

EXECUTIVE SUMMARY

Recommendation to approve the Doctors Pass and North Park Shore Emergency Beach Renourishment Resolution, make a finding that these beaches are critically eroded and TDC funds can be used for renourishment, authorize the expedited handling of a truck haul/inland sand source permit modification, waive the formal competitive thresholds in the Purchasing Policy based on a valid public emergency, and authorize the expenditure of \$1.5M Category A Tourist Development Funds and authorize necessary budget amendments.

OBJECTIVE: To accomplish the emergency renourishment of approximately 1,000 LF of beach immediately south of Doctors Pass and approximately 1,000 LF of beach south of Seagate Drive within the City of Naples utilizing TDC funds as a result of Tropical Storm Fay and the severe erosional storms experienced this winter.

CONSIDERATIONS: The area of Naples Beach just south of Doctors Pass (FDEP monument R58A to FDEP monument R58) and fronting Indies West, Gulf View, the Chateau and Royal Palm condominiums along with the beach area in North Park Shore (FDEP Monuments R-45 and R46) and fronting the Sea House, Le Parc and Meridian Club condominiums has experienced significant erosion as a result of this year's winter storms and Tropical Storm Fay. As a result, Emergency Truck Haul renourishment is required to stabilize the beach and protect the upland property.

This project will be accomplished in two phases:

1. Stabilize the beach by placing 2,000 – 3,000 CY's of upland sand on the dune landward of the current Mean High Water (MHW) at the Indies West and Gulf View condominiums to stabilize the beach until a revised biological opinion and permit can be issued. This work is being coordinated with FDEP and FWC and will be completed as soon as possible but not before 5/1/2010. This sand will be placed landward of the sea turtle nesting habitat to protect the upland structures. Time is of the essence and an Emergency Resolution by both the City of Naples and the County is critical to support the County's emergency renourishment and expedited permit application.
2. Place approximately 37,000 CY's of material on the beach at both locations as soon as the biological opinion and permit modifications can be issued. This work is expected to take 4 to 6 weeks to complete and is dependent on the issuance of the revised permit and biological opinion. This small truck haul project will repair these erosional hot spots by filling the current permitted beach template at each location with previously permitted upland sand from the middle of the state. It is expected that approximately 37,000 CY's of Ortona sand will be used in these areas. Renourishment will occur using a combination of conveyor system and dump trucks. Conveyors will eliminate the need for trucks traveling long distances on the beach by placing the conveyors at key condominiums and feeding sand directly into the conveyors from the dump trucks. Maintenance of traffic will be the responsibility of the contractor and aggressively coordinated with the affected condominiums and the City of Naples Police Department.

This work has been split into two phases however, depending on the issuance of permits this work could be accomplished all at once. It is critical that this work be

completed as early as possible to provide the protection and assurance needed during hurricane season.

The northern condominiums at the beaches south of Doctors Pass are greater than the one-half mile guideline from the nearest public beach access of Lowdermilk Park. These beaches are accessible to the public and are located within the City of Naples where over 80% of its entire beach is accessible to the public via public beach access points. Additionally, TDC funds were used to renourish this beach in 1996 and 2006.

Staff is requesting that:

1. An Emergency Resolution be approved authorizing the use of emergency measures and funds to address this problem and that action must be taken immediately.
2. A finding be made that both the Doctor Pass beach and the North Park Shore beach are critically eroded.
3. A finding that the beach is accessible to the public and meets the requirements in the TDC Category "A" Funding Policy. The emergency renourishment is eligible for TDC Category "A" Funding and serves a public purpose.
4. The formal competitive thresholds in the Purchasing Policy be waived based on a valid public emergency and other state and local statutes.
5. Expenditure of \$1.5M to accomplish this project.
6. Authorize necessary budget amendments.

ADVISORY COMMITTEE RECOMMENDATIONS: At the April 29, 2010 CAC meeting all items were approved as follows: Items 1, 2, and 4 were approved 8-0. Items 3, 5, and 6 were approved 7 to 1.

FISCAL IMPACT: The Source of funds is from Category "A" Tourist Development Tax fund. A budget amendment taking funds from 195 reserves will be necessary to complete this project.

GROWTH MANAGEMENT IMPACT: There is no impact to the Growth Management Plan related to this action.

LEGAL CONSIDERATIONS: This item has been reviewed by the County Attorney's Office and is legally sufficient for Board action. - CMG

RECOMMENDATION: Recommendation to approve the Doctors Pass and North Park Shore Emergency Beach Renourishment as follows:

1. An Emergency Resolution is approved authorizing the use of emergency measures and funds to address this severe beach erosion and that action must be taken immediately.
2. A finding be made that both the Doctor's Pass Beach and the North Park Shore Beach are critically eroded.
3. A finding that the beach is accessible to the public and meets the requirements in the TDC Category "a" Funding Policy. The emergency renourishment is eligible for TDC Category "A" Funding and serves a public purpose.
4. The formal competitive thresholds in the Purchasing Policy be waived based on a valid public emergency and other state and local statutes.
5. Expenditure of \$1.5M in TDC Category "A" Funding to accomplish this project.
6. Authorize necessary budget amendments.

