

Traffic Calming for Pedestrians

Miami Dade College Wolfson Campus

Project Overview



Study Purpose

- Develop recommendations for traffic calming measures
 - Reduce negative impacts of motor vehicle use on pedestrians
 - Improve pedestrian connections and safety at key locations at the campus

Study Area & Focus Areas

LEGEND:



Study Area

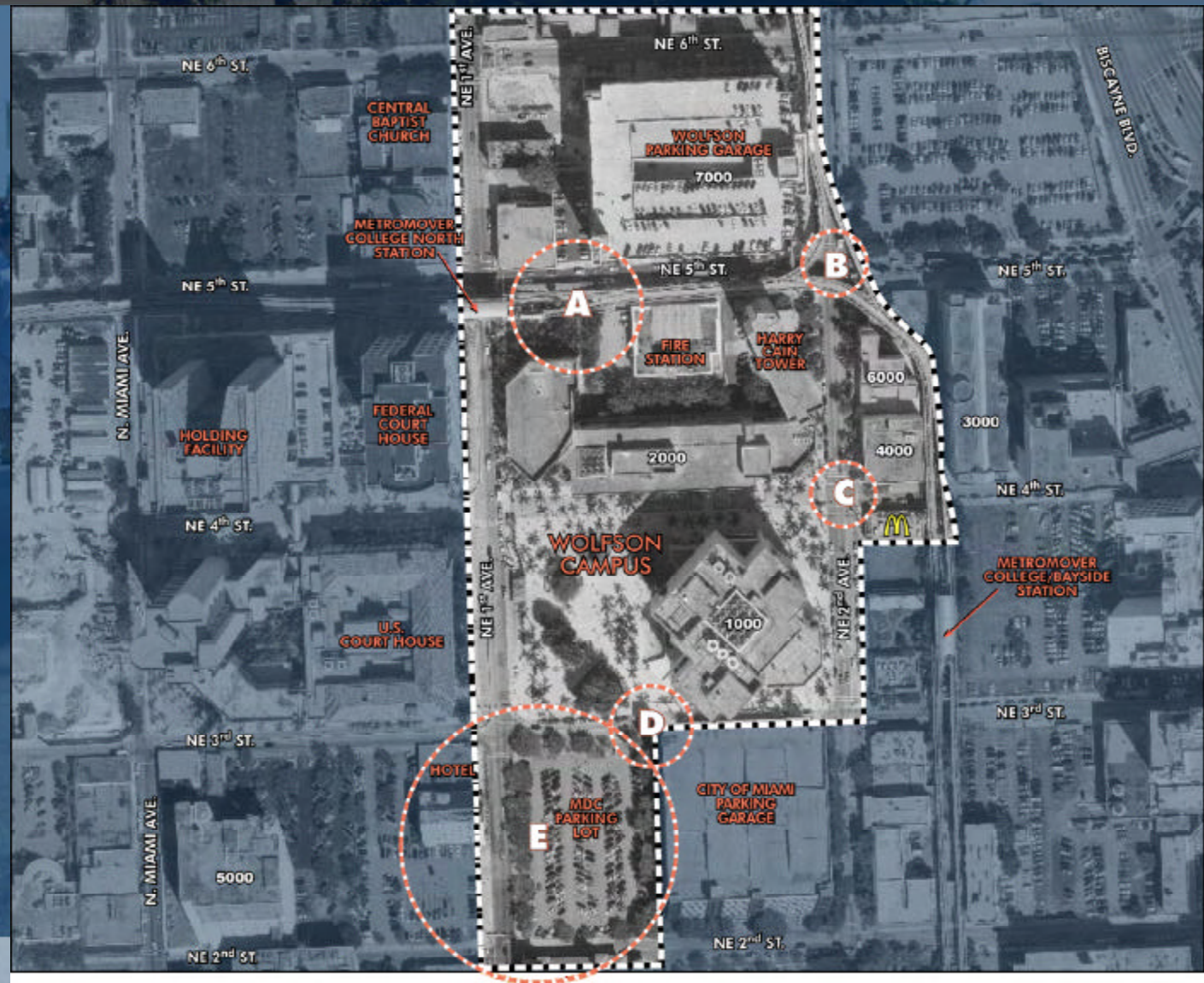


Non-Study Area



Focus Area

1000 MDC Wolfson Building Number



Literature Review

- Research pedestrian and traffic calming issues and recommended treatments
 - At colleges/universities
 - In Downtown areas
- Most prevalent issues:
 - Pedestrian safety
 - Non-compliance by peds at existing crosswalks or signals

Literature Review

- Most common recommendations:
 - Crosswalk enhancements
 - New/improved signals
 - Enhanced signage
 - Curb extensions
 - Pedestrian refuge islands



Tiered Recommendations

- Intended to give the College options

Fewer Ped Safety and
Operational Enhancements



More Ped Safety and
Operational Enhancements

Tier 1

Tier 2

Tier 3

Tier 4

Lowest Cost &
Easiest Implementation



Highest Cost
More Complex Implementation







Recommended Treatments & Symbols

Signage & Striping

- 1  Pedestrian Crossing Warning Sign (W11-2, W16-7)
- 2  "Turning Traffic Must Yield to Pedestrians" Sign (R10-15)
- 3  "Walk Between Posts To Activate Flashing Crosswalk - Watch For Cars Before Crossing Sign"
- 4  "Watch Turning Vehicles" (Pavement Legend)
- 5  "Yield Here to Pedestrians" Sign (R1-5 or R1-5a)
- 6  "Use Crosswalk" Sign (R9-3b)
- 7  "Pedestrian in Crosswalk" lighted sign - tied to automatic detectors in bollards

LEGEND:

Symbols

-  Improvements from previous tier (or existing conditions)
-  Direction of Traffic Flow
-  Active Crosswalk Striping
-  Advanced Walk Line
-  Advanced Stop Line
-  Curb Ramp
-  Curb Extensions
-  Median with Reductive Pedestrian Signal
-  Median with Overhead Pedestrian Warning Sign & Pedaling Detectors
-  Pedestrian Bridge
-  Textured Pavement with In-pavement
-  Red for Forward Vision
-  Bollards
-  Bollards with Advanced Pedestrian Detection
-  Bollards for Older or Low Lighting
-  Pedestrian Crossing
-  Leading Pedestrian Signal Phase
-  Countdown Pedestrian Signal Indication
-  Walkway Connects Highway Features
-  Landscaping & Planting
-  Accessible

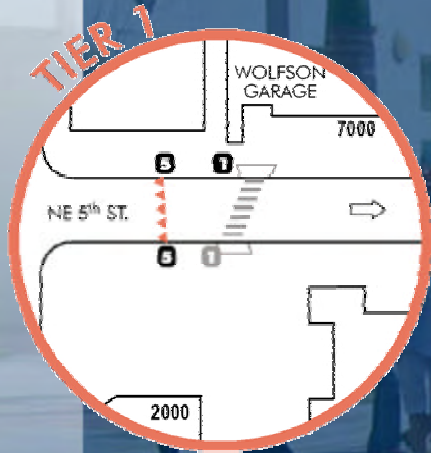
NE 5th Street at Wolfson Garage

Focus Area A Issues:

- Heavy ped volume midblock (500-600 per hour during peak hours)
- Significant truck traffic
- 5th Street is primary route into Port
- Potential for multiple threat crashes with 3-lane roadway section



