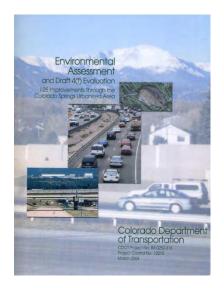


RE-EVALUATION, Mileposts 149 to 161

Interstate 25 Improvements through the Colorado Springs Area Environmental Assessment



WETLANDS AND WATERS OF THE U.S. TECHNICAL MEMO March 2012

Prepared for: CDOT Region 2

Prepared by: Chuck Schrader, (303) 804-0080

Introduction

The Colorado Department of Transportation (CDOT) has prepared this technical memorandum to update findings described in the original 2004 I-25 Environmental Assessment (EA) with regard to the portion of the Proposed Action between Woodmen Road (Exit 149) in Colorado Springs and State Highway 105 in Monument (Exit 161).

The I-25 EA originally evaluated impacts for the widening of I-25 between South Academy Boulevard (Exit 135) and SH 105, together with reconstruction of various I-25 interchanges

within this corridor. Page 2-10 of the EA stated that, "Consistent with projected traffic demand in the I-25 corridor, the conceptual phasing for the Proposed Action calls for:

- (1) initially six-laning through central Colorado Springs, then
- (2) six-laning in northern El Paso County, and finally
- (3) adding HOV [High-Occupancy Vehicle] lanes through central Colorado Springs and widening to six lanes south to South Academy Boulevard."

The first of these conceptual phases was undertaken in central Colorado Springs, completed in 2007. The so-called COSMIX project resulted in 12 miles of six-lane freeway, between South Circle Drive (Exit 138) and North Academy Boulevard (Exit 150). It included major reconstruction at several interchanges, notably not including the Cimarron interchange (Exit 141) or the Fillmore Street interchange (Exit 145). Additional funding will be needed to complete Phase 1.

For the year 2012, CDOT has received funding to begin the second phase, meaning to widen I-25 to six lanes in northern El Paso County, within the area shown in Figure 1. The EA calls for eventually widening I-25 all the way to SH105. Total funding for this project is yet to be determined. Currently enough is available to widen I-25 from Woodmen Rd to Interquest (Exit 153). Nevertheless, to be prepared for possible additional funding being available to complete the widening to SH 105 with this project or available in the



near future, CDOT's current EA re-evaluation effort is covering all Phase 2 improvements. Therefore, the study area for this re-evaluation extends northward all the way to Monument.

The I-25 EA included a new connection with Powers Boulevard (now State Highway 21), following SH21 eastward to just past the Powers Boulevard/Voyager Boulevard interchange. The design and analysis of this connection in the I-25 EA superseded what was proposed earlier in the North Powers Boulevard EA that was approved in 1999. The current EA re-evaluation also includes this portion of Powers Boulevard from I-25 to just east of Voyager Parkway.

Summary of the 2004 EA Wetland Resources, Impact, and Mitigation

The I-25 EA in 2004 included field reconnaissance to identify wetlands along the I-25 corridor and to estimate what amount of acreage would be affected by the Proposed Action. The EA's findings are summarized below.

TABLE 1

Wetland Impacts Summarized in the I-	-25 EA
--------------------------------------	--------

Sub-watershed	Total Wetland Acres in the I-25 Study Area*	Impacted Jurisdictional Wetland Acres	Impacted Non-Jurisdictional Wetland Acres	Total Impacted Wetland Acres
Monument Creek north of Interquest Pkwy (Exit 153)	49.65	4.25	2.14	6.93
Monument Creek south of Exit 153	22.72	1.27	0.66	1.93
Colorado Springs Composite	18.64	0.65	0.63	1.28
Fountain Creek	5.02	0.62	0.00	0.62
TOTALS	96.03	6.79	3.43	10.22
Of the amounts shown above, the amounts on U.S. Air Force Academy property are:	24.69	1.86	1.76	3.62

* Acreages in the I-25 Study Area are only a fraction of the wetland acreage existing within each subwatershed. Total acreages existing within any sub-watershed were not determined.

Wetlands impacts within the U.S. Air Force Academy (USAFA) were highlighted in the table because USAFA was a Cooperating Agency for the EA. As part of interagency coordination, the EA highlighted impacts to USAFA resources.

Of the 10.22 wetland acres anticipated to be impacted by the Proposed Action, almost nine acres were in the Monument Creek sub-watershed, in northern El Paso County, which is the study area for the I-25 EA re-evaluation. Subtotals for the Monument Creek watershed are 5.52 jurisdictional acres and 2.80 non-jurisdictional acres, for a total of 8.32 acres. As mitigation,

CDOT committed to replace all impacted wetlands on a one-to-one basis, consistent with the agency's "no net loss of wetlands" policy.

The estimated impacts summarized above were based on exiting Conceptual Designs for the I-25 Proposed Action. In developing final design for I-25 improvements, CDOT and its contractor will endeavor to further reduce wetland impacts. For mitigation, the EA stated that:

"The proposed mitigation for the identified impacts consists primarily of in-kind replacement at the locations of the impacts. In addition, banked wetlands credits from CDOT's Limon Wetland Bank can be applied to compensate for some of the impacts, where appropriate."

Section 7 of the EA, Wetland Finding, provided detailed estimates of wetland impacts by location and provided extensive details on Best Management Practices and specific wetland mitigation opportunities.

Changes to the Project that Would Affect the Resource Differently

CDOT has not proposed to change the project in any way that would affect wetlands differently from what was described in the EA. Since the EA was approved in 2004, the Baptist Road interchange was reconstructed (I-25 Exit 158), and the COSMIX project widened I-25 from South Circle Drive (Exit 138) to North Academy Boulevard (Exit 150). Impacts and mitigation associated with these projects have already occurred, and would not be considered as remaining future effects of the Proposed Action.

<u>Changes in Resources, Analysis Data, Analysis Methods or Applicable</u> <u>Regulations</u>

The U.S. Army Corps of Engineers now requires use of the Regional Supplements for wetlands delineation. The project area is included in a landscape community that is a transitional area between the Rocky Mountain Forests and Rangeland and Western Great Plains. The two Regional Supplements for these two respective zones are the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (May 2010) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (May 2010)* and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region* (March 2010). For this wetland re-evaluation the Western Mountains, Valleys, and Coast Region wetland determination forms were used.

These supplements are similar in delineation procedure and criteria and are comparable to the 1987 Corps Manual (Environmental Laboratory 1987) that was used at the time of the 2004 wetland delineations. A comparison of the past procedures and criteria for determining wetlands with the 1987 Manual versus the new Regional Supplements would indicate that there is no significant difference in the methods for determining wetland indicators for soils, vegetation or hydrology.

Starting in 2010, CDOT requires that all Wetland Finding Reports for CDOT projects or projects funded by FHWA with permanent wetland impacts of 0.10 acre or greater include a Functional Assessment of Colorado Wetlands (FACWet). It is anticipated that the Project will permanently impact more than 0.10 of an acre of wetlands and will require this additional analysis. This analysis would be prepared as a part of a revised Wetland Finding Report when project impacts are known based on more detailed project design.

Project Impacts Based on Current Resources and Regulations

A field review of wetlands identified in the 2004 Environmental Assessment confirmed that wetland indicators and conditions were still accurate. A field survey was conducted by Chuck Schrader from PKM Design Group on January 26, 2012 which identified existing wetlands and compared these to wetland data from earlier delineations. Photographs are included in Appendix 1 that illustrates the conditions at wetland areas that were identified as being potentially impacted by the Project. A later field review was conducted by Chuck Schrader on March 9, 2012 that included more detailed analysis of wetland conditions and GPS surveying of wetland boundaries. This field GPS surveying, analysis of recent aerial photography, and past aerial/surveyed wetland boundaries was used to produce wetland boundaries as found in the field at the present time (Appendix 2, Wetland Field Mapping).

The identified wetlands were field verified with visual confirmation of vegetation and hydrological indicators and with soil testing if it appeared conditions may have changed. A majority of the wetland areas exhibited characteristics identical to those reported in the 2000 Wetland Delineations.

The results of the field review are found in Appendix 3, Routine Wetland Determination Forms. Field conditions in January and early March were characteristic of the late winter season at elevations of 6,500 to 6,900 feet. Plant material was not in active growth and soil conditions were frozen and snow covered in north facing and shaded locations. Table 1 on the following page lists each wetland that was field verified in the January and March 2012 field surveys.

One new wetland area was found (New WQ Pond) located immediately north of Woodmen Road on the east side of northbound I-25. This resource consists of 0.11 acre that is considered non-jurisdictional. This wetland is within CDOT's easement from USAFA south of Exit 150 (North Academy Boulevard), on the eastern side of I-25. See Figure 2. This wetland will not be impacted by the Proposed Action.

One previously identified wetland (Wetland T) was found to no longer exhibit wetland characteristics. The EA indicated that this ephemeral wetland was 0.0495 acre in size, and estimated that 0.0140 acre would be impacted by the Proposed Action.

In the 2012 field review and delineation, all other identified wetlands from the previous 2004 Wetland Finding were found to exist in the same locations and with the same characteristics as previously identified.

The ID #'s in Table 2 correspond to the identified project wetlands and the Routine Wetland Determination Forms

FIGURE 2. New Wetland on the Eastern Side of I-25, South of Exit 150



that include site data. This table also includes potential wetland impacts as identified in the 2004 Wetland Finding, except for the new WQ wetland and for wetland T, which no longer has wetland characteristics. Updating potential wetland impacts based on the 2012 field survey identified that the wetland boundaries were generally the same, thus the potential impact remains the same. Actual wetland impacts will be calculated during the preparation of the

Wetland Finding once final design has been completed. Table 2 also includes information on photograph reference numbers as found in Appendix 1, wetland classification and the projected jurisdictional and non-jurisdictional.

ID #'s	Photo Reference Number	Wetland Reference	Wetland Classification	Impact Activity	*Jurisdictional Wetland Acres Impacted	*Non- Jurisdictional Wetland Acres Impacted	Drainage Association
1	1 & 2	В	Perennial	Road Widening	0.13	0	Teachout
2	3	С	Perennial	Road Widening	0	0.171	No Name
3	4, 5, 6 & 7	D	Perennial	Baptist	2.44	0	Jackson
10,11	8 & 9	J, K	Isolated/Perennial	Northgate	1.666	0	Smith
12	10	U/AA, V	Isolated/Swale	Interchange	0	1.377	Smith
4	N/A	E	Isolated Wetland	Road Widening	0	0.073	Jackson
5	11	F	Isolated Wetland	Road Widening	0	0.142	N/A
6	12	G	Perennial	Road Widening	0	0.166	No Name
8	13 & 14	н	Perennial	Road Widening	0	0.387	Black Forest
7	15	На	Isolated Wetland	Road Widening	0	0.034	Black Forest
13	16	L	Ephemeral	Road Widening	0.148	0	No Name
14	17	W	Roadside Swale	Interchange	0	0.148	No Name
15	18	L100	Ephemeral	Road Widening	0.044	0	No Name
16	N/A	L200	Ephemeral	Road Widening	0.04	0	No Name
17	19 & 20	М	Perennial	Interchange	0.31	0	Black Squirrel
18	21	N	Isolated Wetland	Interchange	0	0.076	N/A
19	22	S	Perennial	Road Widening	0.181	0	Pine Creek
20	N/A	T**	Ephemeral	Road Widening	0	0	No Name
N/A	N/A	U/AA	Wet Meadow	Interchange	0	0.514	Monument
N/A	N/A	V	Wet Meadow	Interchange	0	0.119	Monument
9	N/A	х	Roadside Swale	Interchange	0	0.016	Smith
21	23	New WQ	Roadside Swale	WQ Pond	0	0	N/A
				TOTALS	4.959	3.223	

TABLE 2. 2012 Wetland Reference and Impact Assessment for the I-25 Re-evaluation Area

* Wetland impact acreage from Wetland Finding in the 2004 I-25 EA.

