PERMIT APPLICATION: NRS 07-129

APPLICANT: Colin E. Barker
The Gipson Company
15 Piedmont Center, Suite L-150
Atlanta, GA 30305

LOCATION: 500 feet northwest of the intersection of Interstate 40 and Mount Juliet Road (SR 171) in Mt. Juliet, Wilson County**.**

WATERSHED DESCRIPTION: Unnamed tributaries to Stoners Creek; Stones River Watershed (HUC 05130203). Subject property and surrounding property consists of hay fields and scattered woodlots of second growth timber. Approximately 6,739 linear feet of stream and 1.51 acres of jurisdictional wetland occur on the proposed site (11 wetlands, 11 streams and 3 springs). Two main unnamed tributaries to Stoners Creek drain the site. Stream #2 drains the eastern half and stream #7 drains the western half. The wetlands consist of both forested and herbaceous. None of the wetlands are considered high quality.

PROJECT DESCRIPTION: The applicant proposes to construct a commercial development that will require the placement of fill in 1.23 acres of jurisdictional wetland and 1,589 linear feet of stream (Table #1 and Table #2).

Compensatory wetland mitigation will occur with the debit of 2.46 credits from the Harpeth Wetland Mitigation Bank.

Compensatory stream mitigation shall consist of the onsite enhancement of 1,238 linear feet of stream #7. The applicant proposes to follow Enhancement II Stream Mitigation under the Tn. Stream Mitigation Guidelines (Guidelines) for 413 feet of credit. The applicant has determined that Stream #7 is experiencing head cutting, numerous areas of bank erosion, and is highly incised. In-stream habitat, bank stabilization and riparian plantings are proposed. A 50-foot buffer shall be established along both banks.

Additional work is proposed in stream #7 as well as stream 8, 9, 10 and 11 that the applicant has determined would qualify as Enhancement I under the Guidelines.

A spring and subsequent stream flows under Pleasant Grove Road along the southern property line.

All impacted intermittent streams would be filled with stone and capped with a geotextile cloth. By filling with stone and covering with an impervious cover groundwater should continue to supply the lower stream reaches. All the springs on the property will be avoided.

