PORT OF MIAMI
CITY STREET IMPROVEMENTS

Beiswenger, Hoch and Associates, Inc.

September, 2000

INTERIM REROUTING PLAN

OF

SEAPORT TRUCK TRAFFIC

September 21, 2000

STUDY AREA

PORT OF MIAMI
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RAIL ROAD AND RAPID TRANSIT LINES

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INTRODUCTION

The MPO Resolution #26-00 authorized the study of evaluating rerouting of seaport truck traffic from Biscayne Boulevard and NE 2nd and 1st Avenues in the Downtown Bayfront area. The area of the study is outlined by I-395 on the north, I-95 on the west, SW 5th Street on the south and Biscayne Boulevard on the east.

The evaluation of possible alternates is based on an analysis of current truck traffic, current improvements, interim improvements, and ultimate improvements.

- Current improvements are:

  1) Improvements in the truck traffic circulation on NE 1st and NE 2nd Avenues.

  2) Improvements on Biscayne Boulevard between NE 4th and NE 14th Street to increase the access capacity to the American Airlines Arena.

- Interim improvement is considered the truck traffic re-routing between the Seaport and I-95 northbound and SR 836 westbound utilizing NE/NW 5th Street, NE/NW 6th Street, NW 3rd Avenue and NW 3rd Terrace. It includes providing at NW 8th Street and I-95, a new truck ramp access to SR 836 westbound.

- Ultimate improvements are considered to be:

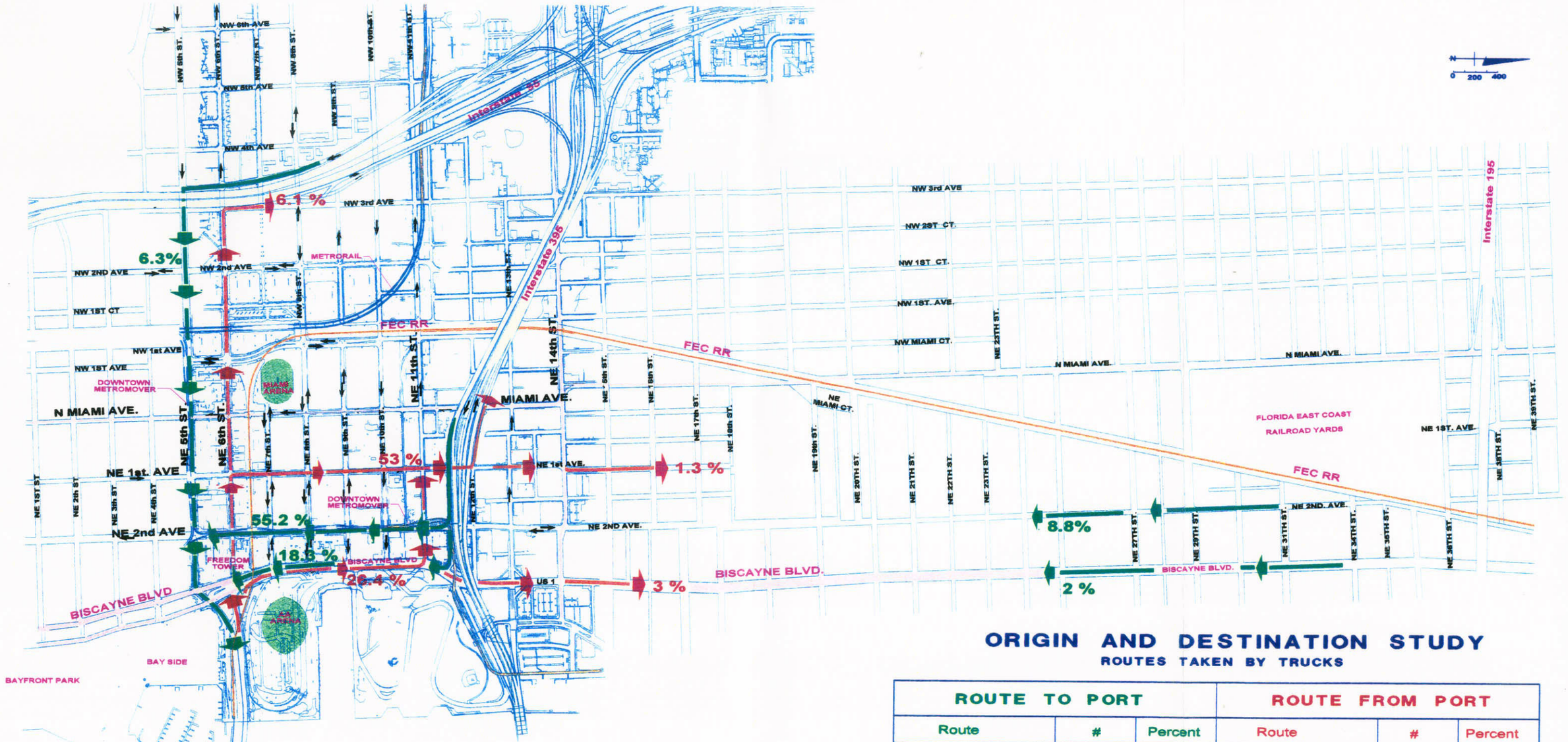
  1) The tunnel access from I-395 to the Seaport.

