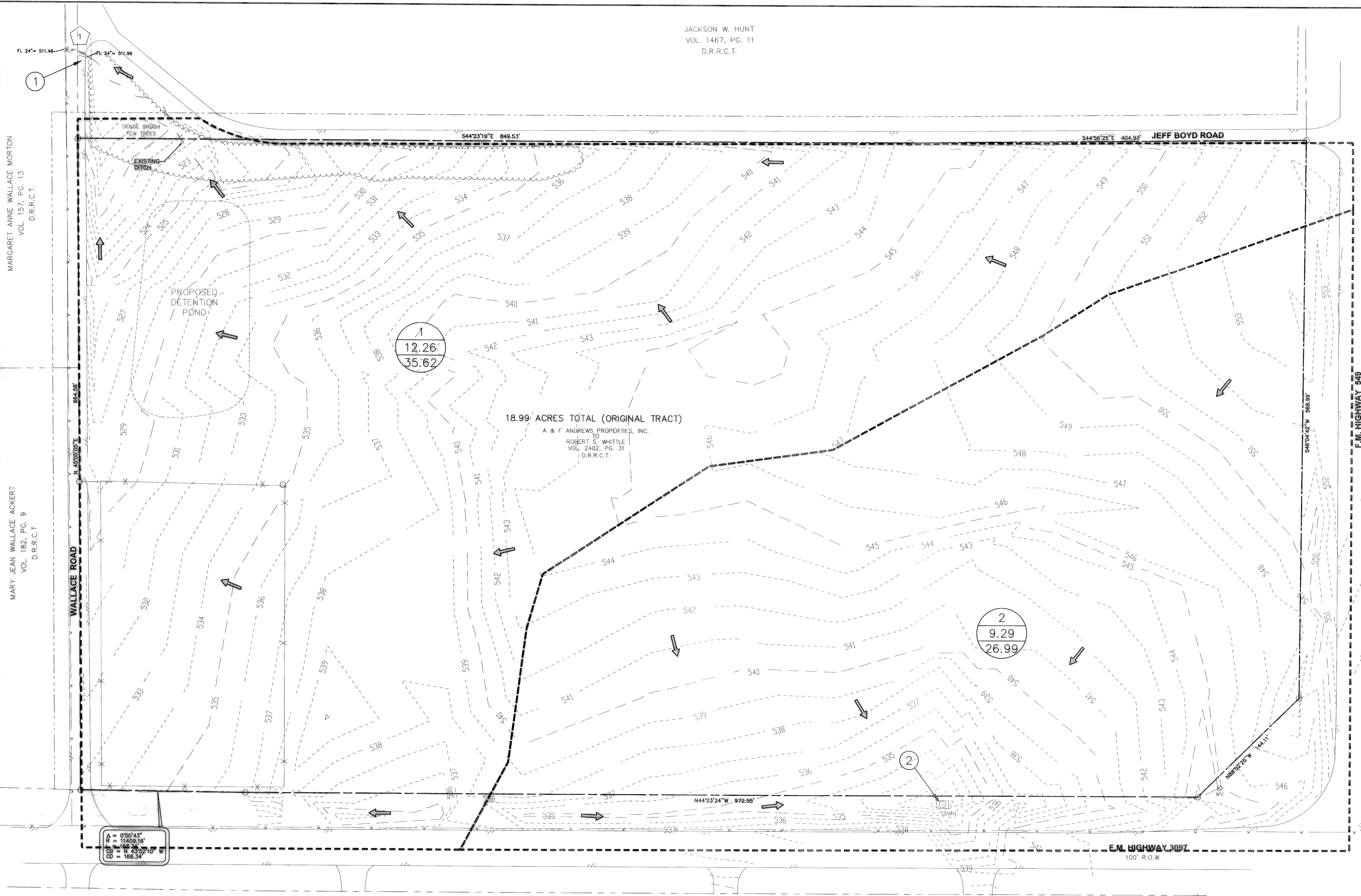


JACKSON W. HUNT
VOL. 1467, PG. 11
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MARGARET ANNE WALLACE MORTON
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D.R.R.C.T.

MARY JEAN WALLACE ACKERT
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DRAINAGE AREA CALCULATIONS						
DRAINAGE AREA NO.	AREA (AC)	C (coeff)	tc (min)	I ₁₀₀ (in/hr)	Q ₁₀₀ (CFS)	COMMENTS
1	12.26	0.35	20	8.30	35.62	TO EX DITCH AND CULVERT
2	9.29	0.35	20	8.30	26.99	TO EX STORM MANHOLE

DESIGN POINT

EXISTING CONDITIONS:
24" CMP CULVERT
LENGTH = 25.32 FT
SLOPE = 1.90%
n = 0.026

PROPOSED CULVERT:
30" ROP CULVERT
LENGTH = 25.32 FT
SLOPE = 1.90%
n = 0.013

DA=12.26 ACRES
Q₁₀₀ = 35.62 CFS
*Q_{cap} = 15.59 CFS

DA=12.26 ACRES
Q₁₀₀ = 35.62 CFS
Q_{cap} = 56.54 CFS

*BASED ON THIS ANALYSIS,
THE CULVERT DOES NOT HAVE
ADEQUATE CAPACITY AND
REQUIRES REPLACEMENT.

RECORD DRAWING
THIS RECORD DRAWING HAS BEEN RECHECKED TO THE BEST OF THE DESIGN ENGINEER'S KNOWLEDGE, THE APPROXIMATE LOCATION OF THE PROPERTY BOUNDARIES AND DRAINAGE INFORMATION HAS BEEN PROVIDED BY THE CONTRACTORS.

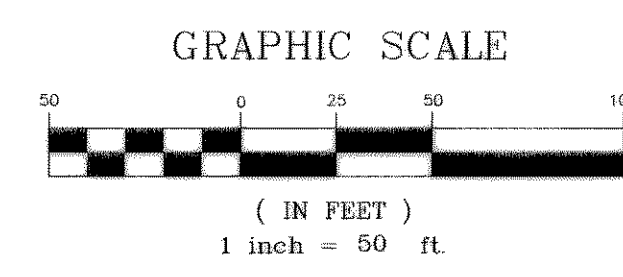
Kimley-Horn and Associates, Inc.
12700 Park Central Drive, Suite 1800
Dallas, Texas 75221
Tel. No. (972) 702-1300
Fax No. (972) 252-5820

Revisions:
No. Date

App. _____

ALLIANCE
ROCKWALL COUNTY
CITY OF ROCKWALL, TEXAS

EXISTING CONDITION
DRAINAGE AREA MAP



LEGEND

- 1 - DRAINAGE AREA NUMBER
- 12.26 - ACRES
- 35.62 - Q₁₀₀
- - - PROPERTY BOUNDARY
- - - DRAINAGE AREA BOUNDARY
- - - DRAINAGE SWALE
- FLOW ARROW

BENCHMARK #1 (BM1)
TOP OF FLANGE NUT ON CONCRETE BASE OF
LIGHT POLE OF THE FOOTBALL FIELD AND TRACK
AT THE NORTHWEST END.
EL. = 529.40

Scale: 1" = 100' 0"
Designed by: KHA
Drawn by: SAW
Checked by: NES
Date: SEPTEMBER 2005
Project No. 06-4015000