** Area T was considered a wetland in 2004, but as of 2012 no longer has wetland characteristics. It was formerly described as 0.0495 wetland acres with 0.014 acre of non-jurisdictional impact.

Changes in Proposed Mitigation

The 2004 I-25 EA indicated that wetland mitigation would be on a one-for-one basis primarily through in-kind replacement at the locations of impacts. Banked wetland credits from CDOT's Limon Wetland Bank could be used where appropriate. However, CDOT will make every effort to replace wetlands within the existing drainage, since most of the wetlands in the re-evaluation project area occur in or near habitat of the threatened Preble's meadow jumping mouse. Included in the Wetland Finding Report will be a FACWet assessment for each impacted wetland area as well as the projected permanent and temporary impacts.

Conclusion

The Proposed Action remains consistent and compatible with current wetland mitigation and permitting conditions and can provide improvements to water quality and watershed degradation. The key findings of this technical memorandum are summarized in Table 3.

EA 2004 – No-Action Alternative	EA 2004 – Impacts of Proposed Action	EA 2004 – Mitigation	2012 – What Has Changed	Re- evaluation 2012 – No Action Alternative	Re- evaluation 2012 – Impacts of Proposed Action	Re-evaluation 2012 – Mitigation
Continued development within watersheds would lead to water quality degradation because increased impervious areas would pass more pollutants to wetlands and waterways. Improvements to deteriorating drainageways would not be made to address the continuing degradation. Wetland and riparian areas would experience additional loss and fragmentation of valuable habitat as a result of continued urban growth, erosion, and deposition.	An estimated total of 8.514 acres of wetlands were identified as within potential project limits including jurisdictional and non-jurisdictional wetlands.	Impacted wetlands will be mitigated on a one-for-one basis primarily through in- kind replacement at the locations of impacts and using banked wetland credits from CDOT's Limon Wetland Bank where appropriate. Necessary permits from the U.S. Army Corps of Engineers and CDOW (CPW) will be obtained for impacted wetlands. The U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service and CDOW (now CPW) will be consulted regarding use of credits to be withdrawn from the Limon Wetland Bank.	USACE now requires use of Regional Supplements to its Wetland Delineation Manual. CDOT now has a revised Functional Assessment of Wetlands approach called FACWet 2.0. The 2012 field review and delineation found that one previously existing ephemeral wetland (0.0495 acre) no longer exhibits wetland characteristics; and one new wetland (0.11 acre) now exists in a roadside water quality pond. Wetland impacts and mitigation associated with projects completed in central Colorado Springs (COSMIX I-25 widening) and the Baptist Road interchange have already occurred.	Not making the remaining, planned 1-25 improvements would lead to water quality degradation, wetland and riparian loss, and fragmentation of habitat as a result of continued development impacts to existing wetlands, waterways and drainageways.	The Proposed Action remains consistent and compatible with current wetland mitigation and permitting conditions. Previously identified wetland impacts in northern El Paso County now can be recalculated to subtract 0.0495 acre for the wetland that has disappeared.	Mitigation will be necessary and will be coordinated with USAFA biologists considering the potential wetland mitigation sites as identified in the Wetland Finding that was included in the 2004 I-25 EA. Mitigation will be on a one-for-one basis at the locations of impacts and at suitable mitigation sites as identified in the 2004 EA and Wetland Finding Report and evaluated in this study.

TABLE 3. Summary of Previously and Currently Identified Wetlands and Waters of the U.S. Impacts and Mitigation

APPENDIX 1. WETLAND SITE PHOTOGRAPHS AND VEGETATION DESCRIPTIONS

Photo's 1-3 illustrate perennial waterways with predominantly sandbar willow (Salix exigua) surrounded by upland grasses, forbs, and shrubs.



Photo #1: B -Teachout Creek (West I-25)



Photo #2: B -Teachout Creek (East I-25)



Photo #3: C -No Name (West I-25)



Photo #4: D –Jackson Creek (West I-25)

Photo's 4-7 illustrate the Jackson Creek waterway that crosses Baptist Road and contains sandbar willow, common cattail (*Typha latifolia*), plains cottonwood (*Populus deltoides*), and peach-leaf willow (*Salix* amygdaloides).



Photo #5: AZ -Jackson Creek (East I-25)



Photo #6: AZ -Jackson Creek (South Baptist Rd.)

Photo 8 illustrates the Smith Creek waterway that crosses Northgate and contains sandbar willow and common cattail.



Photo #7: AZ -Jackson Creek (North Baptist Rd.) Photo #8: J -Smith Creek (East I-25)



APPENDIX 1. WETLAND SITE PHOTOGRAPHS AND VEGETATION DESCRIPTIONS

Photo 9 illustrates the Monument Branch of Smith Creek that is a perennial waterway with predominantly sandbar willow, common cattail, plains cottonwood, and peach-leaf willow.

Photo 10 is of Monument Creek which is a large complex of wetland on either side of northbound I -25. Vegetation here is predominantly sandbar willow, common cattail, Juncus sp., and peach-leaf willow.



Photo #9: K -Monument Branch (West I-25)



Photo #10: U AA Monument Creek (East I-25)

Photo's 11 and 12 are views of small drainages which are dominated by sandbar willow with smaller areas of common cattail.

Photo's 13 and 14 illustrate the difference in conditions in wetland areas on either side of I-25 at Black Forest Creek. Vegetation is a mix of sandbar willow, common cattail, peach-leaf willow and Juncus. The west ROW contains ponderosa pine (Pinus ponderosa) also in more upland areas.

Photo 15 is a pipe drainage that feeds Black Forest Creek with sandbar willow. Wetland areas on the west side of I-25 at L- No Name Creek (Photo 16) is a taller mix of sandbar willow and common cattail surrounded by upland deciduous trees and ponderosa pine.



Photo #13: H -Black Forest Creek (West I-25)



Photo #12: G -No Name (West I-25)

Photo #14: H -Black Forest Creek (East I-25)



Photo #15: Ha -Pipe (West I-25)



Photo #16: L- No Name (West I-25)

APPENDIX 1. WETLAND SITE PHOTOGRAPHS AND VEGETATION DESCRIPTIONS

Photo 17 illustrates a roadside drainage ditch wetland. Photo 18 illustrates the drainage area wetlands at No Name Creek that contain sandbar willow, plains cottonwood and reed canary grass (*Phalaris arundinacea*).



Photo #17: W Roadside Swale (East I-25)



Photo #18: L -100 (East I-25)

Photo's 19 and 20 are of wetland M in the perennial Black Squirrel Creek drainage. The predominant vegetation is sandbar willow and common cattail.



Photo #19: M Black Squirrel Cr. (East I-25)



Photo #20: M Black Squirrel Cr. (West I-25)

Photo 21 is a view of a small roadway drainage wetland dominated by sandbar willow.

Photo 22 illustrates the wetland section of South Pine creek adjacent to I-25 in the North Academy Blvd area.

Photo 23 is a view of the new water quality stormwater pond with cattail wetland at the southern end of the project. This is a new wetland that was not present in the 2004 EA study.

Photo 24 is a view of the area adjacent to the new soundwalls on the west side of southbound I-25. Wetlands were identified here in 2004 which are not present at this time.



Photo #21: N Sandbar Willow (West I-25)



Photo #22: South Pine Creek (East I-25)



Photo #23: New WQ Pond (East I-25)



Photo #24: Former Wetlands—FF-GG

APPENDIX 2

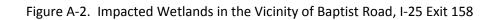
LOCATION AND EXTENTS OF WETLANDS IMPACTED BY THE I-25 PROPOSED ACTION

This Appendix consists of the six figures that are presented on the pages that follow:

- A-1. Map of Re-evaluation Area, indicating Wetlands Impacted by the I-25 Proposed Action
- A-2. Impacted Wetlands in the Vicinity of Baptist Road, I-25 Exit 158
- A-3. Impacted Wetlands in the vicinity of North Gate Road, I-25 Exit 156
- A-4. Impacted Wetlands north of Interquest Parkway, I-25 Exit 153
- A-5. Non-wetland Area formerly Wetland T south of Interquest Parkway, I-25 Exit 153
- A-6. Impacted Wetlands in the Vicinity of North Academy Boulevard, I-25 Exit 150

Fox Run ent Creek eneagle 85 U/AA L200L100 United States Air Force A Ν 21 83 Interqu 87 GRIN New WQ 85

Figure A-1. Map of Re-evaluation Area, indicating Wetlands Impacted by the I-25 Proposed Action



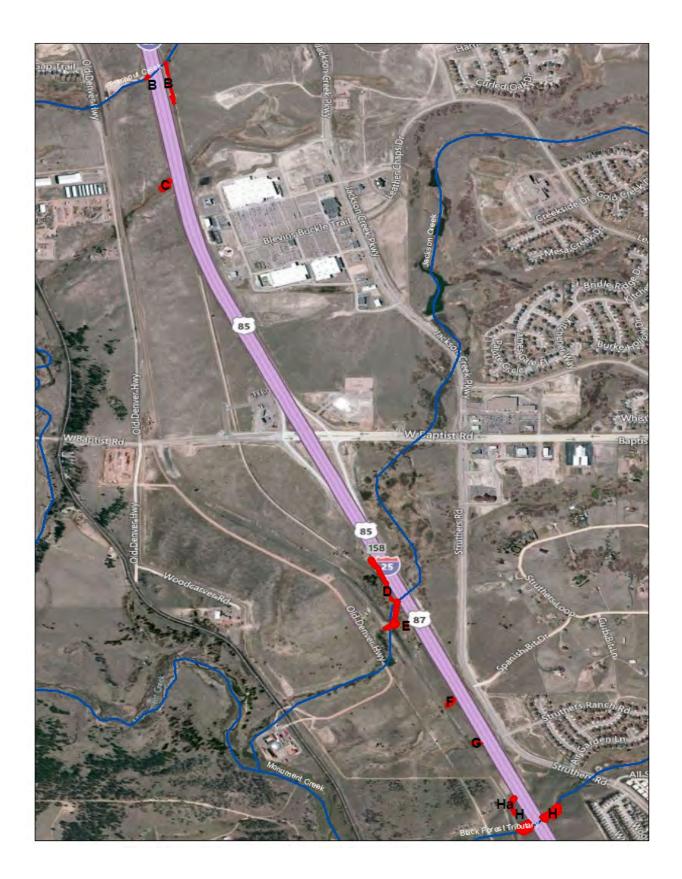
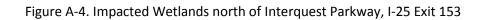