NE 5th Street at Wolfson Garage



\$900 - \$1,400

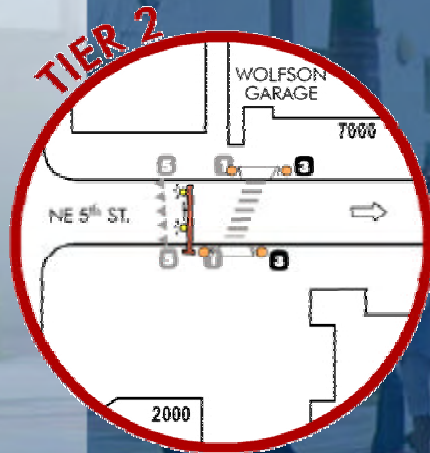
Advance Yield Line

"Yield Here to
Pedestrians" Signs

Pedestrian Crossing
Warning Sign



NE 5th Street at Wolfson Garage



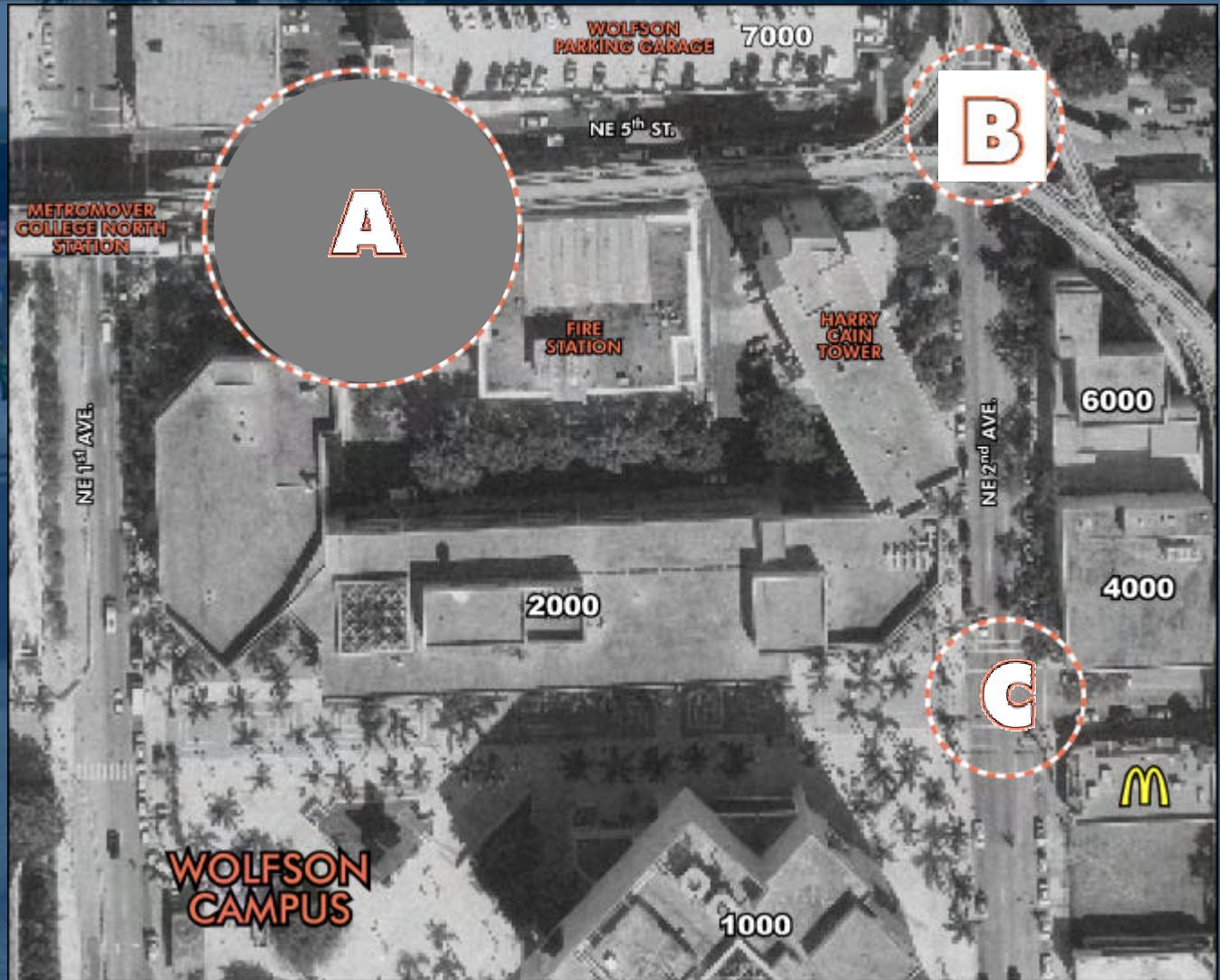
\$17,100 - \$51,700

Tier 1 Improvements

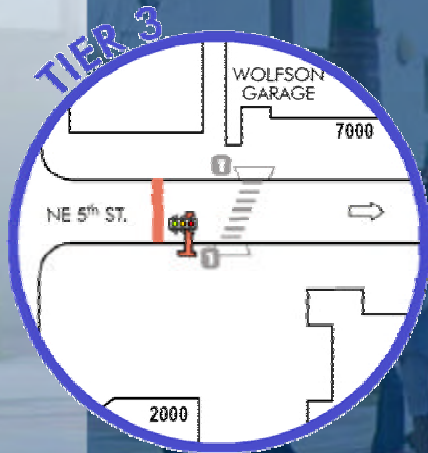
Overhead Sign with
Flashing Beacons

Bollards with Automatic
Detection

"Walk Between Posts to
Activate Flashing
Crosswalk" Signs for
Peds



NE 5th Street at Wolfson Garage

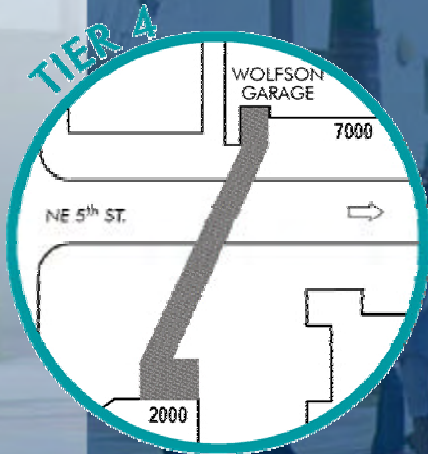


\$50,000 - \$75,000

Exclusive Pedestrian
Signal



NE 5th Street at Wolfson Garage



\$500,000 - \$3,000,000

Pedestrian Bridge



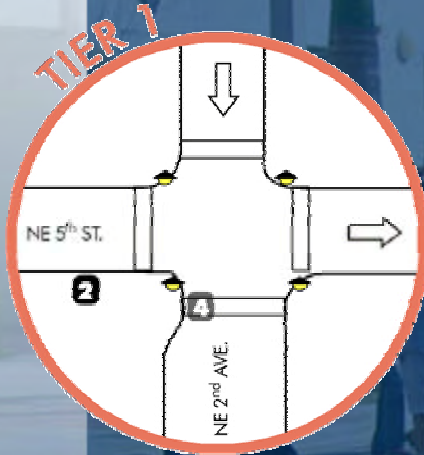
NE 5th Street/NE 2nd Avenue

Focus Area B Issues:

- Significant ped activity (450 per hour in west crosswalk during peak hours)
- Vehicle view of pedestrians can be obstructed by Metromover column
- 3 ped crashes (1996-2003), with 1 fatality
- Lighting is very poor