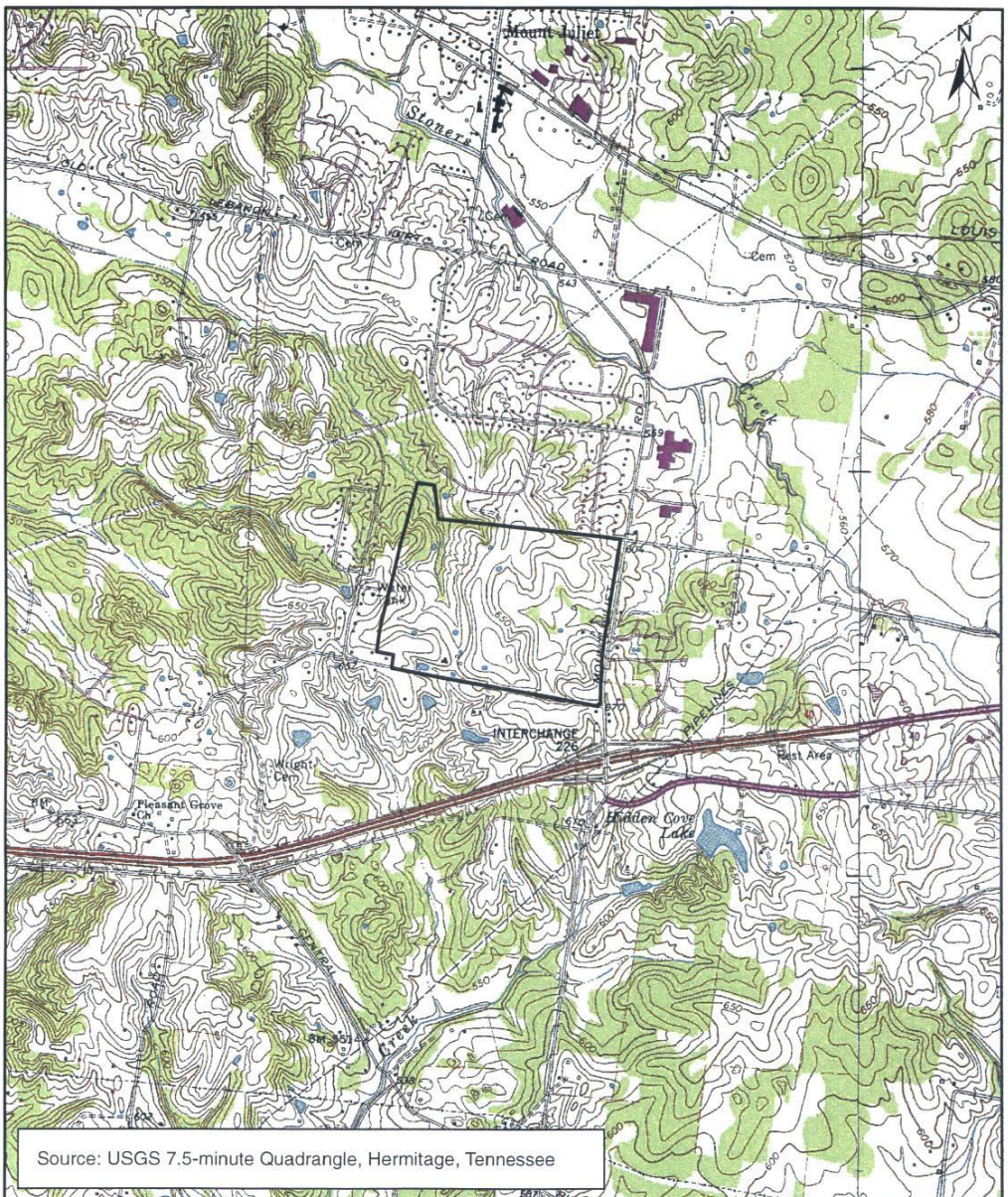
The applicant shall monitor and guarantee success of all onsite compensatory mitigation.

The division's Land Use Restrictions shall be placed on the mitigation areas.

USGS TOPOGRAPHIC QUADRANGLE: **HERMITAGE 311 NE**
36.17718 N; 86.51631 W

PERMIT COORDINATOR: Mike Lee

More details on the proposal can be viewed on the internet at http://www.state.tn.us/environment/wpc/ppo/arap.



Source: USGS 7.5-minute Quadrangle, Hermitage, Tennessee

Figure 1
LOCATION MAP
Scale: 1:24,000
Date: 3/14/2007

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
425 Duke Drive, Suite 270, Franklin, TN 37067
Columbus, OH * Cincinnati, OH * Indianapolis, IN * Chicago, IL
St. Louis, MO * Export, PA * Detroit, MI * Pittsburgh, PA

The Paddocks
Mount Juliet, Tennessee
Project No. 070-324

ARAP #07-129
GIPSON CO.
PAGE 4.

