

APPENDIX C: WOODLAND AND WETLAND DATA

WOODLAND DATA FORMS

TXDOT WOODLAND DATA FORM

GENERAL INFORMATION

Woodland Data Site #:	#1 (Exhibit 4, Sheet 1)	Date of Field Visit:	June 16-19, 2003
Woodland Data Site Location:	Just north of IH 20 at proposed ROW. Also includes isolated wooded site approx. 3200' north of IH 20 and south of Mayfield Rd.		
City:	Grand Prairie, Texas	County:	Dallas County
General Woodland Data Site Description: (riparian, upland, fenceline, wetland, disturbed, vacant property, etc.)			
Riparian and upland woods.			
National or State Forests, NWR, WMA, parks, etc.	NA	Est. Size of Area Included in Data Site #1	19.2 acres total 11 acres riparian
Isolated or Part of a Larger Wooded Area?	Part of a larger wooded area.	Estimated Size (acres) of Larger Wooded Area	Over 75 acres.
General Description of Adjacent Area:	Adjacent to IH 20 on the south and agricultural land on the north. Existing wooded area extends east and west from site.		
Associated Water & Source Type:	Tributary to Fish Creek traverses site.		

SPECIES COMPOSITION

Trees Found within Proposed ROW: (as appropriate, species in order of dominance)

Common Name	Taxonomic Name	DBH (range)	Height (range)	% dominance
Honey Mesquite	<i>Prosopis glandulosa</i>	To 40"	To 35'	45%
Sugarberry	<i>Celtis laevigata</i>	To 14"	To 40'	20%
Honey Locust	<i>Gleditsia triacanthos</i>	To 10"	To 35'	10%
Eastern Red Cedar	<i>Juniperus virginiana</i>	To 7"	To 15'	8%
Cedar Elm	<i>Ulmus crassifolia</i>	To 18"	To 30'	8%
Average DBH:	12"	Average Height:	35'	Density per Acre:
				907 trees/acre includes 1" dbh and greater

Unusual Vegetation Features (Reference section and number in Vegetation Data Form above as appropriate)

Riparian habitat present. Area includes portion of tributary to Fish Creek.

Special Habitat Features (Reference section and number in Vegetation Data Form above as appropriate)

Some snags and dead trees were observed.

Types of Mast Found: None

Wildlife Species Observed or Noted During Field Investigation

Common Name	Taxonomic Name
Eastern Fox Squirrel	<i>Sciurus niger</i>
Wood Thrush	<i>Hylocichla mustelina</i>
Western Kingbird	<i>Tyrannus verticalis</i>
Northern Mockingbird	<i>Mimus polyglottos</i>

Wildlife Signs Noted During Field Investigation (i.e. scat, tracks, feathers, bones, etc.)

Feral hog skull was found in area.

TXDOT WOODLAND DATA FORM

GENERAL INFORMATION

Woodland Data Site #:	#2 (Exhibit 4, Sheet 1)	Date of Field Visit:	June 16-19, 2003
Woodland Data Site Location:	Proposed ROW and Kirby Creek.		
City:	Grand Prairie, Texas	County:	Dallas County
General Woodland Data Site Description: (riparian, upland, fenceline, wetland, disturbed, vacant property, etc.)			
Riparian woodlands			
National or State Forests, NWR, WMA, parks, etc.	No	Est. Size of Area Included in Data Site #2	1.26 acres riparian
Isolated or Part of a Larger Wooded Area?	Part of a larger wooded area.	Estimated Size (acres) of Larger Wooded Area	70 acres
General Description of Adjacent Area:	Agricultural land to the north and south of Kirby Creek.		
Associated Water & Source Type:	Kirby Creek		

SPECIES COMPOSITION

Trees Found within Proposed ROW: (as appropriate, species in order of dominance)

Common Name	Taxonomic Name	DBH (range)	Height (range)	% dominance
Honey Mesquite	<i>Prosopis glandulosa</i>	To 12"	To 25'	60%
Sugarberry	<i>Celtis laevigata</i>	To 10"	To 25'	20%
Average DBH:	8"	Average Height:	20'	Density per Acre:
				700 trees per acre which includes 1" dbh trees and greater

Unusual Vegetation Features (Reference section and number in Vegetation Data Form above as appropriate)

Riparian habitat present.

Special Habitat Features ((Reference section and number in Vegetation Data Form above as appropriate)

Types of Mast Found: None

Wildlife Species Observed or Noted During Field Investigation

Common Name	Taxonomic Name
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>
Mourning Dove	<i>Zenaida macroura</i>
Great-tailed Grackle	<i>Quiscalus mexicanus</i>
Common Grackle	<i>Quiscalus quiscula</i>

Wildlife Signs Noted During Field Investigation (i.e. scat, tracks, feathers, bones, etc.)

TxDOT WOODLAND DATA FORM

GENERAL INFORMATION

Woodland Data Site #:	#3 (Exhibit 4, Sheet 2)	Date of Field Visit:	June 16-19, 2003
Woodland Data Site Location:	Proposed ROW at Arkansas Rd north and south sides.		
City:	Grand Prairie, Texas	County:	Dallas County
General Woodland Data Site Description: (riparian, upland, fenceline, wetland, disturbed, vacant property, etc.)			
Riparian woodland			
National or State Forests, NWR, WMA, parks, etc.	No	Est. Size of Area Included in Data Site #3	0.74 acres riparian
Isolated or Part of a Larger Wooded Area?	Part of a larger wooded area.	Estimated Size (acres) of Larger Wooded Area	15 acres
General Description of Adjacent Area:	Adjacent area was probably upland Blackland Prairie that may have been grazed. A lack of management and control has let the area slowly become overrun with invader species. The area is currently open with scattered shrubs and trees with mixed forbs and grasses.		
Associated Water & Source Type:	Small stream		

SPECIES COMPOSITION

Trees Found within Proposed ROW: (as appropriate, species in order of dominance)

Common Name	Taxonomic Name	DBH (range)	Height (range)	% dominance
Sugarberry	<i>Celtis laevigata</i>	To 14"	To 28'	30%
Black Willow	<i>Salix nigra</i>	To 14"	To 30'	22%
Eastern Red Cedar	<i>Juniperus virginiana</i>	To 3"	To 7'	10%
Average DBH:	14"	Average Height:	25'	Density per Acre:
No density was calculated, it wasn't large enough.				

Unusual Vegetation Features (Reference section and number in Vegetation Data Form above as appropriate)

Riparian habitat present.

Special Habitat Features ((Reference section and number in Vegetation Data Form above as appropriate)

Types of Mast Found: **None**

Wildlife Species Observed or Noted During Field Investigation

Common Name	Taxonomic Name
Cattle Egret	<i>Bubulcus ibis</i>
Mourning Dove	<i>Zenaida macroura</i>
Blue Jay	<i>Cyanocitta cristata</i>

Wildlife Signs Noted During Field Investigation (i.e. scat, tracks, feathers, bones, etc.)

TxDOT WOODLAND DATA FORM

GENERAL INFORMATION

Woodland Data Site #:	#4 (Exhibit 4, Sheet 2)	Date of Field Visit:	June 16-19, 2003
Woodland Data Site Location:	South of Spur 303 where West Freeway dead-ends.		
City:	Grand Prairie, Texas	County:	Dallas County
General Woodland Data Site Description: (riparian, upland, fenceline, wetland, disturbed, vacant property, etc.)			
Riparian woodlands			
National or State Forests, NWR, WMA, parks, etc.	No	Est. Size of Area Included in Data Site #4	4.74 acres riparian
Isolated or Part of a Larger Wooded Area?	Part of larger wooded area.	Estimated Size (acres) of Larger Wooded Area	10 acres
General Description of Adjacent Area:	Adjacent areas are open brushland that have not been maintained and are slowly being developed commercially.		
Associated Water & Source Type:	Tributary of Cottonwood Creek		

SPECIES COMPOSITION

Trees Found within Proposed ROW: (as appropriate, species in order of dominance)				
Common Name	Taxonomic Name	DBH (range)	Height (range)	% dominance
Sugarberry	<i>Celtis laevigata</i>	To 14"	To 28'	35%
American Elm	<i>Ulmus americana</i>	To 8"	To 25'	25%
Cedar Elm	<i>Ulmus crassifolia</i>	To 10"	To 25'	10%
Eastern Red Cedar	<i>Juniperus virginiana</i>	To 2"	To 7'	10%
Honey Mesquite	<i>Prosopis glandulosa</i>	To 8"	To 25'	5%
Average DBH:	8"	Average Height:	25'	Density per Acre:
				750 trees/acre including 1" dbh and greater.

Unusual Vegetation Features (Reference section and number in Vegetation Data Form above as appropriate)

Riparian habitat present. Tributary of Cottonwood Creek has been altered probably when Spur 303 was built. It appeared that some herbicide had been sprayed. The leaves of many of the plants in one area on the east side near the new channel were yellowed and dying.

Special Habitat Features ((Reference section and number in Vegetation Data Form above as appropriate)

Types of Mast Found: **None**

Wildlife Species Observed or Noted During Field Investigation

Common Name	Taxonomic Name

Wildlife Signs Noted During Field Investigation (i.e. scat, tracks, feathers, bones, etc.)

Deer trails were visible from constant use.

TxDOT WOODLAND DATA FORM

GENERAL INFORMATION

Woodland Data Site #:	#5 (Exhibit 4, Sheet 2)	Date of Field Visit:	June 16-19, 2003
Woodland Data Site Location:	North of the intersection of West Freeway and Spur 303 on the west side of West Freeway.		
City:	Grand Prairie, Texas	County:	Dallas County
General Woodland Data Site Description: (riparian, upland, fenceline, wetland, disturbed, vacant property, etc.)			
Riparian woodland			
National or State Forests, NWR, WMA, parks, etc.	No	Est. Size of Area Included in Data Site #5	0.28 acres riparian
Isolated or Part of a Larger Wooded Area?	Isolated	Estimated Size (acres) of Larger Wooded Area	NA
General Description of Adjacent Area:	Open grassy area with commercial development. Grassy area is maintained and is composed of Bermuda and San Augustine grasses.		
Associated Water & Source Type:	Drainage area		

SPECIES COMPOSITION

Trees Found within Proposed ROW: (as appropriate, species in order of dominance)				
Common Name	Taxonomic Name	DBH (range)	Height (range)	% dominance
Green Ash	<i>Fraxinus pennsylvanica</i>	To 10"	To 40'	35%
Black Willow	<i>Salix nigra</i>	To 12"	To 25'	25%
Sugarberry	<i>Celtis laevigata</i>	To 12"	To 40'	20%
Honey Mesquite	<i>Prosopis glandulosa</i>	To 4"	To 8'	5%
Eastern Red Cedar	<i>Juniperus virginiana</i>	To 2"	To 6'	5%
Average DBH:	10"	Average Height:	30'	Density per Acre:
750 trees/acre including 1" dbh and greater.				
Unusual Vegetation Features (Reference section and number in Vegetation Data Form above as appropriate)				
Riparian in nature. Wooded area surrounds a drainage basin area that appears to drain into the Tributary to Cottonwood Creek.				
Special Habitat Features ((Reference section and number in Vegetation Data Form above as appropriate)				
Types of Mast Found:	None			
Wildlife Species Observed or Noted During Field Investigation				
Common Name	Taxonomic Name			
Northern Mockingbird	<i>Mimus polyglottos</i>			
Scissor-tailed Flycatcher	<i>Tyrannus forficatus</i>			
House Finch	<i>Carpodacus mexicanus</i>			
Wildlife Signs Noted During Field Investigation (i.e. scat, tracks, feathers, bones, etc.)				
An old bird nest or two was seen, but it did not appear they were used this year.				

TxDOT WOODLAND DATA FORM

GENERAL INFORMATION

Woodland Data Site #:	#6 (Exhibit 4, Sheet 2)	Date of Field Visit:	June 16-19, 2003
Woodland Data Site Location:	At the intersection of West Freeway and Tributary #2		
City:	Grand Prairie, Texas	County:	Dallas County
General Woodland Data Site Description: (riparian, upland, fenceline, wetland, disturbed, vacant property, etc.)			
Riparian & Upland Woodland			
National or State Forests, NWR, WMA, parks, etc.	No	Est. Size of Area Included in Data Site #6	5.82 acres total 4 acres riparian
Isolated or Part of a Larger Wooded Area?	Part of a larger wooded area.	Estimated Size (acres) of Larger Wooded Area	55 acres or more
General Description of Adjacent Area:	The area is primarily large light industrial companies with large well maintained grassy landscapes. The area is primarily open with some impervious cover.		
Associated Water & Source Type:	Tributary #2 of Cottonwood Creek		

SPECIES COMPOSITION

Trees Found within Proposed ROW: (as appropriate, species in order of dominance)

Common Name	Taxonomic Name	DBH (range)	Height (range)	% dominance
Sugarberry	<i>Celtis laevigata</i>	To 16"	To 40'	30%
Green Ash	<i>Fraxinus pennsylvanica</i>	To 10"	To 40'	20%
Cedar Elm	<i>Ulmus crassifolia</i>	To 14"	To 35'	15%
Eastern Cottonwood	<i>Populus deltoides</i>	To 18"	To 50'	10%
Honey Mesquite	<i>Prosopis glandulosa</i>	To 10"	To 35'	5%
Average DBH:	12"	Average Height:	35'	Density per Acre:
				780 tree/acre includes 1" dbh and greater.

Unusual Vegetation Features (Reference section and number in Vegetation Data Form above as appropriate)

Riparian habitat present. Considerable understory along edges. Some dead trees and snags.

Special Habitat Features ((Reference section and number in Vegetation Data Form above as appropriate)

Types of Mast Found: **None**

Wildlife Species Observed or Noted During Field Investigation

Common Name	Taxonomic Name
Coopers Hawk	<i>Accipiter cooperii</i>
American Kestrel	<i>Falco sparverius</i>
Red-tailed Hawk	<i>Buteo jamaicensis</i>
Bewick's Wren	<i>Thryomanes bewickii</i>

Wildlife Signs Noted During Field Investigation (i.e. scat, tracks, feathers, bones, etc.)

TxDOT WOODLAND DATA FORM

GENERAL INFORMATION

Woodland Data Site #:	#7 (Exhibit 4, Sheet 3)	Date of Field Visit:	June 16-19, 2003
Woodland Data Site Location:	NE corner of 14 th St. and Dalworth.		
City:	Grand Prairie, Texas	County:	Dallas County
General Woodland Data Site Description: (riparian, upland, fenceline, wetland, disturbed, vacant property, etc.)			
Riparian & upland woodland in an older residential neighborhood.			
National or State Forests, NWR, WMA, parks, etc.	No	Est. Size of Area Included in Data Site #7	3.34 acres total 1.7 acres riparian
Isolated or Part of a Larger Wooded Area?	Isolated for the most part.	Estimated Size (acres) of Larger Wooded Area	
General Description of Adjacent Area:	Older residential neighborhood with old homes and vacant lots. The overall contiguous wooded area extends outside the project limits but not to any real extent. Various neighborhood trees found in yards are predominant in the general area.		
Associated Water & Source Type:	Tributary #1 of the West Fork of the Trinity River		

SPECIES COMPOSITION

Trees Found within Proposed ROW: (as appropriate, species in order of dominance)

Common Name	Taxonomic Name	DBH (range)	Height (range)	% dominance
Pecan	<i>Carya illinoensis</i>	To 14"	To 45'	25%
Sugarberry	<i>Celtis laevigata</i>	To 16"	To 35'	20%
American Elm	<i>Ulmus americana</i>	To 14"	To 40'	15%
Eastern Cottonwood	<i>Populus deltoides</i>	To 18"	To 45'	10%
Red Mulberry	<i>Morus rubra</i>	To 6"	To 30'	5%
Average DBH:	14"	Average Height:	35'	Density per Acre:
750 trees/acre including 1" dbh and greater				

Unusual Vegetation Features (Reference section and number in Vegetation Data Form above as appropriate)

In many of the small open areas, various bluestem species, King Ranch, Silver, and Little, of grass were found along with Switchgrass, thistle, Basket flower, and other more common floral species.

Due to lack of maintenance within the proposed ROW, many of the plant woody species have continued to grow, along with many of the understory plant species, vines and such.

Special Habitat Features ((Reference section and number in Vegetation Data Form above as appropriate)

Due to the extent of vegetative growth in this area, it is probable that many migratory avian species may use this area for nesting.

Types of Mast Found: **None**

Wildlife Species Observed or Noted During Field Investigation

Common Name	Taxonomic Name
Red-tailed Hawk	<i>Buteo jamaicensis</i>
Northern Mockingbird	<i>Mimus polyglottos</i>
Northern Cardinal	<i>Cardinalis cardinalis</i>
Mourning Dove	<i>Zenaida macroura</i>

Wildlife Signs Noted During Field Investigation (i.e. scat, tracks, feathers, bones, etc.)

No nests were found due to the density of vegetative growth.

TxDOT WOODLAND DATA FORM

GENERAL INFORMATION

Woodland Data Site #:	#8 (Exhibit 4, Sheet 3)	Date of Field Visit:	June 16-19, 2003
Woodland Data Site Location:	Southeast and west of the intersection of NW 19 th St. and Hill St.		
City:	Grand Prairie, Texas	County:	Dallas County
General Woodland Data Site Description: (riparian, upland, fenceline, wetland, disturbed, vacant property, etc.)			
Riparian & Upland Woodland			
National or State Forests, NWR, WMA, parks, etc.	No	Est. Size of Area Included in Data Site #8	14.23 acres total 10 acres riparian
Isolated or Part of a Larger Wooded Area?	Part of a larger wooded area.	Estimated Size (acres) of Larger Wooded Area	Approximately 40 acres
General Description of Adjacent Area:	Residential area primarily on the east side of NW 19 th St. Wooded area on the west side of NW 19 th St.		
Associated Water & Source Type:	Tributary #2 to the West Fork of the Trinity River and minor drainage ditch that feeds into tributary. Flow of Tributary #2 is in a NE direction.		

SPECIES COMPOSITION

Trees Found within Proposed ROW: (as appropriate, species in order of dominance)

Common Name	Taxonomic Name	DBH (range)	Height (range)	% dominance
Sugarberry	<i>Celtis laevigata</i>	To 16"	To 35'	25%
American Elm	<i>Ulmus americana</i>	To 14"	To 40'	20%
Pecan	<i>Carya illinoensis</i>	To 14"	To 45'	10%
Cedar Elm	<i>Ulmus crassifolia</i>	To 14"	To 40'	10%
Honey Mesquite	<i>Prosopis glandulosa</i>	To 16"	To 30'	5%
Average DBH:	14"	Average Height:	40'	Density per Acre:
700 trees per acre including 1" dbh and greater.				

Unusual Vegetation Features (Reference section and number in Vegetation Data Form above as appropriate)

Riparian habitat is predominant. The woodland area site parallels a drainage ditch on the west side of NW 19th St. that empties into a tributary to the West Fork of the Trinity River. On the east side of NW 19th St, the woodland area encompasses the tributary area and this vegetation appears to have been established a little longer than the portion of the woodland site on the west side of the road because it is on the main tributary or stream portion.

Special Habitat Features ((Reference section and number in Vegetation Data Form above as appropriate)

Some old dead trees do exist on the east side of NW 19th St. The understory is dense and includes species like Bois "D" Arc, Honey Locust, and Roughleaf Dogwood.

Types of Mast Found: None

Wildlife Species Observed or Noted During Field Investigation

Common Name	Taxonomic Name

Wildlife Signs Noted During Field Investigation (i.e. scat, tracks, feathers, bones, etc.)

TXDOT WOODLAND DATA FORM

GENERAL INFORMATION

Woodland Data Site #:	#9 (Exhibit 4, Sheet 4)	Date of Field Visit:	June 16-19, 2003
Woodland Data Site Location:	NW corner of the intersection of IH 30 and NW 19 th St. from IH 30 to north of Egyptian Rd. all on the west side of NW 19 th St.		
City:	Grand Prairie, Texas	County:	Dallas County
General Woodland Data Site Description: (riparian, upland, fenceline, wetland, disturbed, vacant property, etc.)			
Riparian & Upland Woodland			
National or State Forests, NWR, WMA, parks, etc.	No	Est. Size of Area Included in Data Site #9	19.12 acres total 6 acres riparian
Isolated or Part of a Larger Wooded Area?	Woodland area restricted to stream corridor.	Estimated Size (acres) of Larger Wooded Area	NA
General Description of Adjacent Area:	Surrounding area primarily newer residential development, housing and apartments.		
Associated Water & Source Type:	Tributary to Johnson Creek.		

SPECIES COMPOSITION

Trees Found within Proposed ROW: (as appropriate, species in order of dominance)

Common Name	Taxonomic Name	DBH (range)	Height (range)	% dominance
Sugarberry	<i>Celtis laevigata</i>	To 18"	To 35'	40%
Honey Mesquite	<i>Prosopis glandulosa</i>	To 42"	To 35'	25%
Post Oak	<i>Quercus stellata</i>	To 24"	To 45'	10%
American Elm	<i>Ulmus americana</i>	To 12"	To 40'	10%
Average DBH:	16"	Average Height:	35'	Density per Acre:
800 trees/acre including 1" dbh and greater.				

