

INTERNATIONAL DRIVE



A RIDE II
Program Project

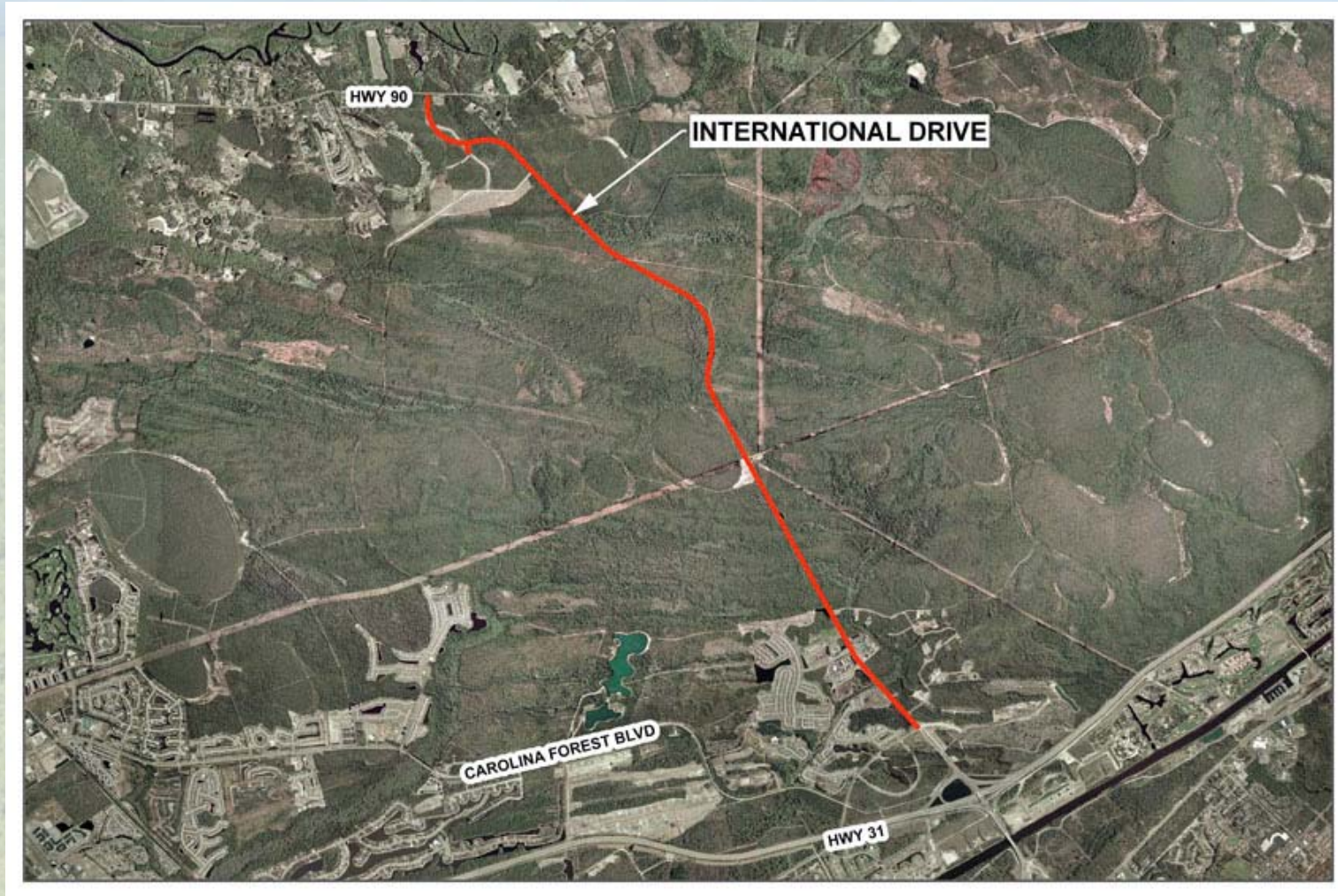


A Presentation to Horry County Council



May 18, 2010

Proposed Alignment

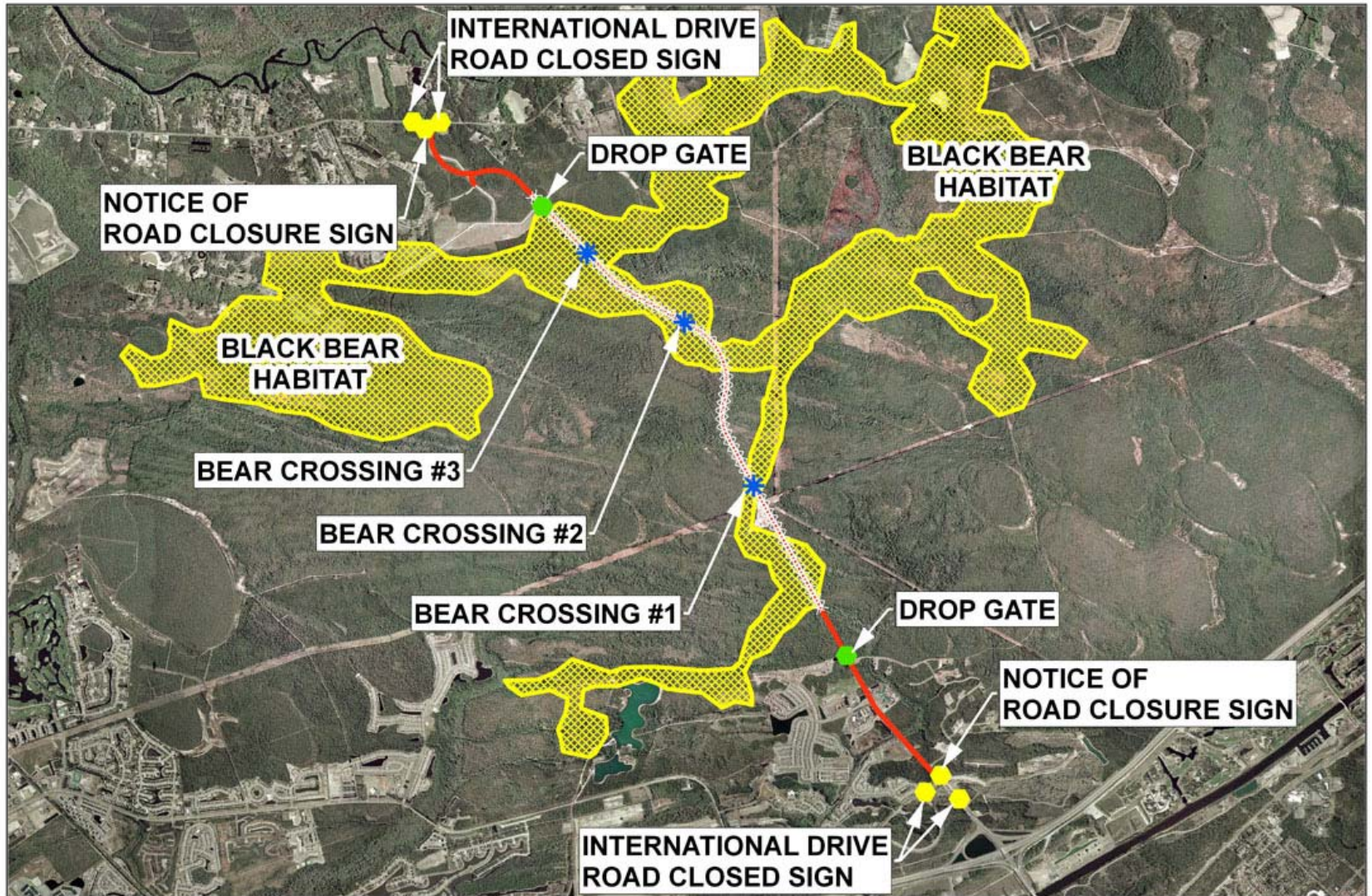


Length: $\pm 30,000\text{ft} = 5.6 \text{ miles} \pm$
Section: Two (2) lane with expansion to four (4) lane
R/W 125'

List of Issues with SCDNR

- Wetland Impacts
- Red-Cockaded Woodpecker Habitat
- Access Restrictions
- Road Closure for Controlled Burns
- Bear Crossings