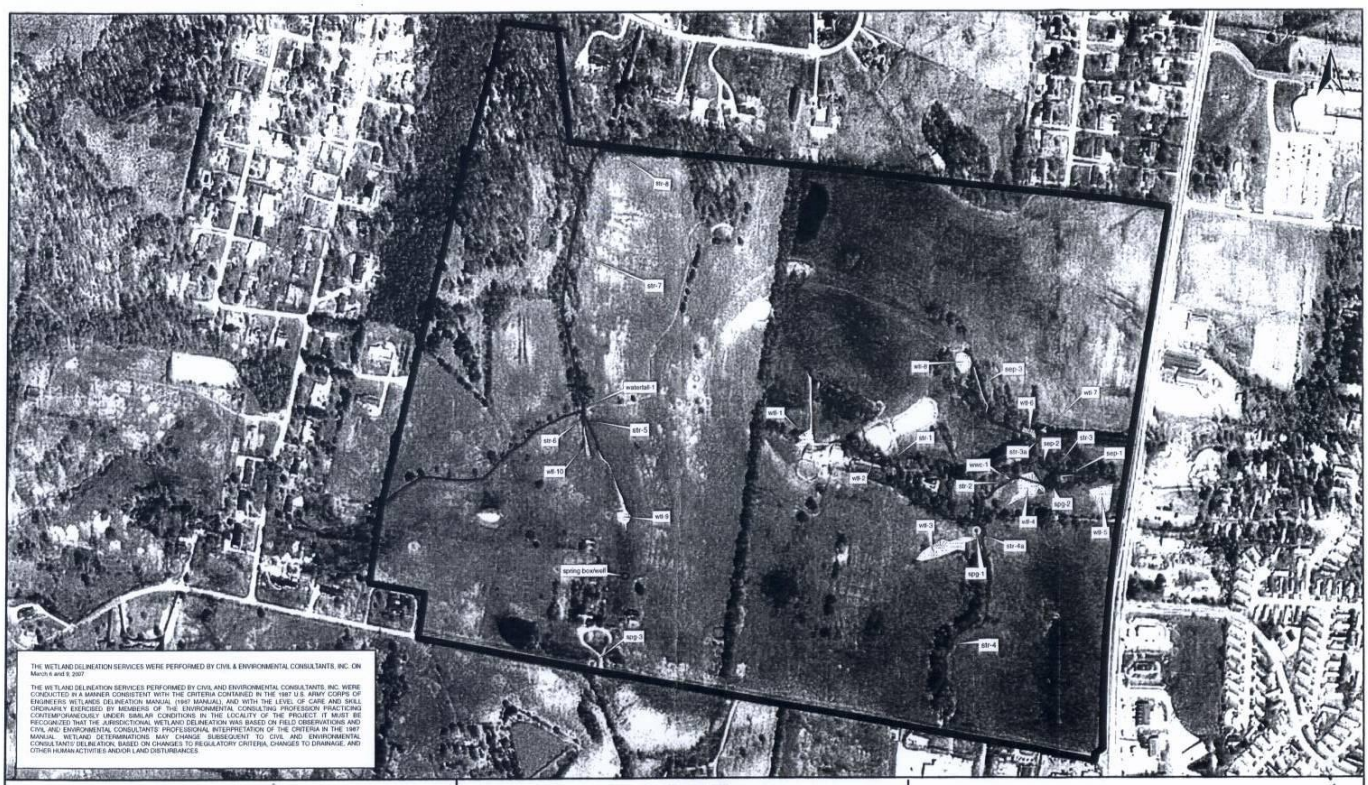


Figure 4
WETLAND AND STREAM DELINEATION MAP

Scale: 1 inch equals 400 feet
Date: 3/14/2007

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
425 Duke Drive, Suite 270, Franklin, TN 37067
Columbus, OH * Cincinnati, OH * Indianapolis, IN * Chicago, IL
St. Louis, MO * Export, PA * Detroit, MI * Pittsburgh, PA