Unusual Vegetation Features (Reference section and number in Vegetation Data Form above as appropriate)

Several large Honey Mesquites were noted in this area.

Riparian habitat was present.

Special Habitat Features ((Reference section and number in Vegetation Data Form above as appropriate)

Types of Mast Found: None

Wildlife Species Observed or Noted During Field Investigation

Common Name	Taxonomic Name
Red-tailed Hawk	<i>Buteo jamaicensis</i>
Blue Jay	<i>Cyanocitta cristata</i>
Mourning Dove	<i>Zenaida macroura</i>
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>
Tufted Titmouse	<i>Parus bicolor</i>

Wildlife Signs Noted During Field Investigation (i.e. scat, tracks, feathers, bones, etc.)

Deer tracks and signs were seen along with a noted trail or pathway.

TXDOT WOODLAND DATA FORM

GENERAL INFORMATION

Woodland Data Site #:	#10 (Exhibit 4, Sheet 4)	Date of Field Visit:	June 16-19, 2003
Woodland Data Site Location:	Southeast corner of the intersection of Carrier and NW 19 th St		
City:	Grand Prairie, Texas	County:	Dallas County
General Woodland Data Site Description: (riparian, upland, fenceline, wetland, disturbed, vacant property, etc.)			
Riparian woodland.			
National or State Forests, NWR, WMA, parks, etc.	Yes, Waggoner Park	Est. Size of Area Included in Data Site #10	3.8 acres riparian
Isolated or Part of a Larger Wooded Area?	Primarily isolated	Estimated Size (acres) of Larger Wooded Area	
General Description of Adjacent Area:	General area is residential and parkland.		
Associated Water & Source Type:	Tributary to Johnson Creek		

SPECIES COMPOSITION

Trees Found within Proposed ROW: (as appropriate, species in order of dominance)

Common Name	Taxonomic Name	DBH (range)	Height (range)	% dominance
Cedar Elm	<i>Ulmus crassifolia</i>	To 18"	To 50'	40%
Sugarberry	<i>Celtis laevigata</i>	To 12"	To 35'	25%
American Elm	<i>Ulmus americana</i>	To 44"	To 45'	20%
Eastern Cottonwood	<i>Populus deltoides</i>	To 18"	To 55'	5%
Black Willow	<i>Salix nigra</i>	To 16"	To 50'	3%
Average DBH:	14"	Average Height:	40'	Density per Acre:
				130 trees/acre not too much understory noted

Unusual Vegetation Features (Reference section and number in Vegetation Data Form above as appropriate)

Riparian habitat present.

Fairly open area with limited understory growth present.

Special Habitat Features ((Reference section and number in Vegetation Data Form above as appropriate)

Dead trees and snags present.

Types of Mast Found: **None**

Wildlife Species Observed or Noted During Field Investigation

Common Name	Taxonomic Name
Red-tailed Hawk	<i>Buteo jamaicensis</i>

Wildlife Signs Noted During Field Investigation (i.e. scat, tracks, feathers, bones, etc.)

Pair of Red-tailed Hawks found in the area. No nest was found.

TXDOT WOODLAND DATA FORM

GENERAL INFORMATION

Woodland Data Site #:	#11 (Exhibit 4, Sheet 4)	Date of Field Visit:	June 16-19, 2003
Woodland Data Site Location:	East of Carrier and south of Johnson Creek.		
City:	Grand Prairie	County:	Dallas County
General Woodland Data Site Description: (riparian, upland, fenceline, wetland, disturbed, vacant property, etc.)			
Riparian Woodland			
National or State Forests, NWR, WMA, parks, etc.	Yes. Waggoner Park	Est. Size of Area Included in Data Site #11	8.16 acres riparian
Isolated or Part of a Larger Wooded Area?	Isolated	Estimated Size (acres) of Larger Wooded Area	
General Description of Adjacent Area:	Parkland area and residential development.		
Associated Water & Source Type:	Johnson Creek		

SPECIES COMPOSITION

Trees Found within Proposed ROW: (as appropriate, species in order of dominance)

Common Name	Taxonomic Name	DBH (range)	Height (range)	% dominance	
Cedar Elm	<i>Ulmus crassifolia</i>	To 21"	To 50'	40%	
Bur Oak	<i>Quercus macrocarpa</i>	To 24"	To 55'	25%	
Pecan	<i>Carya illinoensis</i>	To 18"	To 45'	10%	
American Elm	<i>Ulmus americana</i>	To 27"	To 55'	10%	
Honey Mesquite	<i>Prosopis glandulosa</i>	To 10"	To 25'	5%	
Average DBH:	18"	Average Height:	50'	Density per Acre:	280 trees/acre

Unusual Vegetation Features (Reference section and number in Vegetation Data Form above as appropriate)

Minimal amount of understory in park area. Understory includes species like Bois "D" Arc, Hawthorn, Greenbrier, and Yaupon.

Special Habitat Features ((Reference section and number in Vegetation Data Form above as appropriate)

Types of Mast Found: **None**

Wildlife Species Observed or Noted During Field Investigation

Common Name	Taxonomic Name
Red-shouldered Hawk	<i>Buteo lineatus</i>
Eastern Bluebird	<i>Sialia sialis</i>
Tufted Titmouse	<i>Parus bicolor</i>
Northern Cardinal	<i>Cardinalis cardinalis</i>
Common Grackle	<i>Quiscalus quiscula</i>

Wildlife Signs Noted During Field Investigation (i.e. scat, tracks, feathers, bones, etc.)

TXDOT WOODLAND DATA FORM

GENERAL INFORMATION

Woodland Data Site #:	#12 (Exhibit 4, Sheet 4)	Date of Field Visit:	June 16-19, 2003
Woodland Data Site Location:	East of Carrier and immediately south of Lower Tarrant.		
City:	Grand Prairie, Texas	County:	Dallas County
General Woodland Data Site Description: (riparian, upland, fenceline, wetland, disturbed, vacant property, etc.)			
Upland woodland area and a residential property.			
National or State Forests, NWR, WMA, parks, etc.	No	Est. Size of Area Included in Data Site #12	2.89 acres upland
Isolated or Part of a Larger Wooded Area?	Isolated Woodland	Estimated Size (acres) of Larger Wooded Area	
General Description of Adjacent Area:	Rural ranchland area slowly converting to large commercial development. Adjacent to and partly within floodplain of the West Fork of the Trinity River.		
Associated Water & Source Type:			

SPECIES COMPOSITION

Trees Found within Proposed ROW: (as appropriate, species in order of dominance)

Common Name	Taxonomic Name	DBH (range)	Height (range)	% dominance
Pecan	<i>Carya illinoensis</i>	To 36"	To 65'	30%
Post Oak	<i>Quercus stellata</i>	To 24"	To 60'	25%
American Elm	<i>Ulmus americana</i>	To 27"	To 65'	20%
Sugarberry	<i>Celtis laevigata</i>	To 24"	To 65'	15%
Blackjack Oak	<i>Quercus marilandica</i>	To 18"	To 60'	15%
Average DBH:	27"	Average Height:	60"	Density per Acre:
				125 trees/acre

Unusual Vegetation Features (Reference section and number in Vegetation Data Form above as appropriate)

Rural residential type development. No understory present.

Special Habitat Features ((Reference section and number in Vegetation Data Form above as appropriate)

No dead trees or snags present.

Types of Mast Found: **None**

Wildlife Species Observed or Noted During Field Investigation

Common Name	Taxonomic Name
Eastern Bluebird	<i>Sialia sialis</i>
Red-tailed Hawk	<i>Buteo jamaicensis</i>
Downy Woodpecker	<i>Picoides pubescens</i>
House Finch	<i>Carpodacus mexicanus</i>
Eastern Meadowlark	<i>Sturnella magna</i>

Wildlife Signs Noted During Field Investigation (i.e. scat, tracks, feathers, bones, etc.)

Deer tracks and trail present.

Neighbors have seen coyote, gray fox, and bobcats.

TxDOT WOODLAND DATA FORM

GENERAL INFORMATION

Woodland Data Site #:	#13 (Exhibit 4, Sheet 4)	Date of Field Visit:	June 16-19, 2003
Woodland Data Site Location:	North of Lower Tarrant approximately 125' and east of Carrier. approximately 1000'.		
City:	Grand Prairie, Texas	County:	Dallas County
General Woodland Data Site Description: (riparian, upland, fenceline, wetland, disturbed, vacant property, etc.)			
Riparian & upland woodland.			
National or State Forests, NWR, WMA, parks, etc.	None	Est. Size of Area Included in Data Site #13	8.1 acres total 5 acres riparian
Isolated or Part of a Larger Wooded Area?	Isolated woodland	Estimated Size (acres) of Larger Wooded Area	
General Description of Adjacent Area:	General area is or has recently been primarily used as pasture or grazing land for cattle. Wetland areas present along with low lying natural drainage features along with a pond or two.		
Associated Water & Source Type:	Local ponds, wetlands, and low drainage areas.		

SPECIES COMPOSITION

Trees Found within Proposed ROW: (as appropriate, species in order of dominance)

Common Name	Taxonomic Name	DBH (range)	Height (range)	% dominance
Eastern Cottonwood	<i>Populus deltoides</i>	To 36"	To 70'	55%
Green Ash	<i>Fraxinus pennsylvanica</i>	To 8"	To 25'	10%
Eastern Red Cedar	<i>Juniperus virginiana</i>	To 3"	To 12'	5%
Honey Locust	<i>Gleditsia triacanthos</i>	To 6"	To 14'	5%
Black Willow	<i>Salix nigra</i>	To 10"	To 25'	5%
Average DBH:	18"	Average Height:	60'	Density per Acre:
210 tree/acre including 1" dbh and greater				

Unusual Vegetation Features (Reference section and number in Vegetation Data Form above as appropriate)

Riparian woodland habitat. Dense stand of primarily Eastern Cottonwoods. Wetland areas and small ponds were present along with low broad drainage feature.

Some shrub and vine understory present.

Special Habitat Features ((Reference section and number in Vegetation Data Form above as appropriate)

3 large Post Oaks (*Quercus stallata*) are situated approximately 500' west of Woodland Data Site #13. They range in dbh to 42" and in height to 60'.

Types of Mast Found: None

Wildlife Species Observed or Noted During Field Investigation

Common Name	Taxonomic Name
Coopers Hawk	<i>Accipiter cooperii</i>
Red-shouldered Hawk	<i>Buteo lineatus</i>
Cattle Egret	<i>Bubulcus ibis</i>
Eastern Cottontail	<i>Sylvilagus floridanus</i>
Common Raccoon	<i>Procyon lotor</i>

Wildlife Signs Noted During Field Investigation (i.e. scat, tracks, feathers, bones, etc.)

Deer tracks were found in the mud. A deer trail was also found.

Raccoon tracks were found in the mud.

TxDOT WOODLAND DATA FORM

GENERAL INFORMATION

Woodland Data Site #:	#14 (Exhibit 4, Sheet 4)	Date of Field Visit:	June 16-19, 2003
Woodland Data Site Location:	Northeast corner of LTV Park and south of the West Fork of the Trinity River		
City:	Grand Prairie, Texas	County:	Dallas County
General Woodland Data Site Description: (riparian, upland, fenceline, wetland, disturbed, vacant property, etc.)			
Riparian vegetation in park area.			
National or State Forests, NWR, WMA, parks, etc.	Yes. LTV Park	Est. Size of Area Included in Data Site #	1.25 acres riparian
Isolated or Part of a Larger Wooded Area?	Isolated wooded vegetation	Estimated Size (acres) of Larger Wooded Area	
General Description of Adjacent Area:	General area is open pasture or rangeland some of which still has active grazing.		
Associated Water & Source Type:	West Fork of the Trinity River		

SPECIES COMPOSITION

Trees Found within Proposed ROW: (as appropriate, species in order of dominance)

Common Name	Taxonomic Name	DBH (range)	Height (range)	% dominance
Cedar Elm	<i>Ulmus crassifolia</i>	To 32"	To 60'	60%
Sugarberry	<i>Celtis laevigata</i>	To 8"	To 25'	15%
Honey Mesquite	<i>Prosopis glandulosa</i>	To 3"	To 10'	10%
Green Ash	<i>Fraxinus pennsylvanica</i>	To 36"	To 65'	5%
Average DBH:	10"	Average Height:	30'	Density per Acre:
250 trees/acre including 1" dbh and greater				

Unusual Vegetation Features (Reference section and number in Vegetation Data Form above as appropriate)

Riparian vegetation present. Sugarberry present along fencelines and Green Ash a common understory growth.

Special Habitat Features ((Reference section and number in Vegetation Data Form above as appropriate)

Types of Mast Found: None

Wildlife Species Observed or Noted During Field Investigation

Common Name	Taxonomic Name
American Kestrel	<i>Falco sparverius</i>
Mourning Dove	<i>Zenaida macroura</i>
Killdeer	<i>Charadrius vociferus</i>

Wildlife Signs Noted During Field Investigation (i.e. scat, tracks, feathers, bones, etc.)

Pair of Kestrels were present and probably nested or are nesting in the immediate area. No sign of the nest or nesting tree was found.

TXDOT WOODLAND DATA FORM

GENERAL INFORMATION

Woodland Data Site #:	#15 (Exhibit 4, Sheet 5)	Date of Field Visit:	June 16-19, 2003
Woodland Data Site Location:	South of Oakdale Rd and west of Hardrock Rd where it intersects Oakdale from the south.		
City:	Grand Prairie, Texas	County:	Dallas County
General Woodland Data Site Description: (riparian, upland, fenceline, wetland, disturbed, vacant property, etc.)			
Riparian & upland woodland			
National or State Forests, NWR, WMA, parks, etc.	None	Est. Size of Area Included in Data Site #15	4.46 acres total 1.3 acres riparian
Isolated or Part of a Larger Wooded Area?	Primarily isolated woodland but is adjacent to Woodland Data Site #16.	Estimated Size (acres) of Larger Wooded Area	
General Description of Adjacent Area:	Adjacent area is open ranchland that is now being utilized for small commercial operations and storage.		
Associated Water & Source Type:	Local ditch runs through site, and some ponding occurs.		

SPECIES COMPOSITION

Trees Found within Proposed ROW: (as appropriate, species in order of dominance)

Common Name	Taxonomic Name	DBH (range)	Height (range)	% dominance
Pecan	<i>Carya illinoensis</i>	To 27"	To 40'	35%
Sugarberry	<i>Celtis laevigata</i>	To 10"	To 25'	20%
Eastern Cottonwood	<i>Populus deltoides</i>	To 54"	To 80'	15%
Black Willow	<i>Salix nigra</i>	To 14"	To 30'	15%
American Elm	<i>Ulmus americana</i>	To 12"	To 35'	10%
Average DBH:	12"	Average Height:	30'	Density per Acre:
				300 trees/acre including 1" dbh and greater

Unusual Vegetation Features (Reference section and number in Vegetation Data Form above as appropriate)

Rather large Eastern Cottonwood found at this site.

Special Habitat Features ((Reference section and number in Vegetation Data Form above as appropriate)

Dead trees and snags were found throughout this site.

Types of Mast Found: **None**

Wildlife Species Observed or Noted During Field Investigation

Common Name	Taxonomic Name

Wildlife Signs Noted During Field Investigation (i.e. scat, tracks, feathers, bones, etc.)

TXDOT WOODLAND DATA FORM

GENERAL INFORMATION

Woodland Data Site #:	#16 (Exhibit 4, Sheet 6)	Date of Field Visit:	June 16-19, 2003
Woodland Data Site Location:	North of Oakdale Rd and west of Hardrock where it intersects Oakdale from the south.		
City:	Grand Prairie, Texas	County:	Dallas County
General Woodland Data Site Description: (riparian, upland, fenceline, wetland, disturbed, vacant property, etc.)			
Upland vegetation on vacant residential property.			
National or State Forests, NWR, WMA, parks, etc.	None	Est. Size of Area Included in Data Site #16	13.76 acres upland
Isolated or Part of a Larger Wooded Area?	Isolated	Estimated Size (acres) of Larger Wooded Area	
General Description of Adjacent Area:	Adjacent property was residential property that has been converted to small commercial operations and storage. East of the tract is a man made pond.		
Associated Water & Source Type:	None		

SPECIES COMPOSITION

Trees Found within Proposed ROW: (as appropriate, species in order of dominance)

Common Name	Taxonomic Name	DBH (range)	Height (range)	% dominance	
Pecan	<i>Carya illinoensis</i>	To 36"	To 50'	25%	
Sugarberry	<i>Celtis laevigata</i>	To 14"	To 25'	20%	
American Elm	<i>Ulmus americana</i>	To 42"	To 55'	20%	
Eastern Cottonwood	<i>Populus deltoides</i>	To 27"	To 75'	15%	
Bur Oak	<i>Quercus macrocarpa</i>	To 44"	To 65'	10%	
Average DBH:	32"	Average Height:	60'	Density per Acre:	200 trees/acre

Unusual Vegetation Features (Reference section and number in Vegetation Data Form above as appropriate)

Special Habitat Features ((Reference section and number in Vegetation Data Form above as appropriate)

Dead trees and snags were found. Old site is not maintained any longer.

Types of Mast Found: None

Wildlife Species Observed or Noted During Field Investigation

Common Name	Taxonomic Name
Common Grackle	<i>Quiscalus quiscula</i>
Great-tailed Grackle	<i>Quiscalus mexicanus</i>
Northern Bobwhite	<i>Colinus virginianus</i>
Brown Thrasher	<i>Toxostoma rufum</i>
House Wren	<i>Troglodytes aedon</i>

Wildlife Signs Noted During Field Investigation (i.e. scat, tracks, feathers, bones, etc.)

TXDOT WOODLAND DATA FORM

GENERAL INFORMATION

Woodland Data Site #:	#17 (Exhibit 4, Sheet 6)	Date of Field Visit:	June 16-19, 2003
Woodland Data Site Location:	Situated between Shady Grove on the south and Rock Island on the north and east of Hardrock.		
City:	Grand Prairie, Texas	County:	Dallas County
General Woodland Data Site Description: (riparian, upland, fenceline, wetland, disturbed, vacant property, etc.)			
Riparian woodland and uplands area associated with fencelines, ranch property, wetlands, ponds, and drainage ditches.			
National or State Forests, NWR, WMA, parks, etc.	None	Est. Size of Area Included in Data Site #	23.79 acres total 10 acres riparian
Isolated or Part of a Larger Wooded Area?	Isolated	Estimated Size (acres) of Larger Wooded Area	
General Description of Adjacent Area:	Adjacent areas are open on the east side and small ranches on the west side.		
Associated Water & Source Type:	Some stock ponds, ditches and wetlands associated.		

SPECIES COMPOSITION

Trees Found within Proposed ROW: (as appropriate, species in order of dominance)

Common Name	Taxonomic Name	DBH (range)	Height (range)	% dominance	
Sugarberry	<i>Celtis laevigata</i>	To 24"	To 35'	45%	
Pecan	<i>Carya illinoensis</i>	To 54"	To 70'	15%	
Sycamore	<i>Platanus occidentalis</i>	To 24"	To 55'	15%	
Black Willow	<i>Salix nigra</i>	To 8"	To 20'	5%	
Eastern Red Cedar	<i>Juniperus virginiana</i>	To 10"	To 35'	3%	
Average DBH:	18"	Average Height:	35'	Density per Acre:	300 trees/acre

Unusual Vegetation Features (Reference section and number in Vegetation Data Form above as appropriate)

Several large Pecan trees were found in this area.

Special Habitat Features ((Reference section and number in Vegetation Data Form above as appropriate)

Dead trees and snags were present. Dense vegetation was found along many of the fence lines. Poison Ivy was extremely plentiful and grew high into the trees.

Woody vegetation varied in areas from mature plants to areas of new growth. Many areas were no longer maintained and appeared to have been allowed to grow back based upon opportunity. Sugarberry seemed to dominate these areas.

Types of Mast Found: None

Wildlife Species Observed or Noted During Field Investigation

Common Name	Taxonomic Name
Red-tailed Hawk	<i>Buteo jamaicensis</i>

Wildlife Signs Noted During Field Investigation (i.e. scat, tracks, feathers, bones, etc.)

A pair of Red-tailed Hawks were found to reside in the area. No nest was found, but they were defensive.	Many of the small ranches within this area, raised sheep, goats, chickens, horses, or mules.

VEGETATION DATA FORM

VEGETATION DATA FORM

GENERAL PROJECT DATA

Project Name/location:	SH 161	Date:	June 20, 2003
Project Limits	from IH 20 to SH 183		
CSJ: #	2964-01-013	City:	Grand Prairie, Irving
		County:	Dallas County
Project Scope and Description:	(Reevaluation of Existing EIS) Alt. 2A is a new location 10.8 mile north-south four/six lane controlled access freeway, with three-lane frontage roads.		
New ROW:	Yes	No New ROW:	---
			Description of General Area: Agricultural, Urban, Sub-urban, Rural, Residential, Commercial, Industrial, etc. (Give relevant details of area)
Proposed route traverses through agricultural, older residential, commercial, riparian, sub-urban areas.			

