-Coated Steel

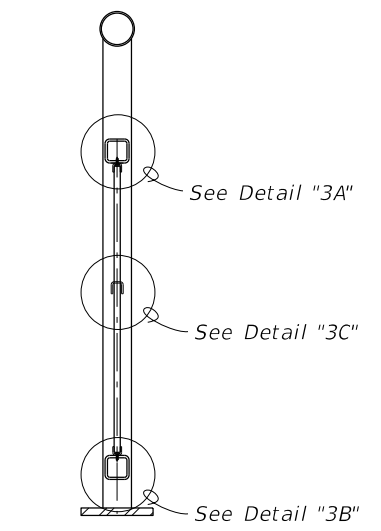
**CHAIN-LINK PANEL NOTE:**  
 Chain-Link Fence Fabric shall be continuous along limits of railing.  
 Splicing of Chain-Link panels using Tension Bars at 20'-0" minimum increments is permitted.

10/12/2020 7:29:39 AM

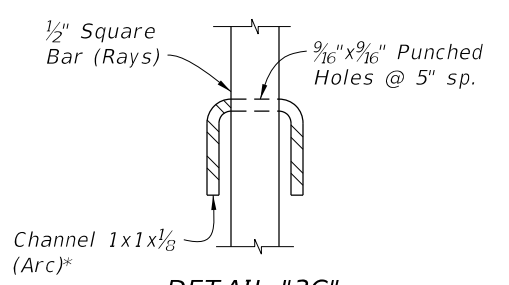


**TYPE 3 - SUNSHINE INFILL PANEL**

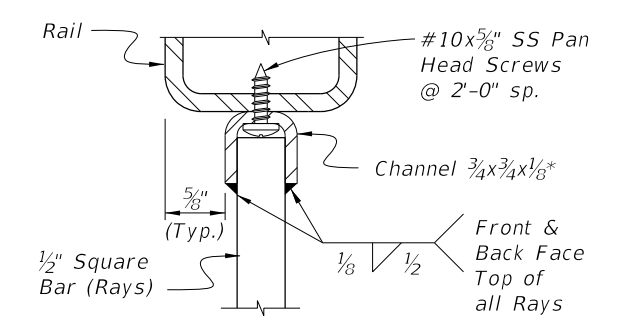
\* Arc, Rays and Sun Segment may be formed in a single panel from 1/2" steel plate pattern cut with laser or plasma CNC, welded to a 1x1 1/8" Angle Border or the 3/4x3/4x1/8" Channel Border shown.