PREPARED BY: Gary McAlpin, Director – Coastal Zone Management



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8500.69

April 27, 2010

Merrie Beth Neely
Environmental Administrator
Florida Department of Environmental Protection
Bureau of Beaches and Coastal Systems
Mail Station 300
3900 Commonwealth Blvd.
Tallahassee, FL 32399-3000

Re: Response to April 22 2010 E-Mail Comments: Permit Modification Request for Collier County Beach Renourishment Project; Permit No. 0222355-001-JC Permit No. SAJ-2003-12405 (IP-MN)

Dear Merrie Beth:

This letter and set of drawings (updated and new permit sketch sheets 2, 3, 7 and 8) is in response to last week's meeting and your e-mail dated April 22, 2010. Based on these discussions, I made a site visit on April 23, 2010 to research the issues and discuss responses with Gary McAlpin. In addition to the modified permit sketches, the following question from the April 23, 2010 e-mail and our responses are provided below:

1.) Truck access points: The primary heavy equipment access points will be 3rd Avenue North in Naples and Horizon Way in Park Shore as illustrated in two new permit sketches (Sheets 7 and 8). A light vehicle access may be available as a back up under certain circumstances at Lowdermilk Park, but cannot handle normal heavy equipment. There is no plan for dump trucks to traverse the beach. They will be unloaded off of the beach into the conveyor system.

2.) Beach/conveyor locations (even down to R52 3.) where there is coastal armoring such as seawalls and rock fronted upland walls along the project area: The conveyors will be located as shown in the attached new permit sketches (Sheets 2 and 3). The primary location in Park Shore will be at Seagate Access (R45+800') or at the adjoining private property of Le Parc. The conveyor at Naples will be placed at either side of Gulf View Beach Club at R58A. The location of coastal armoring is marked on the updated permit sketches (Sheets 2 and 3). There are visible structures in the Naples hot spot, but no visible armoring in the Park Shore hot spot based on both a review of aerial photographs and a site visit. There is a combination of rubble structures and seawalls along the proposed project reach for the Naples hot spot. The rubble appears to be soft rock, much of it small.

The County understands that any nests that are laid before the updated BO is issued must remain in place, avoided by construction work and cannot be relocated. The County has put forth that work will take 1 month and is expected to occur 24/7 until complete – this will require lighting to be of concern during the project so information should be forthcoming about that from the agent in consultation with FWC and USFWS and FWC is likely to require a night-time turtle monitor to be onsite during all construction activities. The County has also put forth that no dump trucks will be traversing the beach, one frontend loader will traverse the beach from R 52 to the Naples Beach placement area twice (to get on the beach for work and then to get off the beach once work is complete) and will be restricted to the placement area 24/7 until the work is completed. The County agrees to these conditions except as follows: The equipment needed for the project will traverse the beach as little as possible. The equipment will include front end loaders and a dozer. To the greatest extent possible, fueling will be done from the upland by hose to the beach to avoid moving the equipment off the beach for fueling. A protective and impermeable ground cover will be placed on the beach during fueling operations to catch any drips, and will be removed from the beach between fueling operations. The 24/7 operation will be monitored for sea turtles during nighttime operations. If no work is required on a given night, the equipment will be fenced with plywood on the beach to prevent any sea turtles from crawling under the equipment, followed by morning inspections by the County's sea turtle monitors before work begins. All sand will be placed on the beach by conveyors from the location shown on the new permit sketches. The heavy equipment needed to move the sand once conveyed to the beach will enter from 3rd Avenue North or Horizon Way. The equipment required to move and grade the sand on the beach will be one (1) Dozer (D5 or D6) and up to 2 loaders. Movement along the beach by dump truck will be avoided, and the heavy equipment will only traverse the beach for initial deployment and essential maintenance operations. The County expects the work to take no more than 30 days from the date of both permit approvals, but may need up to an extra 14 days for potential weather delays, administrative time to implement the permit, and possible mechanical delays. The heavy equipment routes are from the access sites to the project area shown on the new permit sketches (Sheets 7 and 8).

Please submit the revised drawings to DEP and USACE as soon as possible (2 hardcopies signed and sealed and at least 1 electronic copy via email to me if <10M is fine). If any of the above information is incorrect, please submit information clarifying this to all agencies involved – particularly the latter two sentences specifying only 1 front end loader accessing the beach twice (i.e. no provision for multiple front end loaders to work or switching out of equipment in the event of a breakdown such that more than 2 traverses of the beach during the work will occur): It is desired to use two front end loaders on the beach to finish the project in a timely manner and to provide backup equipment. Maintenance and weather threats may necessitate periodically leaving the beach during the construction. To the greatest extent possible, traversing along the beach will be avoided to the maximum extent practical.

Project Needs and Justification Discussion: The County was questioned during the meeting about the timing and need for an emergency fill project. The root causes of the two hot spots goes back to the hurricanes of 2004 and 2005, the decision for a new disposal area for the new Doctors Pass permit, nearby cross-shore structures, and exacerbation by recent storms and weather events. The impacts at these hot spots were a delayed reaction from these events, which

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April 27, 2010
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have become critical lately, as illustrated in recent surveyed profiles (Appendices C and D April 15 submittal). Conditions today are at their worst condition in recent years. The Naples hot spot MHW shoreline location in February 2010 is more landward than the MHW measured with the ECL prior to the 1995-96 project (Sheet 2). The 2010 MHW line at Park Shore (R46) is in worse shape than prior to the 2005-06 project, based on its ECL (Sheet 3). The Park Shore hot spot was not filled during the 1995-96 project. Both hot spots (R46 and R58A) have profiles an average of 8 feet landward of conditions before the 2005-06 project (Appendix C April 15 Submittal). **Since the monitoring survey in July 2009, the shoreline has lost an average of 34 feet at R46 and R58A through February 2010.**

The magnitude of the volumetric erosion indicates that further damages are a distinct possibility. Since July 2009, the Park Shore and Naples hot spots have lost 8,000 and 11,800 cy, respectively. In the 4 years since construction ended in 2006, the total loss for the two hot spots areas is 42,700 cy, with 46% occurring in the last 7 Months (July 2009-February 2010). A continuation of this erosion rate from the worst shoreline position in the last 15 years will threaten the existing uplands and structures. The shoreline and volumetric change rates are provided in Appendix B of the initial April 15, 2010 submittal. See attached photographs of stormy seas at the Naples Beach hot spot.