The Paddocks
Mount Juliet, TN
Project No. 070-324

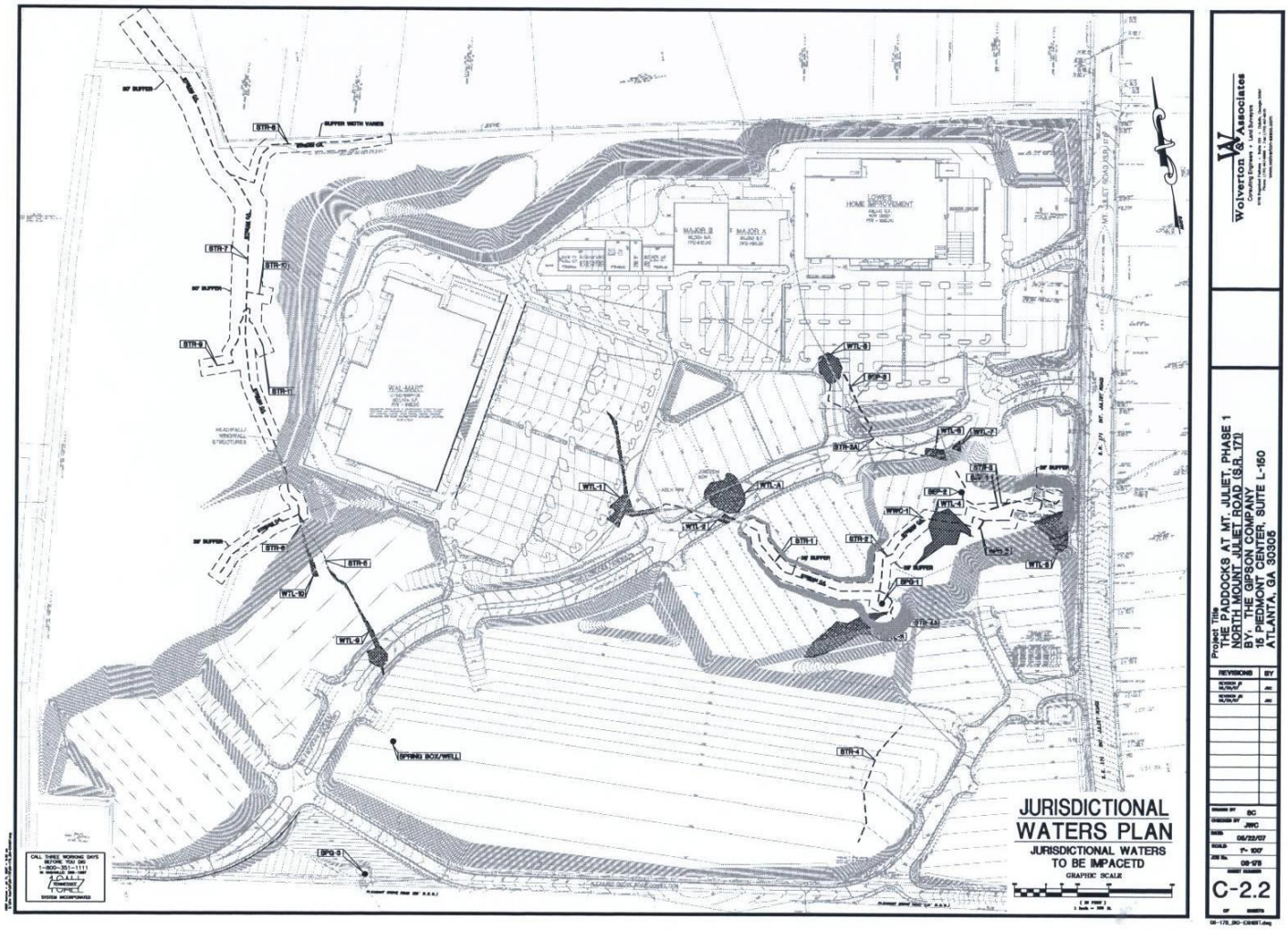

JURISDICTIONAL
WATERS PLAN
JURISDICTIONAL WATERS
TO BE IMPACETD
GRAPHIC SCALE
Wolverton & Associates
Project Title
THE PADDOCKS AT MT. JULIET, PHASE 1
NORTH MOUNT JULIET ROAD (S.R. 171)
BY THE GIPSON COMPANY
115 PIEDMONT CENTER, SUITE L-160
ATLANTA, GA 30305
REVISIONS
BY
DRAWN BY
SC
CHECKED BY
JWC
DATE
08/22/07
SCALE
1"= 100'
JOB NO.
06-178
SHEET NUMBER
C-2.2
OF
SHEETS