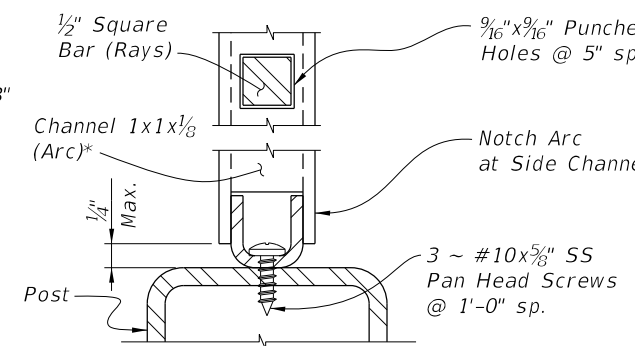
**SECTION A-A**



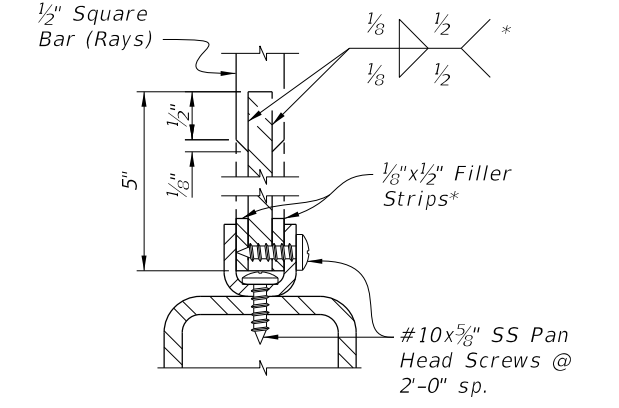
**DETAIL "3C" RAY/ARC CONNECTION**



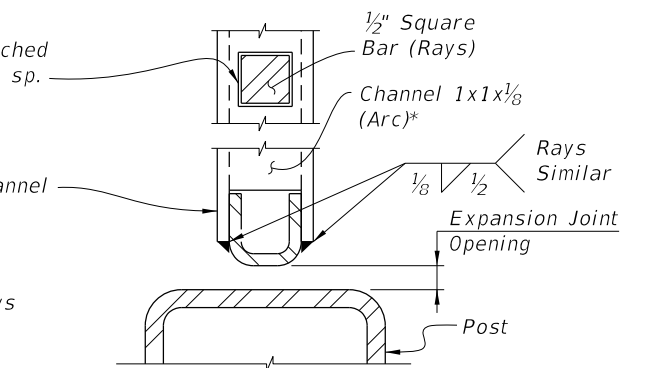
**DETAIL "3A" INTERMEDIATE RAIL/RAY CONNECTION**



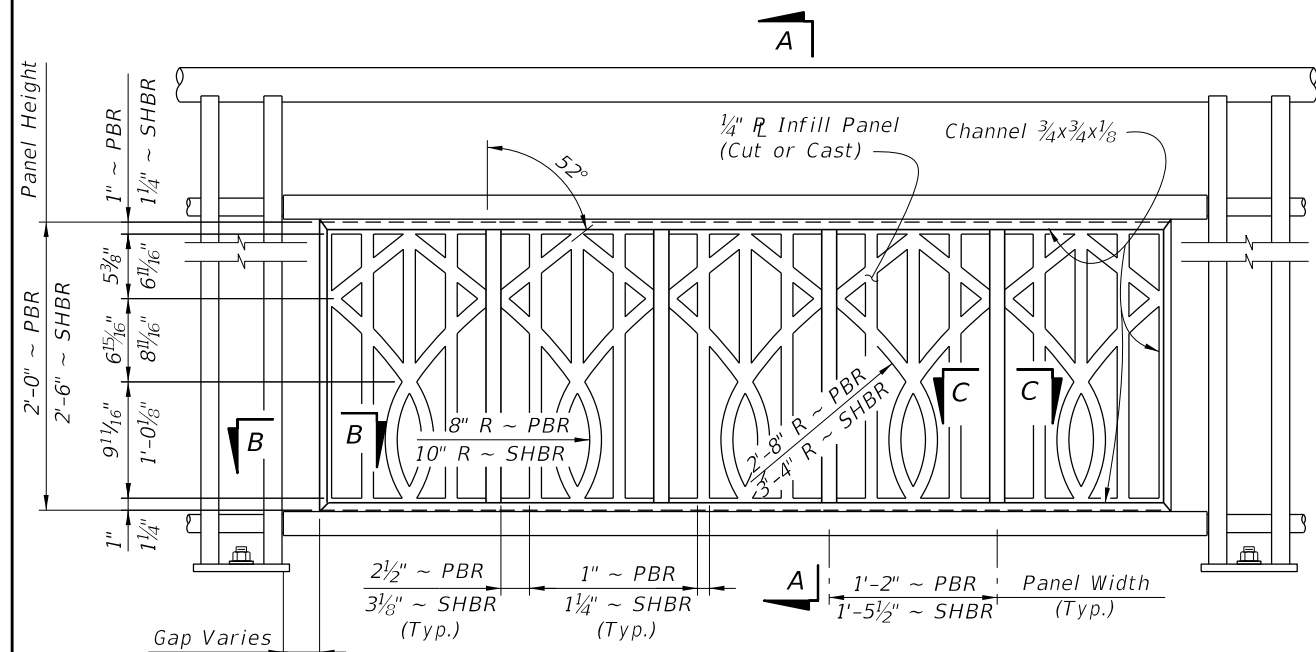
**DETAIL "3D" ARC/POST CONNECTION (Continuous Top Rail)**