NE 5th Street/NE 2nd Avenue

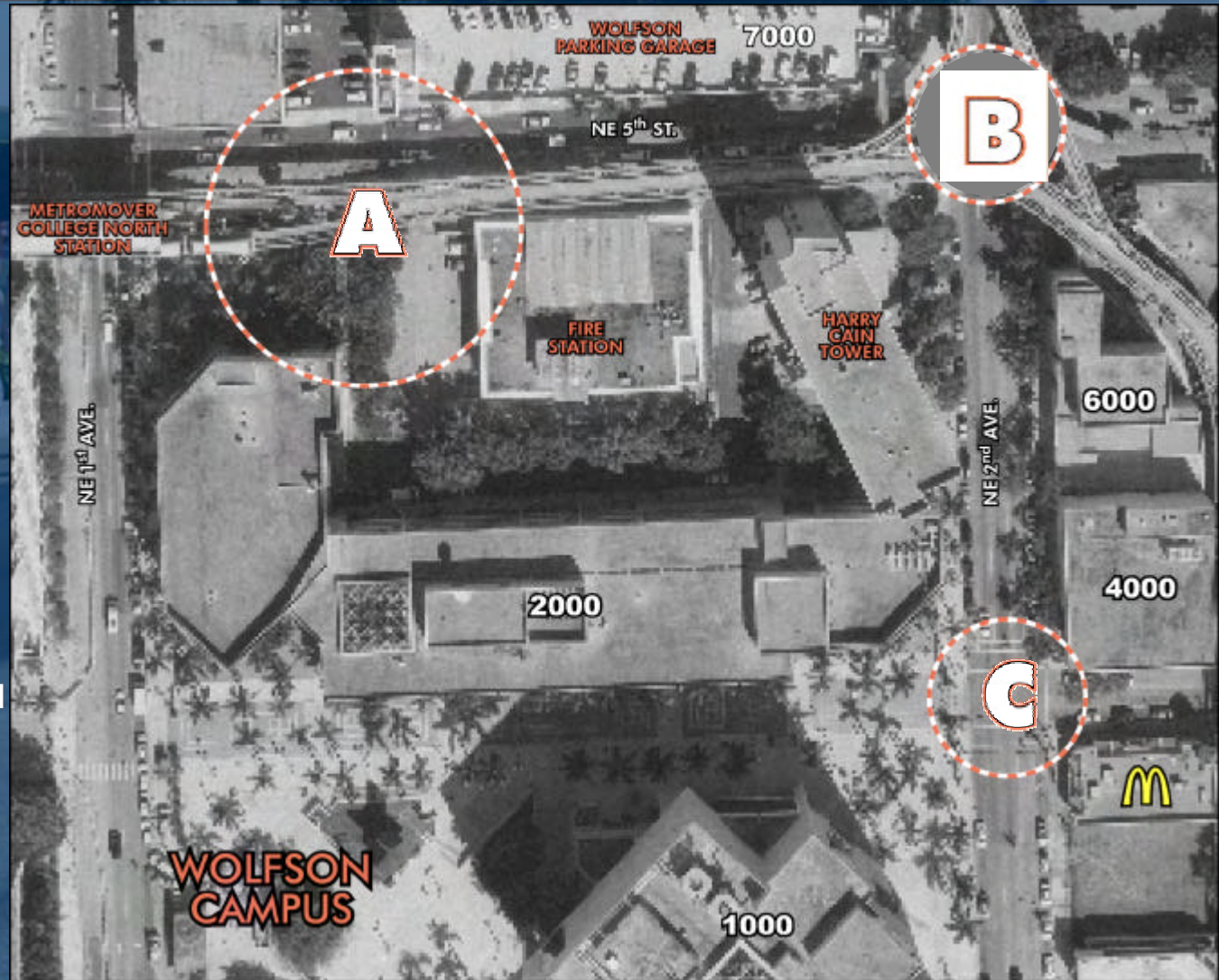


\$16,500 - \$25,000

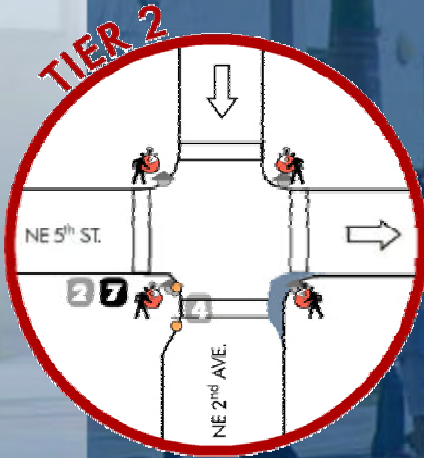
"Watch Turning Vehicles" Pavement Legend for Peds

"Turning Traffic Must Yield To Peds" Sign

Ped-Oriented Street Lighting



NE 5th Street/NE 2nd Avenue



\$31,500 - \$71,400

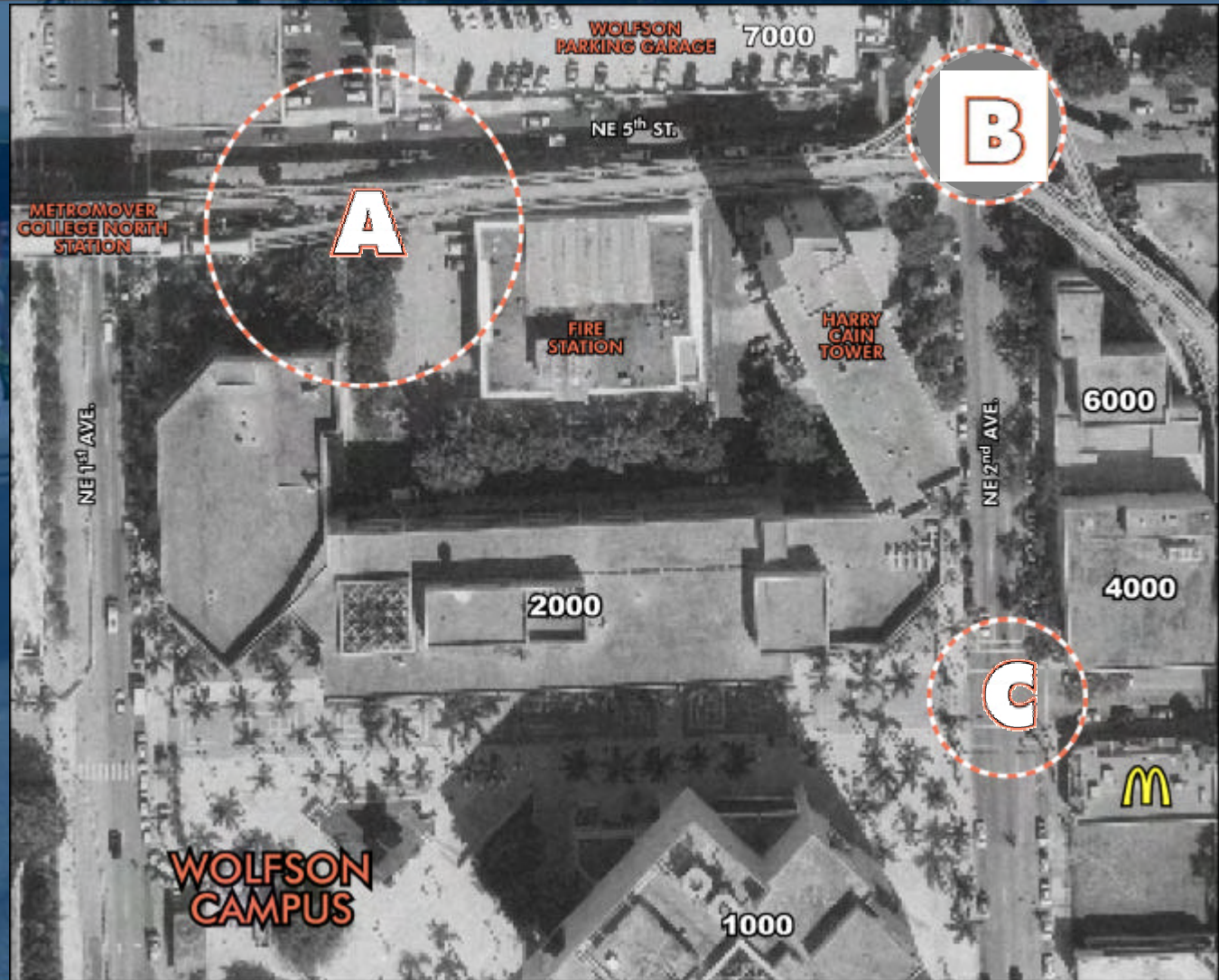
Tier 1 Improvements

Countdown Ped Signal
Indicators

Curb Extension (SE Corner)