We are open to your suggestion for changes, if it will increase your comfort with the proposed work and not impact the project chance of successful completion. Please call me or Gary McAlpin if you want to discuss this further, or have any questions.

Sincerely,

COASTAL PLANNING & ENGINEERING, INC.



Stephen Keehn, P.E.
Senior Coastal Engineer

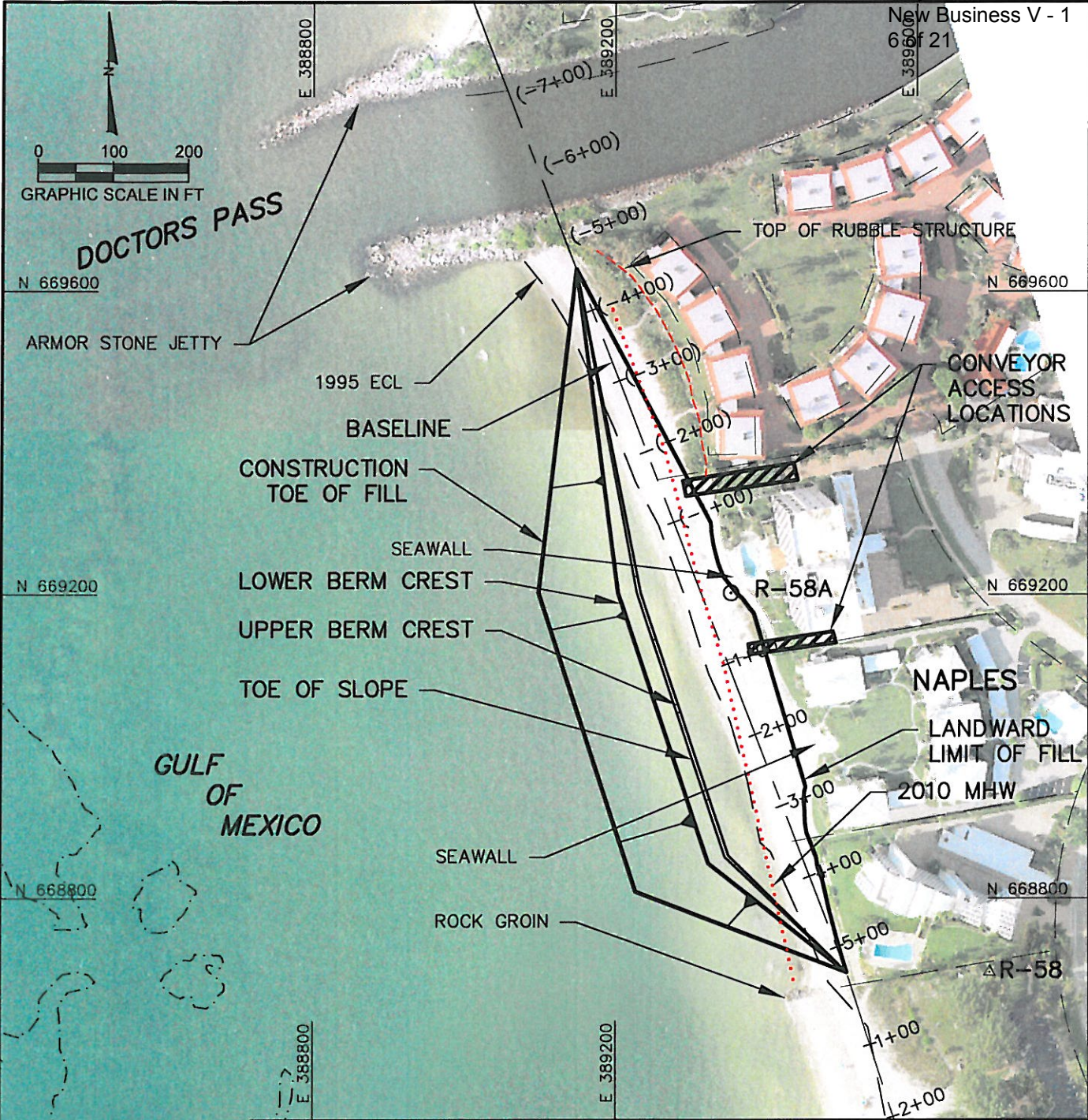
cc: Gary McAlpin, Collier County
Robbin Trindell, Ph.D., FWC
Jeff Howe, FWS
Stephen Fleming, Fort Myers Permitting Section, USACE
Tunis McElwain, Section Chief, Fort Myers Permitting Section, USACE

Attachments: Permit Sketch Sheets 2, 3, 7 and 8
Surveyed Profiles at Conveyor Locations
Photographs at Naples Beach Hot Spot

P/Collier/8500.69 2/Permit Mod Request/ Merrie Beth Neely SK

May 3, 2010

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**COLLIER COUNTY BERM RESTORATION
PERMIT APPLICATION
NAPLES PLAN VIEW**

LEGEND:

△ R-58 FDEP MONUMENTS

⊙ R-58A MAP SPOT

--- HARDBOTTOM CPE AUGUST 2009

..... 2010 MHW

NOTES:

- COORDINATES ARE IN FEET BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM, WEST ZONE, NORTH AMERICAN DATUM OF 1983 (NAD83).
- DATE OF AERIAL PHOTOGRAPH: 9/25/2009.
- DATE OF SIDESCAN SONAR SURVEY: AUGUST 2009.
- LANDWARD LIMIT OF FILL IS THE 5' NGVD (3.7' NAVD) CONTOUR, OR THE SEAWARD EDGE OF VEGETATION, SEAWALL, OR DEVELOPMENT.