GENERAL VEGETATION

Natural Ecological Regions:	Blackland Prairie			
Vegetation Types of Texas (TPWD, 1984) and acres impacted	Urban 120 acres	Post Oak Woods, Forest and Grassland Mosaic; 130 acres	Lakes; 40 acres	Crops 20 acres
Designated National or State Forests, NWR, WMA, etc:	None			
General Vegetation Found in Existing ROW along West Freeway and NW 19th Street: Trees, shrubs, vines, forbs, and grasses (as appropriate and in order of dominance for each group)				
<i>Common Name</i>	<i>Taxonomic Name</i>	<i>DBH (range)</i>	<i>Height (range)</i>	<i>% dominance</i>
Mesquite	<i>Prosopis glandulosa</i>	To 42"	To 35'	30%
Sugarberry	<i>Celtis laevigata</i>	To 24"	To 65'	15%
Green Ash	<i>Fraxinus pennsylvanica</i>	To 16"	To 40'	10%
Rough-leafed Dogwood	<i>Cornus Drummondii</i>			
Tree of Heaven	<i>Ailanthus altissima</i>			
Poison Ivy	<i>Rhus toxicodendron</i>			
Johnsongrass	<i>Sorghum halpense</i>			
Thin Paspalum	<i>Paspalum setaceum</i>			
Little Bluestem	<i>Schizachyrium scoparium</i>			
General Vegetation Found Along Fenceline: Trees, shrubs, vines, forbs, and grasses (as appropriate and in order of dominance for each group)				
<i>Common Name</i>	<i>Taxonomic Name</i>	<i>DBH (range)</i>	<i>Height (range)</i>	<i>% dominance</i>
NA				
NA				
General Vegetation Found Adjacent to Existing ROW or within Proposed ROW: Trees, shrubs, vines, forbs, and grasses (as appropriate, top two or three species in order of dominance for each group)				
<i>Common Name</i>	<i>Taxonomic Name</i>	<i>DBH (range)</i>	<i>Height (range)</i>	<i>% dominance</i>
Mesquite	<i>Prosopis glandulosa</i>	To 42"	To 35'	35%
Sugarberry	<i>Celtis laevigata</i>	To 24"	To 65'	20%
American Elm	<i>Ulmus americana</i>	To 42"	To 55'	15%
Rough-leafed Dogwood	<i>Cornus Drummondii</i>	To 2"	To 7'	
Yaupon	<i>Ilex vomitoria</i>	To 2"	To 8'	
Honey Locust	<i>Gleditsia triacanthos</i>	To 3"	To 10'	
Poison Ivy	<i>Rhus Toxicodendron</i>			

Peppervine	<i>Ampelopsis arborea</i>			
Mustang Grape	<i>Vitis mustangensis</i>			
Hedge Parsley	<i>Torilis arvensis</i>			
Western Ironweed	<i>Veronia baldwinii</i>			
Basket Flower	<i>Cantaurea americana</i>			
Spotted Beebalm	<i>Monarda punctata</i>			
Knotroot Bristlegrass	<i>Setaria geniculata</i>			
Switchgrass	<i>Panicum virgatum</i>			
Virginia Wildrye	<i>Elymus virginicus</i>			
Plant Associations or Series which may be found within Proposed ROW or Outside Existing ROW				
Plant Associations:	Pecan-Sugarberry	Sugarberry-Elm	Little Bluestem-Indiangrass	
Acreage Impacted:	Approx. 50 acres	Approx. 70 acres	NA	
Location:	Pecan and Sugarberry were found in association with each other to some extent in approximately five out of the 18 Woodland Data Sites. Because general dominance was considered, some data sites overlap with the Sugarberry-Elm association.	Sugarberry and Elm were found to be in association, to some extent, in 10 of the 18 Woodland Data Sites. Not all of these 10 sites would be dominated by or considered to be typical Sugarberry-Elm associations.	Little Bluestem was found in various places throughout the project. However, the Little Bluestem-Indiangrass association was not found within the project. Due to limited right-of-entry though, not all areas were field checked.	
Percent Canopy Cover of Project: (Trees and heavy brush throughout project length)		35%	Estimated total acreage of tree removal	171 acres total 80 acres riparian
General Description of Trees and/or Heavy Brush Dispersal Throughout Project: (Evenly, clumped, at creek crossings, scattered etc.)		Trees and heavy brush areas are scattered throughout the project limits. Vegetation densities increase near streams and river crossings, as does old growth dominance.		
Average DBH:	14"	Average Density:	490 trees/acre	Average Height: 40'
Unusual Vegetation Features: <i>unmaintained vegetation, fencerow vegetation, riparian vegetation, unusually large trees, unusual stands or islands, others (give details)</i>				
Description:		Location:		
1. Riparian Vegetation (stream)		Tributary to Fish Creek (south end of project just north of IH 20)		
2. Riparian Vegetation (creek)		Kirby Creek (north of Mayfield Rd.)		
3. Riparian Vegetation (stream)		Tributary #1 to Cottonwood Creek (south of Spur 303)		
4. Riparian Vegetation (stream)		Tributary #2 to Cottonwood Creek (south of Marshall Dr. and north of Spur 303.		
5. Riparian Vegetation (creek)		Cottonwood Creek (Dickey Rd. at West Freeway)		
6. Riparian Vegetation (stream)		Tributary #1 to West Fork of Trinity River (13 th St. at Dalworth St.)		
7. Riparian Vegetation (stream)		Tributary #2 to West Fork of Trinity River (Hill St. at NW 19 th St.)		
8. Riparian Vegetation (stream)		Tributary #1 to Johnson Creek (NW 19 th St. at IH 30)		
9. Riparian Vegetation (stream)		Tributary #1 to Johnson Creek (NW 19 th St. at Carrier Pkwy.)		
10. Riparian Vegetation (creek)		Johnson Creek at Waggoner Park and north of creek		
11. Riparian Vegetation (wetland area)		North of Lower Tarrant Rd.		

12. Riparian Vegetation (river)	West Fork of the Trinity River at LTV Park
13. Riparian Vegetation (wetland area)	North of the West Fork of the Trinity River crossing
14. Riparian Vegetation (drainage area)	South of Oakdale St.
15. Riparian Vegetation (wetland areas)	Scattered riparian vegetation from Shady Grove St. north to Rock Island Rd.
16. Riparian Vegetation (creek)	Associated riparian area north of Bear Creek and south of SH 183.
17. Unusually Large Trees	Unusually large trees were found along all creeks and well established tributaries. Primarily old growth woody vegetation was found in the northern portion of the project from IH 30 north. Large mesquites, pecans, oaks, cottonwoods, hackberries, elms and willows were found primarily in lowland areas, but some were found in upland areas as well. Large mesquites to 42" dbh were noted north of IH 30 and west of NW 19 th St. Large pecans and post oaks were noted south of Lower Tarrant Dr in a residential setting. Three Post Oaks were noted in an open field immediately north of Lower Tarrant. These trees ranged to 42" in dbh and approximately 60' in height. A 54" Pecan was noted north of Shady Grove and south of Rock Island. A 44" Bur Oak was found north of Oakdale and east of Hardrock. A 54" Eastern Cottonwood was found just south of Oakdale Rd. A 44" American Elm was found in Waggoner Park. A 40" Honey Mesquite was found just north of IH 20.
18. Unmaintained Vegetation	Most of the vegetation within the project corridor is not maintained, with the exception of those portions that are within agricultural areas or that encompass existing ROW. Vegetation within the project limits has been, for the most part allowed to continue to grow since the project was originally approved.
19. Unusual Stand	An unusual stand of Cottonwoods were noted north of Lower Tarrant. They noticeably dominated the stand. It was the only stand found where Cottonwoods dominated. They ranged to 36" dbh and to 70' in height.
Temporary and Permanent Impacts to Unusual Vegetation Features	
1. Impacts would be the removal of primarily most of the trees within the proposed ROW. However, only those trees that need to be removed will be removed.	
2.	
3.	
4.	
5.	
Special Habitat Features: <i>bottomland hardwoods, caves, cliffs and bluffs, native prairie, ponds, seeps and springs, snags, water bodies, existing bridges, nesting sites (active or not), den sites, roosting sites, others (give sufficient details for each feature)</i>	
Description:	Location:
1. Stream and creek crossings were mentioned above.	
2. Pond or wetland area.	Approx. 350' north of Arkansas Rd. on the west side of the proposed ROW.
3. Several ponds or wetland areas.	Areas situated just north of the Johnson Creek crossing in a wooded area.
4. Pond area	Pond situated approx. 1000' south of Oakdale on the west side of the proposed ROW.

5. Potential pond area	Located just north of Oakdale on east side of proposed ROW.
6. Pond and wetland areas	Located between Shady Grove and Rock Island.
7. Snags	Exist scattered throughout the mature wooded areas of the project, but not in great numbers.
8. Den or nest sites.	No den or nest sites were noted. However, vegetation has not been cleared since the ROD was issued for this project. Vegetation has continued to mature. Many avian species were noted, as were several pairs of raptors within the project limits. Care will need to be taken to insure that nesting or roosting migratory bird species are not taken during construction activities.
Temporary and Permanent Impacts to Unusual Vegetation Features	
1. Some pond and wetland areas will be disturbed during construction.	
2.	
3.	
4.	
5.	

WETLAND DATA FORMS

**TxDOT WETLAND DETERMINATION
DATA FORM**

GENERAL

Project	SH 161	Site #	9 Upl	Date	7/02/03
CSJ	2964-01-013	Investigator	M. Carothers, S. English	County	Dallas
Scope					
Describe Topography of the Investigation Site					
Catchment basin between highway and apartment complex, probably artificial					
Is this site significantly disturbed? How so?			No (not since wetland formation)		
Is this site a problem area? Why or Why not?			No		
NWI map name	Eules, TX	File name/path	Attachment		

*See attached NWI map for investigation site locations within the project limits

VEGETATION: (list plants by order of dominance)

Dominant Plant Species	Taxonomic Name	Stratum	Indicator
Common sunflower	<i>Helianthus annuus</i>	Herb	FAC
Johnson grass	<i>Sorghum halepense</i>	Herb	FACU
Giant ragweed	<i>Ambrosia trifida</i>	Herb	FAC
Annual sumpweed	<i>Iva annua</i>	Herb	FAC
Percent Dominant Species That Are OBL, FACW, FAC			75
Remarks	Meets hydrophytic vegetation criterion.		

Sketch below depicts an approximate (not to scale) cross-section of the investigation site on {stream name or other location}, taken {parallel/perpendicular/other} to roadway on the {north/south/east/west} side, near {roadway right-of-way line/ditch bottom/other location}. Location of soil sample is shown, along with dominant vegetation and other significant topographic features. Approximate elevation of ordinary high water mark is also shown for reference. (label all features shown in sketch)

See Area 9 Wet

HYDROLOGY

Is this site inundated?	No	Depth of water surface (if applicable)	NA
Soil Saturated		Oxidized Root Channels	
High Water Marks		Water Stained Leaves	
Debris Lodged Above Ground		Sediment Deposits On Plants	
Drift Lines		Other	
Remarks	No indicators of wetland hydrology		

SOIL

Mapped Soil Conditions					
Soil Name	Typical Color	Drainage Class	Hydric List?		
Ferris-Urban land complex, 5 to 12% slopes	Light yellowish brown, olive clay below	Well drained	No		
Field Soil Conditions					
Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture
0-4	A ₁	10YR 4/2	None	NA	Sandy clay
4-12	A ₂	10YR 4/3	None	NA	Clay
	Oxidized Root Channels		Low Chroma Colors		
	Mineral Concretions		High Organic Content		
	Sulfidic Odor		Bright Mottling		
	Gleying		Other		
Remarks	A ₁ layer variable, considerable amount of fill. No hydric soil indicators.				

DETERMINATION

Hydrophytic Vegetation present at the investigation site?	Yes	Fluctuating Hydrology?	No	Hydric Soils Present?	No
Is this site a jurisdictional wetland? If not, explain why it is not:					
No, only 1/3 wetland criteria met.					
What is the approximate size of the wetland? (if applicable)					
NA					
Are there jurisdictional waters associated with site? Identify stream name or other description.					
No					
Ordinary High Water Mark Elevation	NA				
Remarks					

(REVISED JUNE 2000)

Project SH 161 Site # 9 Wet Date 7/2/03

HYDROLOGY

Is this site inundated?	No	Depth of water surface (if applicable)	No
Soil Saturated		Oxidized Root Channels	
High Water Marks	Yes	Water Stained Leaves	
Debris Lodged Above Ground	Yes	Sediment Deposits On Plants	
Drift Lines		Other	
Remarks	Standing water in some areas, obvious drainage patterns (primary indicator of wetland hydrology)		

SOIL

Mapped Soil Conditions					
Soil Name	Typical Color	Drainage Class	Hydric List?		
Ferris-Urban land complex, 5 to 12% slopes	Light yellowish brown, olive clay below	Well drained	No		
Field Soil Conditions					
Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture
0-4	A ₁	10YR 4/3			Clay
		10YR 5/6			
4-12	A ₂	Gley 1 4/N	10YR 5/6	Many/Medium/Prominent	Clay
	Oxidized Root Channels		Yes	Low Chroma Colors	
	Mineral Concretions			High Organic Content	
	Sulfidic Odor		Yes	Bright Mottling	
Yes	Gleying		Yes	Other	
Remarks	A ₁ – heavy Mn staining in a dual matrix – fill. Reducing conditions.				

DETERMINATION

Hydrophytic Vegetation present at the investigation site?	Yes	Fluctuating Hydrology?	Yes	Hydric Soils Present?	Yes
Is this site a jurisdictional wetland? If not, explain why it is not:					
Yes					
What is the approximate size of the wetland? (if applicable)					
0.015 acre					
Are there jurisdictional waters associated with site? Identify stream name or other description.					
No					
Ordinary High Water Mark Elevation			NA		
Remarks					

(REVISED JUNE 2000)

**TxDOT WETLAND DETERMINATION
DATA FORM**

GENERAL

Project	SH 161	Site #	10 Upl	Date	6/17/03
CSJ	2964-01-013	Investigator	F. Land, M. Carothers	County	Dallas
Scope					
Describe Topography of the Investigation Site					
Above a small floodplain area within stream bank					
Is this site significantly disturbed? How so?			No		
Is this site a problem area? Why or Why not?			No		
NWI map name	Eules, TX	File name/path	Attachment		

*See attached NWI map for investigation site locations within the project limits

VEGETATION: (list plants by order of dominance)

Dominant Plant Species	Taxonomic Name	Stratum	Indicator
Johnson grass	<i>Sorghum halepense</i>	Herb	FACU
Virginia wild rye	<i>Elymus virginicus</i>	Herb	FAC
Percent Dominant Species That Are OBL, FACW, FAC			50
Remarks	Does not meet hydrophytic vegetation criterion.		

Sketch below depicts an approximate (not to scale) cross-section of the investigation site on {stream name or other location}, taken {parallel/perpendicular/other} to roadway on the {north/south/east/west} side, near {roadway right-of-way line/ditch bottom/other location}. Location of soil sample is shown, along with dominant vegetation and other significant topographic features. Approximate elevation of ordinary high water mark is also shown for reference. (label all features shown in sketch)

see Area 10 Wet

Project SH 161 Site # 10 Upl Date 6/17/03

HYDROLOGY

Is this site inundated?	No	Depth of water surface (if applicable)	NA
Yes (surface)	Soil Saturated		Oxidized Root Channels
	High Water Marks		Water Stained Leaves
	Debris Lodged Above Ground		Sediment Deposits On Plants
	Drift Lines		Other
Remarks	Surface saturated due to previous day's rain event. Wetland hydrology does not exist at this site.		

SOIL

Mapped Soil Conditions					
Soil Name	Typical Color	Drainage Class	Hydric List?		
Frio silty clay, frequently flooded	Dark to very dark grayish brown	Well drained	No		
Field Soil Conditions					
Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture
0-14	A ₁	2.5Y 4/2	10YR 2/1	Common/Fine/Prominent	Sandy clay
	Oxidized Root Channels		Low Chroma Colors		
	Mineral Concretions		High Organic Content		
	Sulfidic Odor		Bright Mottling		
	Gleying		Other		
Remarks	Soil not hydric.				

DETERMINATION

Hydrophytic Vegetation present at the investigation site?	No	Fluctuating Hydrology?	No	Hydric Soils Present?	No
Is this site a jurisdictional wetland? If not, explain why it is not:					
No, 0/3 wetland criteria met.					
What is the approximate size of the wetland? (if applicable)					
NA					
Are there jurisdictional waters associated with site? Identify stream name or other description.					
No					
Ordinary High Water Mark Elevation			NA		
Remarks					

(REVISED JUNE 2000)

TxDOT WETLAND DETERMINATION DATA FORM

GENERAL

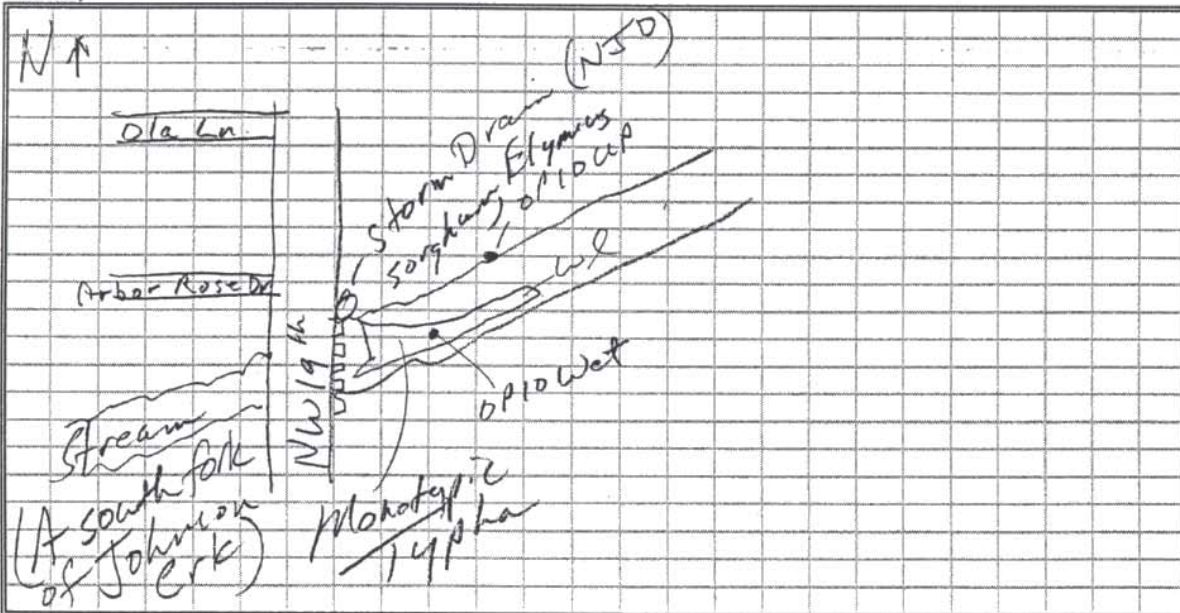
Project	SH 161	Site #	10 Wet	Date	6/17/03
CSJ	2964-01-013	Investigator	F. Land, H. Osborne	County	Dallas
Scope					
Describe Topography of the Investigation Site					
Small floodplain area within stream bank					
Is this site significantly disturbed? How so?			No		
Is this site a problem area? Why or Why not?			No		
NWI map name	Eules, TX	File name/path	Attachment		

*See attached NWI map for investigation site locations within the project limits

VEGETATION: (list plants by order of dominance)

Dominant Plant Species	Taxonomic Name	Stratum	Indicator
Narrow-leaf cattail	<i>Typha angustifolia</i>	herb	OBL
Percent Dominant Species That Are OBL, FACW, FAC			100
Remarks	Monotypic <i>Typha</i> community. Meets hydrophytic vegetation criterion.		

Sketch below depicts an approximate (not to scale) cross-section of the investigation site on {stream name or other location}, taken {parallel/perpendicular/other} to roadway on the {north/south/east/west} side, near (roadway right-of-way line/ditch bottom/other location). Location of soil sample is shown, along with dominant vegetation and other significant topographic features. Approximate elevation of ordinary high water mark is also shown for reference. (label all features shown in sketch)



Project SH 161 Site # 10 Wet Date 6/17/03

HYDROLOGY

Is this site inundated?	No	Depth of water surface (if applicable)	None
Yes (at surface)	Soil Saturated		Oxidized Root Channels
Yes	High Water Marks	Yes	Water Stained Leaves
Yes	Debris Lodged Above Ground	Yes	Sediment Deposits On Plants
Yes	Drift Lines		Other
Remarks	4" depth to free water in pit. Meets wetland hydrology criterion.		

SOIL

Mapped Soil Conditions					
Soil Name	Typical Color	Drainage Class	Hydric List?		
Frio silty clay, frequently flooded	Dark to very dark grayish brown	Well drained	No		
Field Soil Conditions					
Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture
0-10	A ₁	2.5Y 4/2	None	NA	Sandy clay
10-14	A ₂	10YR 2/1	None	NA	Sandy clay loam
	Oxidized Root Channels	Yes	Low Chroma Colors		
	Mineral Concretions		High Organic Content		
Yes	Sulfidic Odor		Bright Mottling		
	Gleying		Other		
Remarks	Meets hydric soil criteria.				