"Pedestrian in Crosswalk"
Internally Illuminated
"Smart Sign"

Bollards with Automatic
Detection



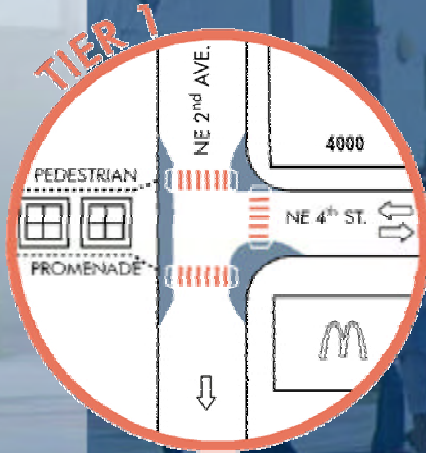
NE 2nd Avenue/NE 4th Street

Focus Area C Issues:

- Very heavy ped traffic (650-1,000 cross 2nd Avenue per hour during peak hours)
- Conflicts between WB left turning vehicles & peds crossing in southern crosswalk
- Low volume of vehicles using 4th Street



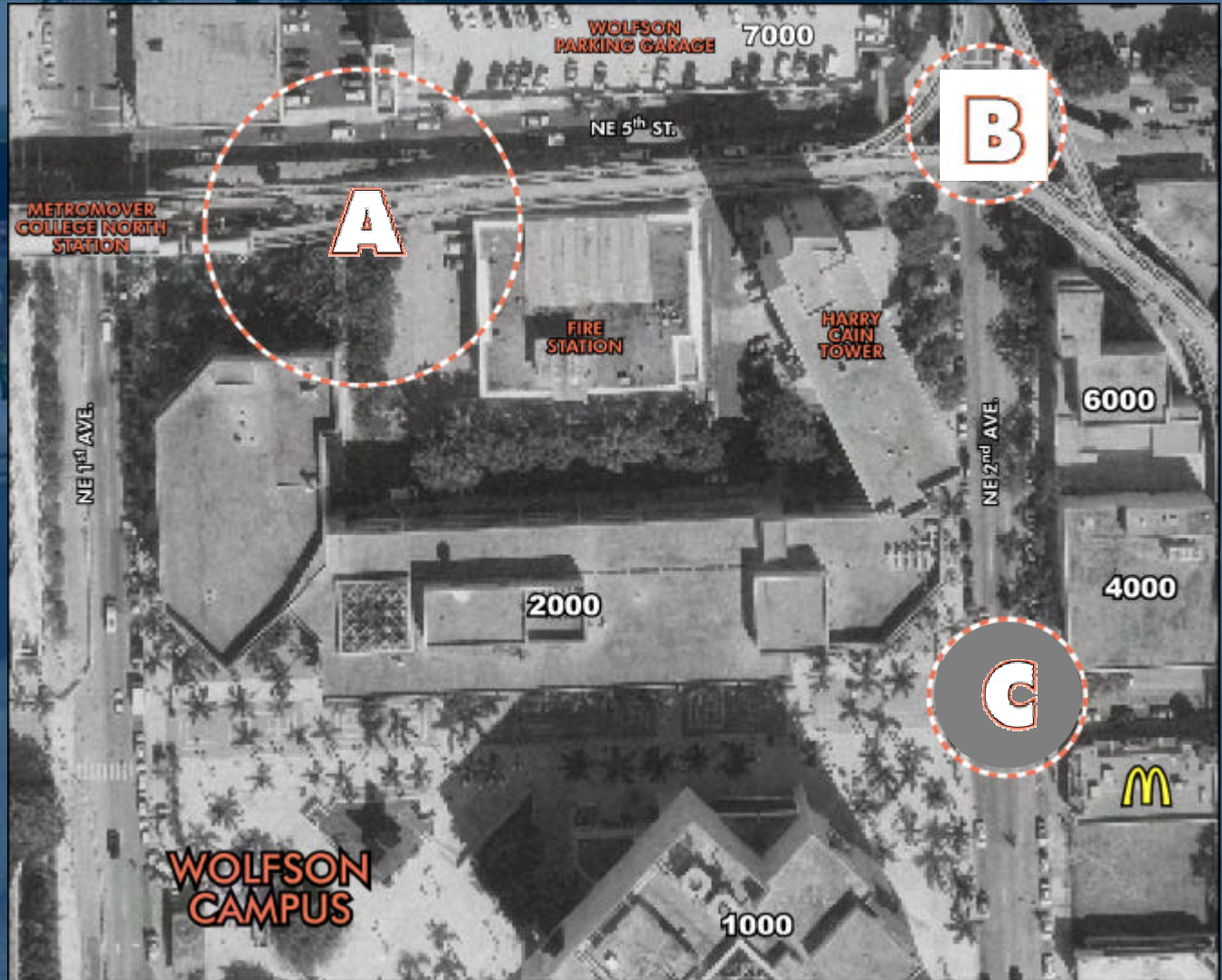
NE 2nd Avenue/NE 4th Street



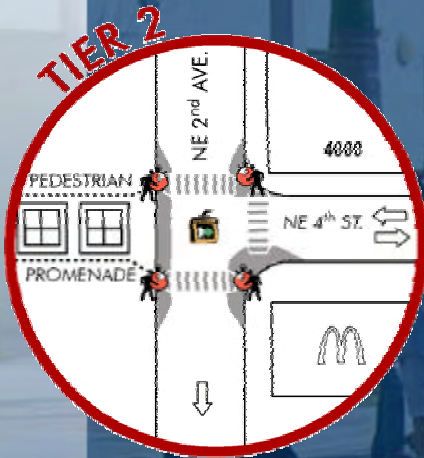
\$16,500 - \$63,000

Curb Extensions (NE/SE
Corners, W side)