Figure A-3. Impacted Wetlands in the vicinity of North Gate Road, I-25 Exit 156





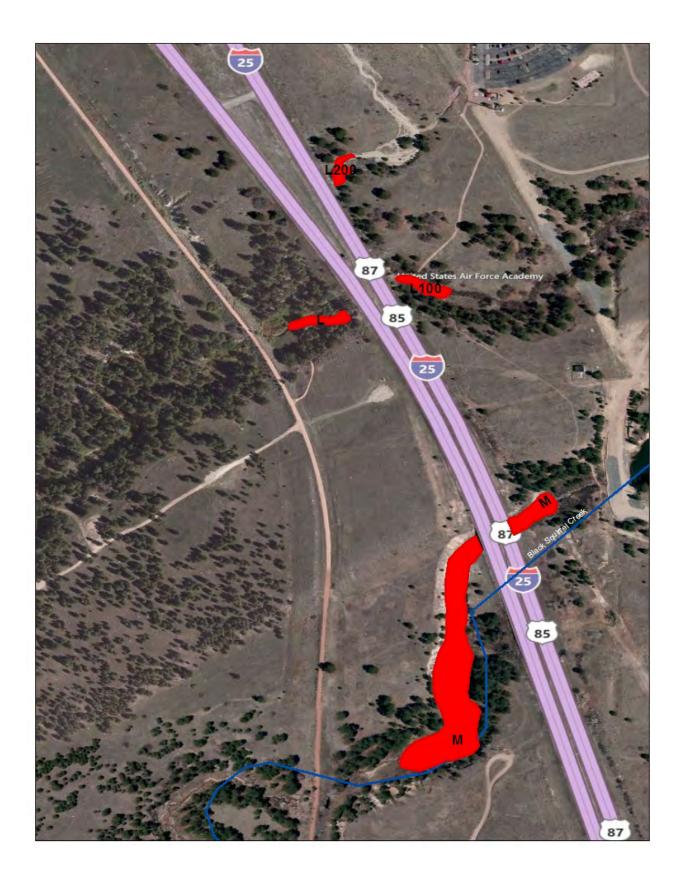
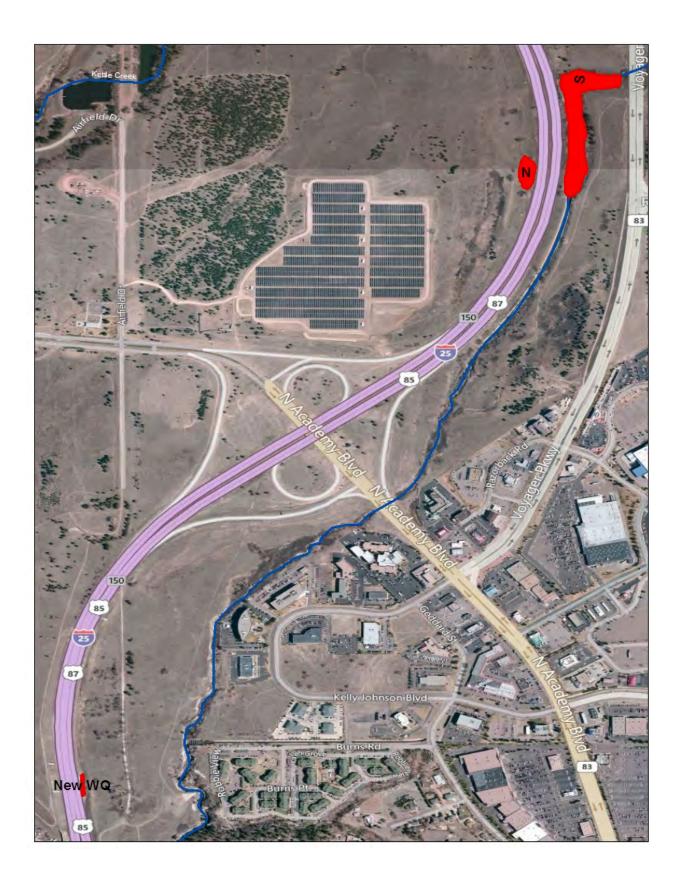


Figure A-5. Non-wetland Area formerly Wetland T south of Interquest Parkway, I-25 Exit 153



Figure A-6. Impacted Wetlands in the Vicinity of North Academy Boulevard, I-25 Exit 150



APPENDIX 3

WETLAND DELINEATION FORMS

This Appendix consists of wetland delineation forms for the following resources in the I-25 EA Reevaluation area, presented in the order shown:

Wetland B Wetland C Wetland D Wetlands J, K Wetlands U/AA, V Wetland E Wetland F Wetland G Wetland H Wetland Ha Wetland L Wetland W Wetland L100 Wetland L200 Wetland M Wetland N Wetland S Former Wetland T* Wetland U/AA Wetland V Wetland X New Wetland WQ

* Area T was considered a wetland in 2004, but as of 2012 no longer has wetland characteristics. It was formerly described as 0.0495 wetland acres with 0.014 acres of non-jurisdictional impact. The wetland determination form for this non-wetland contains only vegetation information as hydric conditions were not present. No delineation form was found for the previous wetland delineation study.

Project/Site: North I-25 Re-evaluation	City/County: El Paso Coun	Sampling Da	te: <u>1/26/</u>	12 & 3/9/12		
Applicant/Owner: Colorado Department of Transportation		State: <u>CO</u>	Sampling	Point:	1: Wetland E	(West)
Investigator(s): <u>Chuck Schrader, PKM Design Group, Inc.</u>	Section, Township, Rang	ge: <u>T 11 S., R 6</u>	67 W., S. 23			
Landform (hillslope, terrace, etc.): <u>creek/drainage channel</u>	Local relief (concave, o	convex, none): _	concave		Slope (%): _	3-8
Subregion (LRR): LRR E	Lat: <u>39.072029</u>	Long:	104.858174	Datum:	NAD 83	
Soil Map Unit Name: Pring Coarse Sandy Loam - Tomah-	Crowfoot Loamy Sands	NWI classifi	ication: <u>PEM/P</u>	SS		
Are climatic / hydrologic conditions on the site typical for this	s time of year? Yes <u>X</u>	_ No (If	f no, explain in Re	emarks.)		
Are Vegetation, Soil, or Hydrologys	ignificantly disturbed? No	Are "Normal	Circumstances"	present?	Yes <u>X</u>	No
Are Vegetation, Soil, or Hydrology n	aturally problematic? No	(If needed, e	explain any answe	ers in Rem	narks.)	
		int loootions				4-

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X No Yes X No Yes X No	Is the Sampled Area within a Wetland?	Yes <u>X</u> No			
Remarks:						
Sandbar willow with sandy, alluvial soil from sediment and high runoff flows. Results match 2000 field delineations.						

	Absolute Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1.	<u>% Cover Species?</u> Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
Conling/Chrish Stratum (Dist size)	0 = Total Cover	Total Number of Dominant Species Across All Strata:1(B)
Sapling/Shrub Stratum (Plot size:) 1. <u>Salix exigua</u>	60YOBL	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
	60 = Total Cover	Prevalence Index worksheet:
		Total % Cover of: Multiply by:
Herb Stratum (Plot size:)		OBL species65 x 1 =65
1. <u>Typha latifolia</u>	<u> 5 N OBL</u>	FACW species10 x 2 =20
2. Phalaris arundinacea	10 N FACW+	FAC species x 3 =
		FACU species x 4 =
	15 = Total Cover	UPL species x 5 =
		Column Totals: <u>75</u> (A) <u>85</u> (B)
Woody Vine Stratum (Plot size:)		Prevalence Index = B/A = <u>1.13</u> Hydrophytic Vegetation Indicators:
1_		
	0 = Total Cover	1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50%
% Bare Ground in Herb Stratum <u>15</u>		<u>X</u> 3 - Prevalence Index is $\leq 3.0^{1}$
		4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
		5 - Wetland Non-Vascular Plants ¹
		Duck low attail budge when the Managet attain 1 (Example in)
		Problematic Hydrophytic Vegetation ¹ (Explain)
		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
		¹ Indicators of hydric soil and wetland hydrology must
Remarks:		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation

	h needed to document th			the absence	or maloutoroly
Depth <u>Matrix</u>	Redox Featu		1.0.02	Tautum	Domester
<u>(inches)</u> <u>Color (moist)</u> <u>%</u>	Color (moist) %	Type'	Loc ²	Texture	Remarks
<u> </u>	some mottles			alluvial	sandy, sandy loam
			<u> </u>		
.	·				
¹ Type: C=Concentration, D=Depletion, RM=	Reduced Matrix CS=Cove	ed or Coated	Sand Gra	ains ² Lo	cation: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all I					ors for Problematic Hydric Soils ³ :
	X Sandy Redox (S5)	,			m Muck (A10)
Histic Epipedon (A2)	Stripped Matrix (S6)				d Parent Material (TF2)
Black Histic (A3)	Loamy Mucky Mineral	F1) (except	MLRA 1)		y Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (=2)		Oth	er (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Matrix (F3)				
Thick Dark Surface (A12)	Redox Dark Surface (F	,			ors of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surface	. ,			and hydrology must be present,
Sandy Gleyed Matrix (S4) Restrictive Layer (if present):	Redox Depressions (Fa	3)		unie	ss disturbed or problematic.
Type:				Undria Cai	
Depth (inches):				Hydric Soi	Present? Yes X No
Remarks:					
HYDROLOGY					
HYDROLOGY Wetland Hydrology Indicators:					
	; check all that apply)			<u>Seco</u>	ndary Indicators (2 or more required)
Wetland Hydrology Indicators:	; check all that apply)	aves (B9) (ex	cept		ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2,
Primary Indicators (minimum of one required		. , .	cept		
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1)	Water-Stained Le	. , .	cept	\	Vater-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2)	Water-Stained Le MLRA 1, 2, 4A	, and 4B)	cept	\ [Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3)	Water-Stained Le MLRA 1, 2, 4A Salt Crust (B11)	, and 4B) tes (B13)	cept	\ t	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required	Water-Stained Le MLRA 1, 2, 4A Salt Crust (B11) Aquatic Invertebra	, and 4B) tes (B13) Odor (C1)	·	[[[Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required	Water-Stained Le MLRA 1, 2, 4A Salt Crust (B11) Aquatic Invertebra Hydrogen Sulfide	, and 4B) tes (B13) Odor (C1) heres along L	iving Root	[[[[[[[[[[Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required	Water-Stained Le MLRA 1, 2, 4A Salt Crust (B11) Aquatic Invertebra Hydrogen Sulfide Oxidized Rhizosp	, and 4B) tes (B13) Odor (C1) neres along L ced Iron (C4)	iving Root	[]]	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required	Water-Stained Le MLRA 1, 2, 4A Salt Crust (B11) Aquatic Invertebra Hydrogen Sulfide Oxidized Rhizosp Presence of Redu	, and 4B) tes (B13) Odor (C1) neres along L ced Iron (C4) ction in Tilled	iving Root Soils (C6)	[]] [[[[]] [[]] [[]] []] []] []]]]	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required	Water-Stained Le MLRA 1, 2, 4A Salt Crust (B11) Aquatic Invertebra Hydrogen Sulfide Oxidized Rhizosp Presence of Redu Recent Iron Redu Stunted or Stresse Other (Explain in	, and 4B) tes (B13) Odor (C1) neres along L ced Iron (C4) ction in Tilled ed Plants (D1	iving Root Soils (C6)	[]] [[[]] [[]] []] []] []] 	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) AC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required	Water-Stained Le MLRA 1, 2, 4A Salt Crust (B11) Aquatic Invertebra Hydrogen Sulfide Oxidized Rhizosp Presence of Redu Recent Iron Redu Stunted or Stresse Other (Explain in	, and 4B) tes (B13) Odor (C1) neres along L ced Iron (C4) ction in Tilled ed Plants (D1	iving Root Soils (C6)	[]] [[[]] [[]] []] []] []] 	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) AC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required	Water-Stained Le MLRA 1, 2, 4A Salt Crust (B11) Aquatic Invertebra Hydrogen Sulfide Oxidized Rhizosp Presence of Redu Recent Iron Redu Stunted or Stresso Other (Explain in 188)	, and 4B) tes (B13) Odor (C1) neres along L ced Iron (C4) ction in Tilled ed Plants (D1 Remarks)	iving Root Soils (C6)) (LRR A)	[]] [[[]] [[]] []] []] []] 	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) AC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required	Water-Stained Le MLRA 1, 2, 4A Salt Crust (B11) Aquatic Invertebra Hydrogen Sulfide Oxidized Rhizosp Presence of Redu Recent Iron Redu Stunted or Stresse Other (Explain in	, and 4B) tes (B13) Odor (C1) neres along L ced Iron (C4) ction in Tilled ed Plants (D1 Remarks)	iving Root Soils (C6)) (LRR A)	[]] [[[]] [[]] []] []] []] 	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) AC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required	Water-Stained Le MLRA 1, 2, 4A Salt Crust (B11) Aquatic Invertebra Hydrogen Sulfide Oxidized Rhizosp Presence of Redu Recent Iron Redu Stunted or Stresso Other (Explain in 188)	, and 4B) tes (B13) Odor (C1) neres along L ced Iron (C4) ction in Tilled ed Plants (D1 Remarks)	iving Root Soils (C6)) (LRR A)	[]] [[[]] [[]] []] []] []] 	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) AC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required	Water-Stained Le MLRA 1, 2, 4A Salt Crust (B11) Aquatic Invertebra Hydrogen Sulfide Oxidized Rhizosp Presence of Redu Recent Iron Redu Stunted or Stresse O Other (Explain in 188)	, and 4B) tes (B13) Odor (C1) neres along L ced Iron (C4) ction in Tilled ed Plants (D1 Remarks)	iving Root Soils (C6)) (LRR A)	[[[[[[[Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) AC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required	Water-Stained Le. MLRA 1, 2, 4A Salt Crust (B11) Aquatic Invertebra Hydrogen Sulfide Oxidized Rhizosp Presence of Redu Recent Iron Redu Stunted or Stresse Other (Explain in 1988) No X Depth (inches): No X Depth (inches):	, and 4B) tes (B13) Odor (C1) neres along L ced Iron (C4) ction in Tilled ed Plants (D1 Remarks)	iving Root Soils (C6)) (LRR A)	(C3) ())))))))))	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) AC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required	Water-Stained Le. MLRA 1, 2, 4A Salt Crust (B11) Aquatic Invertebra Hydrogen Sulfide Oxidized Rhizosp Presence of Redu Recent Iron Redu Stunted or Stresse Other (Explain in 1988) No X Depth (inches): No X Depth (inches):	, and 4B) tes (B13) Odor (C1) neres along L ced Iron (C4) ction in Tilled ed Plants (D1 Remarks)	iving Root Soils (C6)) (LRR A)	(C3) ())))))))))	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) AC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