DETERMINATION

Hydrophytic Vegetation present at the investigation site?	Yes	Fluctuating Hydrology?	Yes	Hydric Soils Present?	Yes
Is this site a jurisdictional wetland? If not, explain why it is not:					
Yes					
What is the approximate size of the wetland? (if applicable)					
0.011 acre					
Are there jurisdictional waters associated with site? Identify stream name or other description.					
Yes, a south fork of Johnson Creek					
Ordinary High Water Mark Elevation	6"				
Remarks					

(REVISED JUNE 2000)

**TxDOT WETLAND DETERMINATION
DATA FORM**

GENERAL

Project	SH 161		Site #	11 Upl	Date	6/18/03
CSJ	2964-01-013	Investigator	M. Carothers, F. Land	County	Dallas	
Scope						
Describe Topography of the Investigation Site						
Above a floodplain wetland adjacent to a major creek						
Is this site significantly disturbed? How so?			No			
Is this site a problem area? Why or Why not?			No			
NWI map name	Eules, TX	File name/path	Attachment			

*See attached NWI map for investigation site locations within the project limits

VEGETATION: (list plants by order of dominance)

Dominant Plant Species	Taxonomic Name	Stratum	Indicator
Johnson grass	<i>Sorghum halepense</i>	Herb	FACU
Sideoats grama	<i>Bouteloua curtipendula</i>	Herb	UPL
Percent Dominant Species That Are OBL, FACW, FAC			0
Remarks	Does not meet hydrophytic vegetation criterion.		

Sketch below depicts an approximate (not to scale) cross-section of the investigation site on {*stream name or other location*}, taken {*parallel/perpendicular/other*} to roadway on the {*north/south/east/west*} side, near {*roadway right-of-way line/ditch bottom/other location*}. Location of soil sample is shown, along with dominant vegetation and other significant topographic features. Approximate elevation of ordinary high water mark is also shown for reference. {label all features shown in sketch}

see Area 11 Wet

Project SH 161

Site # 11 Upl

Date 6/18/03

HYDROLOGY

Is this site inundated?	No	Depth of water surface (if applicable)	NA
Soil Saturated		Oxidized Root Channels	
High Water Marks		Water Stained Leaves	
Debris Lodged Above Ground		Sediment Deposits On Plants	
Drift Lines		Other	
Remarks	Wetland hydrology does not exist at this site.		

SOIL

Mapped Soil Conditions					
Soil Name	Typical Color		Drainage Class	Hydric List?	
Frio silty clay, frequently flooded	Dark grayish brown, very dark grayish brown underneath		Well drained	No	
Field Soil Conditions					
Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture
0-6	A ₁	10YR 3/3	2.5YR 5/3	Common/Medium /Prominent	Clay
6-8	A ₂	10YR 3/3	2.5 YR 6/4	Many/Coarse/ Prominent	Clay
8-14	A ₃	10YR 3/3	10YR 5/3	Common/Medium /Faint	Clay
	Oxidized Root Channels			Low Chroma Colors	
	Mineral Concretions			High Organic Content	
	Sulfidic Odor			Bright Mottling	
	Gleying			Other	
Remarks	Probable fill material, soil not hydric.				

DETERMINATION

Hydrophytic Vegetation present at the investigation site?	No	Fluctuating Hydrology?	No	Hydric Soils Present?	No
Is this site a jurisdictional wetland? If not, explain why it is not:					
No, 0/3 wetland criteria met.					
What is the approximate size of the wetland? (if applicable)					
NA					
Are there jurisdictional waters associated with site? Identify stream name or other description.					
No					
Ordinary High Water Mark Elevation		NA			
Remarks					

(REVISED JUNE 2000)

TxDOT WETLAND DETERMINATION DATA FORM

GENERAL

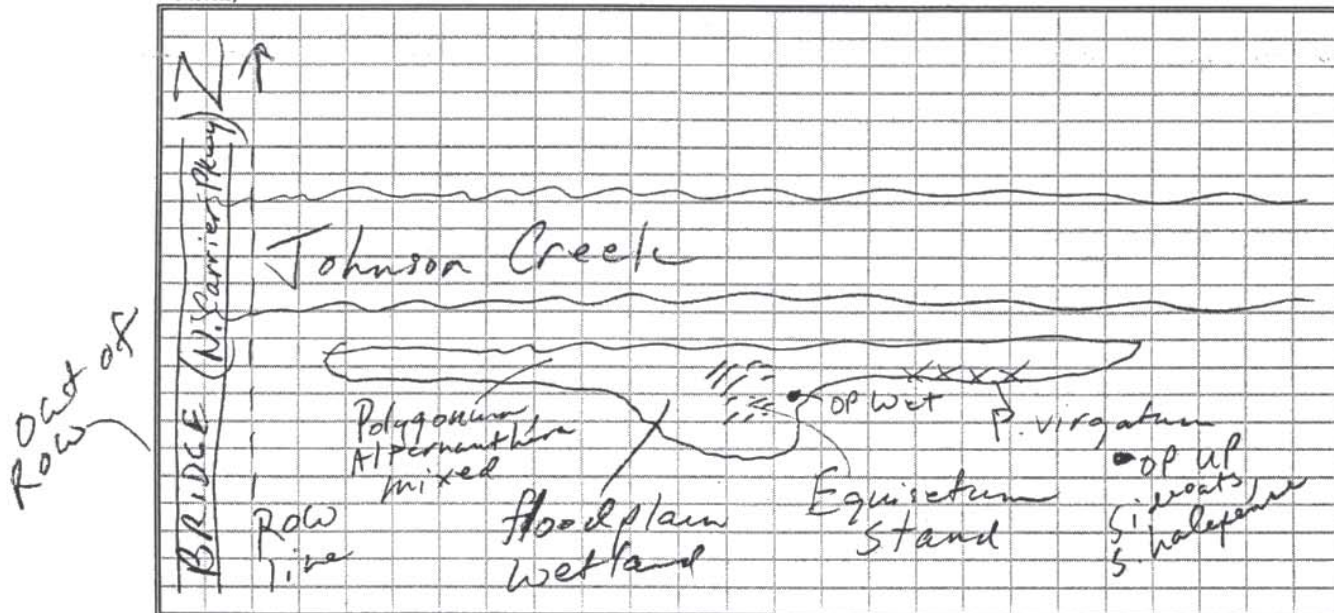
Project	SH 161	Site #	11 Wet	Date	6/18/03
CSJ	2964-01-013	Investigator	M. Carothers, F. Land	County	Dallas
Scope					
Describe Topography of the Investigation Site					
Floodplain adjacent to major creek					
Is this site significantly disturbed? How so?			No		
Is this site a problem area? Why or Why not?			No		
NWI map name	Eules, TX	File name/path	Attachment		

*See attached NWI map for investigation site locations within the project limits

VEGETATION: (list plants by order of dominance)

Dominant Plant Species	Taxonomic Name	Stratum	Indicator
Rough horsetail	<i>Equisetum hyemale</i>	Herb	FACW
Alligator weed	<i>Alternanthera philoxeroides</i>	Herb	OBL
Switchgrass	<i>Panicum virgatum</i>	Herb	FACW
Smartweed	<i>Polygonum</i> sp.	Herb	NA
Percent Dominant Species That Are OBL, FACW, FAC			100
Remarks	Meets hydrophytic vegetation criterion.		

Sketch below depicts an approximate (not to scale) cross-section of the investigation site on {stream name or other location}, taken {parallel/perpendicular/other} to roadway on the {north/south/east/west} side, near {roadway right-of-way line/ditch bottom/other location}. Location of soil sample is shown, along with dominant vegetation and other significant topographic features. Approximate elevation of ordinary high water mark is also shown for reference. {label all features shown in sketch}



Project SH 161 Site # 11 Wet Date 6/17/03

HYDROLOGY

Is this site inundated?	No	Depth of water surface (if applicable)	None
Yes (at surface)	Soil Saturated	Yes	Oxidized Root Channels
Yes	High Water Marks	Yes	Water Stained Leaves
	Debris Lodged Above Ground	Yes	Sediment Deposits On Plants
Yes	Drift Lines	Yes	Other
Remarks	10" depth to free water in pit. Meets wetland hydrology criterion.		

SOIL

Mapped Soil Conditions					
Soil Name	Typical Color		Drainage Class	Hydric List?	
Frio silty clay, frequently flooded	Dark grayish brown, very dark grayish brown underneath		Well drained	No	
Field Soil Conditions					
Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture
0-14	A ₁	2.5Y 4/2	7.5YR 4/6	Common/Medium /Prominent	Sand
Yes	Oxidized Root Channels			Low Chroma Colors	
Yes	Mineral Concretions			High Organic Content	
	Sulfidic Odor		Yes	Bright Mottling	
	Gleying			Other	
Remarks	Meets hydric soil criteria.				

DETERMINATION

Hydrophytic Vegetation present at the investigation site?	Yes	Fluctuating Hydrology?	Yes	Hydric Soils Present?	Yes
Is this site a jurisdictional wetland? If not, explain why it is not:					
Yes					
What is the approximate size of the wetland? (if applicable)					
0.121 acre					
Are there jurisdictional waters associated with site? Identify stream name or other description.					
Yes, Johnson Creek					
Ordinary High Water Mark Elevation			NA		
Remarks					

(REVISED JUNE 2000)

**TxDOT WETLAND DETERMINATION
DATA FORM**

GENERAL

Project	SH 161		Site #	12 Upl	Date	6/18/03
CSJ	2964-01-013	Investigator	F. Land, H. Osborne	County	Dallas	
Scope						
Describe Topography of the Investigation Site						
Above a stock tank and overflow wetland area						
Is this site significantly disturbed? How so?			No			
Is this site a problem area? Why or Why not?			No			
NWI map name	Eules, TX	File name/path	Attachment			

*See attached NWI map for investigation site locations within the project limits

VEGETATION: (list plants by order of dominance)

Dominant Plant Species	Taxonomic Name	Stratum	Indicator
Western ragweed	<i>Ambrosia psilostachya</i>	Herb	FAC-
Japanese brome	<i>Bromus japonicus</i>	Herb	FACU
Perennial ryegrass	<i>Lolium perenne</i>	Herb	FACU
Curly dock	<i>Rumex crispus</i>	Herb	FACW
Percent Dominant Species That Are OBL, FACW, FAC			25
Remarks	Does not meet hydrophytic vegetation criterion.		

Sketch below depicts an approximate (not to scale) cross-section of the investigation site on {stream name or other location}, taken {parallel/perpendicular/other} to roadway on the {north/south/east/west} side, near {roadway right-of-way line/ditch bottom/other location}. Location of soil sample is shown, along with dominant vegetation and other significant topographic features. Approximate elevation of ordinary high water mark is also shown for reference. (label all features shown in sketch)

See Area 12 Wet

Project SH 161 Site # 12 Upl Date 6/18/03

HYDROLOGY

Is this site inundated?	No	Depth of water surface (if applicable)	NA
Soil Saturated		Oxidized Root Channels	
High Water Marks		Water Stained Leaves	
Debris Lodged Above Ground		Sediment Deposits On Plants	
Drift Lines		Other	
Remarks	Wetland hydrology does not exist at this site.		

SOIL

Mapped Soil Conditions					
Soil Name	Typical Color	Drainage Class	Hydric List?		
Silawa fine sandy loam, 1 to 3% slopes	Brown, yellowish red underneath	Well drained	No		
Field Soil Conditions					
Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture
0-12	A ₁	10YR4/2	10YR 4/4	Few/Fine/Distinct	Sandy clay
	Oxidized Root Channels			Low Chroma Colors	
	Mineral Concretions			High Organic Content	
	Sulfidic Odor			Bright Mottling	
	Gleying			Other	
Remarks	Soil not hydric.				

DETERMINATION

Hydrophytic Vegetation present at the investigation site?	No	Fluctuating Hydrology?	No	Hydric Soils Present?	No
Is this site a jurisdictional wetland? If not, explain why it is not:					
No, 0/3 wetland criteria met.					
What is the approximate size of the wetland? (if applicable)					
NA					
Are there jurisdictional waters associated with site? Identify stream name or other description.					
No					
Ordinary High Water Mark Elevation	NA				
Remarks					

(REVISED JUNE 2000)

TxDOT WETLAND DETERMINATION DATA FORM

GENERAL

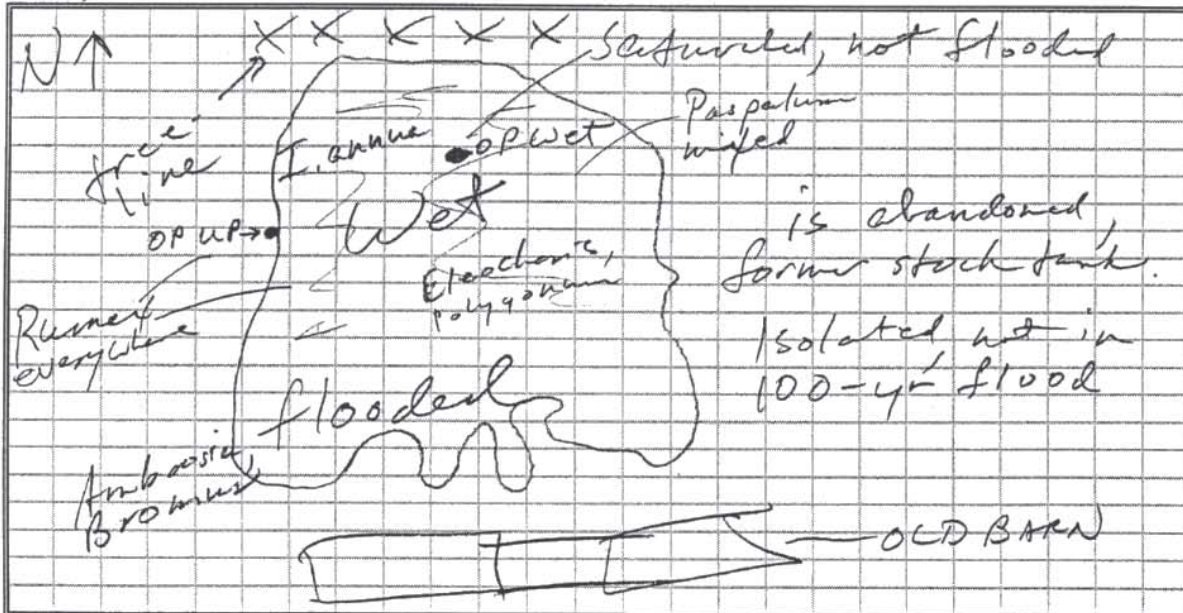
Project	SH 161	Site #	12 Wet	Date	6/18/03
CSJ	2964-01-013	Investigator	M. Carothers, F. Land	County	Dallas
Scope					
Describe Topography of the Investigation Site					
Stock tank and overflow wetland area					
Is this site significantly disturbed? How so?		No			
Is this site a problem area? Why or Why not?		No			
NWI map name	Eules, TX	File name/path	Attachment		

*See attached NWI map for investigation site locations within the project limits

VEGETATION: (list plants by order of dominance)

Dominant Plant Species	Taxonomic Name	Stratum	Indicator
Sand spikerush	<i>Eleocharis montevidensis</i>	herb	FACW+
Swamp smartweed	<i>Polygonum hydropiperoides</i>	herb	OBL
Annual sumpweed	<i>Iva annua</i>	herb	FAC
Paspalum	<i>Paspalum</i> sp.	herb	NA
Percent Dominant Species That Are OBL, FACW, FAC			100
Remarks	Meets hydrophytic vegetation criterion.		

Sketch below depicts an approximate (not to scale) cross-section of the investigation site on (stream name or other location), taken (parallel/perpendicular/other) to roadway on the (north/south/east/west) side, near (roadway right-of-way line/ditch/bottom/other location). Location of soil sample is shown, along with dominant vegetation and other significant topographic features. Approximate elevation of ordinary high water mark is also shown for reference. (label all features shown in sketch)



HYDROLOGY

Is this site inundated?	No	Depth of water surface (if applicable)	None
Yes (at 10" depth)	Soil Saturated	Yes	Oxidized Root Channels
	High Water Marks		Water Stained Leaves
	Debris Lodged Above Ground		Sediment Deposits On Plants
	Drift Lines		Other
Remarks	Meets wetland hydrology criterion.		

SOIL

Mapped Soil Conditions					
Soil Name	Typical Color	Drainage Class	Hydric List?		
Silawa fine sandy loam, 1 to 3% slopes	Brown, yellowish red underneath	Well drained	No		
Field Soil Conditions					
Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture
0-7	A ₁	10YR 3/1	5YR 4/6	Many/Fine/Prominent	Clay
7-10	A ₂	10YR 5/2	5YR 4/6	Common/Fine/Prominent	Clay
10-13	E	10YR 6/2	None	NA	Sand
13-16	B	10YR 4/1	10YR 4/4	Common/Fine/Distinct	Clay
	Oxidized Root Channels		Yes	Low Chroma Colors	
Yes	Mineral Concretions			High Organic Content	
	Sulfidic Odor		Yes	Bright Mottling	
	Gleying			Other	
Remarks	Meets hydric soil criteria.				

DETERMINATION

Hydrophytic Vegetation present at the investigation site?	Yes	Fluctuating Hydrology?	Yes	Hydric Soils Present?	Yes
Is this site a jurisdictional wetland? If not, explain why it is not:					
Yes					
What is the approximate size of the wetland? (if applicable)					
1.4 acre					
Are there jurisdictional waters associated with site? Identify stream name or other description.					
No					
Ordinary High Water Mark Elevation			NA		
Remarks					

(REVISED JUNE 2000)

TxDOT WETLAND DETERMINATION DATA FORM

GENERAL

Project	SH 161	Site #	13 Upl	Date	6/18/03
CSJ	2964-01-013	Investigator	M. Carothers, F. Land	County	Dallas
Scope					
Describe Topography of the Investigation Site					
Above a bottomland flooded wetland at base of upland drainage channel.					
Is this site significantly disturbed? How so?			No		
Is this site a problem area? Why or Why not?			No		
NWI map name	Eules, TX	File name/path	Attachment		

*See attached NWI map for investigation site locations within the project limits

VEGETATION: (list plants by order of dominance)

Dominant Plant Species	Taxonomic Name	Stratum	Indicator
Coastal Bermuda grass	<i>Cynodon dactylon</i> (cult.)	Herb	FACU+
Japanese brome	<i>Bromus japonicus</i>	Herb	FACU
Johnson grass	<i>Sorghum halepense</i>	Herb	FACU
Slender vervain	<i>Verbena officinale</i> ssp. <i>halei</i>	Herb	UPL
Percent Dominant Species That Are OBL, FACW, FAC			0
Remarks	Upland pasture dominated by coastal Bermuda grass. Does not meet hydrophytic vegetation criterion.		

Sketch below depicts an approximate (not to scale) cross-section of the investigation site on {stream name or other location}, taken {parallel/perpendicular/other} to roadway on the {north/south/east/west} side, near {roadway right-of-way line/ditch bottom/other location}. Location of soil sample is shown, along with dominant vegetation and other significant topographic features. Approximate elevation of ordinary high water mark is also shown for reference. {label all features shown in sketch}

see Area 13 Wet

HYDROLOGY

Is this site inundated?	No	Depth of water surface (if applicable)	NA
Soil Saturated		Oxidized Root Channels	
High Water Marks		Water Stained Leaves	
Debris Lodged Above Ground		Sediment Deposits On Plants	
Drift Lines		Other	
Remarks	Wetland hydrology does not exist at this site.		

SOIL

Mapped Soil Conditions					
Soil Name	Typical Color	Drainage Class	Hydric List?		
Silawa fine sandy loam, 2 to 8% slopes, eroded	Grayish brown, reddish brown and yellowish red underneath	Well drained	No		
Field Soil Conditions					
Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture
0-6	A ₁	2.5Y 4/3	2.5Y 6/8	Common/Fine /Prominent	Sandy clay
6-8	A ₂	5YR 4/6	2.5Y 4/4	Few/Fine /Prominent	Sandy clay
8-12	A ₃	10YR 4/1	10YR 5/6	Common/Fine /Prominent	Sandy clay
12-14	A ₄	5YR 4/1	10YR 4/1	Common/Fine /Prominent	Sand
	Oxidized Root Channels			Low Chroma Colors	
	Mineral Concretions			High Organic Content	
	Sulfidic Odor			Bright Mottling	
	Gleying			Other	
Remarks	Probable fill material, soil not hydric.				