Zebra Crosswalk
Striping



NE 2nd Avenue/NE 4th Street

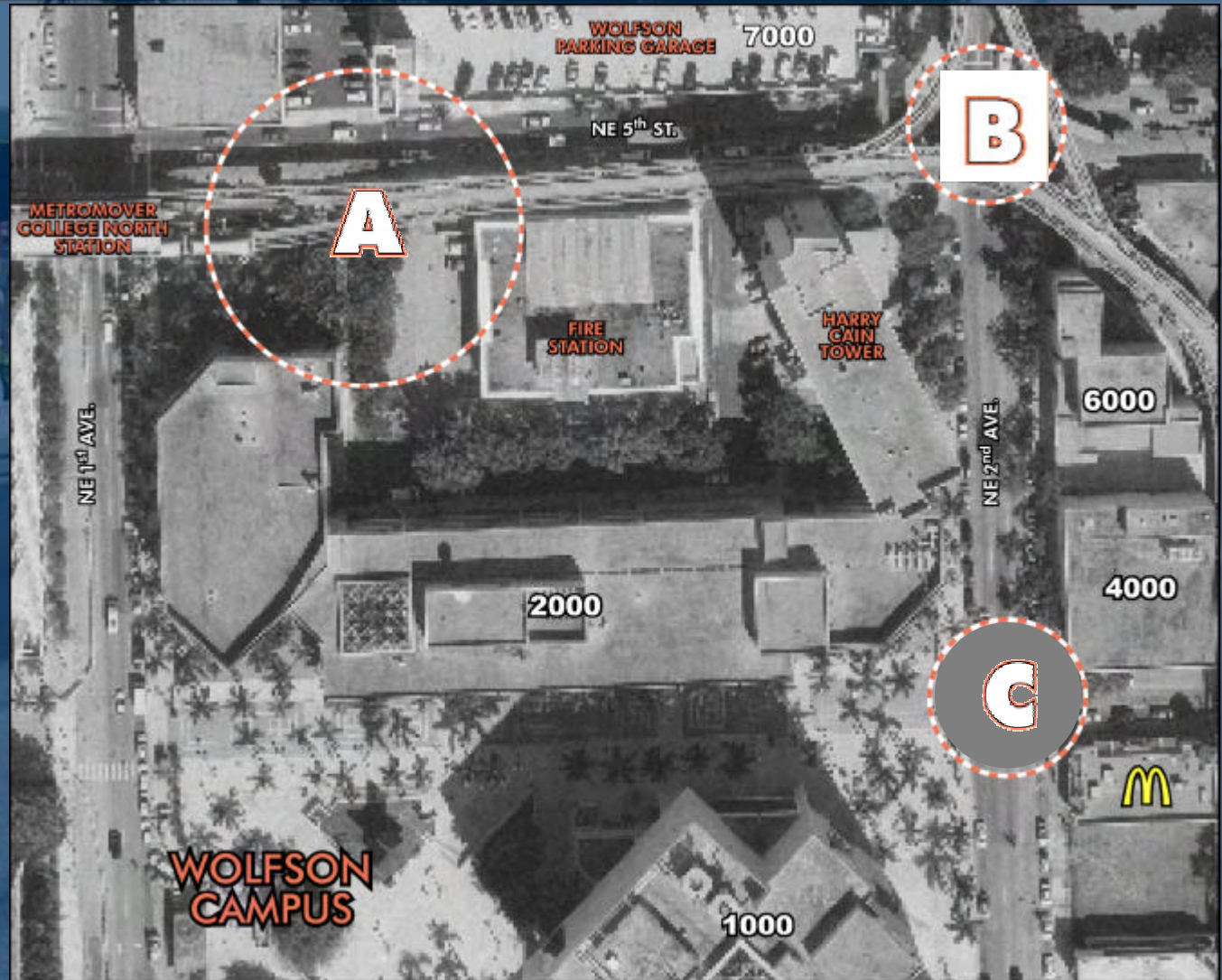


\$20,500 - \$70,300

Tier 1 Improvements

Countdown Ped Signal
Indicators

Leading Pedestrian
Signal Interval



NE 2nd Avenue/NE 4th Street



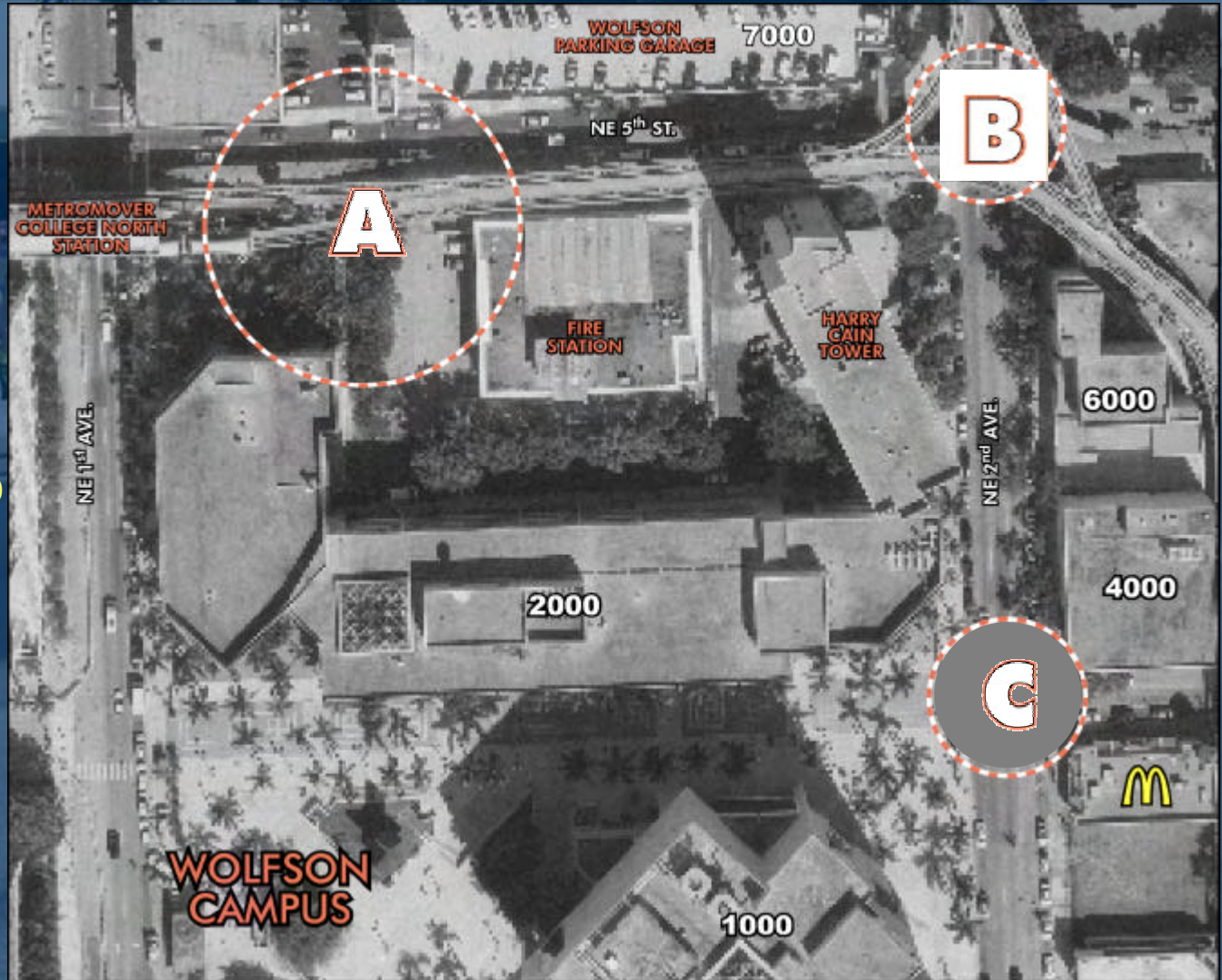
\$1,467,000 - \$1,669,000

Pedestrian Promenade
Extension

Textured Pavement (2nd
Ave/4th St intersection)

Countdown Ped Signal
Indicators

Wolfson Campus
Gateway Feature



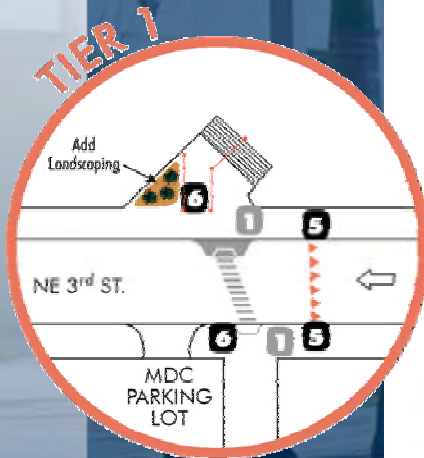
NE 3rd Street

Focus Area D Issues:

- Heavy pedestrian activity crossing 3rd Street midblock (300 per hour during peak hour)
- Wolfson Building 1 steps are angled - peds tend to cross 3rd Street at this same angle