Project/Site: North I-25 Re-evaluation	City/County: El Paso County	Sampling Date: <u>1/26/12 & 3/9/12</u>
Applicant/Owner: Colorado Department of Transportation	State: <u>CO</u>	Sampling Point: <u>2:Wetland C (west)</u>
Investigator(s): <u>Chuck Schrader, PKM Design Group, Inc.</u>	Section, Township, Range: <u>T 11 S., R</u>	. 67 W., S. 26
Landform (hillslope, terrace, etc.): <u>drainage channel</u>	Local relief (concave, convex, none):	concave Slope (%): <u>3-8</u>
Subregion (LRR): <u>LRR E</u>	_ Lat: <u>39.067473</u> Long: <u>104.857</u>	124 Datum: NAD 83
Soil Map Unit Name: Pring Coarse Sandy Loam		NWI classification: <u>PSS</u>
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes X No	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology si	gnificantly disturbed? No Are "Norm	al Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology n	aturally problematic? No (If needed,	explain any answers in Remarks.)
	1	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X No Yes X No Yes X No	Is the Sampled Area within a Wetland?	Yes <u>X</u> No
Remarks:			
Densingence of search envillence within D		who pool field deline them we	ulta Ilualuata any fuana avily automatica di unatua auto

Dominance of sandbar willow within ROW with sedges west of ROW similar to 2000 field delineation results. Hydrology from culvert and upstream Runoff.

	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1	<u>% Cover</u>	Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
Carlias/Ohrsk Otatura (Distaire)	0	_ = Total Cover	Total Number of Dominant Species Across All Strata: (B)
<u>Sapling/Shrub Stratum</u> (Plot size:) 1. <u>Salix exigua</u>	70	Y OBL	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
	70	= Total Cover	Prevalence Index worksheet:
			Total % Cover of: Multiply by:
Herb Stratum (Plot size:)			OBL species x 1 =
1.			FACW species x 2 =
			FAC species x 3 =
	0	= Total Cover	FACU species x 4 =
Woody Vine Stratum (Plot size:)		_	UPL species x 5 =
1.			Column Totals: <u>70</u> (A) <u>70</u> (B)
% Bare Ground in Herb Stratum 20	0	= Total Cover	Prevalence Index = B/A =1.0
			Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
			X 2 - Dominance Test is >50%
			X 3 - Prevalence Index is ≤3.0 ¹
			4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
			5 - Wetland Non-Vascular Plants ¹
			Problematic Hydrophytic Vegetation ¹ (Explain)
			<u> </u>
			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
			¹ Indicators of hydric soil and wetland hydrology must
Remarks:			 ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation

Profile Descrip	tion: (Describ	e to the dept	h needed to docu	ment the in	ndicator	or confirm	the absence	e of indicators.)
Depth	Matrix			ox Features		2		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	10 YR 3/1	90					loamy sand	sandy few mottles
<u> </u>								
						<u> </u>	·	
			Reduced Matrix, C			d Sand Gr		cation: PL=Pore Lining, M=Matrix.
Hydric Soil Ind	icators: (App	icable to all I	LRRs, unless othe	rwise note	∋d.)		Indicate	ors for Problematic Hydric Soils ³ :
Histosol (A	1)		X Sandy Redox ((S5)			2 ci	m Muck (A10)
Histic Epipe	edon (A2)	-	Stripped Matrix	: (S6)				d Parent Material (TF2)
Black Histic	· · /	-	Loamy Mucky I			MLRA 1)		y Shallow Dark Surface (TF12)
Hydrogen S		· · · · · · · · · · ·	Loamy Gleyed)		Oth	ier (Explain in Remarks)
	elow Dark Surfa	ace (A11)	Depleted Matrix				3	
	Surface (A12) ky Mineral (S1)		Redox Dark Su	• • •	· -)			ors of hydrophytic vegetation and
	red Matrix (S4)	=	Depleted Dark Redox Depress		7)			and hydrology must be present, ss disturbed or problematic.
Restrictive Lay	, ,		Redux Depress	SIULIS (FO)				
	,							
<u> </u>	<u> </u>							
	s):		<u> </u>				Hydric Soi	I Present? Yes X No
Remarks:								
HYDROLOG	(
Wetland Hydro	logy Indicator	s:						
			; check all that appl	Iv)			Seco	ndary Indicators (2 or more required)
Surface Wa		r one required		ained Leave	oc (R0) (o	vcont		Vater-Stained Leaves (B9) (MLRA 1, 2,
High Water	. ,			1, 2, 4A, a		xcepi	v	4A, and 4B)
Saturation (Salt Crust		inu 46)		г	Prainage Patterns (B10)
	, , , , , , , , , , , , , , , , , , ,			vertebrate	~ (D12)			o ()
X Water Mark	. ,				` '			Dry-Season Water Table (C2)
	eposits (B2)			Sulfide Oc		Living Doo		Saturation Visible on Aerial Imagery (C9)
Drift Depos				Rhizospher	-	-		Geomorphic Position (D2)
Algal Mat o				of Reduce		,		Shallow Aquitard (D3)
Iron Deposi	. ,			on Reductio				FAC-Neutral Test (D5)
	il Cracks (B6)			r Stressed		1) (LRR A		Raised Ant Mounds (D6) (LRR A)
	Visible on Aeria			plain in Rei	marks)		F	Frost-Heave Hummocks (D7)
	egetated Conca	ive Surface (B	(8)					
Field Observat								
Surface Water F			No X Depth (
Water Table Pre	esent?	Yes N	No X Depth (inches):		_		
Saturation Pres	ent?	Yes N	lo X Depth (inches):		Wetla	and Hydrolog	y Present? Yes X No

(includes capillary fringe)					
Describe Recorded Data	(stream gauge, r	nonitoring well	, aerial photos,	previous inspec	tions), if available:

Remarks:

Hydrology from upstream runoff and culvert drainage, no change from 2000 study.

Project/Site: North I-25 Re-evaluation	City/County: El Paso County	Sampling D	Date: 1/26/12 & 3/9/12
Applicant/Owner: <u>Colorado Department of Transportation</u>		State: <u>CO</u> Sa	ampling Point: <u>3: Wetland D (west)</u>
Investigator(s): <u>Chuck Schrader, PKM Design Group, Inc.</u>	Section, Township, Range: <u>T</u>	11 S., R 67 W., S. 36	
Landform (hillslope, terrace, etc.):stream channel and ber	nch Local relief (concave, con	vex, none): <u>concave</u>	Slope (%): <u>8-15</u>
Subregion (LRR): <u>LRR E</u>	Lat: <u>39.049529</u> Long: _	104.847626	Datum: NAD 83
Soil Map Unit Name: <u>Tomah-Crowfoot Loamy Sands</u>		NWI classificati	ion: <u>PEM/PSSS</u>
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes X No	(If no, explain in F	Remarks.)
Are Vegetation, Soil, or Hydrology si	ignificantly disturbed? No Ar	e "Normal Circumstances	" present? Yes X No
Are Vegetation, Soil, or Hydrology n	aturally problematic? No (If	needed, explain any answ	wers in Remarks.)
	howing compling point l	antiona transacta	important factures ato

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u>X</u> Yes <u>X</u> Yes <u>X</u>	No No No	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No
Remarks:					
West of SB I-25 Jackson Creek.					

	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. Populus deltoides	5	N	FAC	That Are OBL, FACW, or FAC: (A)
2. <u>Salix amygdaloides</u>	5	N	FACW	Total Number of Dominant
				Species Across All Strata: (B)
	10	= Total (Cover	Demonstrat Demonstration
				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot size:)				Prevalence Index worksheet:
1. <u>Salix exigua</u>	40	Y	OBL	Total % Cover of: Multiply by:
				OBL species 60 x 1 = 60
Herb Stratum (Plot size:)	40	= Total Cov	er	
	20	N	OBL	FACW species 15 x 2 = 30
1. <u>Typha latifolia</u>		<u> </u>		FAC species <u>5</u> x 3 = <u>15</u>
2. Phalaris arundinacea	10	<u>N</u>	FACW+	FACU species x 4 =
				UPL species x 5 =
	30	= Total C	over	Column Totals: <u>80</u> (A) <u>105</u> (B)
Woody Vine Stratum (Plot size:)				Prevalence Index = $B/A = 1.31$
				Hydrophytic Vegetation Indicators:
12				1 - Rapid Test for Hydrophytic Vegetation
2		,		 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50%
2		,		X 2 - Dominance Test is >50%
2		,		X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0 ¹ _ 4 - Morphological Adaptations ¹ (Provide supporting
2		,		X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹
2		,		X2 - Dominance Test is >50%X3 - Prevalence Index is $\leq 3.0^1$ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2		,		X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.01 4 - Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants1 Problematic Hydrophytic Vegetation1 (Explain)
2		,		X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.01 4 - Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants1 Problematic Hydrophytic Vegetation1 (Explain) 1Indicators of hydric soil and wetland hydrology must
2		,		X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.01 4 - Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants1 Problematic Hydrophytic Vegetation1 (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation1