TABLE 2 (REVISED)
WETLAND CHARACTERISTICS
THE PADDOCKS OF MT. JULIET
WILSON COUNTY, TENNESSEE

Wetland ID	Area	Classification	Wetland Type
1	0.17 acres	Contiguous	Palustrine Emergent Persistent Temporarily Flooded (PEM1A)
2	0.02 acres	Contiguous	Palustrine Emergent Persistent Seasonally Flooded (PEM1C)
3	0.30 acres	Contiguous	Palustrine Emergent Persistent Seasonally Flooded (PEM1C)
4	0.26 acres	Contiguous	Palustrine Emergent Persistent Seasonally Flooded diked (PEM1Ch)
5	0.19 acres	Contiguous	Palustrine Emergent Persistent Seasonally Flooded diked (PEM1Ch)
6	0.04 acres	Contiguous	Palustrine Forested Broad-Leaved deciduous Seasonally Flooded (PFO1C)
7	0.01 acres	Isolated	Palustrine Emergent Persistent Temporarily Flooded (PEM1A)
8	0.12 acres	Contiguous	Palustrine Open Water Permanently Flooded diked/impounded (POWHh)
9	0.12 acres	Contiguous	Palustrine Open Water Permanently Flooded diked/impounded (POWHh)
10	0.03 acres	Contiguous	Palustrine Emergent Persistent Temporarily Flooded (PEM1A)
A	0.25 acres	Isolated	Palustrine Open Water Permanently Flooded diked/impounded (POWHh)
Total	**1.51 acres**		Note: only WTL-1, 4, 5, 8, 9, and A are labeled on the NWI-map. All other designations on the NWI map are for excavated farm ponds.

Note: Wetland 2 was previously identified as being 0.12 acres in the delineation report. There was a typo and the actual acreage for WTL-2 is 0.02 acres. Wetland A has also been added (isolated pond near Wetland 2) since TDEC took jurisdiction over this feature but was ruled isolated by the Corps. The revised total wetland acreage is 1.51 acres.

Approximately 1,589 linear feet of stream will be impacted by the project requiring mitigation. The channels will be impacted by grading to create commercial lots, as shown on Figure C-2.4 in Appendix C. Details concerning the amount of impacted channel can be seen on Table 2.

TABLE 2
STREAM CLASSIFICATION AND IMPACT SUMMARY
THE PADDOCKS OF MT. JULIET
WILSON COUNTY, TENNESSEE

Stream ID (STR)	Length (ft.)	Classification	Impact Type	Impact Length (ft.)
1	832	Intermittent	Crossing	302
2	885	Perennial / Intermittent	Bottomless Bridge / In-Line	53 (G-ARAP for Minor Road Crossing)
3	409	Intermittent	Bottomless Bridge / In-line	124 (G-ARAP for Minor Road Crossing)
3A	464	Intermittent	Crossing	464
4 / 4A	517	Intermittent / Ephemeral	Fill	472
5	212	Intermittent	Fill	187
6	65	Intermittent	Fill	41
7	2,346	Perennial	Crossing / In-Line	123
8	572	Intermittent	None	0
9	265	Intermittent	None	0
10	25	Intermittent	None	0
11	147	Intermittent	None	0
Total	**6,739 ft.**			**1,766 ft. (1,589 ft. requiring mitigation)**

permit. The amount of effort and detail needed to design a stream mitigation project is considerable. Therefore, some level of assurance is needed that this is a viable mitigation option is needed before proceeding with detailed plants and specification.