**NOT FOR CONSTRUCTION
FOR REGULATORY REVIEW ONLY**

[Signature]
STEPHEN KEEHN P.E. NO. 34857

4-27-10
DATE

REVISIONS		
DATE	BY	DESCRIPTION

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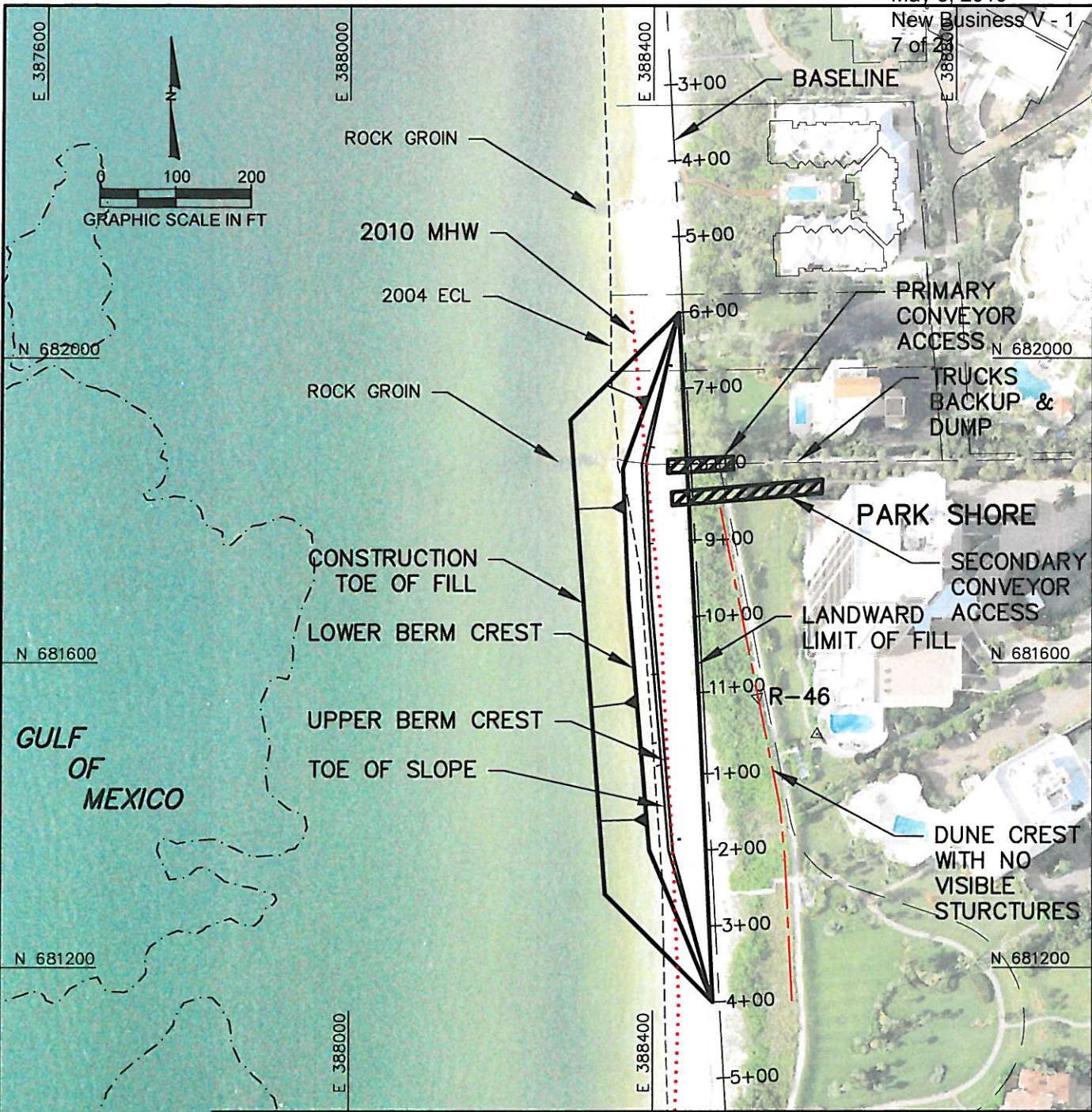
DATE:
4/27/10

BY: JRC
COMM NO.: 8500.69
SHEET: 2

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May 3, 2010

New Business V - 1
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**COLLIER COUNTY BERM RESTORATION
PERMIT APPLICATION
PARK SHORE PLAN VIEW**

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LEGEND:

- △ R-46 FDEP MONUMENTS
- HARBOTTOM CPE AUGUST 2009
- BASELINE STATIONING
- 2010 MHW

NOTES:

1. COORDINATES ARE IN FEET BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM 1983, (NAD 83).
2. DATE OF AERIAL PHOTOGRAPHY: 9/25/2009.
3. DATE OF SIDESCAN SONAR SURVEY: AUGUST 2009.
4. LANDWARD LIMIT OF FILL IS THE 5' NGVD (3.7' NAVD) CONTOUR, OR THE SEAWARD EDGE OF VEGETATION, SEAWALL, OR DEVELOPMENT.