Depth Matrix						the absence	of indicators.)
			K Features		1 2	T 4	Deveseries
(inches) Color (moist)	<u>%</u> C	olor (moist)	%	Type ¹	Loc ²	Texture	Remarks
<u> </u>	80					sandy loam	little to no mottles
						·	
	·						
¹ Type: C=Concentration, D=Depleti					d Sand Gra		cation: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable)	ie to all LRR	s, unless other	wise note	ed.)			ors for Problematic Hydric Soils ³ :
Histosol (A1)		Sandy Redox (S					n Muck (A10)
Histic Epipedon (A2)		Stripped Matrix					l Parent Material (TF2)
Black Histic (A3)		Loamy Mucky N			MLRA 1)		y Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)		Loamy Gleyed N)		Oth	er (Explain in Remarks)
Depleted Below Dark Surface (A	,	Depleted Matrix				³ landianti	ors of hydrophytic vegetation and
Thick Dark Surface (A12) Sandy Mucky Mineral (S1)		Redox Dark Sur Depleted Dark S	, ,	7)			nd hydrology must be present,
Sandy Mucky Milleral (S1) Sandy Gleyed Matrix (S4)		Redox Depressi		/)			s disturbed or problematic.
Restrictive Layer (if present):		Redux Depiessi				une	
Type:							
Depth (inches):						Hydric Soil	Present? Yes X No
Remarks:							
HYDROLOGY							
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one	required: che	eck all that apply	/)			Seco	ndary Indicators (2 or more required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one	required; che			os (BQ) (e)	cent		ndary Indicators (2 or more required)
Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one</u> Surface Water (A1)	required; che	Water-Stai	ned Leave		ccept		Vater-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators: Primary Indicators (minimum of one	required; che	Water-Stair MLRA 1	ned Leave I, 2, 4A, a		ccept	V	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hydrology Indicators: Primary Indicators (minimum of one	required; che	Water-Stain MLRA 1	ned Leave I , 2, 4A, a (B11)	nd 4B)	cept	v c	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Prainage Patterns (B10)
Wetland Hydrology Indicators: Primary Indicators (minimum of one	required; che	Water-Stain MLRA 1 Salt Crust (Aquatic Inv	ned Leave I , 2, 4A, a (B11) ⁄ertebrates	nd 4B) s (B13)	ccept	v c	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Prainage Patterns (B10) Pry-Season Water Table (C2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one	<u>required; che</u>	Water-Stain MLRA 1 Salt Crust (Aquatic Inv Hydrogen 5	ned Leave I , 2, 4A, a (B11) vertebrates Sulfide Od	nd 4B) s (B13) lor (C1)	-	V C C	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Prainage Patterns (B10) Pry-Season Water Table (C2) Paturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators: Primary Indicators (minimum of one	required; che	Water-Stain MLRA 1 Salt Crust (Aquatic Inv Hydrogen 9 Oxidized R	ned Leave I, 2, 4A, a (B11) vertebrates Sulfide Od hizospher	nd 4B) s (B13) lor (C1) res along l	_iving Roo	V C S ts (C3) C	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Irainage Patterns (B10) Iry-Season Water Table (C2) auturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one	required; che	Water-Stain MLRA 1 Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence c	ned Leave I, 2, 4A, a (B11) vertebrates Sulfide Od hizospher of Reduce	nd 4B) s (B13) lor (C1) res along l d Iron (C4	_iving Roo	V C S S S	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Prainage Patterns (B10) Pry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) thallow Aquitard (D3)
Wetland Hydrology Indicators: Primary Indicators (minimum of one	required; che	Water-Stain MLRA 1 Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror	ned Leave (J , 2, 4A, a (B11) vertebrates Sulfide Od hizospher of Reduces n Reductio	nd 4B) s (B13) lor (C1) res along I d Iron (C4 on in Tilled	iving Roo) I Soils (C6	V C S ts (C3) S S	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Prainage Patterns (B10) Pry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) hallow Aquitard (D3) FAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) High Water Table (A2) Saturation (A3) X Water Marks (B1) Sediment Deposits (B2) X Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)		Water-Stain MLRA 1 Salt Crust (Aquatic Inv Hydrogen 3 Oxidized R Presence c Recent Iror Stunted or	ned Leave (B11) rertebrates Sulfide Od hizospher of Reduce n Reductio Stressed	nd 4B) or (C1) res along I d Iron (C4 on in Tilled Plants (D1	iving Roo) I Soils (C6	V C S (C3) S S) F	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Prainage Patterns (B10) Pry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) hallow Aquitard (D3) FAC-Neutral Test (D5) caised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) High Water Table (A2) Saturation (A3) X Water Marks (B1) Sediment Deposits (B2) X Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Image	agery (B7)	Water-Stain MLRA 1 Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror	ned Leave (B11) rertebrates Sulfide Od hizospher of Reduce n Reductio Stressed	nd 4B) or (C1) res along I d Iron (C4 on in Tilled Plants (D1	iving Roo) I Soils (C6	V C S (C3) S S) F	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Prainage Patterns (B10) Pry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) hallow Aquitard (D3) FAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) High Water Table (A2) Saturation (A3) X Water Marks (B1) Sediment Deposits (B2) X Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Ima Sparsely Vegetated Concave S	agery (B7)	Water-Stain MLRA 1 Salt Crust (Aquatic Inv Hydrogen 3 Oxidized R Presence c Recent Iror Stunted or	ned Leave (B11) rertebrates Sulfide Od hizospher of Reduce n Reductio Stressed	nd 4B) or (C1) res along I d Iron (C4 on in Tilled Plants (D1	iving Roo) I Soils (C6	V C S (C3) S S) F	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Prainage Patterns (B10) Pry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) hallow Aquitard (D3) FAC-Neutral Test (D5) caised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) High Water Table (A2) Saturation (A3) X Water Marks (B1) Sediment Deposits (B2) X Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Images Sparsely Vegetated Concave S	agery (B7) Furface (B8)	Water-Stain MLRA 1 Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Stunted or Other (Exp	ned Leave I, 2, 4A, a (B11) rertebrates Sulfide Od hizospher of Reduce n Reductio Stressed lain in Rei	nd 4B) lor (C1) lor (C1) d Iron (C4 on in Tilled Plants (D1 marks)	iving Roo) I Soils (C6 I) (LRR A)	V C S (C3) S S) F	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Prainage Patterns (B10) Pry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) hallow Aquitard (D3) FAC-Neutral Test (D5) caised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) High Water Table (A2) Saturation (A3) X Water Marks (B1) Sediment Deposits (B2) X Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Images Sparsely Vegetated Concave S	agery (B7) Furface (B8)	Water-Stain MLRA 1 Salt Crust (Aquatic Inv Hydrogen 3 Oxidized R Presence c Recent Iror Stunted or	ned Leave I, 2, 4A, a (B11) rertebrates Sulfide Od hizospher of Reduce n Reductio Stressed lain in Rei	nd 4B) lor (C1) lor (C1) d Iron (C4 on in Tilled Plants (D1 marks)	iving Roo) I Soils (C6 I) (LRR A)	V C S (C3) S S) F	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Prainage Patterns (B10) Pry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) hallow Aquitard (D3) FAC-Neutral Test (D5) caised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) High Water Table (A2) Saturation (A3) X Water Marks (B1) Sediment Deposits (B2) X Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Ima Sparsely Vegetated Concave S Field Observations: Surface Water Present?	agery (B7) Surface (B8)	Water-Stain MLRA 1 Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Stunted or Other (Exp	ned Leave I , 2 , 4A , a (B11) vertebrates Sulfide Od hizospher of Reduce n Reduction Stressed lain in Rea hoches):	nd 4B) s (B13) lor (C1) res along I d Iron (C4 on in Tilled Plants (D1 marks)	Living Roo) I Soils (C6 I) (LRR A)	V C S (C3) S S) F	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Prainage Patterns (B10) Pry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) hallow Aquitard (D3) FAC-Neutral Test (D5) caised Ant Mounds (D6) (LRR A)

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

(includes capillary fringe)

Project/Site: North I-25 Re-evaluation	City/County: El Paso County	Samplir	ng Date: <u>1/26/12 & 3/9/12</u>
Applicant/Owner: Colorado Department of Transportation		_ State: <u>CO</u>	Sampling Point: <u>4: Wetland E</u>
Investigator(s): <u>Chuck Schrader, PKM Design Group, Inc.</u>	Section, Township, Range:	<u>T 11 S., R 67 W., S. 36</u>	i
Landform (hillslope, terrace, etc.): <u>bench seep</u>	Local relief (concave, conv	/ex, none): <u>concave</u>	Slope (%): <u>8-15</u>
Subregion (LRR): LRR E	Lat: <u>39.048541</u>	_ Long: <u>104.847234</u>	Datum: NAD 83
Soil Map Unit Name: Tomah-Crowfoot Loamy Sands		NWI clas	ssification: <u>PEM /PSS</u>
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes X No		in Remarks.)
Are Vegetation, Soil, or Hydrologys	ignificantly disturbed? No	Are "Normal Circumstan	nces" present? Yes <u>X</u> No
Are Vegetation, Soil, or Hydrology n	aturally problematic? No (If needed, explain any a	answers in Remarks.)
SUMMARY OF FINDINGS - Attach site man	showing compling point	locations transor	te important foaturos oto

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X No Yes X No Yes X No	Is the Sampled Area within a Wetland?	Yes X No
Remarks:			

VEGETATION – Use scientific names of plants.

	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1.	<u>% Cover</u>	Species? Status	- Number of Dominant Species That Are OBL, FACW, or FAC: (A)
One line (Ohne & Ohne have (Dict since	0	_ = Total Cover	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
Sapling/Shrub Stratum (Plot size:) 1. <u>Salix exigua</u>	30	Y OBL	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
	30	= Total Cover	Prevalence Index worksheet:
		_	Total % Cover of: Multiply by:
Herb Stratum (Plot size:)			OBL species _40 x 1 = _40
1. Phalaris arundinacea	20	N FACW+	_ FACW species <u>20</u> x 2 = <u>40</u>
2. Juncus arcticus	10	N OBL	_ FAC species x 3 =
3. <u>Glycyrrhiza lepidota</u>	20	N FACU	FACU species <u>20</u> x 4 = <u>80</u>
			UPL species x 5 =
	50	= Total Cover	Column Totals: <u>80</u> (A) <u>160</u> (B)
Woody Vine Stratum (Plot size:)			()
			Prevalence Index = B/A =
1			- Hydrophytic Vegetation Indicators:
		·	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation
1			- Hydrophytic Vegetation Indicators:
1 2		·	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation
1 2		·	 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%
1 2		·	 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting
1 2		·	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
1 2		·	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹
1 2		·	 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain)
1 2		·	 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation

US Army Corps of Engineers

Depth	Matrix		Redo	x Feature	s			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remark	۲S
0-18	10 YR 3/1	80					sandy clay	
						·	· ·	
						·		
							· ·	
	oncentration, D=Depl					d Sand G		
•	Indicators: (Applica	able to all			ed.)		Indicators for Problematic Hy	ydric Soils":
Histosol	· · /		Sandy Redox (,			2 cm Muck (A10)	
	pipedon (A2)		Stripped Matrix	. ,			Red Parent Material (TF2)	
	istic (A3)		Loamy Mucky I			MLRA 1)		
	en Sulfide (A4) d Below Dark Surface	(111)	Loamy Gleyed		.)		Other (Explain in Remarks	;)
	ark Surface (A12)	(ATT)	X Depleted Matrix	. ,			³ Indicators of hydrophytic vege	tation and
	()		Redox Dark Su Depleted Dark				, , , , ,	
	Aucky Mineral (S1)		·	•	7)		wetland hydrology must be	•
	Bleyed Matrix (S4)		Redox Depress	sions (F8)			unless disturbed or problem	
Type:	Layer (il present).							
Depth (inc							Hydric Soil Present? Yes X	No
Remarks:								
Small upland	d seep area above cre	eek and be	elow roadway.					
YDROLO	GY							
Vetland Hyd	drology Indicators:							
Sectors and the all s	t		de als a de all de at				Opportunity in dispetation (C	