  2) The concept of depressing the FEC Railroad from north of I-395 to the Port of Miami. The depressed railroad would be a tunnel from north of I-395 to the Port of Miami.

The "Dade County Freight Movement Study, Technical Memorandum No. 4, Port of Miami Truck Survey", dated November 1996 was reviewed concurrently with new truck traffic counts provided by the Port of Miami for the months of June, July and August, 2000. This analysis determined an increase of 42% of average daily truck traffic and 62% peak day truck traffic to the Port of Miami in the last 4 years.

Port Of Miami Week Day Truck Traffic

	Average	Peak Day
Year 1996 (Corradino Study)	1820	1947
Year 2000 (BHA)	2576	3162
Truck Traffic Increase	42%	62%



ORIGIN AND DESTINATION STUDY

ROUTES TAKEN BY TRUCKS

ROUTE TO PORT			ROUTE FROM PORT		
Route	#	Percent	Route	#	Percent
From I-95 onto NE 5th to Port	76	6.3	From Port onto NE 6th to I-95	73	6.1
From I-395 onto Biscayne to Port	224	18.5	From Port onto Biscayne to I-395 at 11th Street	317	26.4
From I-395 onto NE 2nd to Port	669	55.2	From Port onto NE 1st to I-395	635	53.0
From Buena Vista Yards onto NE 2nd to Port	106	8.8	From Port onto NE 1st North past I-395	16	1.3
From Buena Vista Yards onto Biscayne to Port	24	2.0	From Port onto Biscayne North past I-395	37	3.0
From I-395 indeterminate route to Port	65	5.4	From Port indetermine route to I-395	84	7.0
From I-95 indeterminate route to Port	46	3.8	From Port indetermine route to I-95	38	3.2

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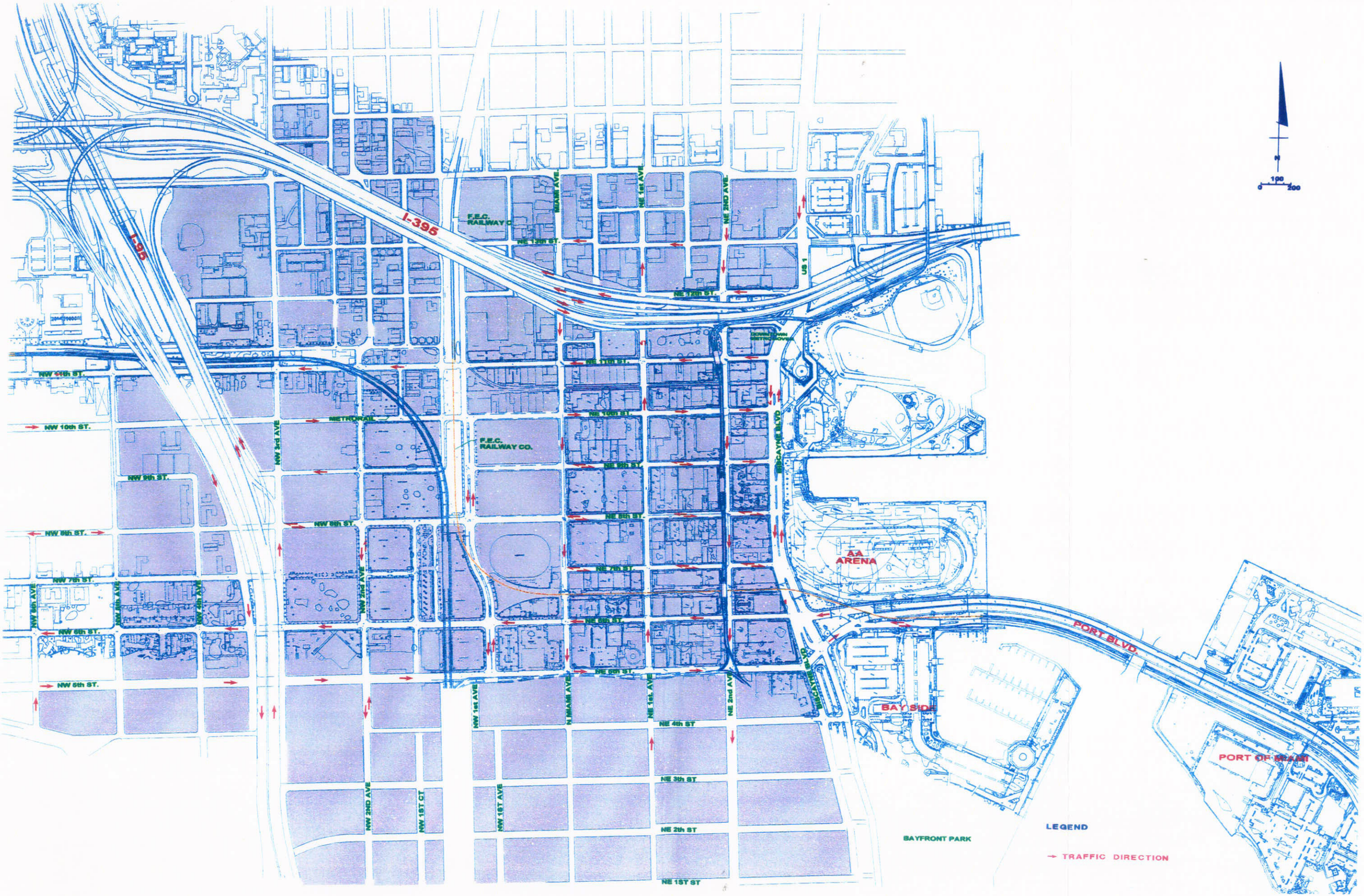