Plan View Showing Key Features



SCDNR Issues

1) Right-of-way needs

- 👍 Current 25' easement 7± acres
 - 👍 Regulatory Permitting 9± acres
- Total: 16± acres**

2) Regulatory Permitting

SCDNR HURDLES

Wetland Impacts

Avoidance

Minimization

Mitigation

\$1 Million±

Red-Cockaded Woodpecker Habitat

Access Restrictions

Controlled Burn Roadway Closures

Bear Crossings

👍 Tunnels and Fill

(\$2.0 million)

👍 Fencing

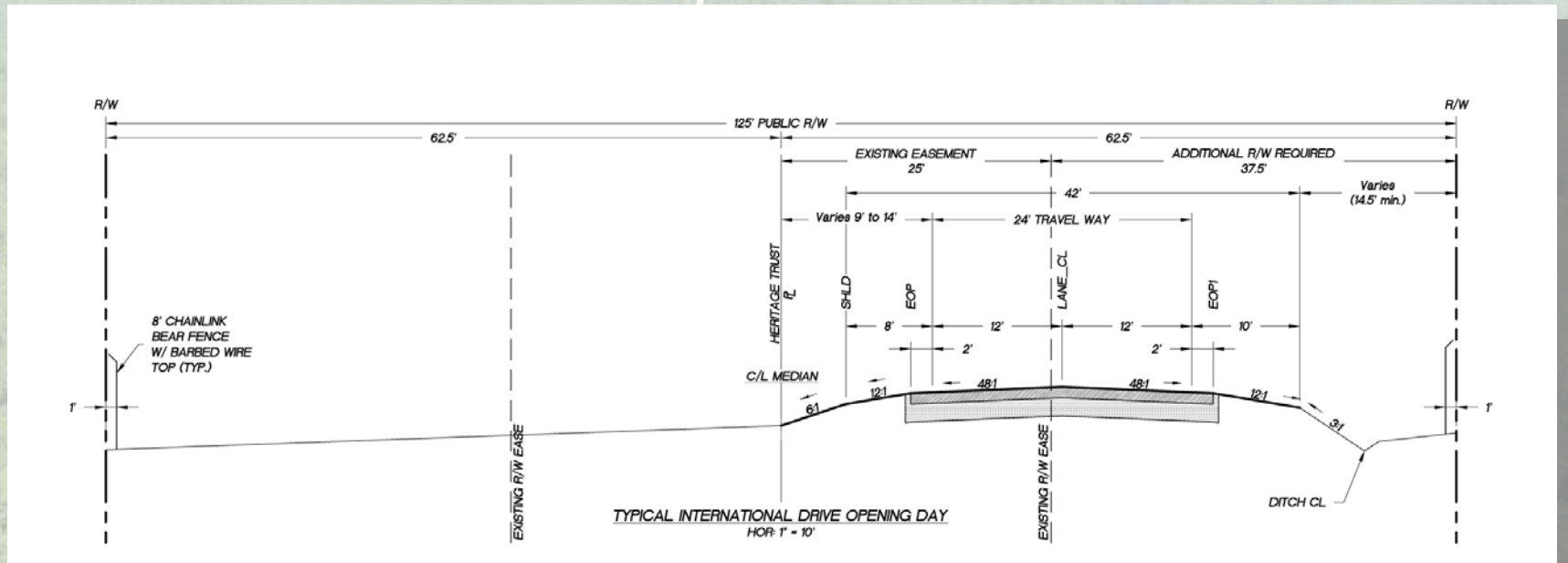
(\$0.6 million)