Primary Indicators (minimum	of one requ	lirea; cneck	all that apply)		Secondary Indicators (2 or more required)
Surface Water (A1) Water-Stained Leaves (B9) (except				Water-Stained Leaves (B9) (MLRA 1, 2,	
High Water Table (A2)			MLRA 1, 2, 4A, and 4B)		4A, and 4B)
Saturation (A3)			_ Salt Crust (B11)		Drainage Patterns (B10)
X Water Marks (B1)			_ Aquatic Invertebrates (B13)		Dry-Season Water Table (C2)
Sediment Deposits (B2)			_ Hydrogen Sulfide Odor (C1)		Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)			Oxidized Rhizospheres along	g Living Roots (C3	 Geomorphic Position (D2)
Algal Mat or Crust (B4)			Presence of Reduced Iron (C	24)	Shallow Aquitard (D3)
Iron Deposits (B5)			_ Recent Iron Reduction in Till	ed Soils (C6)	X FAC-Neutral Test (D5)
Surface Soil Cracks (B6)			_ Stunted or Stressed Plants (D1) (LRR A)	Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Aer	rial Imagery	(B7)	Other (Explain in Remarks)		Frost-Heave Hummocks (D7)
Sparsely Vegetated Cone	cave Surfac	e (B8)			
Field Observations:					
Surface Water Present?	Yes	No <u></u>	Depth (inches):		
Water Table Present?	Yes	No <u></u>	Depth (inches):		
Saturation Present?	Yes	NoX	Depth (inches):	Wetland H	lydrology Present? Yes X No
(includes capillary fringe)					
Describe Recorded Data (stre	eam gauge,	monitoring	well, aerial photos, previous ir	ispections), if avai	ilable:
Remarks:					

Project/Site: North I-25 Re-evaluation	City/County: El Paso Count	y Samplin	g Date: <u>1/26/12 & 3/9/12</u>
Applicant/Owner: Colorado Department of Transportation		State: CO	Sampling Point: <u>5:Wetland F (west)</u>
Investigator(s): <u>Chuck Schrader, PKM Design Group, Inc.</u>	Section, Township, Rang	je: <u>T 11 S., R 67 W., S. 36</u>	
Landform (hillslope, terrace, etc.): drainage swale	Local relief (c	concave, convex, none): <u>co</u>	oncave Slope (%): <u>3-8</u>
Subregion (LRR): LRR E	Lat: <u>39.045530</u>	Long: <u>104.845175</u>	Datum: NAD 83
Soil Map Unit Name: <u>Peyton-Pring Complex</u>		NW	I classification: <u>PSS</u>
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes X	No (If no, explain	in Remarks.)
Are Vegetation, Soil, or Hydrologysi	gnificantly disturbed? No	Are "Normal Circumstan	ces" present? Yes X No
Are Vegetation, Soil, or Hydrology n	aturally problematic? No	(If needed, explain any a	nswers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing sampling poi	int locations, transec	ts, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X No Yes X No Yes X No	Is the Sampled Area within a Wetland?	Yes X	No		
Remarks:		·				
Sandbar willow dominated with seasonal runoff and upslope runoff from highway ditches.						

	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species? Status	Number of Dominant Species
	0	= Total Cover	That Are OBL, FACW, or FAC: (A)
Sapling/Shrub Stratum (Plot size:) 1. Salix exigua	80	Y OBL	Total Number of Dominant Species Across All Strata: (B)
	80	= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
			Prevalence Index worksheet:
Herb Stratum (Plot size:)			Total % Cover of: Multiply by:
1.			OBL species <u>80</u> x 1 = <u>80</u>
	0	= Total Cover	FACW species x 2 =
Woody Vine Stratum (Plot size:)			FAC species x 3 =
1,			FACU species x 4 =
			UPL species x 5 =
2		_= Total Cover	Column Totals: <u>80</u> (A) <u>80</u> (B)
% Bare Ground in Herb Stratum <u>15</u>			Prevalence Index = $B/A = 1.0$
			Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
			X 2 - Dominance Test is >50%
			X 3 - Prevalence Index is $\leq 3.0^{1}$
			4 - Morphological Adaptations ¹ (Provide supporting
			data in Remarks or on a separate sheet)
			5 - Wetland Non-Vascular Plants ¹
			Problematic Hydrophytic Vegetation ¹ (Explain)
			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
			Hydrophytic Vegetation Present? Yes <u>X</u> No
Remarks:			

Profile Des	cription: (Describe to the de	epth needed to document the indicator or confirm	n the absence	e of indicators.)
Depth	Matrix	Redox Features		
(inches)	Color (moist) %	Color (moist) % Type ¹ Loc ²	Texture	Remarks
0-6	10 YR 2/1		no mottles	sandy/loam
6-18	10 YR 4/1			
	· · · · · · · · · · · · · · · · · · ·			·
	·			
	·			
17			21	
		M=Reduced Matrix, CS=Covered or Coated Sand G II LRRs, unless otherwise noted.)		ocation: PL=Pore Lining, M=Matrix.
-				•
Histoso	pipedon (A2)	Sandy Redox (S5) Stripped Matrix (S6)		m Muck (A10) d Parent Material (TF2)
	istic (A3)	Loamy Mucky Mineral (F1) (except MLRA 1)		ry Shallow Dark Surface (TF12)
	en Sulfide (A4)	Loamy Gleyed Matrix (F2)		her (Explain in Remarks)
	d Below Dark Surface (A11)	X Depleted Matrix (F3)		
Thick D	ark Surface (A12)	Redox Dark Surface (F6)	³ Indicat	tors of hydrophytic vegetation and
	Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetl	and hydrology must be present,
	Gleyed Matrix (S4)	Redox Depressions (F8)	unle	ess disturbed or problematic.
Restrictive	Layer (if present):			
Туре:				
Depth (in	iches):		Hydric So	il Present? Yes X No
Remarks:			•	
HYDROLO				
	-			
-	drology Indicators:			
	cators (minimum of one requi			ondary Indicators (2 or more required)
	Water (A1)	Water-Stained Leaves (B9) (except		Water-Stained Leaves (B9) (MLRA 1, 2,
-	ater Table (A2)	MLRA 1, 2, 4A, and 4B)		4A, and 4B)
Saturati	. ,	Salt Crust (B11)		Drainage Patterns (B10)
<u>X</u> Water M		Aquatic Invertebrates (B13)		Dry-Season Water Table (C2)
	nt Deposits (B2)	Hydrogen Sulfide Odor (C1)		Saturation Visible on Aerial Imagery (C9)
Drift De	posits (B3)	Oxidized Rhizospheres along Living Roc	ots (C3) 0	Geomorphic Position (D2)

Stunted or Stressed Plants (D1) (LRR A)	Raised Ant Mounds (D6) (LRR A)
Other (Explain in Remarks)	Frost-Heave Hummocks (D7)

Inundation Visible on A	erial Imagery	(B7)	Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Cor	ncave Surfac	e (B8)		
Field Observations:				
Surface Water Present?	Yes	No <u></u>	_ Depth (inches):	_
Water Table Present?	Yes	No <u></u>	_ Depth (inches):	_
Saturation Present? (includes capillary fringe)	Yes	No <u></u>	_ Depth (inches):	_ Wetland Hydrology Present? Yes X No
Describe Recorded Data (st	ream gauge,	monitoring w	ell, aerial photos, previous insp	ections), if available:
Remarks:				

Presence of Reduced Iron (C4)

____ Recent Iron Reduction in Tilled Soils (C6)

Algal Mat or Crust (B4)
Iron Deposits (B5)

_ Surface Soil Cracks (B6)

____ Shallow Aquitard (D3)

X FAC-Neutral Test (D5)

Project/Site: North I-25 Re-evaluation	City/County: El Paso Coun	t <u>y</u> Samplii	ng Date: <u>1/26/12 & 3/9/12</u>
Applicant/Owner: Colorado Department of Transportation		State: CO	Sampling Point: <u>6: Wetland G</u>
Investigator(s): <u>Chuck Schrader, PKM Design Group, Inc.</u>	Section, Township, Rang	ge: <u>T 11 S., R 67 W., S. 36</u>	3
Landform (hillslope, terrace, etc.): <u>drainage swale</u>	Local relief (concave,	convex, none): <u>concave</u>	Slope (%): <u>3-8</u>
Subregion (LRR): LRR E	Lat: <u>39.043578</u>	Long: <u>104.843957</u>	Datum: NAD 83
Soil Map Unit Name: Pring Coarse Sandy Loams		NW	I classification: <u>PEM/PSS</u>
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes X	_ No (If no, explair	n in Remarks.)
Are Vegetation, Soil, or Hydrologys	ignificantly disturbed? No	Are "Normal Circumstar	nces" present? Yes <u>X</u> No
Are Vegetation, Soil, or Hydrology n	aturally problematic? No	(If needed, explain any	answers in Remarks.)
SUMMARY OF EINDINGS Attach aita man	showing compling po	int logations transp	ate important features ate

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u>X</u> Yes <u>X</u> Yes <u>X</u>	No No No	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No
Remarks:					

	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
	0	_ = Total Cover	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
Sapling/Shrub Stratum (Plot size:)			
1. <u>Salix exigua</u>	80	Y OBL	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
	80	= Total Cover	Prevalence Index worksheet:
	00		Total % Cover of: Multiply by:
Herb Stratum (Plot size:)			OBL species <u>90</u> x 1 = <u>90</u>
1. Typha latifolia	10	Y OBL	FACW species x 2 =
			FAC species x 3 =
	10	= Total Cover	FACU species x 4 =
Woody Vine Stratum (Plot size:)			UPL species x 5 =
1			Column Totals: <u>90</u> (A) <u>90</u> (B)
2			
	0		Prevalence Index = $B/A = 1.0$
% Bare Ground in Herb Stratum 5		_	Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
			X 2 - Dominance Test is >50%
			<u>X</u> 3 - Prevalence Index is $\leq 3.0^1$
			4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
			5 - Wetland Non-Vascular Plants ¹
			Problematic Hydrophytic Vegetation ¹ (Explain)
			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
			Hydrophytic Vegetation Present? Yes <u>X</u> No
Remarks:			