TRAFFIC MOVEMENTS

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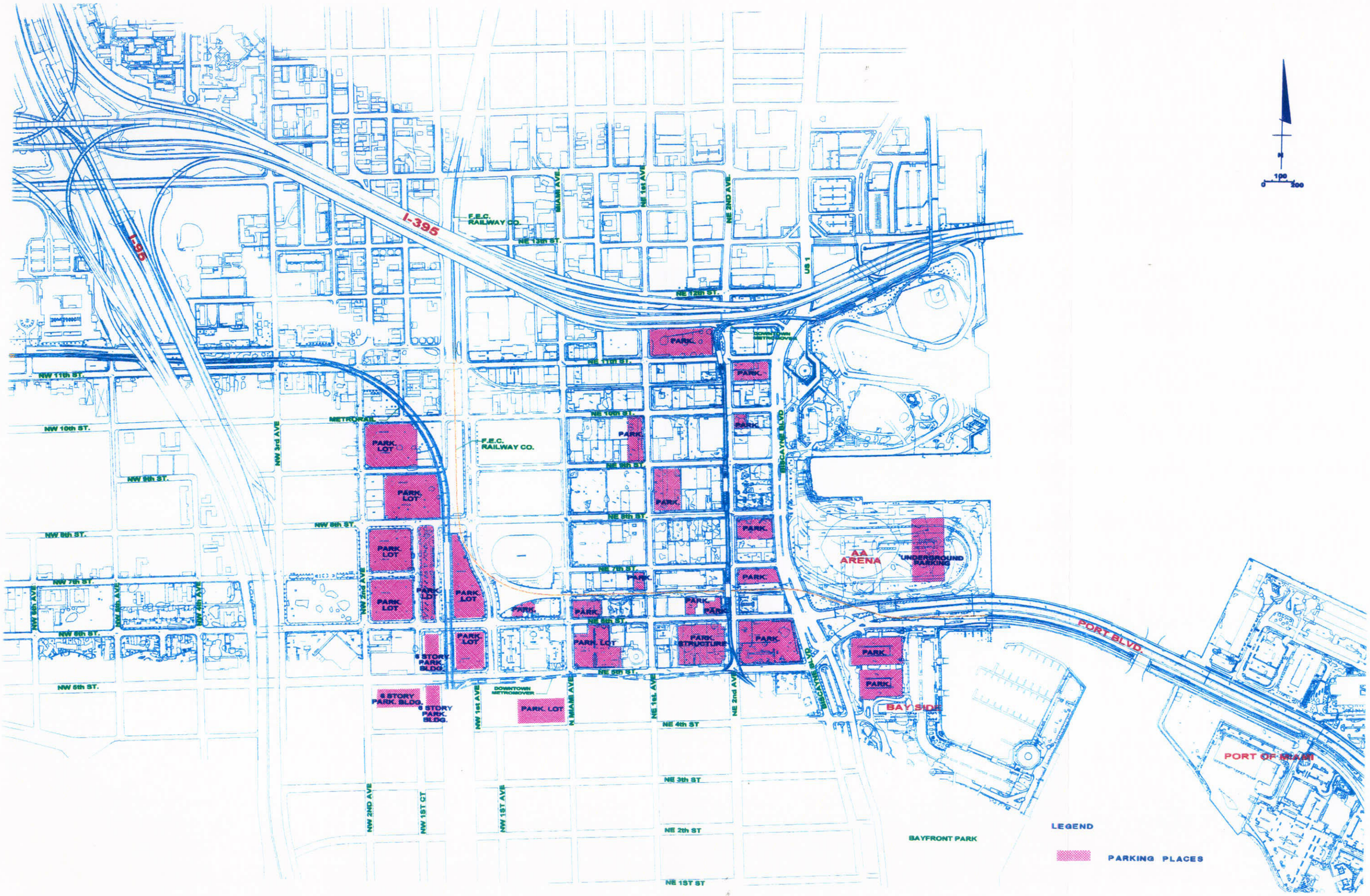