DETERMINATION

Hydrophytic Vegetation present at the investigation site?	No	Fluctuating Hydrology?	No	Hydric Soils Present?	No
Is this site a jurisdictional wetland? If not, explain why it is not:					
No, 0/3 wetland criteria met.					
What is the approximate size of the wetland? (if applicable)					
NA					
Are there jurisdictional waters associated with site? Identify stream name or other description.					
No					
Ordinary High Water Mark Elevation			NA		
Remarks					

(REVISED JUNE 2000)

TXDOT WETLAND DETERMINATION DATA FORM

GENERAL

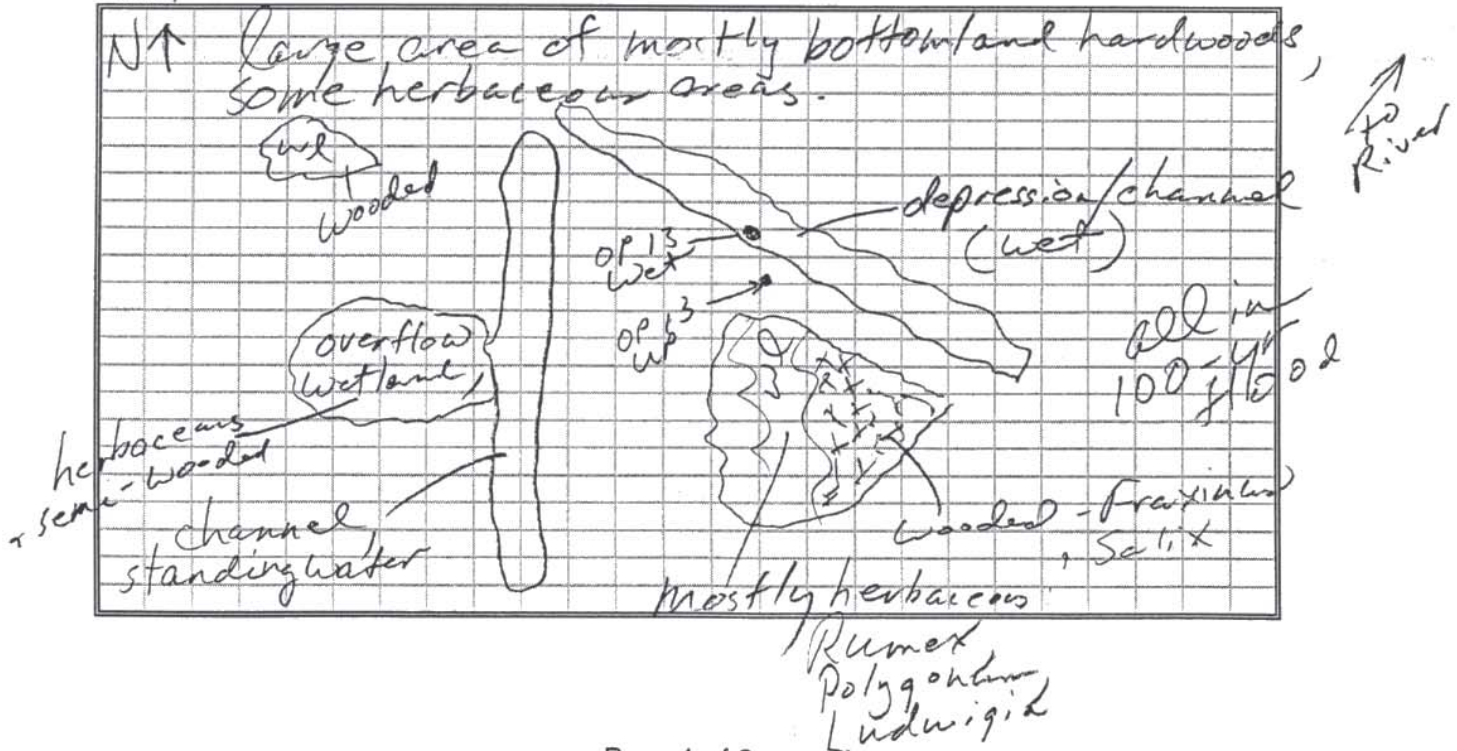
Project	SH 161	Site #	13 Wet	Date	6/18/03
CSJ	2964-01-013	Investigator	M. Carothers, J. Barker	County	Dallas
Scope					
Describe Topography of the Investigation Site					
Bottomland flooded area at base of upland drainage channel.					
Is this site significantly disturbed? How so?		No			
Is this site a problem area? Why or Why not?		No			
NWI map name	Euless, TX	File name/path	Attachment		

*See attached NWI map for investigation site locations within the project limits

VEGETATION: (list plants by order of dominance)

Dominant Plant Species	Taxonomic Name	Stratum	Indicator
Black willow	<i>Salix nigra</i>	Tree	FACW+
Narrow-leaf cattail	<i>Typha angustifolia</i>	Herb	OBL
Giant ragweed	<i>Ambrosia trifida</i>	Herb	FAC
Sand spikerush	<i>Eleocharis montevidensis</i>	Herb	FACW+
Percent Dominant Species That Are OBL, FACW, FAC			100
Remarks	Meets hydrophytic vegetation criterion.		

Sketch below depicts an approximate (not to scale) cross-section of the investigation site on (stream name or other location), taken (parallel/perpendicular/other) to roadway on the (north/south/east/west) side, near (roadway right-of-way line/ditch bottom/other location). Location of soil sample is shown, along with dominant vegetation and other significant topographic features. Approximate elevation of ordinary high water mark is also shown for reference. (label all features shown in sketch)



Project SH 161 Site # 13 Wet Date 6/18/03

HYDROLOGY

Is this site inundated?	No	Depth of water surface (if applicable)	None
Soil Saturated	Yes	Oxidized Root Channels	
High Water Marks	Yes	Water Stained Leaves	
Debris Lodged Above Ground		Sediment Deposits On Plants	
Yes	Drift Lines	Other	
Remarks	Meets wetland hydrology criterion.		

SOIL

Mapped Soil Conditions					
Soil Name	Typical Color	Drainage Class	Hydric List?		
Silawa fine sandy loam, 2 to 8% slopes, eroded	Grayish brown, reddish brown and yellowish red underneath	Well drained	No		
Field Soil Conditions					
Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture
0-2	A ₁	7.5YR 4/2	None	NA	Clay
2-16	A ₂	7.5YR 5/6	10YR 3/1	Common/Medium/Prominent	Sand
Yes	Oxidized Root Channels			Low Chroma Colors	
Yes	Mineral Concretions			High Organic Content	
	Sulfidic Odor			Bright Mottling	
	Gleying		Yes	Other	
Remarks	Reducing conditions. Meets hydric soil criteria.				

DETERMINATION

Hydrophytic Vegetation present at the investigation site?	Yes	Fluctuating Hydrology?	Yes	Hydric Soils Present?	Yes
Is this site a jurisdictional wetland? If not, explain why it is not:					
Yes					
What is the approximate size of the wetland? (if applicable)					
0.081 acre					
Are there jurisdictional waters associated with site? Identify stream name or other description.					
No					
Ordinary High Water Mark Elevation	NA				
Remarks					

(REVISED JUNE 2000)

**TxDOT WETLAND DETERMINATION
DATA FORM**

GENERAL

Project	SH 161		Site #	13A Upl	Date	6/18/03
CSJ	2964-01-013	Investigator	M. Carothers, Jene Barker		County	Dallas
Scope						
Describe Topography of the Investigation Site						
Bottomland hardwood and emergent wetland areas in river floodplain.						
Is this site significantly disturbed? How so?			No			
Is this site a problem area? Why or Why not?			No			
NWI map name	Eules, TX	File name/path	Attachment			

*See attached NWI map for investigation site locations within the project limits

VEGETATION: (list plants by order of dominance)

Dominant Plant Species	Taxonomic Name	Stratum	Indicator
Cedar elm	<i>Ulmus crassifolia</i>	Tree	FAC
Poison ivy	<i>Toxicodendron radicans</i>	Herb	FAC
Virginia wild-rye	<i>Elymus virginicus</i>	Herb	FAC
Southern dewberry	<i>Rubus trivialis</i>	Herb	FAC
Giant ragweed	<i>Ambrosia trifida</i>	Herb	FAC
Percent Dominant Species That Are OBL, FACW, FAC			100
Remarks	Meets hydrophytic vegetation criterion.		

Sketch below depicts an approximate (not to scale) cross-section of the investigation site on *(stream name or other location)*, taken *(parallel/perpendicular/other)* to roadway on the *(north/south/east/west)* side, near *(roadway right-of-way line/ditch bottom/other location)*. Location of soil sample is shown, along with dominant vegetation and other significant topographic features. Approximate elevation of ordinary high water mark is also shown for reference. (label all features shown in sketch)

See Area 13A Wet

Project SH 161Site # 13A UplDate 6/18/03**HYDROLOGY**

Is this site inundated?	No	Depth of water surface (if applicable)	NA
Soil Saturated		Oxidized Root Channels	
High Water Marks		Water Stained Leaves	
Debris Lodged Above Ground		Sediment Deposits On Plants	
Drift Lines		Other	
Remarks	Wetland hydrology does not exist at this site.		

SOIL

Mapped Soil Conditions					
Soil Name	Typical Color		Drainage Class	Hydric List?	
Arents, loamy, gently undulating	No uniform layers due to past mining activity		Not classified	No	
Field Soil Conditions					
Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture
0-3	A ₁	10YR 4/2	None	NA	Sand
3-14	A ₂	10YR 4/6	None	NA	Sand
	Oxidized Root Channels			Low Chroma Colors	
	Mineral Concretions			High Organic Content	
	Sulfidic Odor			Bright Mottling	
	Gleying			Other	
Remarks	Soil not hydric.				

DETERMINATION

Hydrophytic Vegetation present at the investigation site?	Yes	Fluctuating Hydrology?	No	Hydric Soils Present?	No
Is this site a jurisdictional wetland? If not, explain why it is not:					
No, only 1/3 wetland criteria met.					
What is the approximate size of the wetland? (if applicable)					
NA					
Are there jurisdictional waters associated with site? Identify stream name or other description.					
No					
Ordinary High Water Mark Elevation			NA		
Remarks					

(REVISED JUNE 2000)

Project SH 161 Site # 13A Wet Date 6/18/03

HYDROLOGY

Is this site inundated?	Yes	Depth of water surface (if applicable)	Surface
Yes (at surface)	Soil Saturated		Oxidized Root Channels
Yes	High Water Marks	Yes	Water Stained Leaves
Yes	Debris Lodged Above Ground	Yes	Sediment Deposits On Plants
Yes	Drift Lines	Yes	Other
Remarks	Crawfish mounds. Meets wetland hydrology criterion.		

SOIL

Mapped Soil Conditions					
Soil Name	Typical Color	Drainage Class	Hydric List?		
Arents, loamy, gently undulating	No uniform layers due to past mining activity	Not classified	No		
Field Soil Conditions					
Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture
0-14	A ₁	10YR 3/1	None	NA	Loamy clay
	Oxidized Root Channels		Yes	Low Chroma Colors	
	Mineral Concretions		Yes	High Organic Content	
	Sulfidic Odor			Bright Mottling	
Yes	Gleying		Yes	Other	
Remarks	High organic content throughout matrix. Meets hydric soil criteria.				

DETERMINATION

Hydrophytic Vegetation present at the investigation site?	Yes	Fluctuating Hydrology?	Yes	Hydric Soils Present?	Yes
Is this site a jurisdictional wetland? If not, explain why it is not:					
Yes					
What is the approximate size of the wetland? (if applicable)					
0.683 ac., 0.380 ac., 0.237 ac., 0.040 ac. (areas within ROW)					
Are there jurisdictional waters associated with site? Identify stream name or other description.					
Yes, in floodplain of the West Fork of the Trinity River.					
Ordinary High Water Mark Elevation			NA		
Remarks					

(REVISED JUNE 2000)

**TxDOT WETLAND DETERMINATION
DATA FORM**

GENERAL

Project	SH 161	Site #	14Upl	Date	6/18/03
CSJ	2964-01-013	Investigator	F. Land, M. Carothers	County	Dallas
Scope					
Describe Topography of the Investigation Site					
High area above a semi-wooded and herbaceous wetland area in river floodplain.					
Is this site significantly disturbed? How so?			No		
Is this site a problem area? Why or Why not?			No		
NWI map name	Eules, TX	File name/path	Attachment		

*See attached NWI map for investigation site locations within the project limits

VEGETATION: (list plants by order of dominance)

Dominant Plant Species	Taxonomic Name	Stratum	Indicator
Bermuda grass	<i>Cynodon dactylon</i>	Herb	FACU+
Silver nightshade	<i>Solanum eleagnifolium</i>	Herb	UPL
Cedar elm	<i>Ulmus crassifolia</i>	Herb	FAC
Western ragweed	<i>Ambrosia psilostachya</i>	Herb	FAC-
Percent Dominant Species That Are OBL, FACW, FAC			25
Remarks	Does not meet hydrophytic vegetation criterion.		

Sketch below depicts an approximate (not to scale) cross-section of the investigation site on {stream name or other location}, taken {parallel/perpendicular/other} to roadway on the {north/south/east/west} side, near {roadway right-of-way line/ditch bottom/other location}. Location of soil sample is shown, along with dominant vegetation and other significant topographic features. Approximate elevation of ordinary high water mark is also shown for reference. (label all features shown in sketch)

see Area 14 Wet

Project SH 161 Site # 14Upl Date 6/18/03

HYDROLOGY

Is this site inundated?	No	Depth of water surface (if applicable)	NA
Soil Saturated		Oxidized Root Channels	
High Water Marks		Water Stained Leaves	
Debris Lodged Above Ground		Sediment Deposits On Plants	
Drift Lines		Other	
Remarks	Wetland hydrology does not exist at this site.		

SOIL

Mapped Soil Conditions					
Soil Name	Typical Color		Drainage Class	Hydric List?	
Frio silty clay, occasionally flooded	Dark to very dark grayish brown		Well drained	No	
Field Soil Conditions					
Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture
0-14	A ₁	10YR 3/2	None	NA	Sandy clay loam
	Oxidized Root Channels			Low Chroma Colors	
	Mineral Concretions			High Organic Content	
	Sulfidic Odor			Bright Mottling	
	Gleying			Other	
Remarks	No indicators of hydric soil.				

DETERMINATION

Hydrophytic Vegetation present at the investigation site?	No	Fluctuating Hydrology?	No	Hydric Soils Present?	No
Is this site a jurisdictional wetland? If not, explain why it is not: No, 0/3 wetland criteria met.					
What is the approximate size of the wetland? (if applicable) NA					
Are there jurisdictional waters associated with site? Identify stream name or other description. No					
Ordinary High Water Mark Elevation			NA		
Remarks					

(REVISED JUNE 2000)

TxDOT WETLAND DETERMINATION DATA FORM

GENERAL

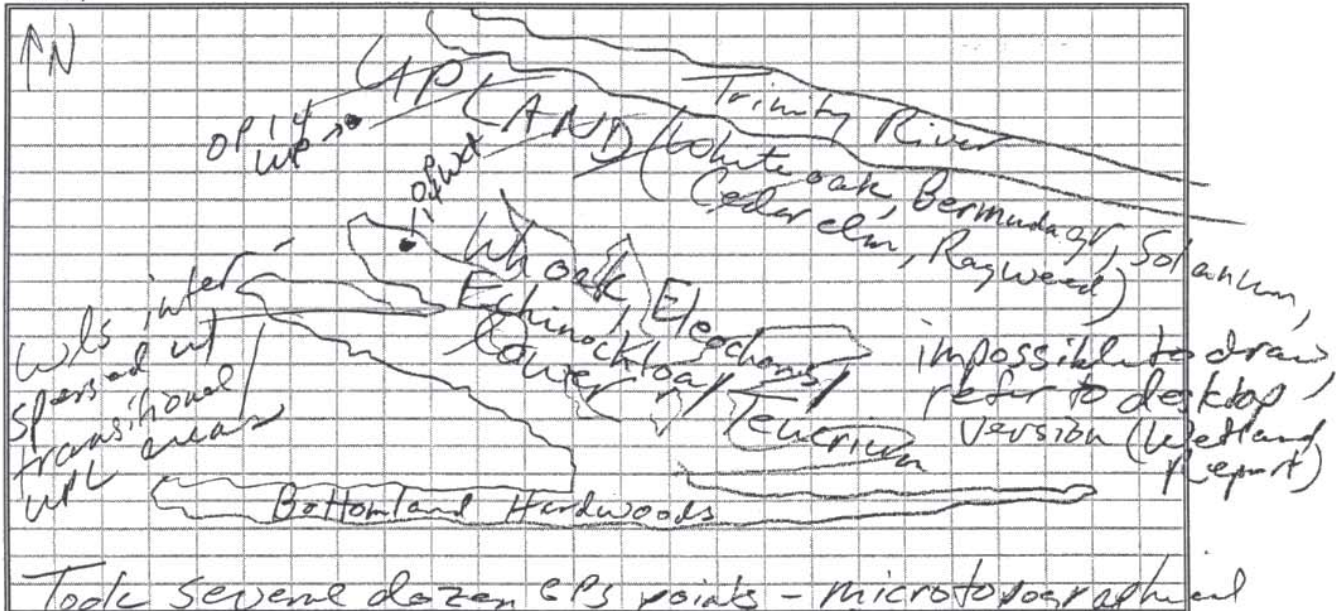
Project	SH 161	Site #	14 Wet	Date	6/18/03
CSJ	2964-01-013	Investigator	M. Carothers, F. Land	County	Dallas
Scope					
Describe Topography of the Investigation Site					
Semi-wooded and herbaceous wetland area in river floodplain.					
Is this site significantly disturbed? How so?			No		
Is this site a problem area? Why or Why not?			No		
NWI map name	Eules, TX	File name/path	Attachment		

*See attached NWI map for investigation site locations within the project limits

VEGETATION: (list plants by order of dominance)

Dominant Plant Species	Taxonomic Name	Stratum	Indicator
Sand spikerush	<i>Eleocharis montevidensis</i>	Herb	FACW+
White oak	<i>Quercus alba</i>	Tree	FACU+
Cedar elm	<i>Ulmus crassifolia</i>	Tree	FAC
Curly dock	<i>Rumex crispus</i>	Herb	FACW
Barnyard grass	<i>Echinochloa crusgalli</i>	Herb	FACW-
American germander	<i>Teucrium canadense</i>	Herb	FACW-
Percent Dominant Species That Are OBL, FACW, FAC			83.3
Remarks	Meets hydrophytic vegetation criterion.		

Sketch below depicts an approximate (not to scale) cross-section of the investigation site on {stream name or other location}, taken {parallel/perpendicular/other} to roadway on the {north/south/east/west} side, near {roadway right-of-way line/ditch bottom/other location}. Location of soil sample is shown, along with dominant vegetation and other significant topographic features. Approximate elevation of ordinary high water mark is also shown for reference. {label all features shown in sketch}



HYDROLOGY

Is this site inundated?	No	Depth of water surface (if applicable)	NA
Yes (8" from surface)	Soil Saturated	Yes	Oxidized Root Channels
	High Water Marks	Yes	Water Stained Leaves
	Debris Lodged Above Ground		Sediment Deposits On Plants
	Drift Lines		Other
Remarks	Drainage patterns in wetlands. Meets wetland hydrology criterion.		

SOIL

Mapped Soil Conditions					
Soil Name	Typical Color	Drainage Class	Hydric List?		
Frio silty clay, occasionally flooded	Dark to very dark grayish brown	Well drained	No		
Field Soil Conditions					
Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture
0-2	A ₁	10YR 4/2	10YR 4/6	Few/Fine/Prominent	Sandy clay loam
2-14	A ₂	10YR 3/1	10YR 4/6	Few/Fine/Prominent	Clay
Yes	Oxidized Root Channels		Yes	Low Chroma Colors	
	Mineral Concretions			High Organic Content	
	Sulfidic Odor			Bright Mottling	
	Gleying		Yes	Other	
Remarks	Reducing conditions. Meets hydric soil criteria.				

DETERMINATION

Hydrophytic Vegetation present at the investigation site?	Yes	Fluctuating Hydrology?	Yes	Hydric Soils Present?	Yes
Is this site a jurisdictional wetland? If not, explain why it is not:					
Yes					
What is the approximate size of the wetland? (if applicable)					
1.29 ac., 0.070 ac., 0.058 ac.					
Are there jurisdictional waters associated with site? Identify stream name or other description.					
Yes, in floodplain of the West Fork of the Trinity River.					
Ordinary High Water Mark Elevation			NA		
Remarks					

(REVISED JUNE 2000)

TxDOT WETLAND DETERMINATION DATA FORM

GENERAL

Project	SH 161	Site #	14AUpl	Date	7/3/03
CSJ	2964-01-013	Investigator	M. Carothers	County	Dallas
Scope					
Describe Topography of the Investigation Site					
Adjacent to flat emergent herbaceous wetland areas in river floodplain.					
Is this site significantly disturbed? How so?		No			
Is this site a problem area? Why or Why not?		No			
NWI map name	Eules, TX	File name/path	Attachment		

*See attached NWI map for investigation site locations within the project limits

VEGETATION: (list plants by order of dominance)

Dominant Plant Species	Taxonomic Name	Stratum	Indicator
Lemon beebalm	<i>Monarda citriodora</i>	Herb	UPL
Annual sumpweed	<i>Iva annua</i>	Herb	FAC
American germander	<i>Teucrium canadense</i>	Herb	FACW-
Curly dock	<i>Rumex crispus</i>	Herb	FACW
Rush	<i>Juncus</i> sp.	Herb	--
Golden tickseed	<i>Coreopsis tinctoria</i>	Herb	FAC
Percent Dominant Species That Are OBL, FACW, FAC			80
Remarks	Meets hydrophytic vegetation criterion.		