(inches)	<u>Matrix</u> Color (moist) %	Ke Color (moist)	dox Features %	Type ¹	Loc ²	Texture	Remarks
			/0	туре	LUC		
0-12	10 YR 2/1			<u> </u>		sandy loam	no mottles
12-18	10 YR 3/1			. <u> </u>			
Type: C=Co	oncentration, D=Depletion	, RM=Reduced Matrix,	CS=Covered	or Coate	ed Sand Gr	ains. ² Lo	cation: PL=Pore Lining, M=Matrix.
Iydric Soil	Indicators: (Applicable t	to all LRRs, unless oth	nerwise note	ed.)		Indicato	ors for Problematic Hydric Soils ³ :
Histosol	(A1)	Sandy Redox	(S5)				m Muck (A10)
	pipedon (A2)	Stripped Mat					l Parent Material (TF2)
Black Hi		Loamy Muck			t MLRA 1)		y Shallow Dark Surface (TF12)
	n Sulfide (A4)	Loamy Gleye)		Oth	er (Explain in Remarks)
	d Below Dark Surface (A1)	· _ ·	. ,			³ ladia at	
	ark Surface (A12) lucky Mineral (S1)	Redox Dark Depleted Dar	· ,	7)			ors of hydrophytic vegetation and and hydrology must be present,
	Bleyed Matrix (S4)	Redox Depre		")			as disturbed or problematic.
canay c	-						
Restrictive I	_aver (if present):						
	Layer (if present):						
Type:						Hydric Soil	Present? Yes X No
Type: Depth (ind	Layer (if present):					Hydric Soil	Present? Yes X No
Type:						Hydric Soil	Present? Yes <u>X</u> No
Type: Depth (ind						Hydric Soil	Present? Yes X No
Type: Depth (ind						Hydric Soil	Present? Yes <u>X</u> No
Type: Depth (ind						Hydric Soil	Present? Yes <u>X</u> No
Type: Depth (ind Remarks:	ches):					Hydric Soil	Present? Yes <u>X</u> No
Type: Depth (ind Remarks: YDROLO	Ches):					Hydric Soil	Present? Yes <u>X</u> No
Type: Depth (ind Remarks: YDROLO Wetland Hyd	ches): GY drology Indicators:						
Type: Depth (ind Remarks: YDROLO Wetland Hyd Primary India	GY GY Grology Indicators: cators (minimum of one rec			es (B9) (e	xcent	<u>Seco</u>	ndary Indicators (2 or more required)
Type: Depth (ind Remarks: YDROLO Wetland Hyd Primary Indic Surface	GY drology Indicators: cators (minimum of one real Water (A1)	Water-S	stained Leave		xcept	<u>Seco</u>	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 ,
Type: Depth (ind Remarks: YDROLO Wetland Hyd Primary India Surface High Wa	GY drology Indicators: cators (minimum of one red Water (A1) iter Table (A2)	Water-S MLR	Stained Leave A 1, 2, 4A, a		xcept	<u>Seco</u> V	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Type: Depth (ind Remarks: YDROLO Wetland Hyd Primary India Surface High Wa Saturated	GY drology Indicators: cators (minimum of one real Water (A1) tter Table (A2) on (A3)	Water-S MLR Salt Cru	Stained Leave A 1, 2, 4A, a Ist (B11)	nd 4B)	xcept	<u>Seco</u> V C	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 , 4A, and 4B) Drainage Patterns (B10)
Type: Depth (ind Remarks: YDROLO Wetland Hyd Primary India Surface High Wa Saturatio X Water M	GY drology Indicators: cators (minimum of one red Water (A1) tter Table (A2) on (A3) arks (B1)	Water-S MLR Salt Cru Aquatic	Stained Leave A 1, 2, 4A, a Ist (B11) Invertebrates	nd 4B) s (B13)	xcept	<u>Seco</u> V C	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 , 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2)
Type: Depth (ind Remarks: YDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic X Water M Sedimer	GY drology Indicators: cators (minimum of one red Water (A1) tter Table (A2) on (A3) arks (B1) ht Deposits (B2)	Water-S MLR Salt Cru Aquatic Hydroge	Stained Leave A 1, 2, 4A, a Ist (B11) Invertebrates en Sulfide Od	nd 4B) s (B13) lor (C1)		<u>Seco</u> V C C S	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9
Type: Depth (ind Remarks: YDROLO Wetland Hyd Primary Indid Surface Surface High Wa Saturatio X Water M Sedimer Drift Dep	GY drology Indicators: cators (minimum of one red Water (A1) tter Table (A2) on (A3) arks (B1) nt Deposits (B2) posits (B3)	Water-S MLR Salt Cru Aquatic Hydroge Oxidized	Stained Leave A 1, 2, 4A, a list (B11) Invertebrates en Sulfide Od d Rhizospher	nd 4B) s (B13) lor (C1) res along	Living Roo	<u>Seco</u> V C C ts (C3) C	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 , 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2)
Type: Depth (ind Remarks: YDROLO Wetland Hyd Primary India Surface High Wa Saturatio X Water M Sedimer Drift Dep Algal Ma	GY drology Indicators: cators (minimum of one real Water (A1) tter Table (A2) on (A3) arks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	Water-S MLR Salt Cru Aquatic Hydroge Oxidized Presence	Stained Leave A 1, 2, 4A, a Ist (B11) Invertebrates en Sulfide Od d Rhizospher ce of Reduce	nd 4B) s (B13) lor (C1) res along d Iron (C4	Living Roo	<u>Seco</u> V C C ts (C3) S	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Seomorphic Position (D2) Shallow Aquitard (D3)
Type: Depth (ind Remarks: YDROLO YDROLO Wetland Hyd Primary India Outrace High Wa Saturatio X Water M Sedimer Drift Dep Algal Ma Iron Dep	GY drology Indicators: cators (minimum of one red Water (A1) atter Table (A2) on (A3) arks (B1) ht Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	Water-S MLR Salt Cru Aquatic Hydroge Oxidized Presenc Recent	Stained Leave A 1, 2, 4A, a Ist (B11) Invertebrates on Sulfide Od d Rhizospher ce of Reduce Iron Reductio	nd 4B) s (B13) lor (C1) res along d Iron (C4 on in Tille	Living Roo 4) d Soils (C6	<u>Seco</u> V C C S ts (C3) G S) <u>X</u> F	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Type: Depth (ind Remarks: YDROLO Wetland Hyd Primary India Surface High Wa Saturatio X Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	GY drology Indicators: cators (minimum of one real Water (A1) tter Table (A2) on (A3) arks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	Water-S MLR Salt Cru Aquatic Hydroge Oxidized Presend Recent Stunted	Stained Leave A 1, 2, 4A, a Ist (B11) Invertebrates en Sulfide Od d Rhizospher ce of Reduce	nd 4B) s (B13) lor (C1) res along d Iron (C4 on in Tille Plants (D	Living Roo 4) d Soils (C6	<u>Seco</u> V C C C ts (C3) C S S) F	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C3 Seomorphic Position (D2) Shallow Aquitard (D3)

		(DO)				
Field Observations:						
Surface Water Present?	Yes	No <u>X</u>	Depth (inches):			
Water Table Present?	Yes	No <u>X</u>	Depth (inches):			
Saturation Present? (includes capillary fringe)	Yes	No <u>X</u>	Depth (inches):	Wetland Hydrology Present?	Yes X	No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:						
Remarks:						

Project/Site: North I-25 Re-evaluation	City/County: El Paso County	y Samplin	ig Date: <u>1/26/12 & 3/9/12</u>
Applicant/Owner: <u>Colorado Department of Transportation</u>		State: <u>CO</u>	Sampling Point: <u>7: Wetland Ha</u>
Investigator(s): <u>Chuck Schrader, PKM Design Group, Inc.</u>	Section, Township, Range	e: <u>T 12 S., R 67 W., S. 1</u>	
Landform (hillslope, terrace, etc.): <u>drainage/seep</u>	Local relief (concave, co	onvex, none): <u>concave</u>	Slope (%): <u>3-8</u>
Subregion (LRR): LRR E	Lat: <u>39.041245</u>	Long: <u>104.842637</u>	Datum: NAD 83
Soil Map Unit Name: Pring Coarse Sandy Loam		N	WI classification: <u>PEM/PSS</u>
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes X	No (If no, explain	in Remarks.)
Are Vegetation, Soil, or Hydrologys	ignificantly disturbed? No	Are "Normal Circumstan	ces" present? Yes X No
Are Vegetation, Soil, or Hydrology n	aturally problematic? No	(If needed, explain any a	answers in Remarks.)
SUMMARY OF FINDINGS - Attach site man	showing compling noi	nt locations transpo	ts important features ate

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u>X</u> Yes <u>X</u> Yes <u>X</u>	No No No	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No
Remarks:					

	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1. <u>Salix amygdaloides</u>	5	N	FACW	That Are OBL, FACW, or FAC: (A)
	5	_ = Total Co	over	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
Sapling/Shrub Stratum (Plot size:) 1. <u>Salix exigua</u>	30	Y	OBL	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
				Prevalence Index worksheet:
	30	= Total Co	over	Total % Cover of: Multiply by:
				OBL species x 1 =70
Herb Stratum (Plot size:)				FACW species <u>5</u> x 2 = <u>10</u>
1. Typha latifolia	30	Y	OBL	FAC species x 3 =
2. Juncus arcticus	10	N	OBL	FACU species x 4 =
				UPL species x 5 =
	40	= Total Co	ver	Column Totals: <u>75</u> (A) <u>80</u> (B)
Woody Vine Stratum (Plot size:)				Prevalence Index = $B/A = 1.14$
1				Hydrophytic Vegetation Indicators:
2			······	1 - Rapid Test for Hydrophytic Vegetation
% Bare Ground in Herb Stratum 15	0	_= Total Co	over	X = 2 - Dominance Test is >50%
				<u>X</u> 3 - Prevalence Index is $≤3.0^1$
				 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
				5 - Wetland Non-Vascular Plants ¹
				Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Hydrophytic Vegetation Present? Yes <u>X</u> No
Remarks:				