NE 3rd Street



\$4,600 - \$13,100

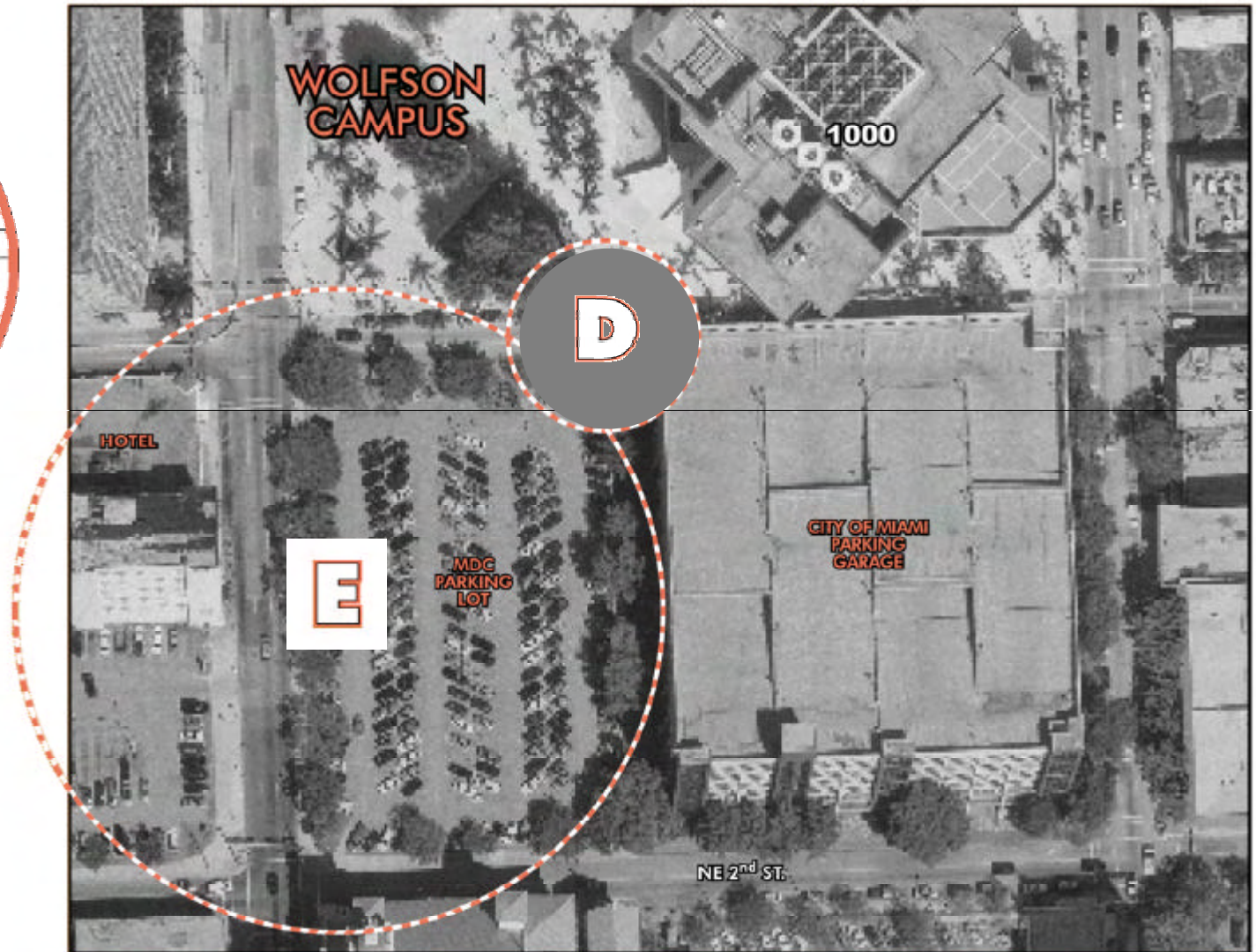
Advance Yield Line

"Yield Here to Pedestrians" Signs

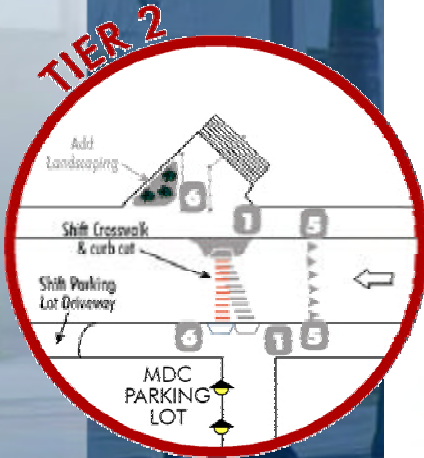
Landscape Planter at Building 1 Steps

Pedestrian Railing on Building 1 Steps

"Use Crosswalk" Signs for Peds



NE 3rd Street



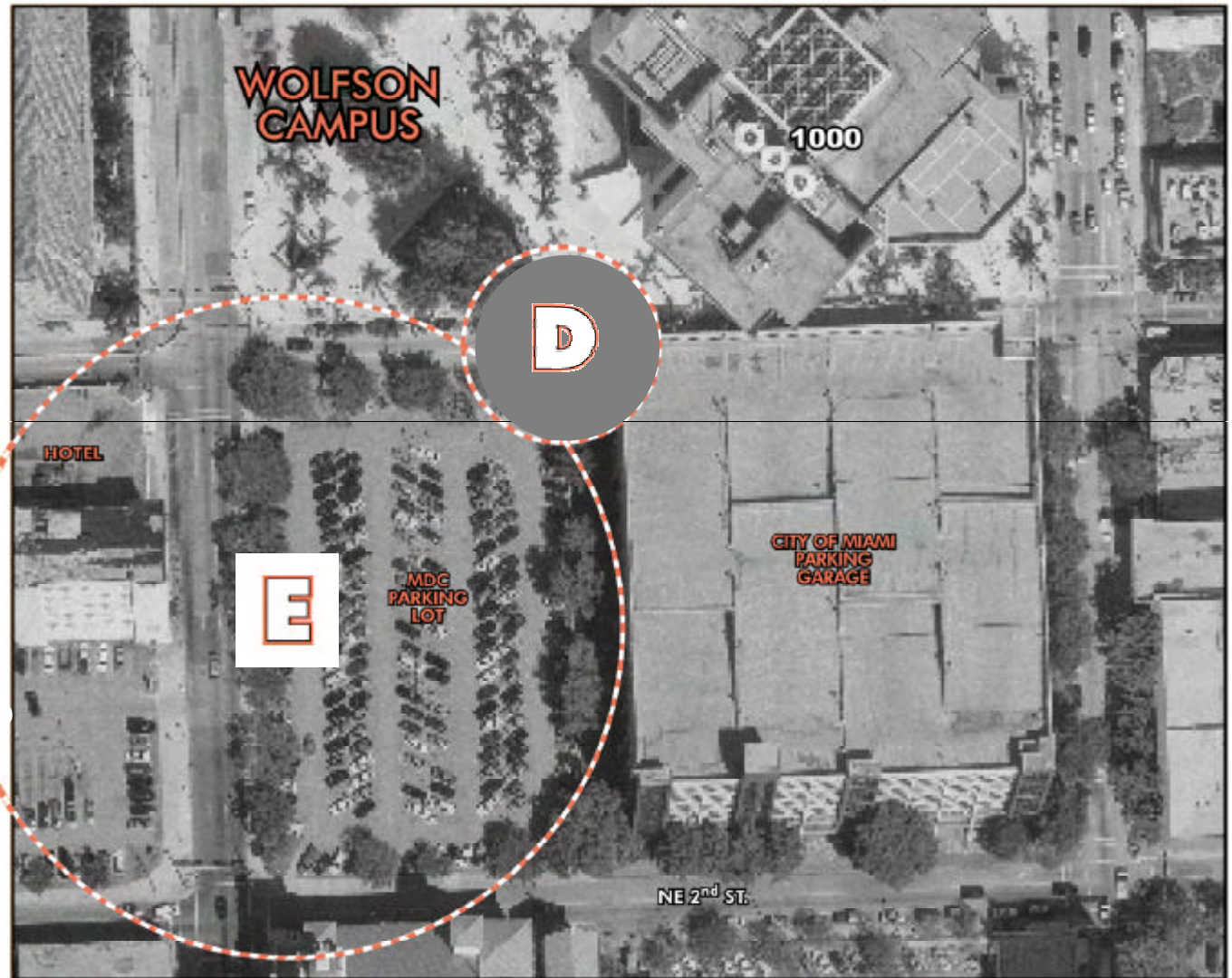
\$19,900 - \$36,600

Tier 1 Improvements

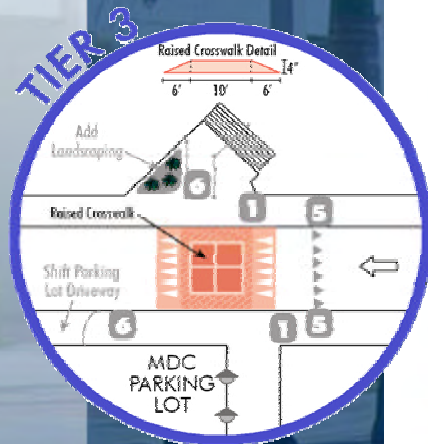
Shift MDC Parking Lot Driveway to the West

Shift Crosswalk (South Ramp & Zebra Striping)