**DETAIL "3B" BOTTOM RAIL/RAY CONNECTION**

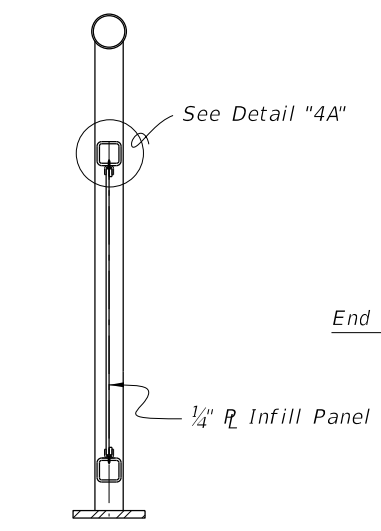


**DETAIL "3E" PANEL END CONNECTION AT POST WITH EXPANSION JOINT**

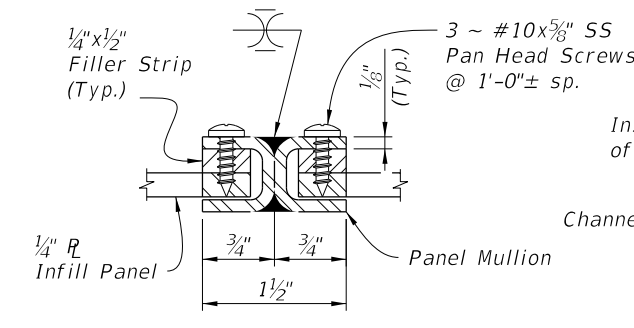


**TYPE 4 - BROADWAY INFILL PANEL**

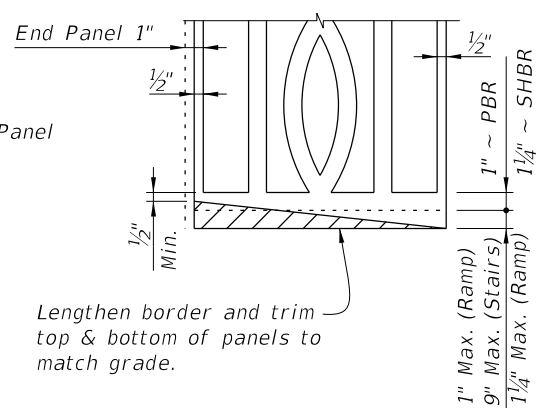
NOTES:  
1. See Plans for Infill Panel Option required.