Total Additional Cost: \$3.6 million

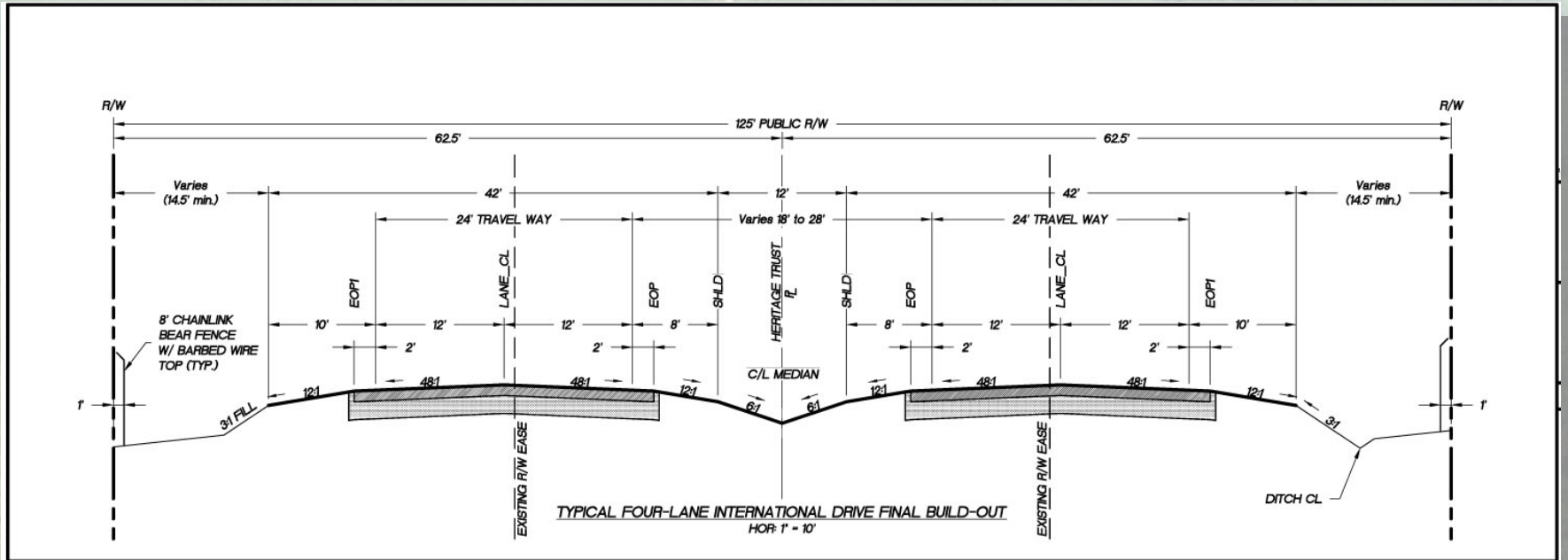
Thank You / Questions



Initial Construction Section Looking North



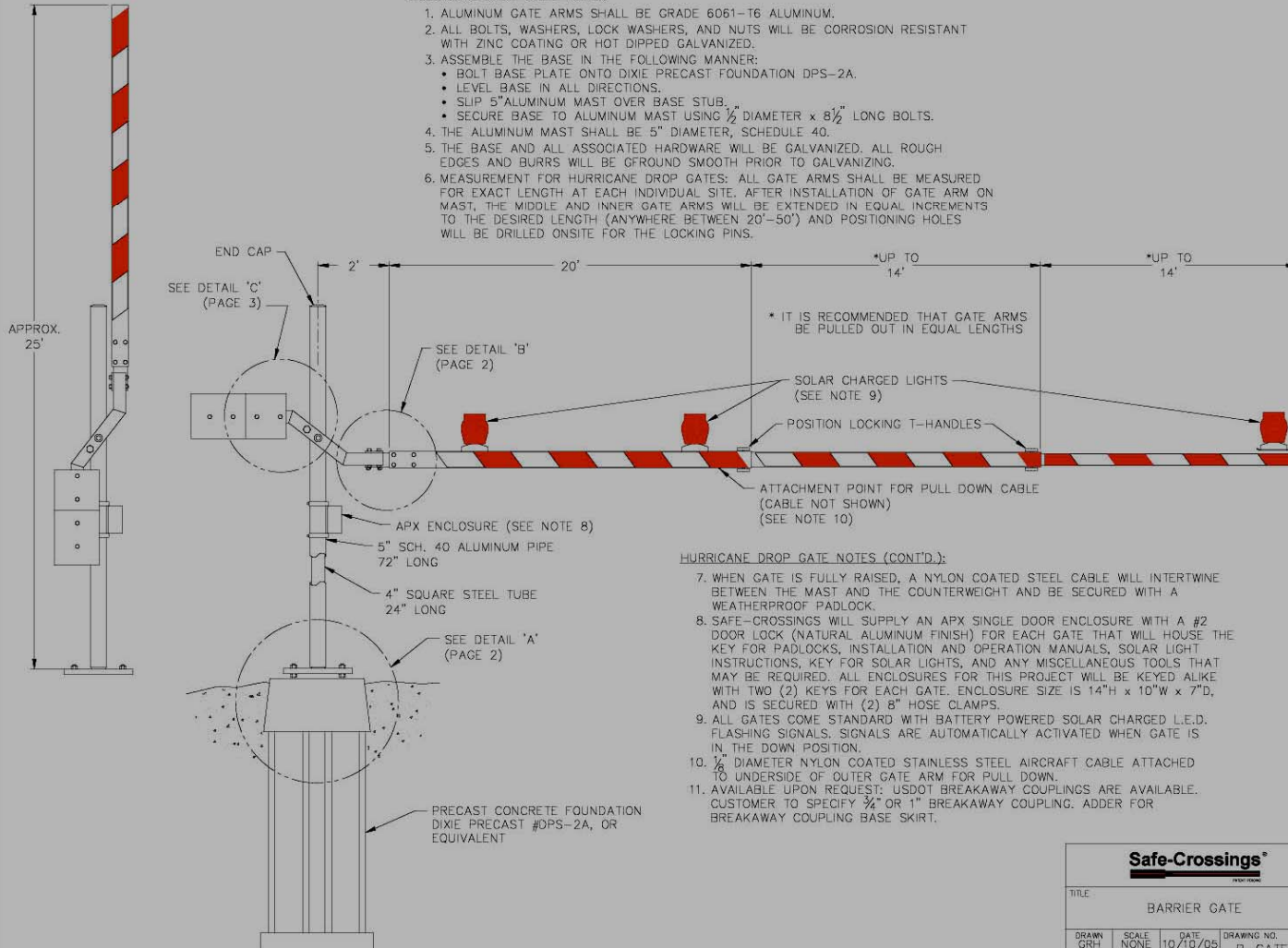
Ultimate Construction Section



Detail of Proposed Gates / Signage

HURRICANE DROP GATE NOTES:

1. ALUMINUM GATE ARMS SHALL BE GRADE 6061-T6 ALUMINUM.
2. ALL BOLTS, WASHERS, LOCK WASHERS, AND NUTS WILL BE CORROSION RESISTANT WITH ZINC COATING OR HOT DIPPED GALVANIZED.
3. ASSEMBLE THE BASE IN THE FOLLOWING MANNER:
 - BOLT BASE PLATE ONTO DIXIE PRECAST FOUNDATION DPS-2A.
 - LEVEL BASE IN ALL DIRECTIONS.
 - SLIP 5" ALUMINUM MAST OVER BASE STUB.
 - SECURE BASE TO ALUMINUM MAST USING $\frac{1}{2}$ " DIAMETER x $8\frac{1}{2}$ " LONG BOLTS.
4. THE ALUMINUM MAST SHALL BE 5" DIAMETER, SCHEDULE 40.
5. THE BASE AND ALL ASSOCIATED HARDWARE WILL BE GALVANIZED. ALL ROUGH EDGES AND BURRS WILL BE OGROUND SMOOTH PRIOR TO GALVANIZING.
6. MEASUREMENT FOR HURRICANE DROP GATES: ALL GATE ARMS SHALL BE MEASURED FOR EXACT LENGTH AT EACH INDIVIDUAL SITE. AFTER INSTALLATION OF GATE ARM ON MAST, THE MIDDLE AND INNER GATE ARMS WILL BE EXTENDED IN EQUAL INCREMENTS TO THE DESIRED LENGTH (ANYWHERE BETWEEN 20'-50') AND POSITIONING HOLES WILL BE DRILLED ONSITE FOR THE LOCKING PINS.