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4-27-10
DATE

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DATE: 4/27/10
BY: JRC
COMM NO.: 8500.63
SHEET: 3

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May 3, 2010

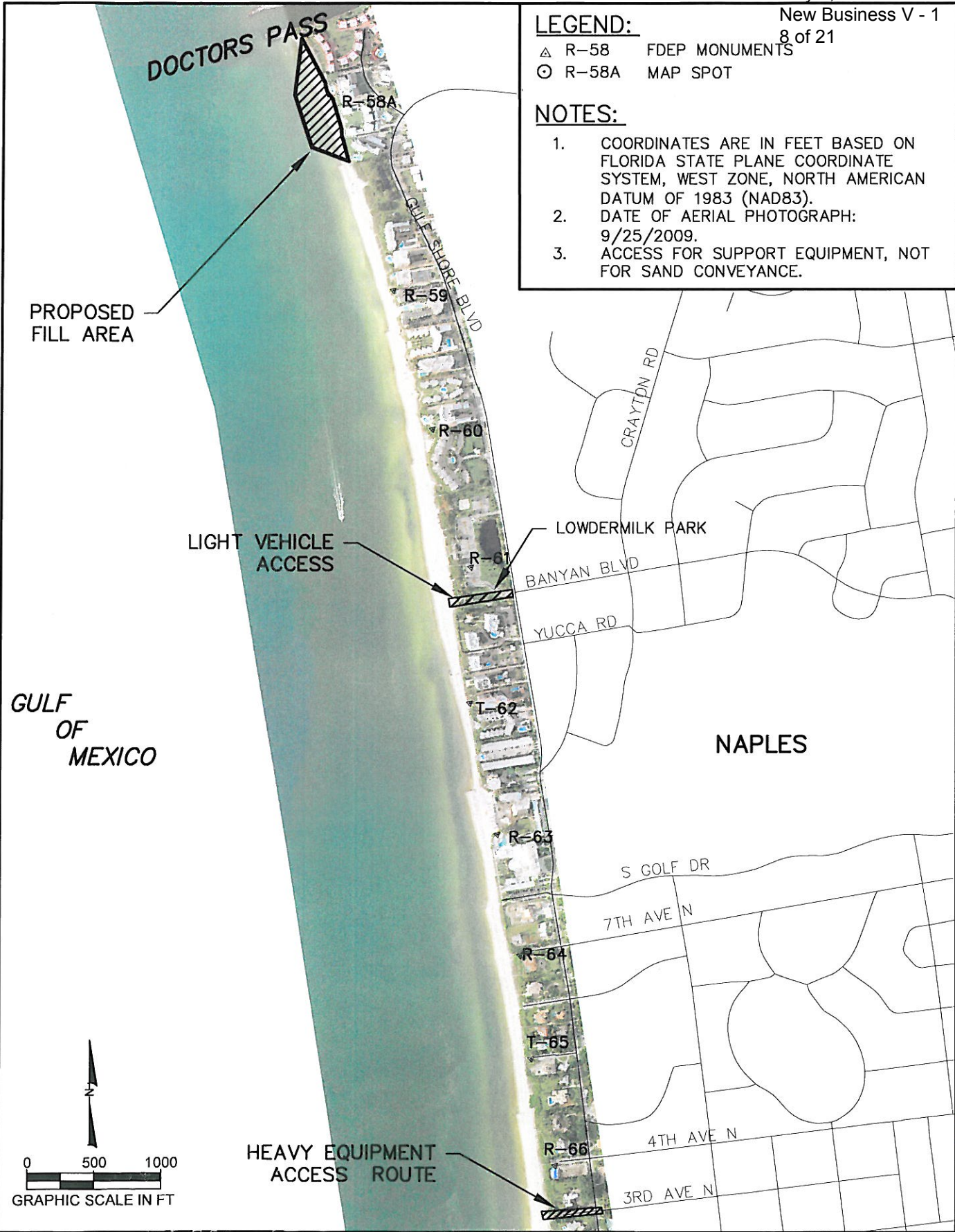
New Business V - 1
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LEGEND:

- △ R-58 FDEP MONUMENTS
- ⊙ R-58A MAP SPOT

NOTES:

1. COORDINATES ARE IN FEET BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM, WEST ZONE, NORTH AMERICAN DATUM OF 1983 (NAD83).
2. DATE OF AERIAL PHOTOGRAPH: 9/25/2009.
3. ACCESS FOR SUPPORT EQUIPMENT, NOT FOR SAND CONVEYANCE.



COLLIER COUNTY BERM RESTORATION
NAPLES SEGMENT
ACCESS ROUTE PLAN VIEW

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DATE: 4/27/10
 BY: JRC

COMM NO.: 8500.69
 SHEET: 7

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May 3, 2010

New Business V - 1
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LEGEND:

△ R-58 FDEP MONUMENTS

NOTES:

1. COORDINATES ARE IN FEET BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM, WEST ZONE, NORTH AMERICAN DATUM OF 1983 (NAD83).
2. DATE OF AERIAL PHOTOGRAPH: 9/25/2009.
3. ACCESS FOR SUPPORT EQUIPMENT, NOT FOR SAND CONVEYANCE.