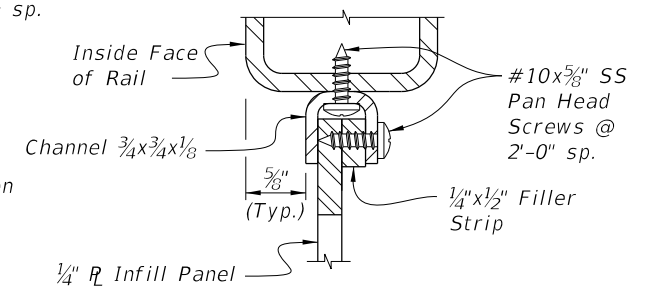
**SECTION A-A**



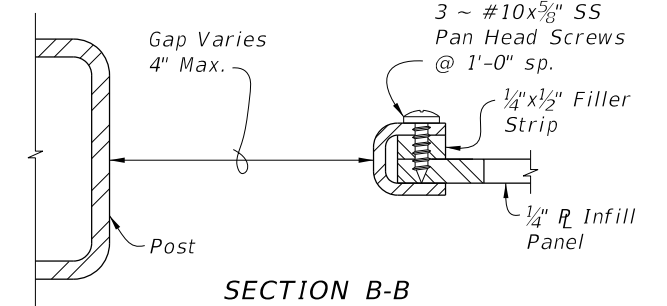
**SECTION C-C PANEL/SPLICE CONNECTION**



**PANEL ADJUSTMENT FOR RAILINGS ON GRADES**



**DETAIL "4A" PANEL/RAIL CONNECTION (Top Shown, Bottom Similar)**

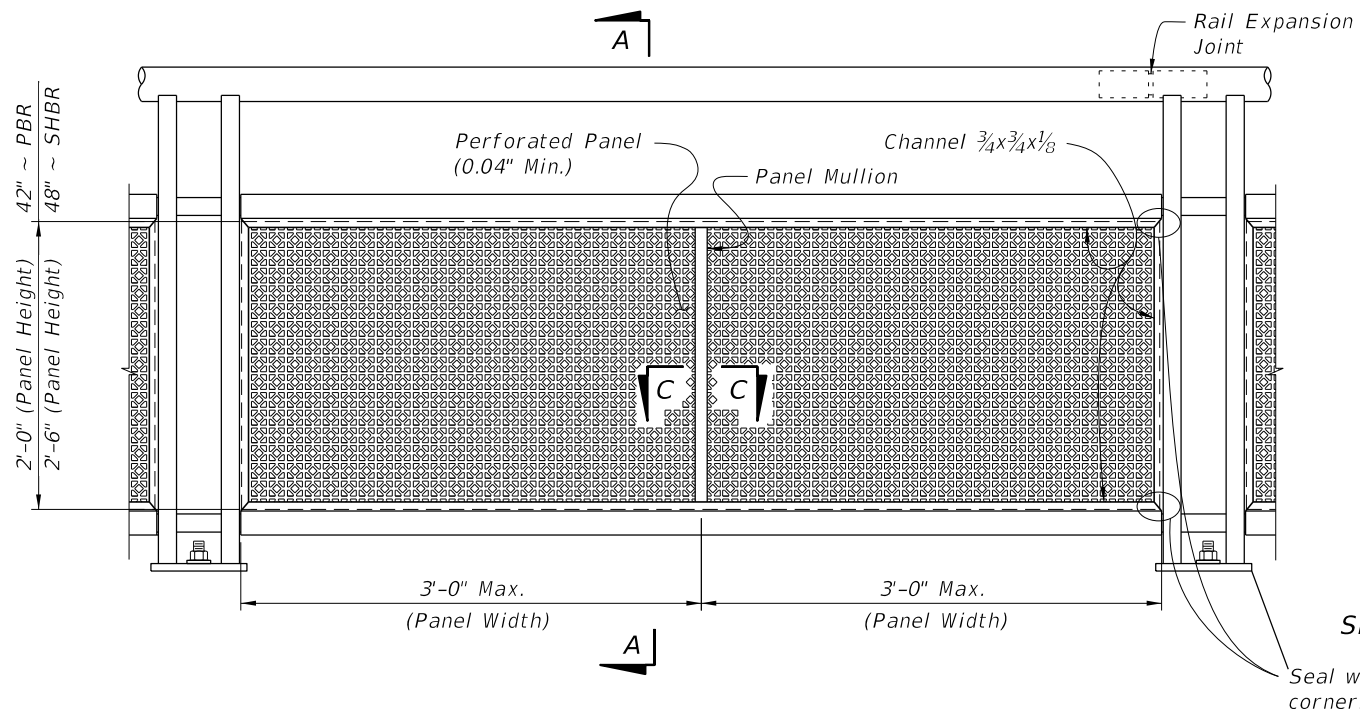


**SECTION B-B PANEL END CAP**

10/12/2020 7:29:41 AM

LAST REVISION 11/01/16	DESCRIPTION:	FDOT FY 2021-22 STANDARD PLANS	PEDESTRIAN/BICYCLE RAILING (STEEL)	INDEX 515-052	SHEET 6 of 8
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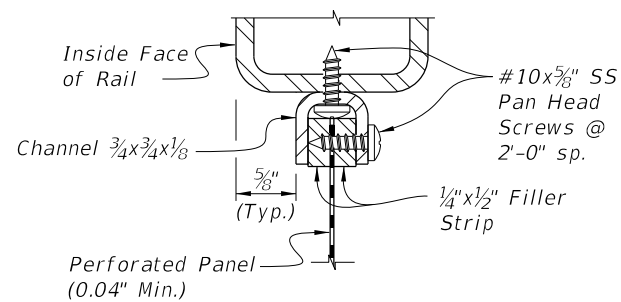




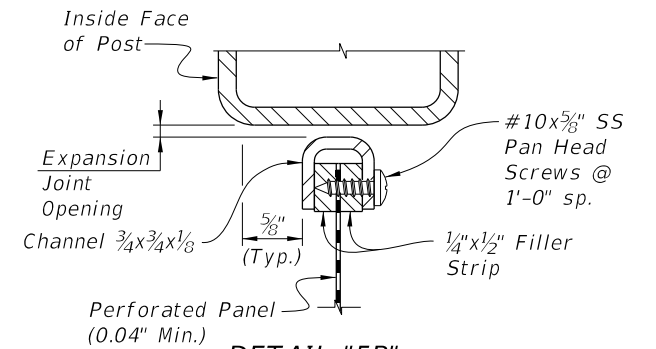
**TYPE 5 - PERFORATED INFILL PANEL**

**SECTION A-A**

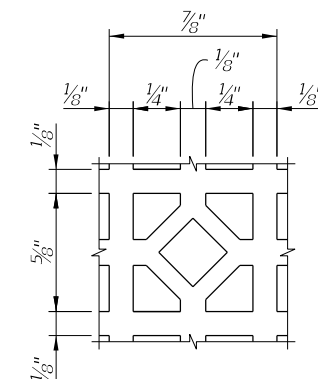
Seal welding mitered corners is permitted



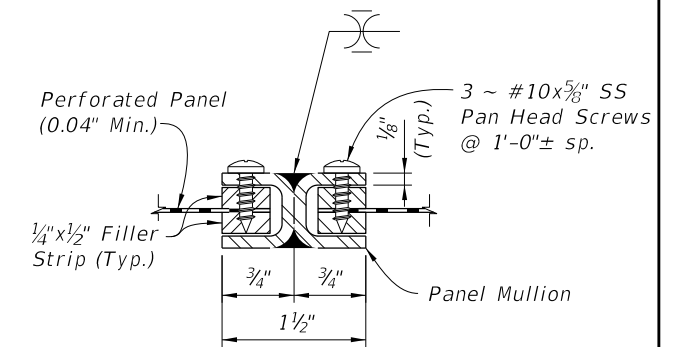
**DETAIL "5A"  
PANEL/RAIL CONNECTION  
(Top Shown, Bottom Similar)**



**DETAIL "5B"  
PANEL END CONNECTION  
(Expansion Joint Shown, Sides Similar)**



**REPEATING PATTERN DETAIL  
FOR PERFORATED PANEL**




**SECTION C-C  
PANEL/SPLICE CONNECTION**

**NOTES:**

- 1. See Plans for Infill Panel Type required.

10/12/2020 7:29:46 AM

LAST REVISION 11/01/16	REVISION	DESCRIPTION:	 <b>FY 2021-22 STANDARD PLANS</b>	<b>PEDESTRIAN/BICYCLE RAILING (STEEL)</b>	INDEX 515-052	SHEET 7 of 8
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