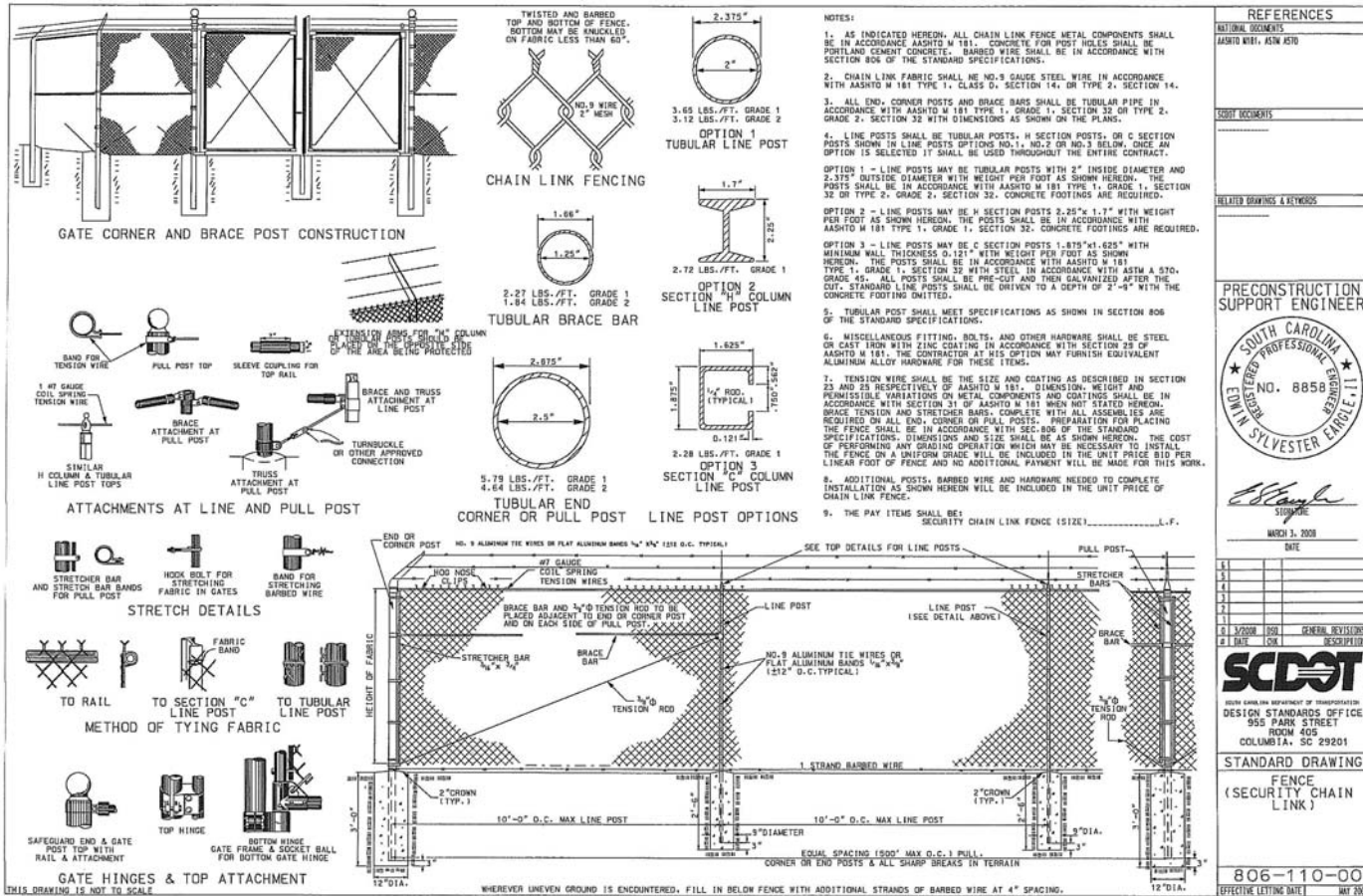


HURRICANE DROP GATE NOTES (CONT'D.):