PRESENT PARKING SPACES

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CURRENT IMPROVEMENTS

1. Improvements to NE 1st & 2nd Avenues and NE 5th & 6th Streets

Dade County Public Works (DCPW) currently has a design project to make improvements to NE 1st and NE 2nd Avenues from NE 5th Street to I-395. These improvements include pavement restoration, drainage, signing, pavement markings, and signalization. Total cost of these improvements varies from $1,000,000 to $1,800,000. The difference in cost is due to minor versus major improvements to the drainage. DCPW is currently reviewing these drainage concepts with DERM

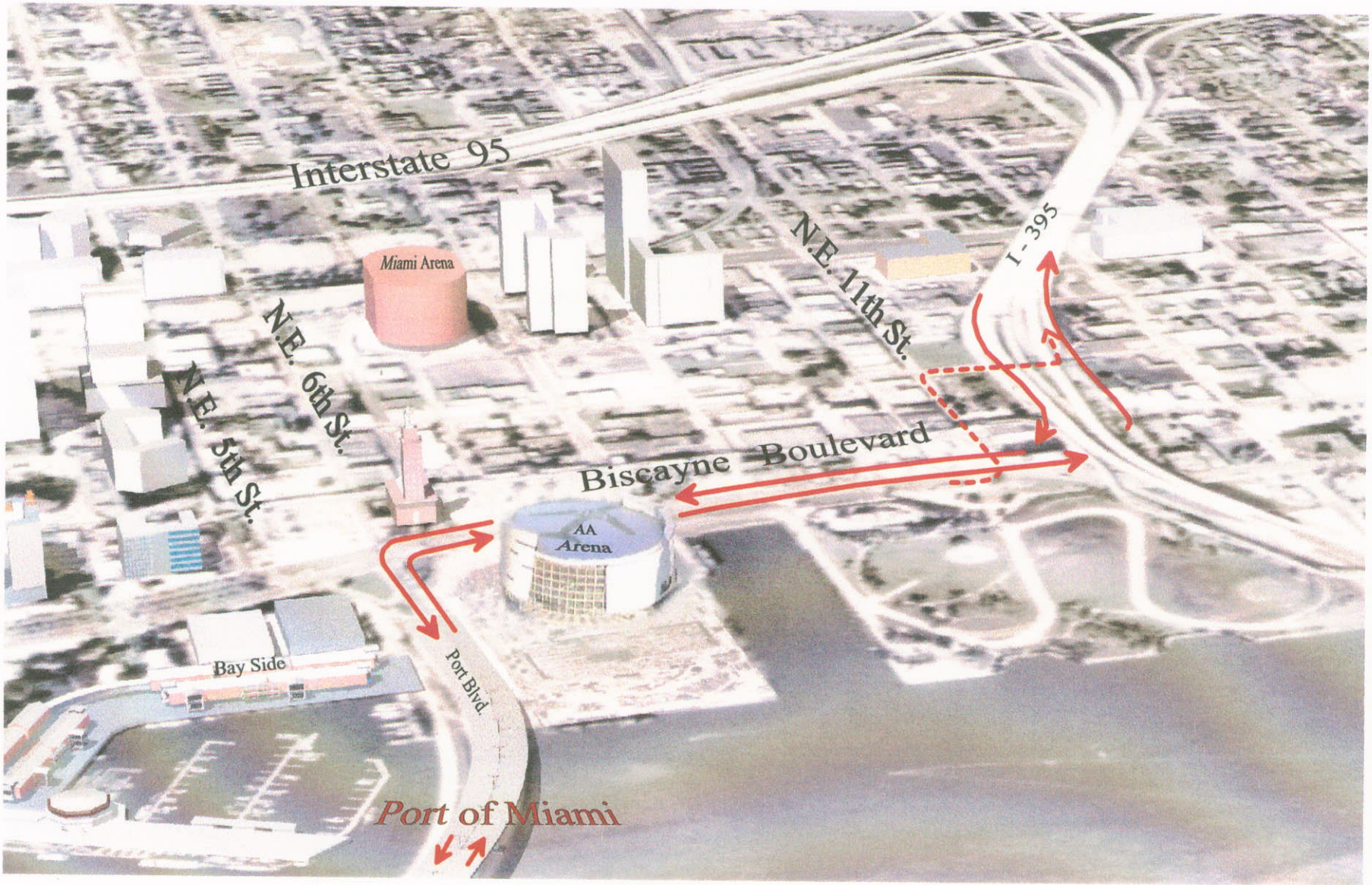
Additional turning movements improvements can be made with the acquisition of right-of-way at the northeast corners of NE 6th Street at NE 1st Avenue and NE 5th Street at NE 2nd Avenue. DCPW is currently having this property appraised to determine the actual cost. The Seaport has allocated funds for these properties, but until a final cost is determined no final decision has been made.