Ped-Oriented Lighting on Walkway E. of MDC Parking Lot



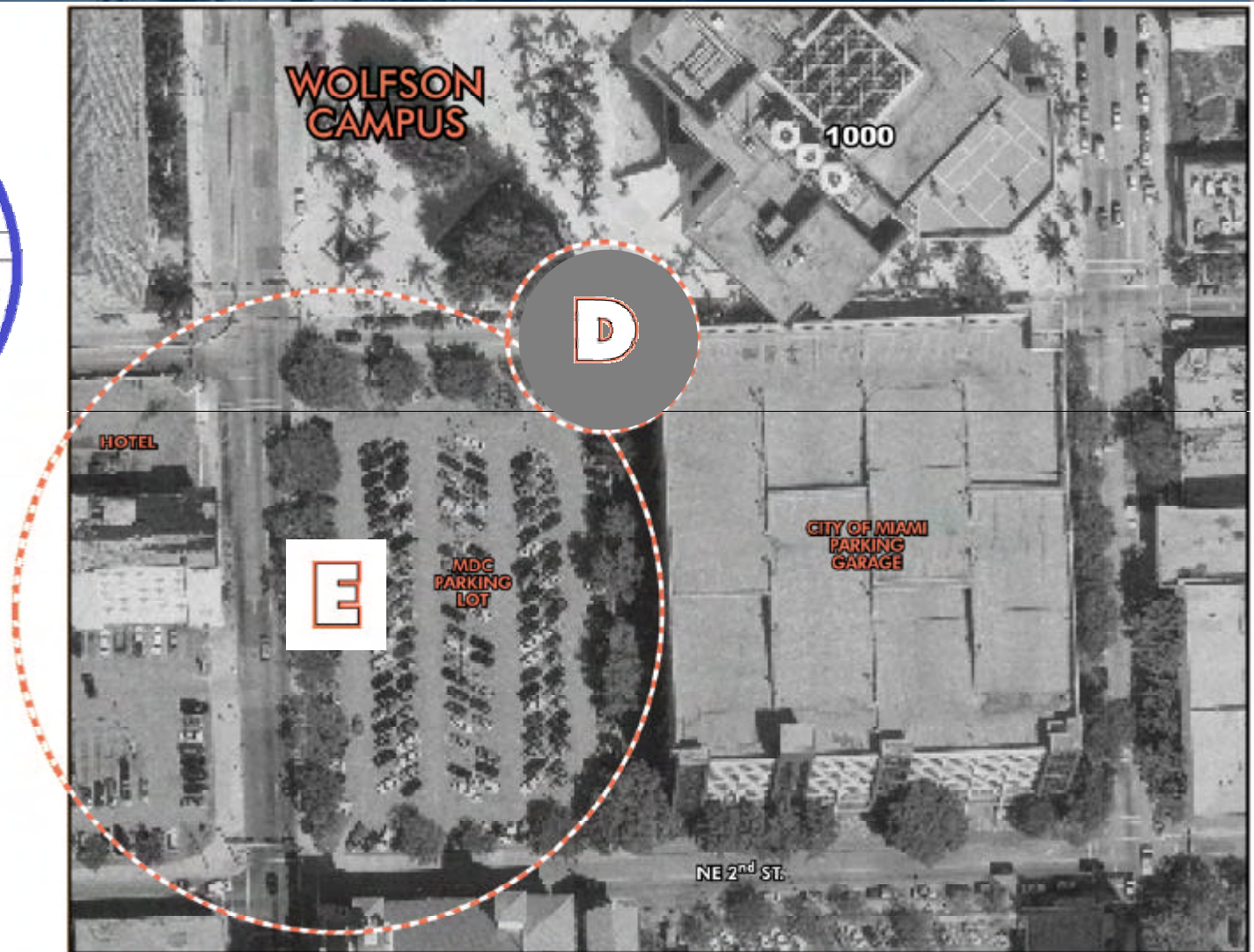
NE 3rd Street



\$29,900 - \$56,600

Tier 2 Improvements

Raised Crosswalk



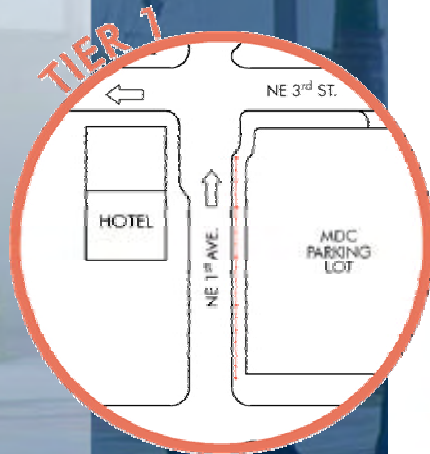
NE 1st Avenue

Focus Area E Issues:

- Heavy pedestrian activity crossing 1st Avenue midblock (400 per hour during peak hour)
- Midblock pedestrian crossings occur over the whole block (between 2nd & 3rd Streets), not at 1 location
- Many peds cut-through the MDC Parking Lot

