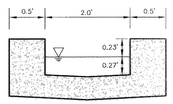
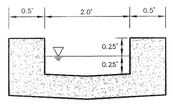
## 1 FLUME AT PRIVATE STREET




SLOPE = 9.13%
n = 0.012
Q100 = 7.32 CFS
V100 = 13.4 FPS
d100 = 0.27 FT

## 2 FLUME AT JEFF BOYD




SLOPE = 4.6%
n = 0.012
Q100 = 4.32 CFS
V100 = 8.95 FPS
d100 = 0.25 FT

GRAPHIC SCALE
30 0 15 30 60
( IN FEET )
1 inch = 30 ft.

RECORD DRAWING
THIS RECORD DRAWING HEREIN REFLECTS TO THE BEST OF THE DESIGN ENGINEER'S KNOWLEDGE AND BELIEF THE LOCATION OF THE CONSTRUCTED WORK, USING INFORMATION AS PROVIDED BY THE CONTRACTORS.

| No. | Date | Revisions | App. |
|---|---|---|---|
| | | | |


Kimley-Horn and Associates, Inc.
Tel. No. (972) 770-1300
Fax No. (972) 239-3820
12700 Park Central Drive, Suite 1800
Dallas, Texas 75251


STATE OF TEXAS
NICHOLAS E. SOUKOWSKI
106921
LICENSED
PROFESSIONAL ENGINEER

# ALLIANCE
## ROCKWALL COUNTY
## CITY OF ROCKWALL, TEXAS

## OFF-SITE GRADING AND DETENTION POND PLAN

INSTALL:
2' CONCRETE FLUME PER "MISC. CONSTRUCTION DETAILS" SHEET

TRANSITION LANE TO MATCH EX. ASPHALT PAVEMENT

ULTIMATE RIGHT-OF-WAY

5:1 SLOPE (TYP.)

TEMPORARY DRAINAGE DITCH TO EXISTING CULVERT.

INSTALL:
16 C.Y. GROUTED ROCK RIP-RAP TXDOT 432, TYPE R WITH GEOTEXTILE MAT BELOW.

ON-SITE IMPROVEMENTS REFERENCE "STORM DRAINAGE PLAN" SHEET C-14

50' DRAINAGE EASEMENT BY SEPARATE INSTRUMENT

15' DRAINAGE EASEMENT BY PLAT

TEMPORARY DRAINAGE DITCH TO DETENTION POND.

EXIST CONDITIONS $Q_{100}$ = 14.74 cfs

INSTALL:
14 C.Y. GROUTED ROCK RIP-RAP TXDOT 432, TYPE R WITH GEOTEXTILE MAT BELOW.

INSTALL:
2' CONCRETE FLUME PER "MISC. CONSTRUCTION DETAILS" SHEET

INSTALL:
29 C.Y. GROUTED ROCK RIP-RAP TXDOT 432, TYPE R WITH GEOTEXTILE MAT BELOW.

FUTURE DETENTION POND LIMITS

PROPOSED DETENTION POND EASEMENT

INSTALL:
EROSION CONTROL MAT NORTH AMERICAN GREEN S-150 OR APPROVED EQUIVALENT

Max. Volume: 45,632 ft3
Area: 0.25 Ac.
100 YR WSEL: 527.16 ft
Bottom Elevation: 521.50 ft

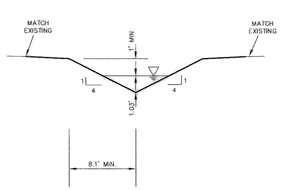
DENSE BRUSH FEW TREES

EXISTING DITCH

MATCH EX. DITCH FLOWLINE ±528.87

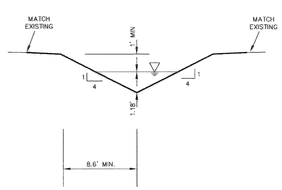
FOR CONTINUATION, SEE "GRADING PLAN - 1"

### SECTION A-A



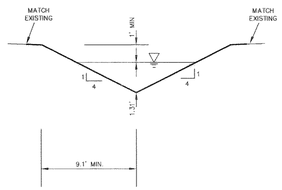

PR. SLOPE = 4.88%
n = 0.035
$Q_{AA-100}$ = 25.7 CFS
$V_{AA-100}$ = 5.94 FPS
$d_{AA-100}$ = 1.03 FT

### SECTION B-B



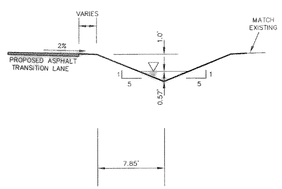

PR. SLOPE = 1.75%
n = 0.030
$Q_{BB-100}$ = 25.7 CFS
$V_{BB-100}$ = 4.55 FPS
$d_{BB-100}$ = 1.18 FT

### SECTION C-C



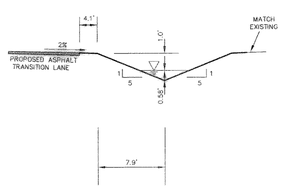

PR. SLOPE = 1.00%
n = 0.030
$Q_{CC-100}$ = 25.7 CFS
$V_{CC-100}$ = 3.68 FPS
$d_{CC-100}$ = 1.31 FT

### SECTION D-D



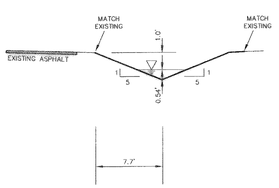

PR. SLOPE = 2.3%
n = 0.030
$Q_{DD-100}$ = 5.11 CFS
$V_{DD-100}$ = 3.23 FPS
$d_{DD-100}$ = 0.57 FT

### SECTION E-E




PR. SLOPE = 2.1%
n = 0.030
$Q_{EE-100}$ = 5.11 CFS
$V_{EE-100}$ = 3.12 FPS
$d_{EE-100}$ = 0.58 FT

### SECTION F-F




PR. SLOPE = 3.2%
n = 0.030
$Q_{FF-100}$ = 5.11 CFS
$V_{FF-100}$ = 3.66 FPS
$d_{FF-100}$ = 0.54 FT

NOTE:
ALL SPOT ELEVATIONS ARE TOP OF PAVEMENT OR FINISHED GRADE UNLESS LABELED OTHERWISE.

TC = TOP OF CURB
EX = EXISTING GRADE
TW = TOP OF WALL (EXPOSED FACE)
BW = BOTTOM OF WALL (EXPOSED FACE)

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" = 30' |
| Designed by: | KHA |
| Drawn by: | MSM |
| Checked by: | NES |
| Date: | SEPTEMBER 2005 |
| Project No. | 064015000 |

SHEET
C-8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