The final stage of improvements for NE 1st and 2nd Avenues will require depressing these roads approximately two feet at I-395. The current clearance of 14'-6" is not adequate for many of the trucks using the entrance and exit ramps from I-395. Depressing the roadways will require relocation of FP&L power lines and water and sewer lines. The utility agencies have estimated that 18 months would be required for these relocations.

Funding for the construction of this project is through FDOT and the Seaport.

2. Improvements on Biscayne Boulevard

These improvements were considered at one time in conjunction with the American Airlines Arena. Biscayne Boulevard would be widened between NE 4th Street and NE 14th Street to provide more capacity along Biscayne Boulevard, and also multilane turning movements at NE 8th Street for access to the Arena parking entrance at NE 8th Street. FDOT has completed the PD&E study on this section of Biscayne Boulevard and is proceeding with final plans. It is estimated that final plans will be completed by January 2002 and construction is programmed for fiscal year 2004/2005. The estimated construction cost is $7.9 million.



ROUTE 1
Primary Route
Secondary Route
TRUCK ROUTES

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ROUTE 2

Primary Route ——————

Secondary Route - - - - - - - -

TRUCK ROUTES

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INTERIM IMPROVEMENTS

The Port of Miami sponsored in 1996 the study "Access Routes Improvements to the Miami Central Business District". This report recommended the implementation of a new access ramp on I-95 for truck traffic bound for SR 836 westbound. This new ramp beginning at NW 8th Street is to be built between existing I-95 northbound and I-95 southbound. Also the vertical clearance on the existing entrance ramp to I-95 northbound from NW 8th Street would be increased.

These modifications will permit the channelization of all Port of Miami and Miami Central Business District truck traffic to I-95 north and SR 836 west through NE 5th and 6th Streets and NW 3rd Avenue and NW 3rd Terrace.

The project entails modifications of a section of I-95 southbound, new embankment, structure widening, and raising a section of the superstructure connecting I-95 northbound with I-395 eastbound.

The estimated construction cost, right-of-way acquisition cost, utilities impact costs and engineering costs are as follows:

Construction	$11,700,000 *
Right-of-way	600,000
Utilities	1,200,000
Subtotal	$12,500,000
PD&E & Final Design	
Utilities Survey & Geotechnical	3,000,000
Total	**$15,500,000**

* Includes signing and pavement marking at city streets, concrete decorative panels and landscaping under I-95.

It is estimated the overall effort of design and construction will take five years. However, upon completion and approval of the PD&E study, this project could be a good candidate for a "design-build Project". Design-build could reduce the implementation time by a year and one half.