Sketch below depicts an approximate (not to scale) cross-section of the investigation site on (stream name or other location), taken (parallel/perpendicular/other) to roadway on the (north/south/east/west) side, near (roadway right-of-way line/ditch bottom/other location). Location of soil sample is shown, along with dominant vegetation and other significant topographic features. Approximate elevation of ordinary high water mark is also shown for reference. (label all features shown in sketch)

see Area 14A Wet

Project SH 161 Site # 14AUpl Date 7/3/03

HYDROLOGY

Is this site inundated?	No	Depth of water surface (if applicable)	NA
Soil Saturated		Oxidized Root Channels	
High Water Marks		Water Stained Leaves	
Debris Lodged Above Ground		Sediment Deposits On Plants	
Drift Lines		Other	
Remarks	Wetland hydrology does not exist at this site.		

SOIL

Mapped Soil Conditions					
Soil Name	Typical Color		Drainage Class	Hydric List?	
Frio silty clay, occasionally flooded	Dark to very dark grayish brown		Well drained	No	
Field Soil Conditions					
Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture
0-2	A ₁	10YR 4/2	None	NA	Sandy clay
2-14	A ₂	10YR 3/1	None	NA	Clay
	Oxidized Root Channels		Yes	Low Chroma Colors	
	Mineral Concretions			High Organic Content	
	Sulfidic Odor			Bright Mottling	
	Gleying			Other	
Remarks	Indicators of hydric soil.				

DETERMINATION

Hydrophytic Vegetation present at the investigation site?	Yes	Fluctuating Hydrology?	No	Hydric Soils Present?	Yes
Is this site a jurisdictional wetland? If not, explain why it is not:					
No, only 2/3 wetland criteria met.					
What is the approximate size of the wetland? (if applicable)					
NA					
Are there jurisdictional waters associated with site? Identify stream name or other description.					
No					
Ordinary High Water Mark Elevation	NA				
Remarks					

(REVISED JUNE 2000)

TxDOT WETLAND DETERMINATION DATA FORM

GENERAL

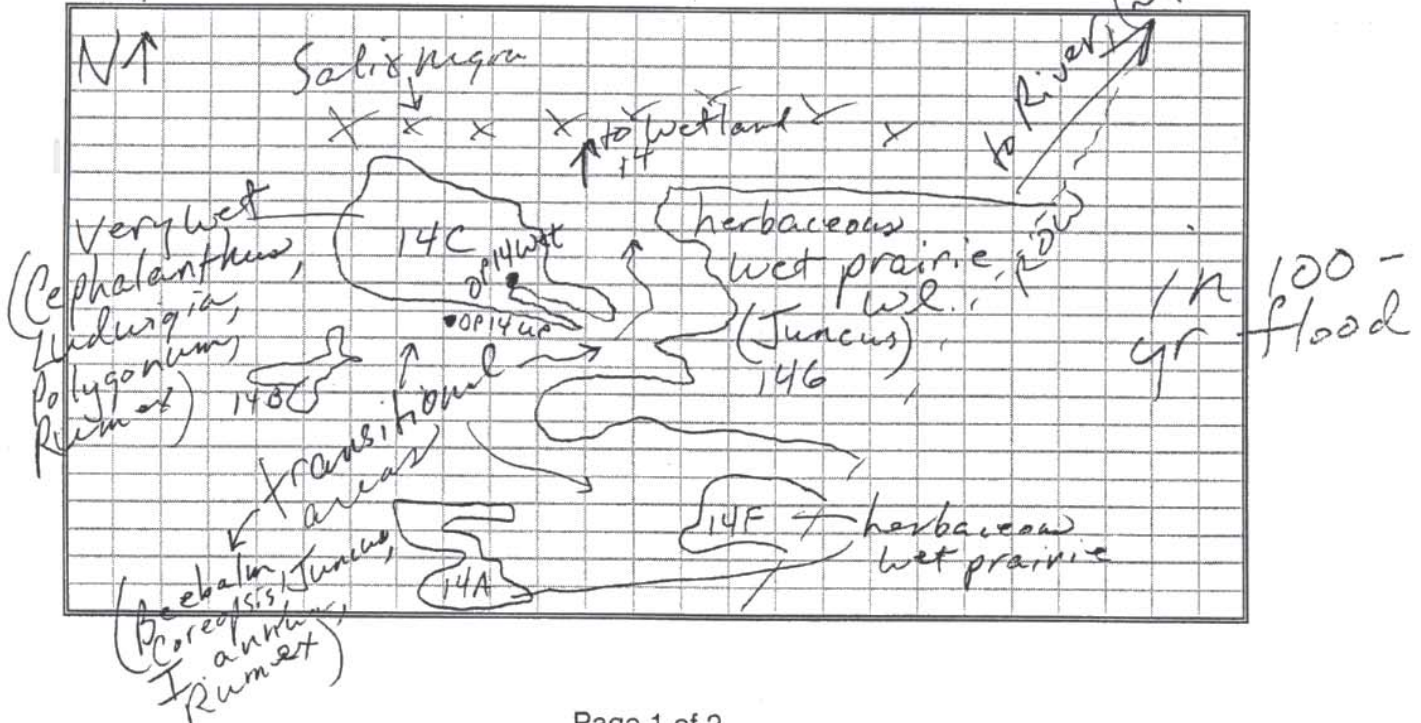
Project	SH 161	Site #	14AWet	Date	7/3/03
CSJ	2964-01-013	Investigator	M. Carothers	County	Dallas
Scope					
Describe Topography of the Investigation Site					
Flat profile emergent herbaceous wetland areas in river floodplain, with numerous swales.					
Is this site significantly disturbed? How so?		No			
Is this site a problem area? Why or Why not?		No			
NWI map name	Eules, TX	File name/path	Attachment		

*See attached NWI map for investigation site locations within the project limits

VEGETATION: (list plants by order of dominance)

Dominant Plant Species	Taxonomic Name	Stratum	Indicator
Swamp smartweed	<i>Polygonum hydropiperoides</i>	Herb	OBL
Marsh seedbox	<i>Ludwigia palustris</i>	Herb	OBL
Square-stem spikerush	<i>Eleocharis quadrangulata</i>	Herb	OBL
Curly dock	<i>Rumex crispus</i>	Herb	FACW
Common buttonbush	<i>Cephalanthus occidentalis</i>	Herb	OBL
Black willow	<i>Salix nigra</i>	Tree	FACW+
Rough cockle-bur	<i>Xanthium strumarium</i>	Herb	FAC-
Percent Dominant Species That Are OBL, FACW, FAC			85.7
Remarks	Meets hydrophytic vegetation criterion.		

Sketch below depicts an approximate (not to scale) cross-section of the investigation site on {stream name or other location}, taken {parallel/perpendicular/other} to roadway on the {north/south/east/west} side, near {roadway right-of-way line/ditch bottom/other location}. Location of soil sample is shown, along with dominant vegetation and other significant topographic features. Approximate elevation of ordinary high water mark is also shown for reference. (label all features shown in sketch)



Project SH 161 Site # 14AWet Date 7/03/03

HYDROLOGY

Is this site inundated?	No	Depth of water surface (if applicable)	NA
Yes	Soil Saturated	Yes	Oxidized Root Channels
	High Water Marks		Water Stained Leaves
	Debris Lodged Above Ground	Yes	Sediment Deposits On Plants
	Drift Lines		Other
Remarks	Drainage patterns in wetlands. Meets wetland hydrology criterion.		

SOIL

Mapped Soil Conditions					
Soil Name	Typical Color	Drainage Class	Hydric List?		
Frio silty clay, occasionally flooded	Dark to very dark grayish brown	Well drained	No		
Field Soil Conditions					
Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture
0-14	A ₁	10YR 3/1	10YR 3/6	Few/Fine/Prominent	Clay
Yes	Oxidized Root Channels		Yes	Low Chroma Colors	
	Mineral Concretions			High Organic Content	
	Sulfidic Odor			Bright Mottling	
	Gleying		Yes	Other	
Remarks	Reducing conditions. Meets hydric soil criteria.				

DETERMINATION

Hydrophytic Vegetation present at the investigation site?	Yes	Fluctuating Hydrology?	Yes	Hydric Soils Present?	Yes
Is this site a jurisdictional wetland? If not, explain why it is not:					
Yes					
What is the approximate size of the wetland? (if applicable)					
2.946 ac., 0.713 ac., 0.365 ac., 0.233 ac., 0.062 ac. (areas within ROW)					
Are there jurisdictional waters associated with site? Identify stream name or other description.					
Yes, in floodplain of the West Fork of the Trinity River.					
Ordinary High Water Mark Elevation			NA		
Remarks					

(REVISED JUNE 2000)

**TxDOT WETLAND DETERMINATION
DATA FORM**

GENERAL

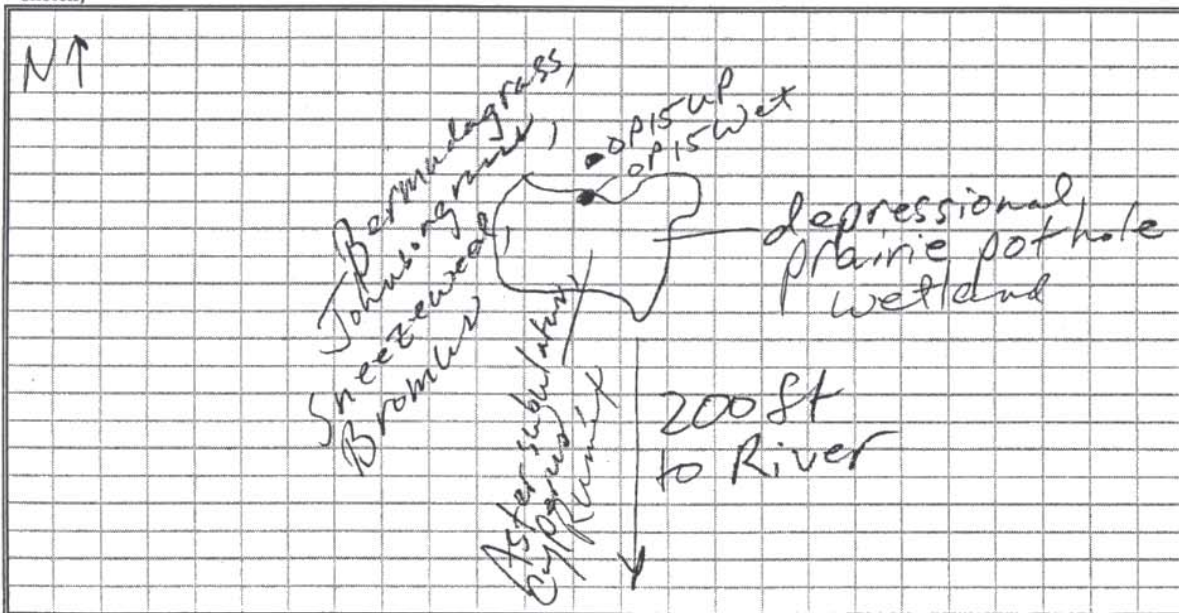
Project	SH 161	Site #	15 Upl	Date	6/19/03
CSJ	2964-01-013	Investigator	F. Land, M. Carothers	County	Dallas
Scope					
Describe Topography of the Investigation Site					
Above a depressional pothole on a flat floodplain					
Is this site significantly disturbed? How so?			No		
Is this site a problem area? Why or Why not?			No		
NWI map name	Eules, TX	File name/path	Attachment		

*See attached NWI map for investigation site locations within the project limits

VEGETATION: (list plants by order of dominance)

Dominant Plant Species	Taxonomic Name	Stratum	Indicator
Bermuda grass	<i>Cynodon dactylon</i>	Herb	FACU+
Johnson grass	<i>Sorghum halepense</i>	Herb	FACU
Five-leaf sneezeweed	<i>Helenium amarum</i>	Herb	FACU*
Japanese brome	<i>Bromus japonicus</i>	Herb	FACU
Percent Dominant Species That Are OBL, FACW, FAC			0
Remarks	Does not meet hydrophytic vegetation criterion.		

Sketch below depicts an approximate (not to scale) cross-section of the investigation site on {stream name or other location}, taken {parallel/perpendicular/other} to roadway on the {north/south/east/west} side, near (roadway right-of-way line/ditch bottom/other location). Location of soil sample is shown, along with dominant vegetation and other significant topographic features. Approximate elevation of ordinary high water mark is also shown for reference. (label all features shown in sketch)



Project SH 161 Site # 15 Upl Date 6/19/03

HYDROLOGY

Is this site inundated?	No	Depth of water surface (if applicable)	NA
Soil Saturated		Oxidized Root Channels	
High Water Marks		Water Stained Leaves	
Debris Lodged Above Ground		Sediment Deposits On Plants	
Drift Lines		Other	
Remarks	Wetland hydrology does not exist at this site.		

SOIL

Mapped Soil Conditions					
Soil Name	Typical Color	Drainage Class	Hydric List?		
Arents, loamy, hilly	Light yellowish brown	Not classified	No		
Field Soil Conditions					
Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture
0-5	A ₁	10YR 3/1	10YR 2/1	Few/Fine/Faint	Clay
		7.5YR 4/6	5YR 5/8	Few/Fine /Prominent	Sand
5-12	A ₂	10yr 3/1	10yr 5/8	Many/Common /Prominent	Clay
	Oxidized Root Channels	Yes	Low Chroma Colors		
Yes	Mineral Concretions		High Organic Content		
	Sulfidic Odor		Bright Mottling		
	Gleying		Other		
Remarks	A ₁ layer has dual matrix, Mn staining in clay layer. Indicators of hydric soil exist.				

DETERMINATION

Hydrophytic Vegetation present at the investigation site?	No	Fluctuating Hydrology?	No	Hydric Soils Present?	Yes
Is this site a jurisdictional wetland? If not, explain why it is not:					
No, only 1/3 wetland criteria met.					
What is the approximate size of the wetland? (if applicable)					
NA					
Are there jurisdictional waters associated with site? Identify stream name or other description.					
No					
Ordinary High Water Mark Elevation	NA				
Remarks					

(REVISED JUNE 2000)

TxDOT WETLAND DETERMINATION DATA FORM

GENERAL

Project	SH 161	Site #	15 Wet	Date	6/19/03
CSJ	2964-01-013	Investigator	M. Carothers, F. Land	County	Dallas
Scope					
Describe Topography of the Investigation Site					
Depressional pothole on flat floodplain					
Is this site significantly disturbed? How so?			No		
Is this site a problem area? Why or Why not?			No		
NWI map name	Eules, TX	File name/path	Attachment		

*See attached NWI map for investigation site locations within the project limits

VEGETATION: (list plants by order of dominance)

Dominant Plant Species	Taxonomic Name	Stratum	Indicator
Hierba del marrano	<i>Aster subulatus</i> var. <i>ligulosa</i>	Herb	OBL
Sticky flatsedge	<i>Cyperus elegans</i>	Herb	FACW-
Curly dock	<i>Rumex crispus</i>	Herb	FACW
Percent Dominant Species That Are OBL, FACW, FAC			100
Remarks	Meets hydrophytic vegetation criterion.		

Sketch below depicts an approximate (not to scale) cross-section of the investigation site on {stream name or other location}, taken {parallel/perpendicular/other} to roadway on the {north/south/east/west} side, near {roadway right-of-way line/ditch bottom/other location}. Location of soil sample is shown, along with dominant vegetation and other significant topographic features. Approximate elevation of ordinary high water mark is also shown for reference. (label all features shown in sketch)

See Area 15 UP

Project SH 161Site # 15 WetDate 6/19/03

HYDROLOGY

Is this site inundated?	Yes	Depth of water surface (if applicable)	1"
Yes (surface)	Soil Saturated		Oxidized Root Channels
	High Water Marks		Water Stained Leaves
	Debris Lodged Above Ground		Sediment Deposits On Plants
	Drift Lines	Yes	Other
Remarks	Drainage patterns in wetlands. Meets wetland hydrology criterion.		

SOIL

Mapped Soil Conditions					
Soil Name	Typical Color	Drainage Class	Hydric List?		
Arents, loamy, hilly	Light yellowish brown	Not classified	No		
Field Soil Conditions					
Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture
0-1	A ₁	10YR 4/2	None	NA	Sand
1-6	A ₂	10YR 4/1	None	NA	Sandy clay
6-12	A ₃	7.5 YR 5/6	5YR 4/6	Common/Fine /Distinct	Sand
12-14	A ₄	10YR 3/1	None	NA	Sandy clay
Yes	Oxidized Root Channels		Yes	Low Chroma Colors	
	Mineral Concretions			High Organic Content	
	Sulfidic Odor		Yes	Bright Mottling	
	Gleying		Yes	Other	
Remarks	Reducing conditions. Meets hydric soil criteria.				

DETERMINATION

Hydrophytic Vegetation present at the investigation site?	Yes	Fluctuating Hydrology?	Yes	Hydric Soils Present?	Yes
Is this site a jurisdictional wetland? If not, explain why it is not:					
Yes					
What is the approximate size of the wetland? (if applicable)					
0.043					
Are there jurisdictional waters associated with site? Identify stream name or other description.					
Yes, in floodplain of the West Fork of the Trinity River.					
Ordinary High Water Mark Elevation		NA			
Remarks					

(REVISED JUNE 2000)

**TxDOT WETLAND DETERMINATION
DATA FORM**

GENERAL

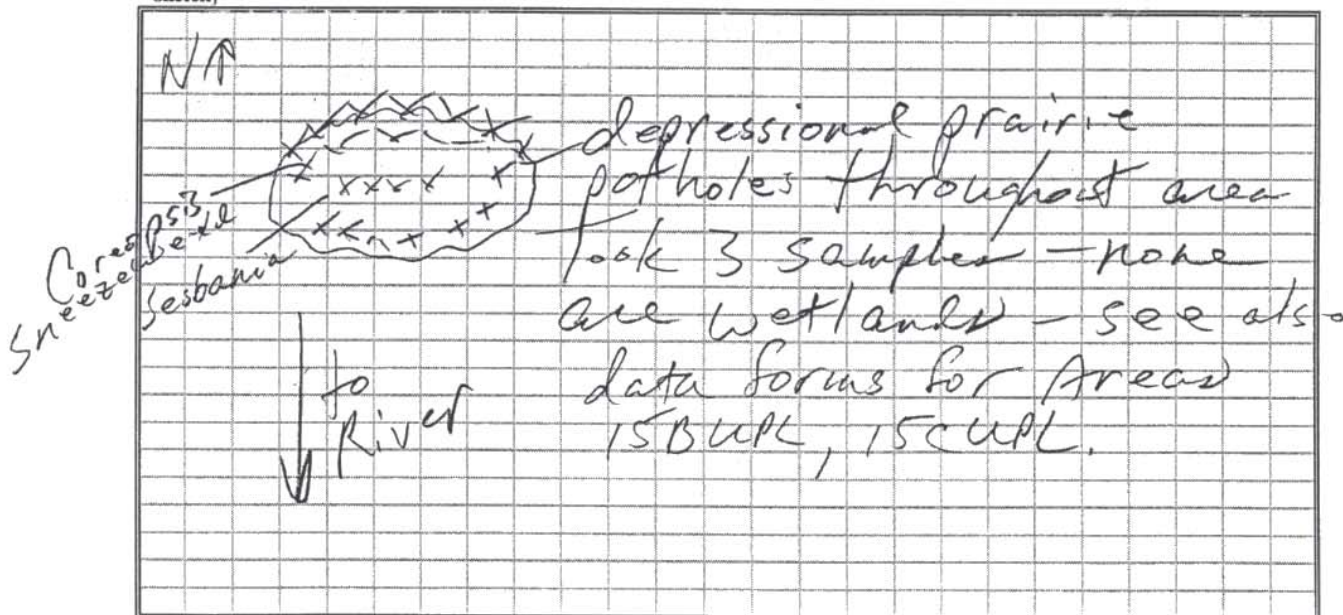
Project	SH 161		Site #	15AUpl	Date	6/19/03
CSJ	2964-01-013	Investigator	F. Land, M. Carothers	County	Dallas	
Scope						
Describe Topography of the Investigation Site						
Depressional pothole on a flat floodplain						
Is this site significantly disturbed? How so?			No			
Is this site a problem area? Why or Why not?			No			
NWI map name	Eules, TX	File name/path	Attachment			

*See attached NWI map for investigation site locations within the project limits

VEGETATION: (list plants by order of dominance)

Dominant Plant Species	Taxonomic Name	Stratum	Indicator
Drummond's rattle-bush	<i>Sesbania drummondii</i>	Herb	FACW
Golden tickseed	<i>Coreopsis tinctoria</i>	Herb	FAC
Five-leaf sneezeweed	<i>Helenium amarum</i>	Herb	FACU*
Percent Dominant Species That Are OBL, FACW, FAC			66.6
Remarks	Meets hydrophytic vegetation criterion.		