7. WHEN GATE IS FULLY RAISED, A NYLON COATED STEEL CABLE WILL INTERTWINE BETWEEN THE MAST AND THE COUNTERWEIGHT AND BE SECURED WITH A WEATHERPROOF PADLOCK.
8. SAFE-CROSSINGS WILL SUPPLY AN APX SINGLE DOOR ENCLOSURE WITH A #2 DOOR LOCK (NATURAL ALUMINUM FINISH) FOR EACH GATE THAT WILL HOUSE THE KEY FOR PADLOCKS, INSTALLATION AND OPERATION MANUALS, SOLAR LIGHT INSTRUCTIONS, KEY FOR SOLAR LIGHTS, AND ANY MISCELLANEOUS TOOLS THAT MAY BE REQUIRED. ALL ENCLOSURES FOR THIS PROJECT WILL BE KEYED ALIKE WITH TWO (2) KEYS FOR EACH GATE. ENCLOSURE SIZE IS 14"H x 10"W x 7"D, AND IS SECURED WITH (2) 8" HOSE CLAMPS.
9. ALL GATES COME STANDARD WITH BATTERY POWERED SOLAR CHARGED L.E.D. FLASHING SIGNALS. SIGNALS ARE AUTOMATICALLY ACTIVATED WHEN GATE IS IN THE DOWN POSITION.
10. $\frac{1}{2}$ " DIAMETER NYLON COATED STAINLESS STEEL AIRCRAFT CABLE ATTACHED TO UNDERSIDE OF OUTER GATE ARM FOR PULL DOWN.
11. AVAILABLE UPON REQUEST: USDOT BREAKAWAY COUPLINGS ARE AVAILABLE. CUSTOMER TO SPECIFY $\frac{3}{4}$ " OR 1" BREAKAWAY COUPLING. ADDER FOR BREAKAWAY COUPLING BASE SKIRT.

Safe-Crossings®			
TITLE			
BARRIER GATE			
DRAWN	SCALE	DATE	DRAWING NO.
GRH	NONE	10/10/05	B-GATE
APPR.	REFERENCE		PAGE 1

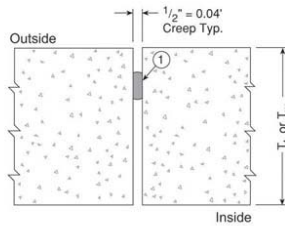
Bear Fencing Detail



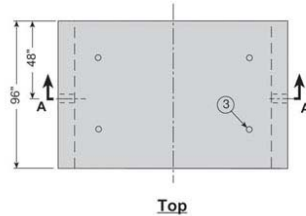
Section / Detail of Proposed Bear Crossing Structure

Precast Box Culverts & Crown-Span

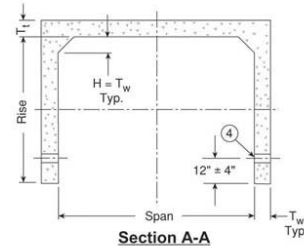
Box Geometry	Span	10	12	14	16	18	20	22	24	26	28	FT
	T _t	12	12	12	12	12	12	12	12	12	12	12
T _w	12	12	12	12	12	12	12	12	12	12	12	Inches
Weight for Each Rise	x 4'	1.63	1.78	1.94	2.09	2.25	2.40	2.56	2.71	2.87	3.02	Tons per Unit Foot
	x 5'	1.78	1.94	2.09	2.25	2.40	2.56	2.71	2.87	3.02	3.18	
	x 6'	1.94	2.09	2.25	2.40	2.56	2.71	2.87	3.02	3.18	3.33	
	x 7'	2.09	2.25	2.40	2.56	2.71	2.87	3.02	3.18	3.33	3.49	
	x 8'	2.25	2.40	2.56	2.71	2.87	3.02	3.18	3.33	3.49	3.64	
	x 9'	2.40	2.56	2.71	2.87	3.02	3.18	3.33	3.49	3.64	3.80	
	x 10'	2.56	2.71	2.87	3.02	3.18	3.33	3.49	3.64	3.80	3.95	



Joint Detail
Not to scale



Top



Section A-A

Notes:

- (1) Joint to be sealed with state approved sealant in accordance with manufacturer's instructions.
- (2) Other span and wall thicknesses are available
- (3) Liftholes: 2 1/2" ϕ ±.
- (4) Optional Pull/Weep Holes: 2 1/2" ϕ ±. To be filled with grout or filler material in field by others.
- (5) For larger spans, only shorter lengths may be available due to production and handling constraints.

-No Scale-
All dimensions subject to allowable specification tolerances.

TITLE	STATE	SECTION/PAGE	DATE	Hanson
Dimensions, Weights & Details - Crown-Span	VA	5,3	03-15-06	Hanson