PROPOSED TRUCK REROUTING ALTERNATE

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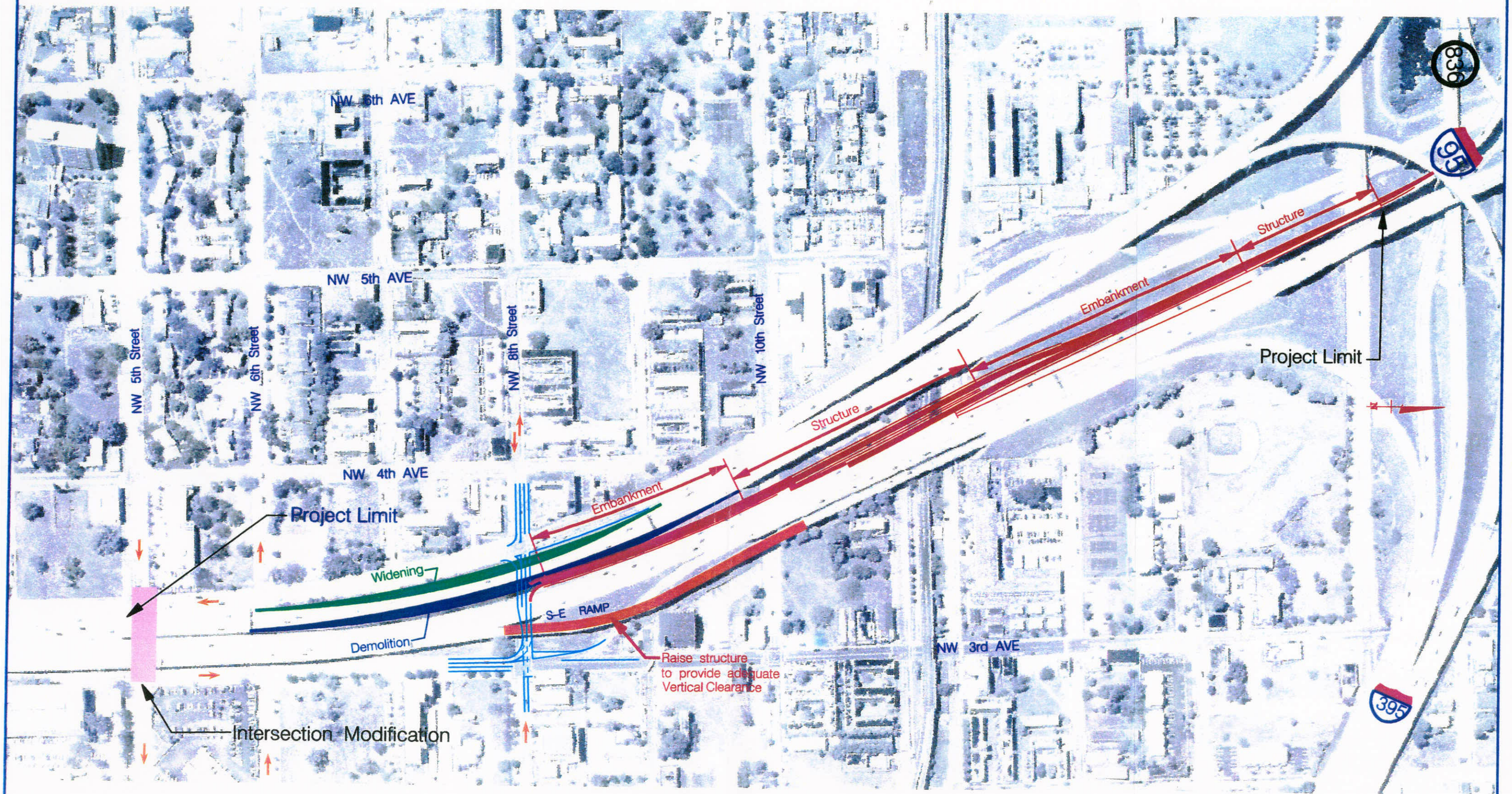

PROPOSED ALTERNATE

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ULTIMATE CONCEPT IMPROVEMENTS

1. Tunnel Access from I-395 to the Port of Miami

The tunnel concept has been under consideration for several years. The current status is the PD&E study will be completed by November 2000. There is a $6-million dollar balance to be applied to final design. Funding for construction is not included in the next fifteen-year plan. Cost of the project is estimated to be over $400 million.

2. FEC Railroad Depressed Access to the Port of Miami

Due to the many advances that have been made in recent years in tunnel boring machine design, tunneling below urban areas for transportation systems has become a viable option for consideration. Although the initial cost is higher, the impact on surface activities is completely eliminated and allows construction to proceed without major traffic, business and pedestrian interruption.