Sketch below depicts an approximate (not to scale) cross-section of the investigation site on {stream name or other location}, taken {parallel/perpendicular/other} to roadway on the {north/south/east/west} side, near {roadway right-of-way line/ditch bottom/other location}. Location of soil sample is shown, along with dominant vegetation and other significant topographic features. Approximate elevation of ordinary high water mark is also shown for reference. (label all features shown in sketch)



Project SH 161Site # 15AUpl Date 6/19/03

HYDROLOGY

Is this site inundated?	No	Depth of water surface (if applicable)	NA
Soil Saturated		Oxidized Root Channels	
High Water Marks		Water Stained Leaves	
Debris Lodged Above Ground		Sediment Deposits On Plants	
Drift Lines		Other	
Remarks	Wetland hydrology does not exist at this site.		

SOIL

Mapped Soil Conditions					
Soil Name	Typical Color		Drainage Class	Hydric List?	
Dutek loamy fine sand, 1 to 5% slopes	Brown, light yellowish brown to very pale brown underneath		Well drained	No	
Field Soil Conditions					
Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture
0-14	A	10YR 5/6	None	NA	Sand
	Oxidized Root Channels			Low Chroma Colors	
	Mineral Concretions			High Organic Content	
	Sulfidic Odor			Bright Mottling	
	Gleying			Other	
Remarks	No indicators of hydric soil.				

DETERMINATION

Hydrophytic Vegetation present at the investigation site?	Yes	Fluctuating Hydrology?	No	Hydric Soils Present?	No
Is this site a jurisdictional wetland? If not, explain why it is not:					
No, only 1/3 wetland criteria met.					
What is the approximate size of the wetland? (if applicable)					
NA					
Are there jurisdictional waters associated with site? Identify stream name or other description.					
No					
Ordinary High Water Mark Elevation		NA			
Remarks					
First of three test points to determine if commonly occurring depressions in prairie floodplain, having somewhat similar vegetation communities, are wetlands.					

(REVISED JUNE 2000)

**TXDOT WETLAND DETERMINATION
DATA FORM**

GENERAL

Project	SH 161	Site #	15BUpl	Date	6/19/03
CSJ	2964-01-013	Investigator	F. Land, M. Carothers	County	Dallas
Scope					
Describe Topography of the Investigation Site					
Depressional pothole on a flat floodplain					
Is this site significantly disturbed? How so?			No		
Is this site a problem area? Why or Why not?			No		
NWI map name	Eules, TX	File name/path	Attachment		

*See attached NWI map for investigation site locations within the project limits

VEGETATION: (list plants by order of dominance)

Dominant Plant Species	Taxonomic Name	Stratum	Indicator
Annual sumpweed	<i>Iva annua</i>	Herb	FAC
Giant ragweed	<i>Ambrosia trifida</i>	Herb	FAC
Percent Dominant Species That Are OBL, FACW, FAC			100
Remarks	Meets hydrophytic vegetation criterion.		

Sketch below depicts an approximate (not to scale) cross-section of the investigation site on {stream name or other location}, taken {parallel/perpendicular/other} to roadway on the {north/south/east/west} side, near {roadway right-of-way line/ditch bottom/other location}. Location of soil sample is shown, along with dominant vegetation and other significant topographic features. Approximate elevation of ordinary high water mark is also shown for reference. {label all features shown in sketch}

see Area 15B data form

HYDROLOGY

Is this site inundated?	No	Depth of water surface (if applicable)	NA
Soil Saturated		Oxidized Root Channels	
High Water Marks		Water Stained Leaves	
Debris Lodged Above Ground		Sediment Deposits On Plants	
Drift Lines		Other	
Remarks	Wetland hydrology does not exist at this site.		

SOIL

Mapped Soil Conditions					
Soil Name	Typical Color	Drainage Class	Hydric List?		
Arents, loamy, hilly	Light yellowish brown	Not classified	No		
Field Soil Conditions					
Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture
0-2	A ₁	10YR 2/2	None	NA	Sandy loam
2-4	A ₂	10YR 4/1	5YR 4/6	Few/Fine /Prominent	Sandy clay
4-18	A ₃	10YR 5/6	5YR 5/8	Many/Fine /Prominent	Sand
	Oxidized Root Channels		Yes (A ₂)	Low Chroma Colors	
	Mineral Concretions			High Organic Content	
	Sulfidic Odor		Yes	Bright Mottling	
	Gleying			Other	
Remarks	Indicators of hydric soil exist.				

DETERMINATION

Hydrophytic Vegetation present at the investigation site?	Yes	Fluctuating Hydrology?	No	Hydric Soils Present?	Yes
Is this site a jurisdictional wetland? If not, explain why it is not:					
No, only 2/3 wetland criteria met.					
What is the approximate size of the wetland? (if applicable)					
NA					
Are there jurisdictional waters associated with site? Identify stream name or other description.					
No					
Ordinary High Water Mark Elevation		NA			
Remarks					
Second of three test points to determine if commonly occurring depressions in prairie floodplain, having similar vegetation communities, are wetlands.					

(REVISED JUNE 2000)

HYDROLOGY

Is this site inundated?	No	Depth of water surface (if applicable)	NA
Soil Saturated		Oxidized Root Channels	
High Water Marks		Water Stained Leaves	
Debris Lodged Above Ground		Sediment Deposits On Plants	
Drift Lines		Other	
Remarks	Wetland hydrology does not exist at this site.		

SOIL

Mapped Soil Conditions					
Soil Name	Typical Color		Drainage Class	Hydric List?	
Dutek loamy fine sand, 1 to 5% slopes	Brown, light yellowish brown to very pale brown underneath		Well drained	No	
Field Soil Conditions					
Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture
0-2	A ₁	10YR 2/2	None	NA	Sandy loam
2-14	A ₂	10YR 4/6	None	NA	Sand
	Oxidized Root Channels			Low Chroma Colors	
	Mineral Concretions			High Organic Content	
	Sulfidic Odor			Bright Mottling	
	Gleying			Other	
Remarks	No indicators of hydric soil.				

DETERMINATION

Hydrophytic Vegetation present at the investigation site?	Yes	Fluctuating Hydrology?	No	Hydric Soils Present?	No
Is this site a jurisdictional wetland? If not, explain why it is not:					
No, only 1/3 wetland criteria met.					
What is the approximate size of the wetland? (if applicable)					
NA					
Are there jurisdictional waters associated with site? Identify stream name or other description.					
No					
Ordinary High Water Mark Elevation	NA				
Remarks					
Third of three test points to determine if commonly occurring depressions in prairie floodplain, having similar vegetation communities, are wetlands.					

(REVISED JUNE 2000)

**TxDOT WETLAND DETERMINATION
DATA FORM**

GENERAL

Project	SH 161	Site #	16 Upl	Date	6/19/03
CSJ	2964-01-013	Investigator	F. Land, M. Carothers	County	Dallas
Scope					
Describe Topography of the Investigation Site					
Bottomland hardwood forested area, gently sloping					
Is this site significantly disturbed? How so?			No		
Is this site a problem area? Why or Why not?			No		
NWI map name	Eules, TX	File name/path	Attachment		

*See attached NWI map for investigation site locations within the project limits

VEGETATION: (list plants by order of dominance)

Dominant Plant Species	Taxonomic Name	Stratum	Indicator
Poison ivy	<i>Toxicodendron radicans</i>	Herb, vine	FAC
Mustang grape	<i>Vitis mustangensis</i>	Vine	UPL
American elm	<i>Ulmus americana</i>	Tree	FAC
Giant ragweed	<i>Ambrosia trifida</i>	Herb	FAC
Percent Dominant Species That Are OBL, FACW, FAC			75
Remarks	Meets hydrophytic vegetation criterion.		

Sketch below depicts an approximate (not to scale) cross-section of the investigation site on {stream name or other location}, taken {parallel/perpendicular/other} to roadway on the {north/south/east/west} side, near {roadway right-of-way line/ditch bottom/other location}. Location of soil sample is shown, along with dominant vegetation and other significant topographic features. Approximate elevation of ordinary high water mark is also shown for reference. (label all features shown in sketch)

see Area 16 Wet

Project SH 161 Site # 16 Upl Date 6/19/03

HYDROLOGY

Is this site inundated?	No	Depth of water surface (if applicable)	NA
Soil Saturated		Oxidized Root Channels	
High Water Marks		Water Stained Leaves	
Debris Lodged Above Ground		Sediment Deposits On Plants	
Drift Lines		Other	
Remarks	Wetland hydrology does not exist at this site.		

SOIL

Mapped Soil Conditions					
Soil Name	Typical Color	Drainage Class	Hydric List?		
Arents, loamy, hilly	Light yellowish brown	Not classified	No		
Field Soil Conditions					
Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture
0-12	A ₁	10YR 4/3	None	NA	Sandy loam
12-14	A ₂	10YR 4/4	None	NA	Fill
	Oxidized Root Channels			Low Chroma Colors	
	Mineral Concretions		Yes	High Organic Content	
	Sulfidic Odor			Bright Mottling	
	Gleying			Other	
Remarks	Considerable organic material in top 6". No other indicators of hydric soil exist.				

DETERMINATION

Hydrophytic Vegetation present at the investigation site?	Yes	Fluctuating Hydrology?	No	Hydric Soils Present?	No
Is this site a jurisdictional wetland? If not, explain why it is not:					
No, only 1/3 wetland criteria met.					
What is the approximate size of the wetland? (if applicable)					
NA					
Are there jurisdictional waters associated with site? Identify stream name or other description.					
No					
Ordinary High Water Mark Elevation	NA				
Remarks					

(REVISED JUNE 2000)

TxDOT WETLAND DETERMINATION DATA FORM

GENERAL

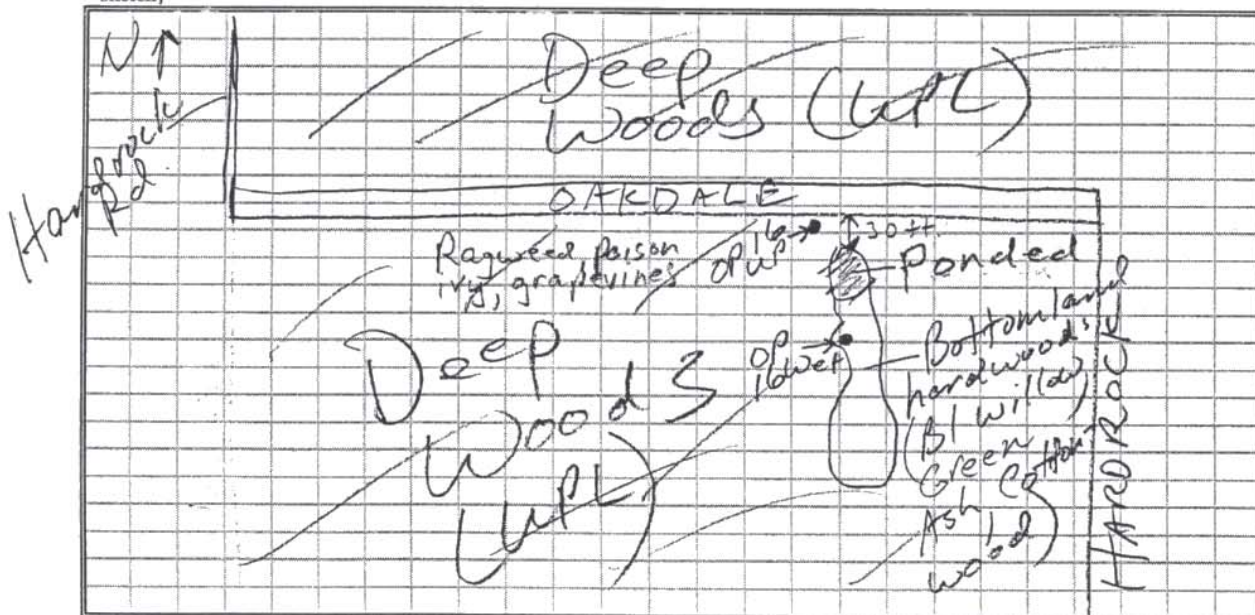
Project	SH 161	Site #	16 Wet	Date	6/19/03
CSJ	2964-01-013	Investigator	M. Carothers, F. Land	County	Dallas
Scope					
Describe Topography of the Investigation Site					
Bottomland hardwood forested area, gently sloping					
Is this site significantly disturbed? How so?			No		
Is this site a problem area? Why or Why not?			No		
NWI map name	Eules, TX	File name/path	Attachment		

*See attached NWI map for investigation site locations within the project limits

VEGETATION: (list plants by order of dominance)

Dominant Plant Species	Taxonomic Name	Stratum	Indicator
Black willow	<i>Salix nigra</i>	Tree	FACW+
Green ash	<i>Fraxinus pennsylvanica</i>	Tree	FACW-
American elm	<i>Ulmus americana</i>	Tree	FAC
Poison ivy	<i>Toxicodendron radicans</i>	Herb, vine	FAC
Pecan	<i>Carya illinoensis</i>	Tree	FAC+
Eastern cottonwood	<i>Populus deltoides</i>	Tree	FAC
Percent Dominant Species That Are OBL, FACW, FAC			100
Remarks	Meets hydrophytic vegetation criterion.		

Sketch below depicts an approximate (not to scale) cross-section of the investigation site on (stream name or other location), taken (parallel/perpendicular/other) to roadway on the (north/south/east/west) side, near (roadway right-of-way line/ditch/bottom/other location). Location of soil sample is shown, along with dominant vegetation and other significant topographic features. Approximate elevation of ordinary high water mark is also shown for reference. (label all features shown in sketch)



Project SH 161 Site # 16 Wet Date 6/19/03

HYDROLOGY

Is this site inundated?	Yes	Depth of water surface (if applicable)	1"
Yes (surface)	Soil Saturated		Oxidized Root Channels
	High Water Marks		Water Stained Leaves
	Debris Lodged Above Ground		Sediment Deposits On Plants
	Drift Lines	Yes	Other
Remarks	Drainage patterns in wetlands. Meets wetland hydrology criterion.		

SOIL

Mapped Soil Conditions					
Soil Name	Typical Color	Drainage Class	Hydric List?		
Silstid loamy fine sand, 0 to 3% slopes	Brown, light yellowish brown underneath	Well drained	No		
Field Soil Conditions					
Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture
0-4	A ₁	10YR 3/1	None	NA	Organic sandy loam
4-12	A ₂	10YR 6/2	7.5YR 4/6	Few/Medium /Prominent	Sandy clay
	Oxidized Root Channels		Yes	Low Chroma Colors	
	Mineral Concretions		Yes	High Organic Content	
	Sulfidic Odor		Yes	Bright Mottling	
	Gleying			Other	
Remarks	Top 4" has high organic content. Meets hydric soil criterion.				

DETERMINATION

Hydrophytic Vegetation present at the investigation site?	Yes	Fluctuating Hydrology?	Yes	Hydric Soils Present?	Yes
Is this site a jurisdictional wetland? If not, explain why it is not:					
Yes					
What is the approximate size of the wetland? (if applicable)					
0.062 acre					
Are there jurisdictional waters associated with site? Identify stream name or other description.					
No					
Ordinary High Water Mark Elevation			NA		
Remarks					

(REVISED JUNE 2000)

**TxDOT WETLAND DETERMINATION
DATA FORM**

GENERAL

Project	SH 161	Site #	17 Upl	Date	6/19/03
CSJ	2964-01-013	Investigator	F. Land, M. Carothers	County	Dallas
Scope					
Describe Topography of the Investigation Site					
Above a flooded black willow swamp					
Is this site significantly disturbed? How so?			No		
Is this site a problem area? Why or Why not?			No		
NWI map name	Eules, TX	File name/path	Attachment		

*See attached NWI map for investigation site locations within the project limits

VEGETATION: (list plants by order of dominance)

Dominant Plant Species	Taxonomic Name	Stratum	Indicator
Giant ragweed	<i>Ambrosia trifida</i>	Herb	FAC
Pepper-vine	<i>Ampelopsis arborea</i>	Herb	FAC
American elm	<i>Ulmus americana</i>	Tree	FAC
Johnson grass	<i>Sorghum halepense</i>	Herb	FACU
Black willow	<i>Salix nigra</i>	Tree	FACW+
Percent Dominant Species That Are OBL, FACW, FAC			80
Remarks	Meets hydrophytic vegetation criterion.		

Sketch below depicts an approximate (not to scale) cross-section of the investigation site on *(stream name or other location)*, taken *(parallel/perpendicular/other)* to roadway on the *(north/south/east/west)* side, near *(roadway right-of-way line/ditch bottom/other location)*. Location of soil sample is shown, along with dominant vegetation and other significant topographic features. Approximate elevation of ordinary high water mark is also shown for reference. *(label all features shown in sketch)*

see Area 17 Wet

Project SH 161 Site # 17 Upl Date 6/19/03

HYDROLOGY

Is this site inundated?	No	Depth of water surface (if applicable)	NA
Soil Saturated		Oxidized Root Channels	
High Water Marks		Water Stained Leaves	
Debris Lodged Above Ground		Sediment Deposits On Plants	
Drift Lines		Other	
Remarks	Wetland hydrology does not exist at this site.		

SOIL

Mapped Soil Conditions					
Soil Name	Typical Color	Drainage Class	Hydric List?		
Arents, loamy, hilly	Light yellowish brown	Not classified	No		
Field Soil Conditions					
Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture
0-6	A ₁	10YR 3/2	None	NA	Loamy clay
6-12	A ₂	10YR 4/6	None	NA	Sandy loam
	Oxidized Root Channels			Low Chroma Colors	
	Mineral Concretions			High Organic Content	
	Sulfidic Odor			Bright Mottling	
	Gleying			Other	
Remarks	No indicators of hydric soil exist.				

DETERMINATION

Hydrophytic Vegetation present at the investigation site?	Yes	Fluctuating Hydrology?	No	Hydric Soils Present?	No
Is this site a jurisdictional wetland? If not, explain why it is not: No, only 1/3 wetland criteria met.					
What is the approximate size of the wetland? (if applicable) NA					
Are there jurisdictional waters associated with site? Identify stream name or other description. No					
Ordinary High Water Mark Elevation		NA			
Remarks					

(REVISED JUNE 2000)

TxDOT WETLAND DETERMINATION DATA FORM

GENERAL

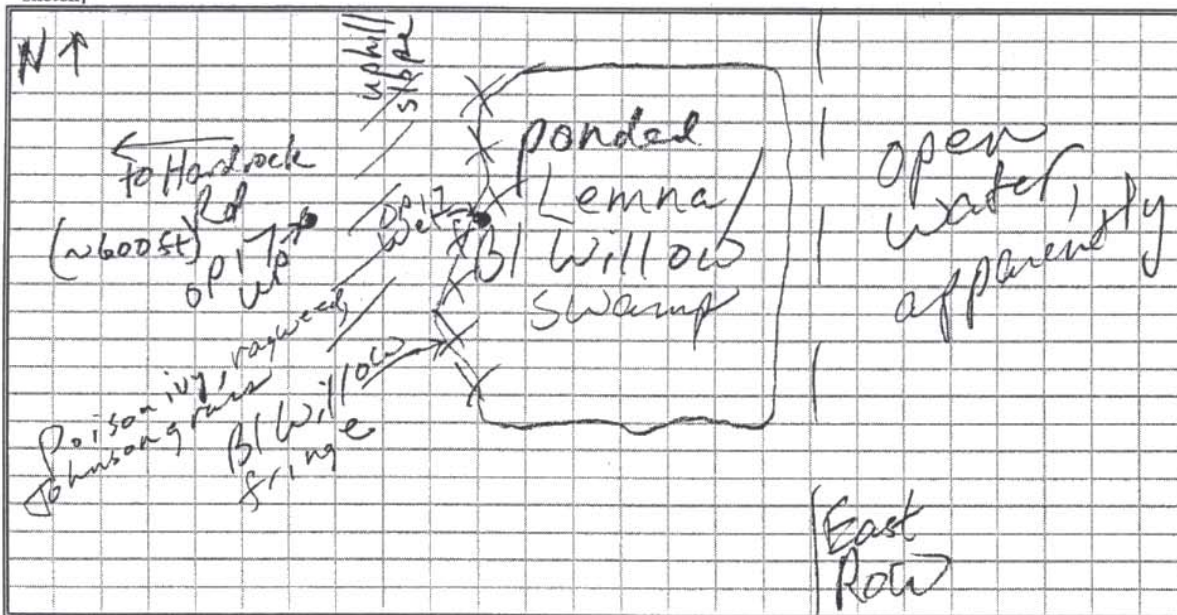
Project	SH 161	Site #	17 Wet	Date	6/19/03
CSJ	2964-01-013	Investigator	M. Carothers, F. Land	County	Dallas
Scope					
Describe Topography of the Investigation Site					
Flooded black willow swamp					
Is this site significantly disturbed? How so?			No		
Is this site a problem area? Why or Why not?			No		
NWI map name	Eules, TX	File name/path	Attachment		

*See attached NWI map for investigation site locations within the project limits

VEGETATION: (list plants by order of dominance)

Dominant Plant Species	Taxonomic Name	Stratum	Indicator
Black willow	<i>Salix nigra</i>	Tree	FACW+
Lesser duckweed	<i>Lemna minor</i>	Herb	OBL
Percent Dominant Species That Are OBL, FACW, FAC			100
Remarks	Meets hydrophytic vegetation criterion.		