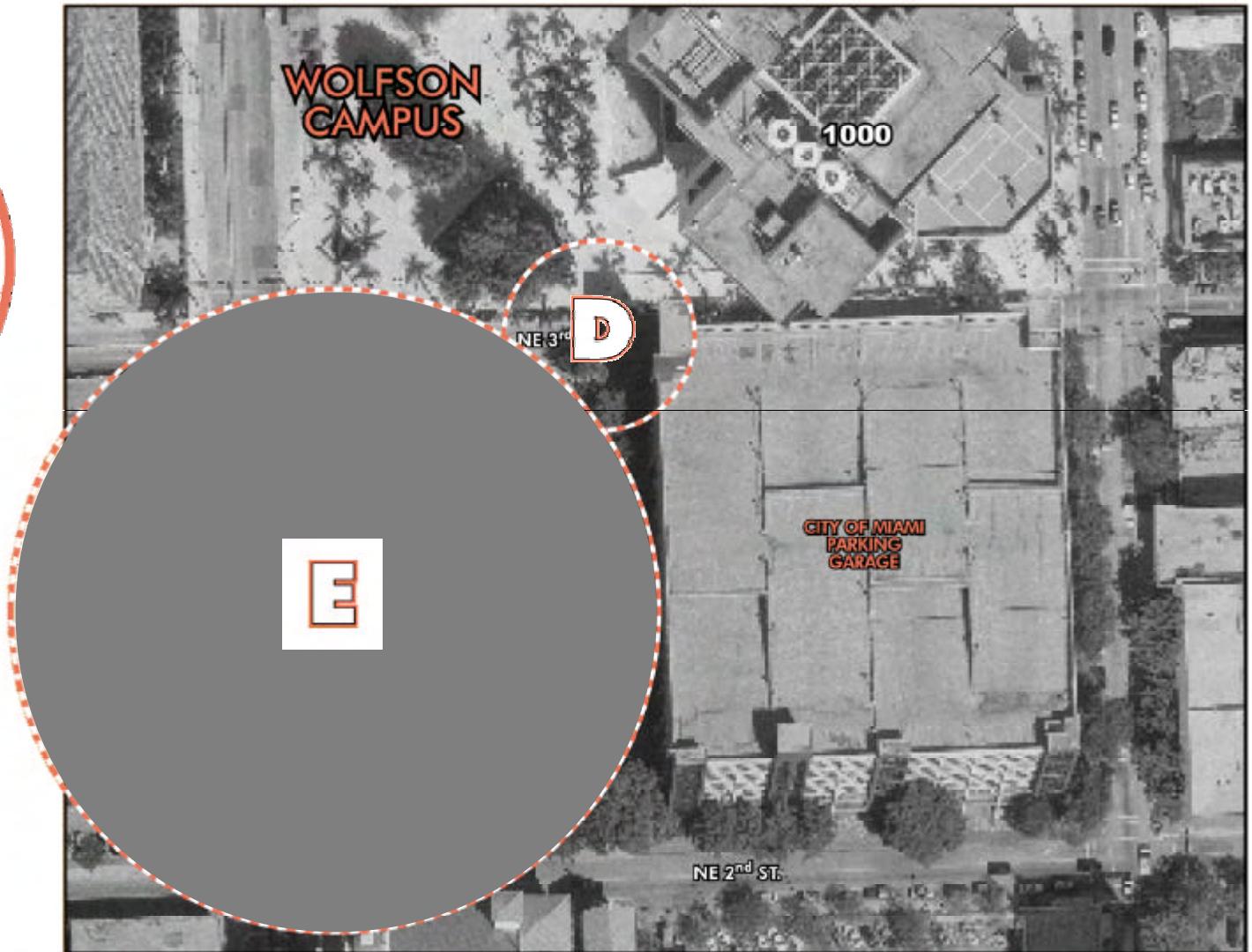


NE 1st Avenue

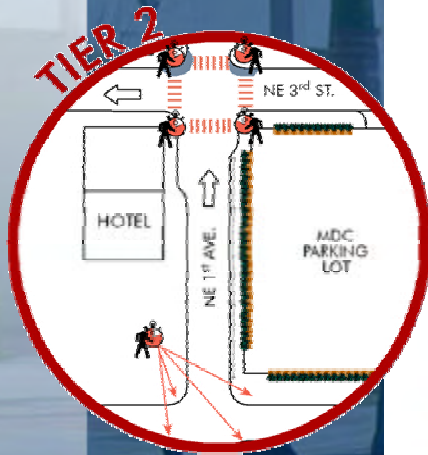


\$6,250 - \$8,750

Pedestrian Railing on
East Sidewalk along 1st
Ave



NE 1st Avenue



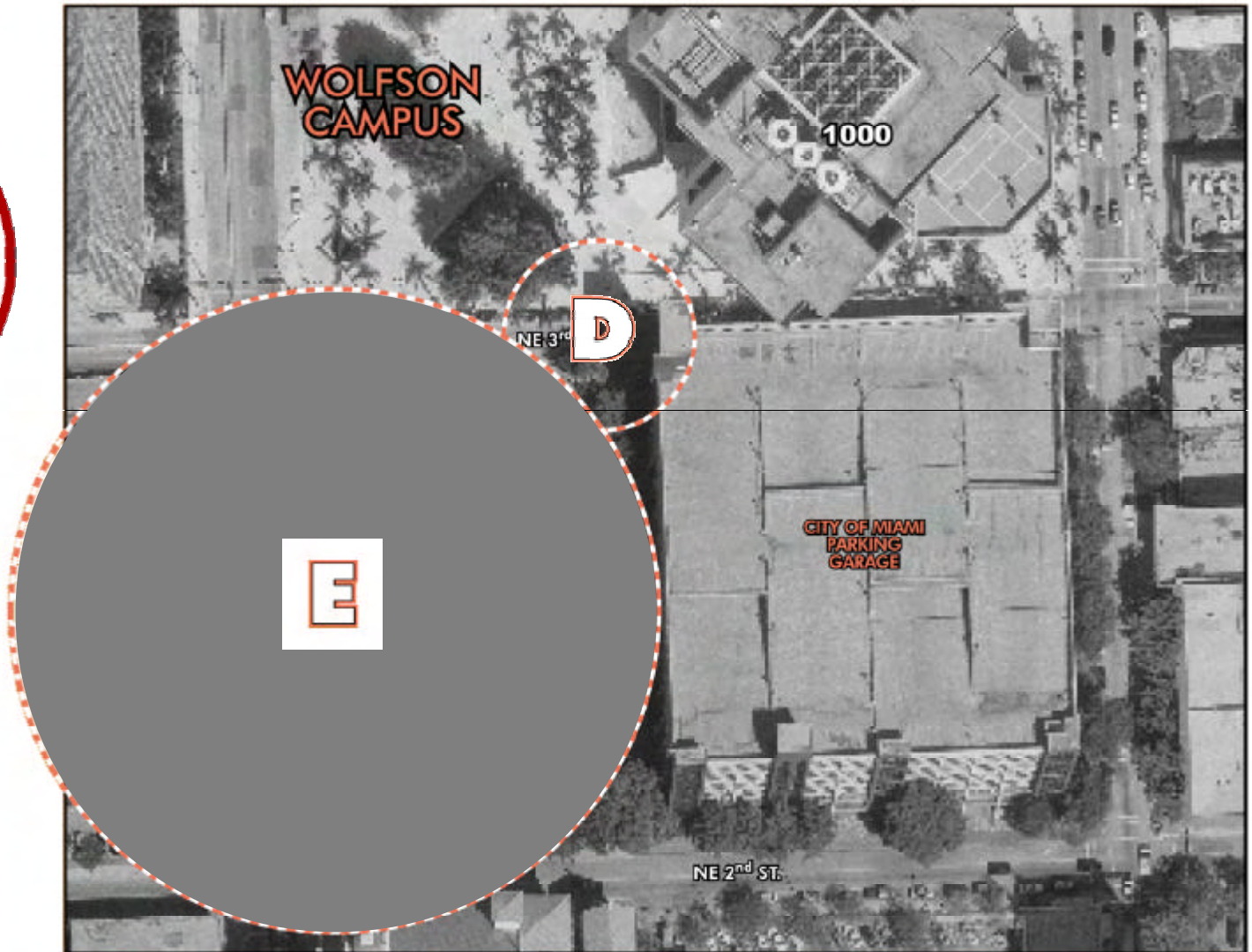
\$35,690 - \$83,250

Tier 1 Improvements

Fencing & Landscaping
along Borders of MDC
Parking Lot

Countdown Ped Signal
Indicators (at 1st Ave/
2nd St & 1st Ave/3rd St)

Zebra Crosswalk
Striping (1st Ave/3rd St)



Funding Options

- City of Miami or Miami-Dade County CIP
- People's Transportation Plan (from the City of Miami allocation)
- Coordination with other projects (i.e., City of Miami Streetcar)
- Coordination with new large-scale development
- TEA-21 (or its successor)

Recommended First Step

- MDC Representatives Meet with:
 - City of Miami Staff
 - Miami-Dade County Staff
- Determine how to incorporate recommended projects as a component of other projects or programs

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