SEAGATE PEDESTRIAN ACCESS

PROPOSED FILL AREA

GULF OF MEXICO

HEAVY EQUIPMENT ACCESS ROUTE

PARK SHORE

GULF SHORE BLVD

PARK SHORE DR

HORIZON WAY

NEAPOLITAN WAY

TURTLE HATCH DR

CRAYTON RD

BINNACLE DR

R-45

R-46

R-47

R-48

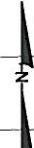
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R-51

R-52

R-53



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GRAPHIC SCALE IN FT

**COLLIER COUNTY BERM RESTORATION
PARK SHORE SEGMENT
ACCESS ROUTE PLAN VIEW**

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4-27-10

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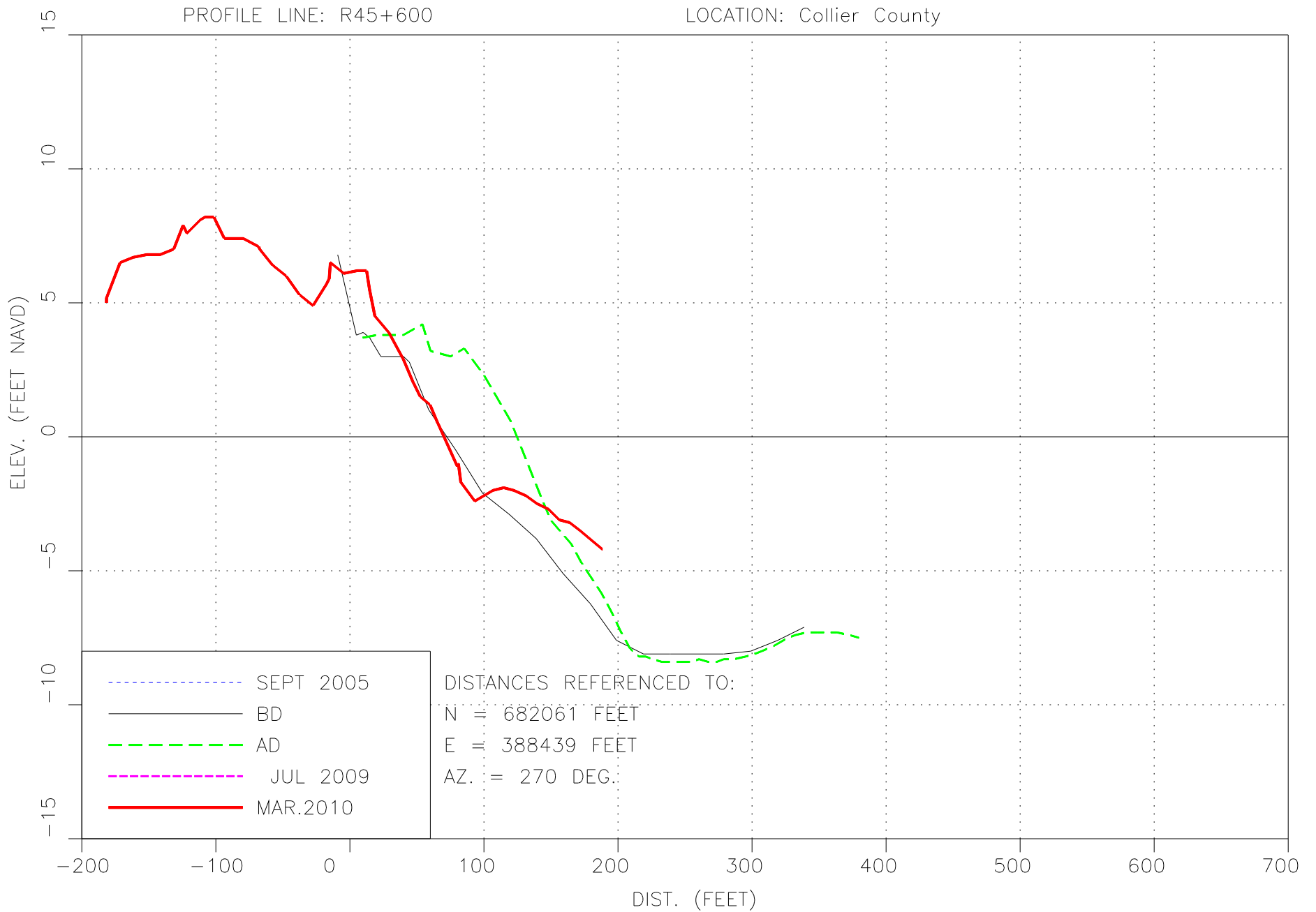
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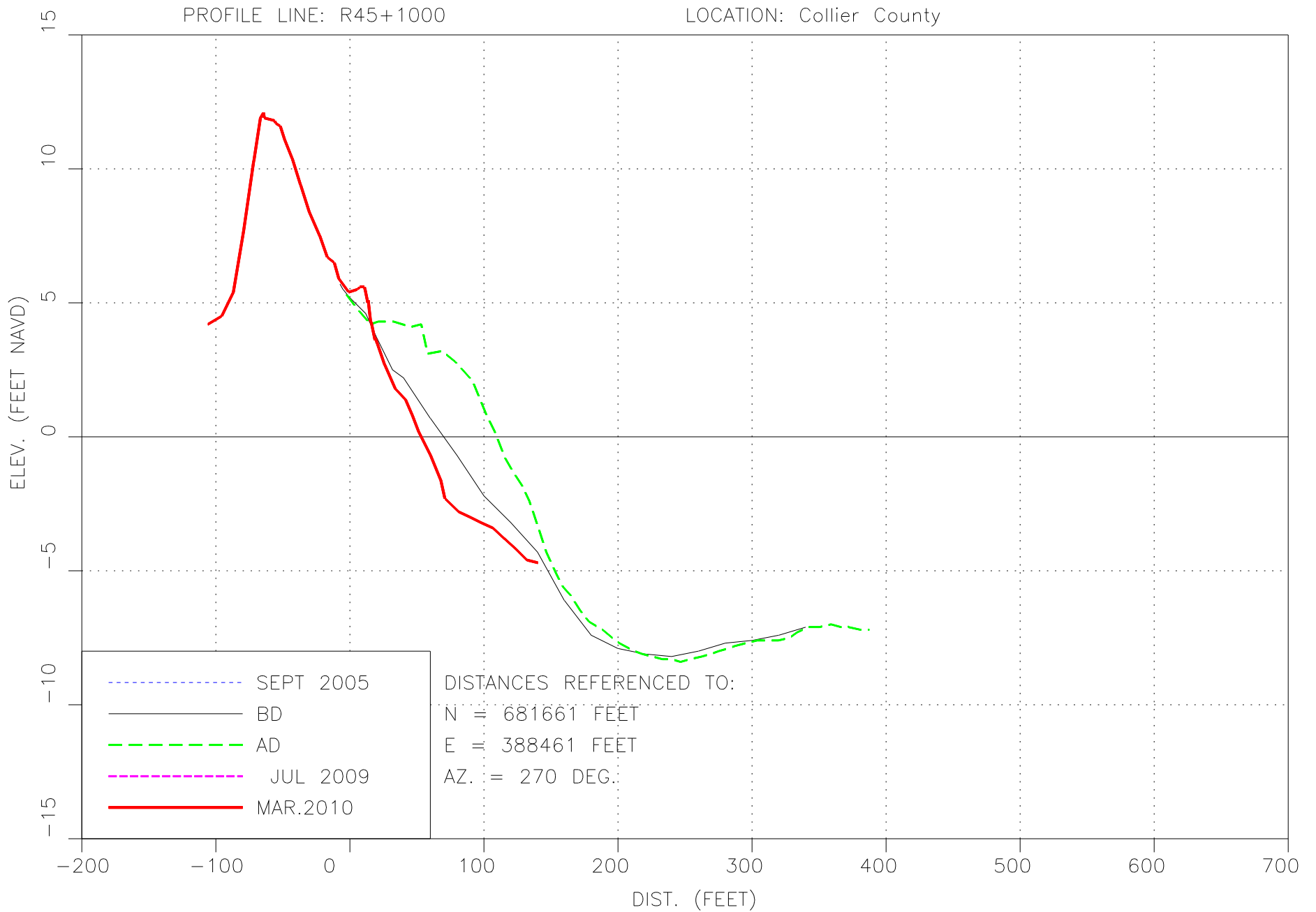
**Comparative Profiles at Proposed Conveyor Locations
2006-2010**