Sketch below depicts an approximate (not to scale) cross-section of the investigation site on {stream name or other location}, taken {parallel/perpendicular/other} to roadway on the {north/south/east/west} side, near {roadway right-of-way line/ditch bottom/other location}. Location of soil sample is shown, along with dominant vegetation and other significant topographic features. Approximate elevation of ordinary high water mark is also shown for reference. {label all features shown in sketch}



Project SH 161

Site # 17 Wet Date 6/19/03

HYDROLOGY

Is this site inundated?	Yes	Depth of water surface (if applicable)	1"
Yes (surface)	Soil Saturated		Oxidized Root Channels
Yes	High Water Marks	Yes	Water Stained Leaves
	Debris Lodged Above Ground		Sediment Deposits On Plants
Yes	Drift Lines	Yes	Other
Remarks	Meets wetland hydrology criterion.		

SOIL

Mapped Soil Conditions					
Soil Name	Typical Color	Drainage Class	Hydric List?		
Arents, loamy, hilly	Light yellowish brown	Not classified	No		
Field Soil Conditions					
Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture
0-1	O				Organic material
1-4	A ₁	10YR 3/1	2.5YR 5/3	Many/Common /Prominent	Sandy loam w/ high organic content
4-14	A ₂	2.5YR 5/3	10YR 6/4	Few/Fine /Prominent	Sand
	Oxidized Root Channels	Yes	Low Chroma Colors		
	Mineral Concretions	Yes	High Organic Content		
	Sulfidic Odor		Bright Mottling		
	Gleying		Other		
Remarks	Top 4" has high organic content. Top "O" layer. Meets hydric soil criterion.				

DETERMINATION

Hydrophytic Vegetation present at the investigation site?	Yes	Fluctuating Hydrology?	Yes	Hydric Soils Present?	Yes
Is this site a jurisdictional wetland? If not, explain why it is not:					
Yes					
What is the approximate size of the wetland? (if applicable)					
~1.16 acre					
Are there jurisdictional waters associated with site? Identify stream name or other description.					
No					
Ordinary High Water Mark Elevation	NA				
Remarks					

(REVISED JUNE 2000)

**TxDOT WETLAND DETERMINATION
DATA FORM**

GENERAL

Project	SH 161	Site #	18 Upl	Date	6/20/03
CSJ	2964-01-013	Investigator	F. Land, M. Carothers	County	Dallas
Scope					
Describe Topography of the Investigation Site					
Above a depressional pothole in flat plain, area semi-wooded					
Is this site significantly disturbed? How so?			No		
Is this site a problem area? Why or Why not?			No		
NWI map name	Eules, TX	File name/path	Attachment		

*See attached NWI map for investigation site locations within the project limits

VEGETATION: (list plants by order of dominance)

Dominant Plant Species	Taxonomic Name	Stratum	Indicator
Bermuda grass	<i>Cynodon dactylon</i>	Herb	FACU+
Southern dewberry	<i>Rubus trivialis</i>	Herb	FAC
Japanese brome	<i>Bromus japonicus</i>	Herb	FACU
Giant ragweed	<i>Ambrosia trifida</i>	Herb	FAC
American elm	<i>Ulmus americana</i>	Tree	FAC
Pecan	<i>Carya illinoensis</i>	Tree	FAC+
Percent Dominant Species That Are OBL, FACW, FAC			50
Remarks	Does not meet hydrophytic vegetation criterion.		

Sketch below depicts an approximate (not to scale) cross-section of the investigation site on {stream name or other location}, taken {parallel/perpendicular/other} to roadway on the {north/south/east/west} side, near {roadway right-of-way line/ditch bottom/other location}. Location of soil sample is shown, along with dominant vegetation and other significant topographic features. Approximate elevation of ordinary high water mark is also shown for reference. {label all features shown in sketch}

See Area 18 Wet

HYDROLOGY

Is this site inundated?	No	Depth of water surface (if applicable)	NA
Soil Saturated		Oxidized Root Channels	
High Water Marks		Water Stained Leaves	
Debris Lodged Above Ground		Sediment Deposits On Plants	
Drift Lines		Other	
Remarks	Wetland hydrology does not exist at this site.		

SOIL

Mapped Soil Conditions					
Soil Name	Typical Color		Drainage Class	Hydric List?	
Silawa fine sandy loam, 1 to 3% slopes	Brown, yellowish red underneath		Well drained	No	
Field Soil Conditions					
Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture
0-8	A ₁	10YR 4/2	None	NA	Sandy clay
8-10	A ₂	10YR 4/4	None	NA	Sandy clay
10-14	A ₃	10YR 4/2	None	NA	Sandy clay
		10YR 4/4			
	Oxidized Root Channels			Low Chroma Colors	
	Mineral Concretions			High Organic Content	
	Sulfidic Odor			Bright Mottling	
	Gleying			Other	
Remarks	A ₃ has dual matrix. No indicators of hydric soil exist.				

DETERMINATION

Hydrophytic Vegetation present at the investigation site?	No	Fluctuating Hydrology?	No	Hydric Soils Present?	No
Is this site a jurisdictional wetland? If not, explain why it is not:					
No, 0/3 wetland criteria met.					
What is the approximate size of the wetland? (if applicable)					
NA					
Are there jurisdictional waters associated with site? Identify stream name or other description.					
No					
Ordinary High Water Mark Elevation			NA		
Remarks					

(REVISED JUNE 2000)

TxDOT WETLAND DETERMINATION DATA FORM

GENERAL

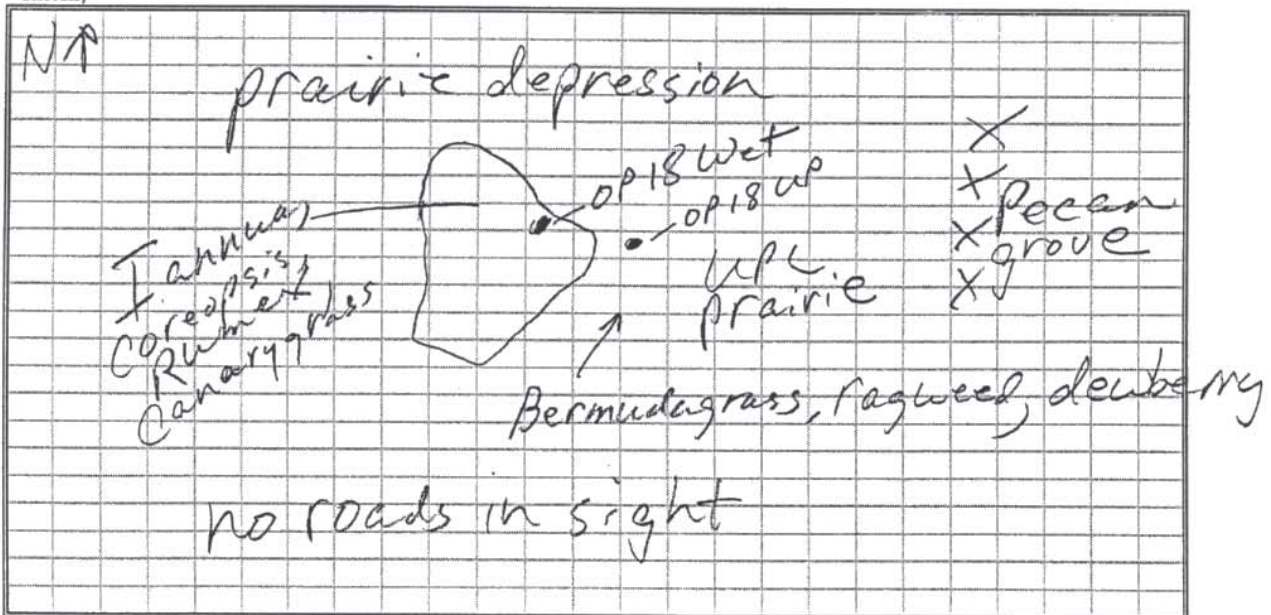
Project	SH 161	Site #	18 Wet	Date	6/20/03
CSJ	2964-01-013	Investigator	M. Carothers, F. Land	County	Dallas
Scope					
Describe Topography of the Investigation Site					
Depressional pothole in flat plain					
Is this site significantly disturbed? How so?			No		
Is this site a problem area? Why or Why not?			No		
NWI map name	Eules, TX	File name/path	Attachment		

*See attached NWI map for investigation site locations within the project limits

VEGETATION: (list plants by order of dominance)

Dominant Plant Species	Taxonomic Name	Stratum	Indicator
Annual sumpweed	<i>Iva annua</i>	Herb	FAC
Golden Tickseed	<i>Coreopsis tinctoria</i>	Herb	FAC
Curly dock	<i>Rumex crispus</i>	Herb	FACW
Giant ragweed	<i>Ambrosia trifida</i>	Herb	FAC
Carolina canarygrass	<i>Phalaris caroliniana</i>	Herb	FACW
Percent Dominant Species That Are OBL, FACW, FAC			100
Remarks	Meets hydrophytic vegetation criterion.		

Sketch below depicts an approximate (not to scale) cross-section of the investigation site on (stream name or other location), taken (parallel/perpendicular/other) to roadway on the (north/south/east/west) side, near (roadway right-of-way line/ditch bottom/other location). Location of soil sample is shown, along with dominant vegetation and other significant topographic features. Approximate elevation of ordinary high water mark is also shown for reference. (label all features shown in sketch)



Project SH 161 Site # 18 Wet Date 6/20/03

HYDROLOGY

Is this site inundated?	No	Depth of water surface (if applicable)	NA
Yes (at surface)	Soil Saturated		Oxidized Root Channels
	High Water Marks		Water Stained Leaves
	Debris Lodged Above Ground		Sediment Deposits On Plants
	Drift Lines		Other
Remarks	9" to free water in pit. Meets wetland hydrology criterion.		

SOIL

Mapped Soil Conditions					
Soil Name	Typical Color	Drainage Class	Hydric List?		
Silawa fine sandy loam, 1 to 3% slopes	Brown, yellowish red underneath	Well drained	No		
Field Soil Conditions					
Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture
0-4	A ₁	10YR 4/1	10YR 4/4	Common/Many /Distinct	Clay
4-14	A ₂	10YR 4/4	10YR 4/1	Many/Common /Distinct	Sandy clay
			10YR 2/1	Many/Coarse /Faint	Mn staining
	Oxidized Root Channels		Yes	Low Chroma Colors	
Yes	Mineral Concretions		Yes	High Organic Content	
	Sulfidic Odor			Bright Mottling	
	Gleying			Other	
Remarks	Reducing conditions. Manganese concretions interspersed in layers. Meets hydric soil criterion.				

DETERMINATION

Hydrophytic Vegetation present at the investigation site?	Yes	Fluctuating Hydrology?	Yes	Hydric Soils Present?	Yes
Is this site a jurisdictional wetland? If not, explain why it is not:					
Yes					
What is the approximate size of the wetland? (if applicable)					
0.026 acre					
Are there jurisdictional waters associated with site? Identify stream name or other description.					
No					
Ordinary High Water Mark Elevation			NA		
Remarks					

(REVISED JUNE 2000)

**TxDOT WETLAND DETERMINATION
DATA FORM**

GENERAL

Project	SH 161	Site #	19 Upl	Date	6/30/03
CSJ	2964-01-013	Investigator	F. Land, M. Carothers	County	Dallas
Scope					
Describe Topography of the Investigation Site					
High wooded area above flat, semi-wooded and herbaceous floodplain wetland					
Is this site significantly disturbed? How so?			No		
Is this site a problem area? Why or Why not?			No		
NWI map name	Eules, TX	File name/path	Attachment		

*See attached NWI map for investigation site locations within the project limits

VEGETATION: (list plants by order of dominance)

Dominant Plant Species	Taxonomic Name	Stratum	Indicator
Sugar-berry	<i>Celtis laevigata</i>	Tree	FAC
Pecan	<i>Carya illinoensis</i>	Tree	FAC+
Eastern cottonwood	<i>Populus deltoides</i>	Tree	FAC
Texas ash	<i>Fraxinus texensis</i>	Tree	UPL
Black willow	<i>Salix nigra</i>	Tree	FACW+
Poison ivy	<i>Toxicodendron radicans</i>	Herb	FAC
Osage-orange	<i>Maclura pomifera</i>	Tree	UPL
Percent Dominant Species That Are OBL, FACW, FAC			57
Remarks	Meets hydrophytic vegetation criterion.		

Sketch below depicts an approximate (not to scale) cross-section of the investigation site on {stream name or other location}, taken {parallel/perpendicular/other} to roadway on the {north/south/east/west} side, near {roadway right-of-way line/ditch bottom/other location}. Location of soil sample is shown, along with dominant vegetation and other significant topographic features. Approximate elevation of ordinary high water mark is also shown for reference. (label all features shown in sketch)

See Area 19 Wet

Project SH 161 Site # 19 Upl Date 6/30/03

HYDROLOGY

Is this site inundated?	No	Depth of water surface (if applicable)	NA
Soil Saturated		Oxidized Root Channels	
High Water Marks		Water Stained Leaves	
Debris Lodged Above Ground		Sediment Deposits On Plants	
Drift Lines		Other	
Remarks	Wetland hydrology does not exist at this site.		

SOIL

Mapped Soil Conditions					
Soil Name	Typical Color		Drainage Class	Hydric List?	
Frio silty clay, occasionally flooded	Dark and very dark grayish brown		Well drained	No	
Field Soil Conditions					
Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture
0-4	A ₁	10YR 4/2	None	NA	Sandy clay
4-14	A ₂	10YR 3/2	7.5YR 4/6	Many/Fine /Prominent	Sandy clay
	Oxidized Root Channels			Low Chroma Colors	
	Mineral Concretions		Yes	High Organic Content	
	Sulfidic Odor			Bright Mottling	
	Gleying			Other	
Remarks	In woods – organic material in top layer. No other indicators of hydric soil exist.				

DETERMINATION

Hydrophytic Vegetation present at the investigation site?	Yes	Fluctuating Hydrology?	No	Hydric Soils Present?	No
Is this site a jurisdictional wetland? If not, explain why it is not: No, only 1/3 wetland criteria met.					
What is the approximate size of the wetland? (if applicable) NA					
Are there jurisdictional waters associated with site? Identify stream name or other description. No					
Ordinary High Water Mark Elevation		NA			
Remarks					

(REVISED JUNE 2000)

**TxDOT WETLAND DETERMINATION
DATA FORM**

GENERAL

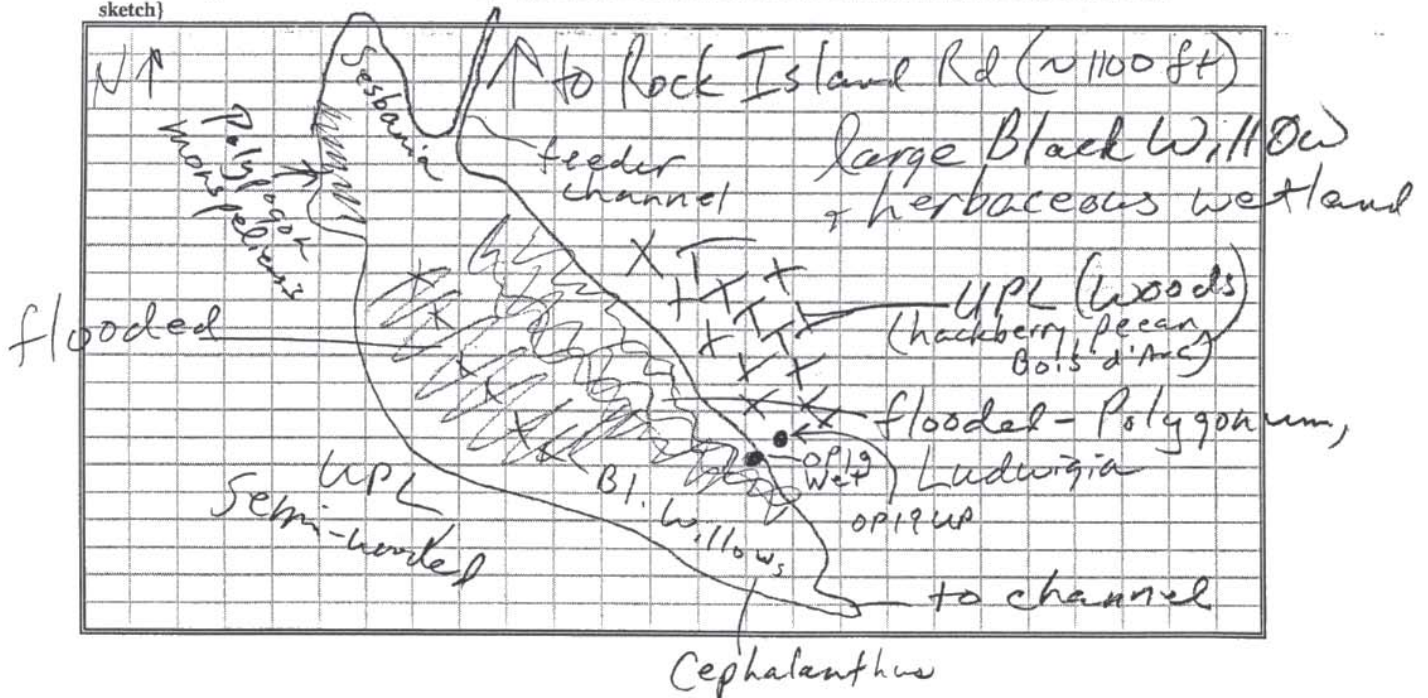
Project	SH 161	Site #	19 Wet	Date	6/30/03
CSJ	2964-01-013	Investigator	M. Carothers, S. English	County	Dallas
Scope					
Describe Topography of the Investigation Site					
Flat, semi-wooded and herbaceous floodplain wetland					
Is this site significantly disturbed? How so?			No		
Is this site a problem area? Why or Why not?			No		
NWI map name	Eules, TX	File name/path	Attachment		

*See attached NWI map for investigation site locations within the project limits

VEGETATION: (list plants by order of dominance)

Dominant Plant Species	Taxonomic Name	Stratum	Indicator
Swamp smartweed	<i>Polygonum hydropiperoides</i>	Herb	OBL
Marsh seedbox	<i>Ludwigia palustris</i>	Herb	OBL
Drummond's rattlebush	<i>Sesbania drummondii</i>	Herb	FACW
Annual rabbit-foot grass	<i>Polypogon monspeliensis</i>	Herb	FACW+
Black willow	<i>Salix nigra</i>	Tree	FACW+
Percent Dominant Species That Are OBL, FACW, FAC			100
Remarks	Meets hydrophytic vegetation criterion.		

Sketch below depicts an approximate (not to scale) cross-section of the investigation site on (stream name or other location), taken (parallel/perpendicular/other) to roadway on the (north/south/east/west) side, near (roadway right-of-way line/ditch bottom/other location). Location of soil sample is shown, along with dominant vegetation and other significant topographic features. Approximate elevation of ordinary high water mark is also shown for reference. (label all features shown in sketch)



Project SH 161 Site # 19 Wet Date 6/30/03

HYDROLOGY

Is this site inundated?	No	Depth of water surface (if applicable)	NA
	Soil Saturated	Yes	Oxidized Root Channels
Yes	High Water Marks		Water Stained Leaves
	Debris Lodged Above Ground		Sediment Deposits On Plants
Yes	Drift Lines		Other
Remarks	Sampled at small high spot. Immediate area flooded. Meets wetland hydrology criterion.		

SOIL

Mapped Soil Conditions					
Soil Name	Typical Color	Drainage Class	Hydric List?		
Frio silty clay, occasionally flooded	Dark and very dark grayish brown	Well drained	No		
Field Soil Conditions					
Depth	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture
0-2	A ₁	10YR 4/1	10YR 4/6	Common/Medium/Prominent	Loamy clay
2-14	A ₂	10YR 3/1	None	NA	
		10YR 4/4*			Clay
Yes	Oxidized Root Channels		Yes	Low Chroma Colors	
Yes	Mineral Concretions			High Organic Content	
	Sulfidic Odor		Yes	Bright Mottling	
	Gleying			Other	
Remarks	*A ₂ layer has dual matrix – translocation. Meets hydric soil criterion.				

DETERMINATION

Hydrophytic Vegetation present at the investigation site?	Yes	Fluctuating Hydrology?	Yes	Hydric Soils Present?	Yes
Is this site a jurisdictional wetland? If not, explain why it is not:					
Yes					
What is the approximate size of the wetland? (if applicable)					
2.275 acres					
Are there jurisdictional waters associated with site? Identify stream name or other description.					
Yes, Bear Creek floodplain					
Ordinary High Water Mark Elevation			NA		
Remarks					

(REVISED JUNE 2000)