The cost benefit in many cases justifies tunneling versus the cut and cover method of construction in urban areas. Also, it is now very feasible to bore tunnels in high water table areas by the use of the Earth Pressure Balance Machines. The current construction of the "Tren Urbano" Project in San Juan, Puerto Rico is an example of the use of tunnels in urban areas adjacent to the coast.

The application of the tunnel concept to the Port of Miami will modify current cargo handling at the Port, by having all container cargo move into and out of the Port only on rail. This will require depressing the FEC Railroad between the Port and an area north of I-395.

The necessary railroad modifications will need to be studied to analyze the impacts on the city streets of depressing the railroad to a suitable level. This long-term improvement would have a major significant positive improvement to the Miami Bayfront business area. The estimated cost per mile of tunneling a rail facility is $116 million. Assuming a length of 6 miles for a section from north of Buena Vista to the Port, the cost would be $696 million.

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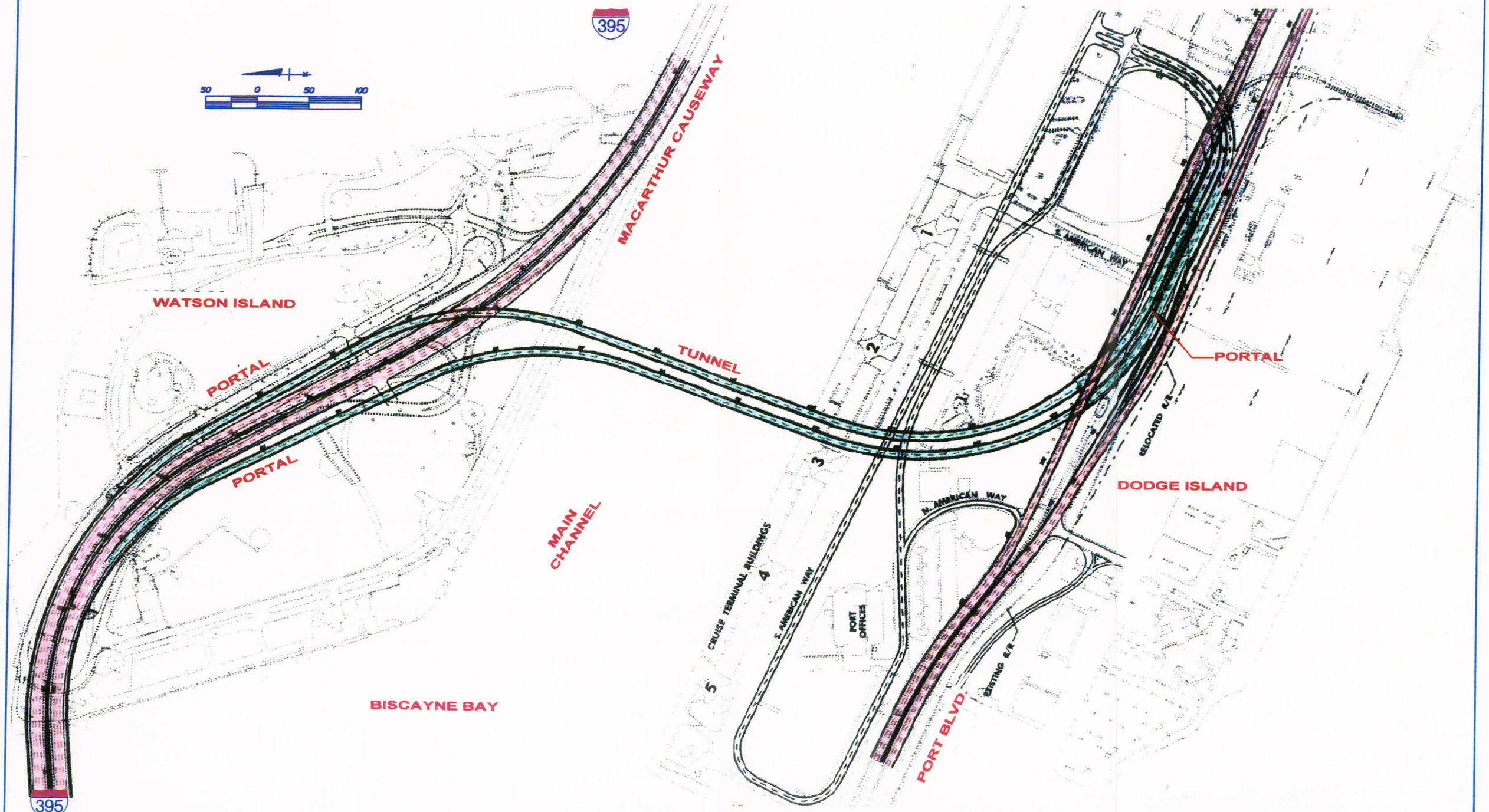