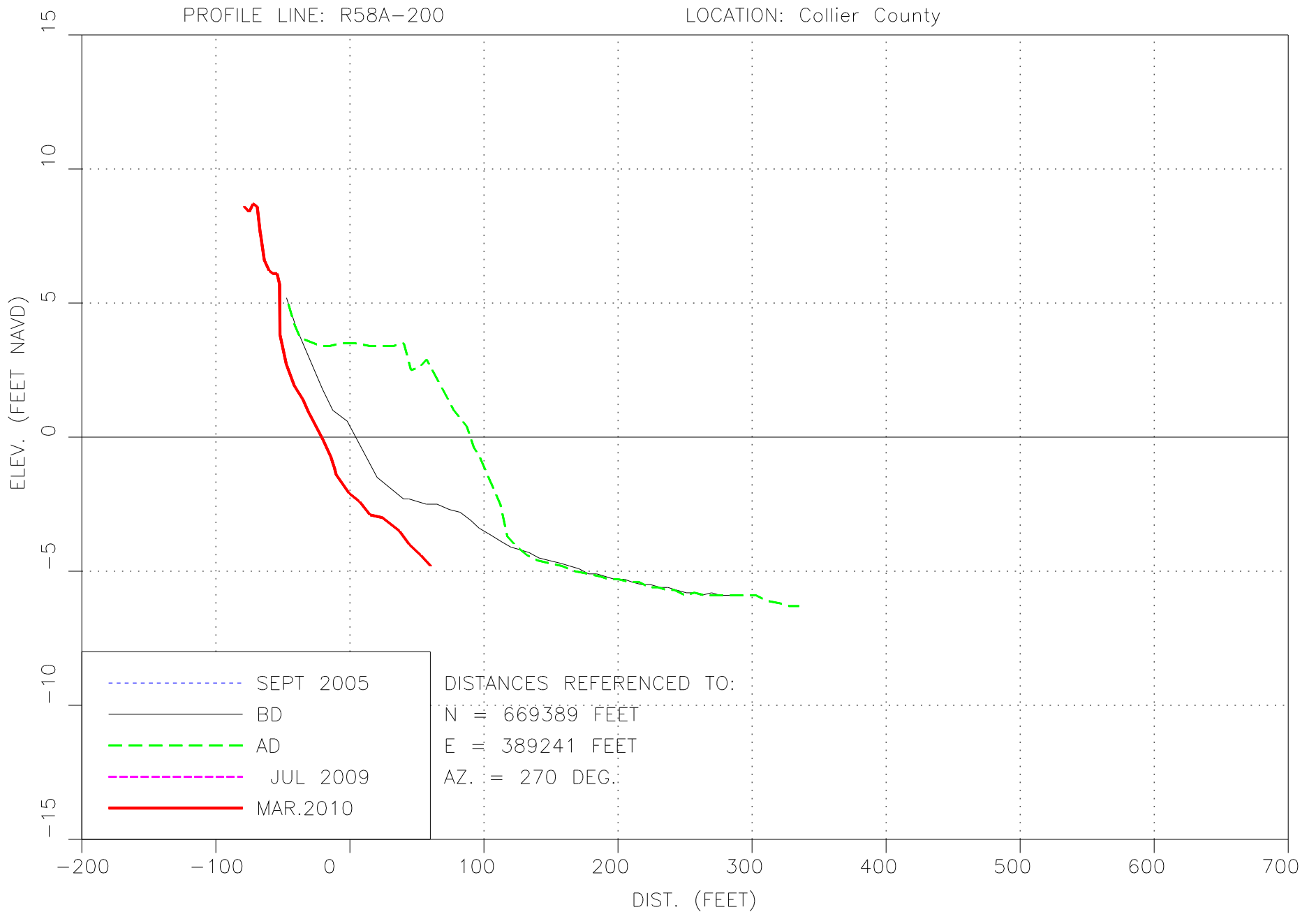
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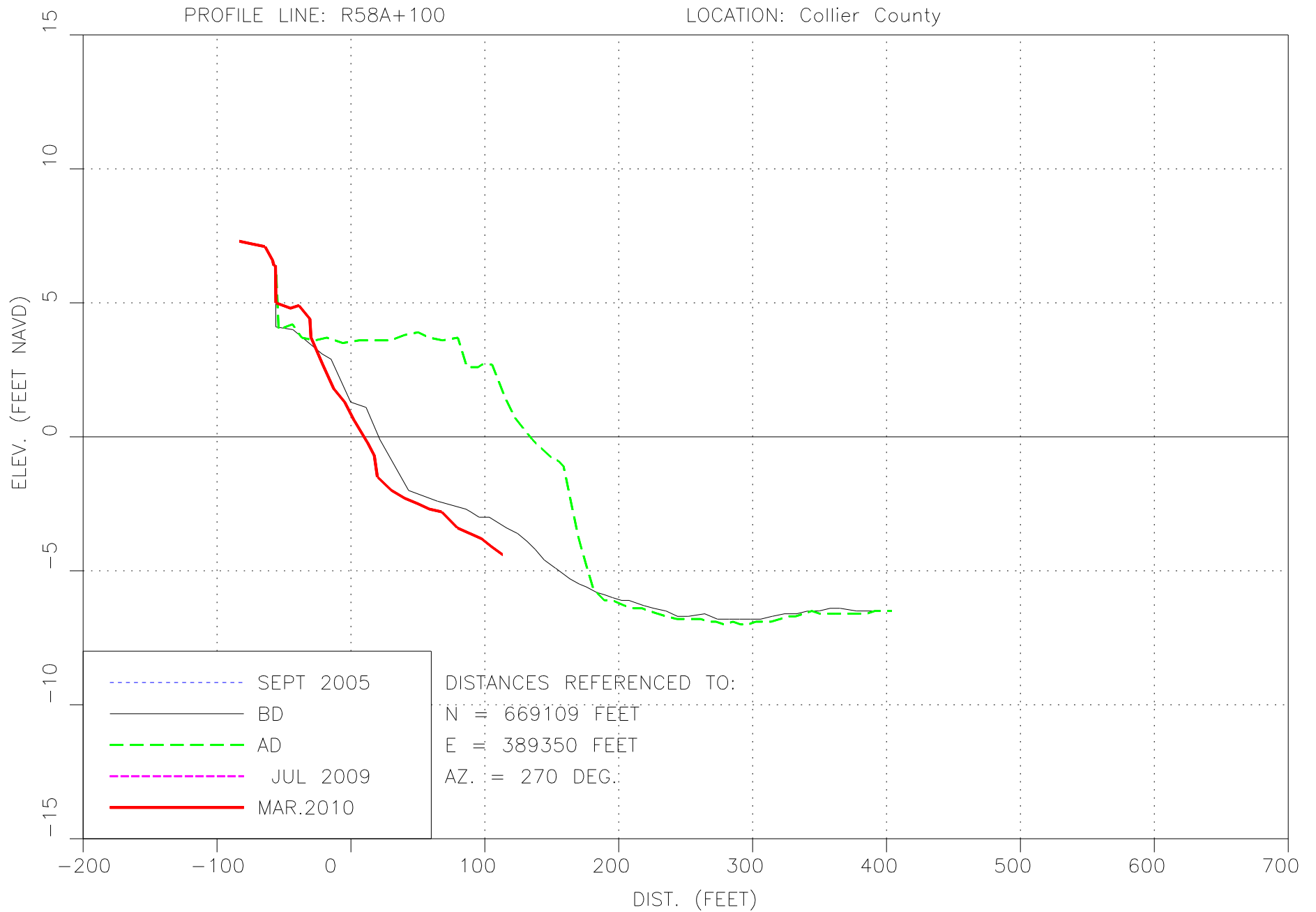
**Sand Conveyance Access Points are in the vicinity of R45+800 and R45+900 for
Park Shore and in the vicinity of R58A for Naples Beach.**

**The closest profiles to the conveyor access points are at R45+600, R45+1000,
R58A-200, and R58A+100.**











Photographs from Mike Field, local resident, from April 26, 2010 storm at Naples Beach hot spot.

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