Stream 7 contains additional footage that meets the Enhancement I (6:1 ratio) mitigation classification as well as streams 8, 9, 10, and 11. Enhancement I efforts will be focused on planting additional trees along each stream to increase the riparian zone diversity and installing instream habitat features. Instream habitat features will primarily consist of log structures. There are a few areas on these streams that will have Coir rolls placed along the toe of the streambank for stabilization. The reach of stream meeting Enhancement I mitigation ratios totals of 1,258 linear feet, which equates to 210 ft. of credit.

A spring (SPG-3) and subsequent stream was identified that flows under Pleasant Grove Road along the southern property boundary. This spring / stream will receive Replacement mitigation credit (1:1 ratio) for completely removing and replacing this section of stream. The culvert and transitions to this culver total approximately 50 ft. of stream replacement.

TABLE 3
ON-SITE STREAM MITIGATION SUMMARY

Stream ID (STR / SPG)	Length (ft.)	Mitigation Type[6]	Ratio	Credits (ft.)
7	1,238	Enhancement II	3:1	413
7	249	Enhancement I	6:1	42
8	572	Enhancement I	6:1	95
9	265	Enhancement I	6:1	44
10	25	Enhancement I	6:1	4
11	147	Enhancement I	6:1	25
SPG-3	50	Replacement	1:1	50
Total				**673 ft.**

[6] *According to the Tennessee Stream Mitigation Guidelines*

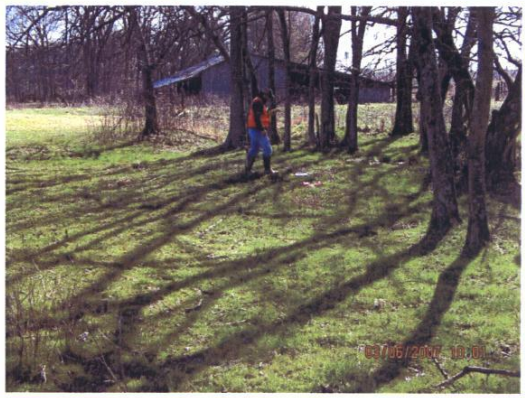


Photo 1 (3506)

Wetland 1 (WTL-1)

Photo 2 (3507)

STR-1, immediately downstream of a farm road culvert and at the outlet of WTL-1

Photo 3 (3508)

WTL-2, located adjacent and on both sides of STR-1 adjacent to a constructed farm pond

Photo 7 (3512)

WTL-3

Photo 8 (3513)

WTL-4

Photo 9 (3514)

STR-2

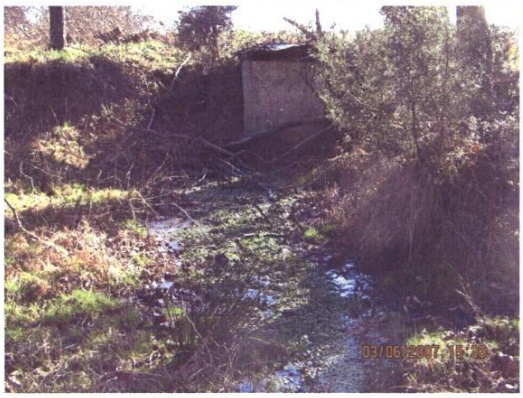


Photo 22 (3528)

Spring 1 (SPG-1), main source of flow for STR-2. Several streams converge at this location to form STR-2. STR-1 and STR-4 join with SPG-1 to form the main stream that flows towards SR-171.

Photo 23 (3529)

STR-4, same location as previous photo but view is towards the east (left side of Photo 22).

Photo 24 (3530)

STR-2, view is downstream from the confluence of STR-1 (from the left), STR-4 (from the right) and SPG-1. Opposite view from Photo 22.

Photo 31

STR-6, view if upstream towards WTL-10 and just upstream of the confluence with STR-5 and 7.

Photo 32

STR-7, view is upstream at small waterfall. Located just downstream of confluence with STR-5 and 6.

Photo 33

STR-7, view upstream