TUNNEL CONCEPT

PROPOSED TUNNEL

CONNECTING ROADS

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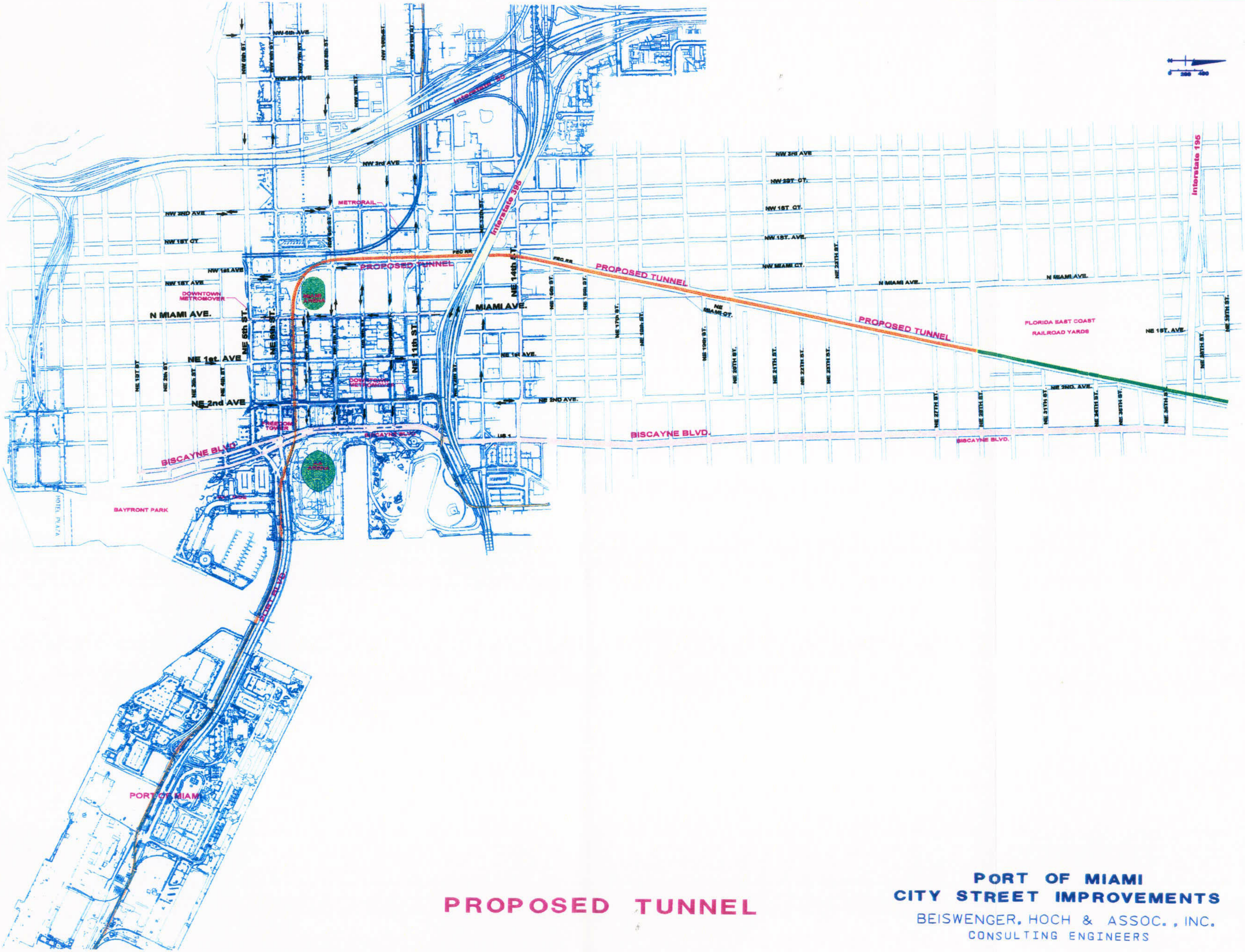

PROPOSED TUNNEL

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RECOMMENDATIONS

"Current Improvements" will only alleviate in a minor way truck traffic circulation to the Port of Miami

"Ultimate Improvements" are long-range improvements with costly budgets and undetermined time for implementation.

Considering the above we highly recommend the MPO approval and endorsement of the "Interim Improvements". This concept will in a short term alleviate significantly the truck traffic impact on the Downtown Bayfront area.