Profile Description: (Desc Depth Mat	rix	R	edox Feature	s			
(inches) Color (mois		Color (moist)			Loc ²	Texture	Remarks
0-18 10 YR 3/2		10 YR 5/6	0-2			sandy loam	few mottles
				. <u> </u>			
		<u> </u>					
		<u> </u>					
		<u> </u>					
;							
Type: C=Concentration, D					d Sand Gra		cation: PL=Pore Lining, M=Matrix.
ydric Soil Indicators: (A	oplicable to a			ea.)			ors for Problematic Hydric Soils ³ :
Histosol (A1)		_ Sandy Redo					m Muck (A10)
 Histic Epipedon (A2) Black Histic (A3) 		Stripped Ma	ky Mineral (F	1) (oxcon			d Parent Material (TF2) y Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)			/ed Matrix (F2				er (Explain in Remarks)
_ Depleted Below Dark S	urface (A11)	X Depleted M		-,			
Thick Dark Surface (A1)			Surface (F6))		³ Indicat	ors of hydrophytic vegetation and
Sandy Mucky Mineral (51)	Depleted D	ark Surface (F	=7)		wetla	and hydrology must be present,
Sandy Gleyed Matrix (S		Redox Dep	ressions (F8)			unle	ss disturbed or problematic.
estrictive Layer (if prese	nt):						
Restrictive Layer (if present Type:	nt):						
						Hydric Soi	I Present? Yes <u>X</u> No
Type: Depth (inches): Remarks:						Hydric Soi	I Present? Yes <u>X</u> No
Type: Depth (inches): Remarks:						Hydric Soi	I Present? Yes <u>X</u> No
Type: Depth (inches): Remarks: YDROLOGY Vetland Hydrology Indica	ors:	ed: check all that i					
Type: Depth (inches): temarks: //DROLOGY /etland Hydrology Indicar rimary Indicators (minimun	ors:					<u>Seco</u>	ndary Indicators (2 or more required)
Type: Depth (inches): emarks: //DROLOGY /etland Hydrology Indicar rimary Indicators (minimun Surface Water (A1)	ors:	Water	Stained Leav		xcept	<u>Seco</u>	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2
Type: Depth (inches): emarks: //DROLOGY /etland Hydrology Indica rimary Indicators (minimun Surface Water (A1) High Water Table (A2)	ors:	Water ML	-Stained Leav RA 1, 2, 4A, a		xcept	<u>Seco</u> \	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
Type: Depth (inches): temarks: //DROLOGY //etland Hydrology Indicators //imary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3)	ors:	Water ML Salt C	-Stained Leav RA 1, 2, 4A, a rust (B11)	and 4B)	xcept	<u>Seco</u> \	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10)
Type: Depth (inches): Remarks: YDROLOGY Yetland Hydrology Indicat Primary Indicators (minimun Surface Water (A1) High Water Table (A2) Saturation (A3) X Water Marks (B1)	cors:	Water ML Salt C Aquati	-Stained Leav RA 1, 2, 4A, a rust (B11) c Invertebrate	and 4B) es (B13)	xcept	<u>Seco</u> V	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Type: Depth (inches): Remarks: YDROLOGY Yetland Hydrology Indicat Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) X Water Marks (B1) Sediment Deposits (B2)	cors:	Water ML Salt C Aquati Hydrog	-Stained Leav RA 1, 2, 4A , a rust (B11) c Invertebrate gen Sulfide O	and 4B) es (B13) dor (C1)	-	<u>Seco</u> \ [[ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C
Type: Depth (inches): Remarks: YDROLOGY Yetland Hydrology Indicat Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) X Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	cors:	Water ML Salt C Aquati Hydro Oxidiz	-Stained Leav RA 1, 2, 4A, i rust (B11) c Invertebrate gen Sulfide O ed Rhizosphe	and 4B) es (B13) dor (C1) eres along	Living Root	<u>Seco</u> \ [[[s (C3) (ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2)
Type: Depth (inches): Remarks: YDROLOGY Vetland Hydrology Indicat Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) X Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	cors:	Water ML Salt C Aquati Hydrog Oxidiz Preser	-Stained Leav RA 1, 2, 4A, a rust (B11) c Invertebrate gen Sulfide O ed Rhizosphe nce of Reduce	and 4B) es (B13) dor (C1) eres along ed Iron (C4	Living Root	<u>Seco</u> \ [[[[[[[[[[[[[[[[]]	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3)
Type: Depth (inches): Remarks: YDROLOGY Vetland Hydrology Indicat Primary Indicators (minimun Surface Water (A1) High Water Table (A2) Saturation (A3) X Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	tors:	Water ML Salt C Aquati Hydroy Oxidiz Preser Recen	Stained Leav RA 1, 2, 4A, a rust (B11) c Invertebrate gen Sulfide O ed Rhizosphe nce of Reduce t Iron Reducti	and 4B) es (B13) dor (C1) eres along ed Iron (C4 ion in Tille	Living Root) d Soils (C6)	<u>Seco</u> \ []] [[[[]] [[]] [[]] []]	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) (AC-Neutral Test (D5)
Type: Depth (inches): temarks: YDROLOGY Vetland Hydrology Indica <u>trimary Indicators (minimun</u> Surface Water (A1) High Water Table (A2) Saturation (A3) <u>K</u> Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	tors: <u>n of one requir</u>	Water- ML Salt C Aquati Hydrog Oxidiz Preser Recen Stunte	-Stained Leav RA 1, 2, 4A, a rust (B11) c Invertebrate gen Sulfide O ed Rhizosphe nce of Reduce	and 4B) es (B13) dor (C1) eres along ed Iron (C4 ion in Tille I Plants (D	Living Root) d Soils (C6)	<u>Seco</u> V [[ts (C3) (5 5 5 7	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) GAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Type: Depth (inches): Remarks: YDROLOGY Yetland Hydrology Indicat Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) X Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Addition Visible o	iors: n of one requir) erial Imagery (Water ML Salt C Aquati Aquati Oxidiz Preser Recen Stunte B7) Other	Stained Leav RA 1, 2, 4A, i rust (B11) c Invertebrate gen Sulfide O ed Rhizosphe nce of Reduce t Iron Reducti d or Stressed	and 4B) es (B13) dor (C1) eres along ed Iron (C4 ion in Tille I Plants (D	Living Root) d Soils (C6)	<u>Seco</u> V [[ts (C3) (5 5 5 7	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) (AC-Neutral Test (D5)
Type: Depth (inches): Remarks: YDROLOGY Vetland Hydrology Indicat Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) X Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	iors: n of one requir) erial Imagery (Water ML Salt C Aquati Aquati Oxidiz Preser Recen Stunte B7) Other	Stained Leav RA 1, 2, 4A, i rust (B11) c Invertebrate gen Sulfide O ed Rhizosphe nce of Reduce t Iron Reducti d or Stressed	and 4B) es (B13) dor (C1) eres along ed Iron (C4 ion in Tille I Plants (D	Living Root) d Soils (C6)	<u>Seco</u> V [[ts (C3) (5 5 5 7	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) GAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Type: Depth (inches): Remarks: YDROLOGY Vetland Hydrology Indicat Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) X Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6 Inundation Visible on Ad Sparsely Vegetated Con ield Observations:	tors: n of one requir) erial Imagery (ncave Surface	Water- ML Salt C Aquati Hydrog Oxidiz Preser Recen Stunte B7) Other (B8)	Stained Leav RA 1, 2, 4A, a rust (B11) c Invertebrate gen Sulfide O ed Rhizosphe nce of Reduce t Iron Reducti d or Stressed (Explain in Re	and 4B) dor (C1) eres along ed Iron (C4 ion in Tilled I Plants (D emarks)	Living Root) d Soils (C6) 1) (LRR A)	<u>Seco</u> V [[ts (C3) (5 5 5 7	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) GAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Type: Depth (inches): Remarks: YDROLOGY Vetland Hydrology Indica Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) X Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6 Inundation Visible on Ac Sparsely Vegetated Cou	tors: <u>n of one requir</u>) erial Imagery (<u>ncave Surface</u> Yes	Water- ML Salt C Aquati Aquati Oxidiz Preser Recen Stunte B7) Other (B8)	Stained Leav RA 1, 2, 4A, a rust (B11) c Invertebrate gen Sulfide O ed Rhizosphe nce of Reduce t Iron Reducti d or Stressed (Explain in Re th (inches):	and 4B) es (B13) dor (C1) eres along ed Iron (C4 ion in Tille I Plants (D emarks)	Living Root) d Soils (C6) 1) (LRR A)	<u>Seco</u> V [[ts (C3) (5 5 5 7	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) GAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Type: Depth (inches): Remarks: YDROLOGY Vetland Hydrology Indicat Primary Indicators (minimun Surface Water (A1) High Water Table (A2) Saturation (A3) X Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on A6 Sparsely Vegetated Con Surface Water Present?	tors: n of one requir erial Imagery (ncave Surface Yes Yes	Water- ML Salt C Aquati Hydrog Oxidiz Preser Recen Stunte B7) Other (B8)	Stained Leav RA 1, 2, 4A, i rust (B11) c Invertebrate gen Sulfide O ed Rhizosphe nce of Reduce t Iron Reducti d or Stressed (Explain in Re th (inches): th (inches):	and 4B) es (B13) dor (C1) eres along ed Iron (C4 ion in Tilled I Plants (D emarks)	Living Root I) d Soils (C6) 1) (LRR A)	<u>Seco</u> \ []]	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) GAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)

Remarks:

Project/Site: North I-25 Re-evaluation	City/County: El Paso Count	y Sampling	Date: <u>1/26/12 & 3/9/12</u>
Applicant/Owner: <u>Colorado Department of Transportation</u>		State: CO	Sampling Point: <u>8: Wetland H</u>
Investigator(s): <u>Chuck Schrader, PKM Design Group, Inc.</u>	Section, Township, Rang	e: <u>T 12 S., R 67 W., S. 1</u>	
Landform (hillslope, terrace, etc.): Black Forest creek drain	nage Local relief (concave	, convex, none): <u>concave</u>	Slope (%): <u>3-8</u>
Subregion (LRR): LRR E	Lat: <u>39.040162</u>	Long: <u>104.841905</u>	Datum: NAD 83
Soil Map Unit Name: Pring Coarse Sandy Loam		NWI classifica	ation: <u>PEM/PSS</u>
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes X	No (If no, explain in	n Remarks.)
Are Vegetation, Soil, or Hydrologysi	ignificantly disturbed? No	Are "Normal Circumstanc	es" present? Yes <u>X</u> No
Are Vegetation, Soil, or Hydrology na	aturally problematic? No	(If needed, explain any an	nswers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing sampling poi	nt locations, transect	s, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X No Yes X No Yes X No	Is the Sampled Area within a Wetland?	Yes X No
Remarks:			
Dominant sandbar willow and hydrolog	y mirrors results from 2000 delineat	on.	

	Absolute	Dominant Indicate	
<u>Tree Stratum</u> (Plot size:) 1.	<u>% Cover</u>	Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
	0	= Total Cover	Total Number of Dominant Species Across All Strata: 1 (B)
Sapling/Shrub Stratum (Plot size:)			
1. <u>Salix exigua</u>	80	<u>Y</u> OB	Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
	80	= Total Cover	Prevalence Index worksheet: Total % Cover of: Multiply by:
Herb Stratum (Plot size:)			OBL species <u>80</u> x 1 = <u>80</u>
1Typha latifolia	10	N OBL	FACW species x 2 =
			FAC species x 3 =
	10	= Total Cover	FACU species x 4 =
Woody Vine Stratum (Plot size:)			UPL species x 5 =
1			Column Totals: <u>80</u> (A) <u>80</u> (B)
2		·	
	0		Prevalence Index = B/A = <u>1.0</u> Hydrophytic Vegetation Indicators:
% Bare Ground in Herb Stratum <u>15</u>			1 - Rapid Test for Hydrophytic Vegetation
			X = 2 - Dominance Test is >50%
			X 3 - Prevalence Index is $\leq 3.0^{1}$
			 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
			5 - Wetland Non-Vascular Plants ¹
			Problematic Hydrophytic Vegetation ¹ (Explain)
			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
			Hydrophytic Vegetation Present? Yes <u>X</u> No
Remarks:			

Depth <u>Matrix</u> (inches) Color (moist) %	<u>Redox Features</u> Color (moist) % <u>Type¹ Loc²</u>	Texture Remarks	
<u> </u>			
<u>0-20</u> <u>10 YR 3/1</u>		loam few mottles	
	RM=Reduced Matrix, CS=Covered or Coated Sand G		
ydric Soil Indicators: (Applicable to	all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soil	ls³:
Histosol (A1)	_ Sandy Redox (S5)	2 cm Muck (A10)	
_ Histic Epipedon (A2)	Stripped Matrix (S6)	Red Parent Material (TF2)	
Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLRA 1)		
 Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11) 	Loamy Gleyed Matrix (F2) X Depleted Matrix (F3)	Other (Explain in Remarks)	
_ Depleted Below Dark Surface (ATT) _ Thick Dark Surface (A12)	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and	ł
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present,	-
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic.	
Restrictive Layer (if present):			
Туре:			
Depth (inches):		Hydric Soil Present? Yes X No	
		Hydric Soil Present? Yes X No	>
Depth (inches):		Hydric Soil Present? Yes X No	> <u> </u>
Depth (inches):		Hydric Soil Present? Yes X No	o
Depth (inches):		Hydric Soil Present? Yes <u>X</u> No	»
Depth (inches):		Hydric Soil Present? Yes <u>X</u> No	<u> </u>
Depth (inches):		Hydric Soil Present? Yes <u>X</u> No	>
Depth (inches): Remarks: YDROLOGY Vetland Hydrology Indicators:			
Depth (inches): Remarks: YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requ	uired; check all that apply)	Secondary Indicators (2 or more requi	ired)
Depth (inches):	uired; check all that apply)	Secondary Indicators (2 or more requi	ired)
Depth (inches):	uired; check all that apply) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	Secondary Indicators (2 or more requi Water-Stained Leaves (B9) (MLR 4A, and 4B)	ired)
Depth (inches): Remarks: YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requ Surface Water (A1) High Water Table (A2) Saturation (A3)	uired; check all that apply) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11)	Secondary Indicators (2 or more requi Water-Stained Leaves (B9) (MLR 4A, and 4B) Drainage Patterns (B10)	ired)
Depth (inches): Remarks: YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requ Surface Water (A1) High Water Table (A2) Saturation (A3) X Water Marks (B1)	uired; check all that apply) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13)	Secondary Indicators (2 or more requi Water-Stained Leaves (B9) (MLR 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)	<u>ired)</u> 2A 1, 2
Depth (inches): Remarks: YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requ Surface Water (A1) High Water Table (A2) Saturation (A3) X Water Marks (B1) Sediment Deposits (B2)	uired; check all that apply) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Secondary Indicators (2 or more requisited in the second and th	<u>ired)</u> 2A 1, 2
Depth (inches): Remarks: YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requ Surface Water (A1) High Water Table (A2) Saturation (A3) X Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	uired; check all that apply) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Ro	Secondary Indicators (2 or more requi Water-Stained Leaves (B9) (MLR 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Image ots (C3) Geomorphic Position (D2)	<u>ired)</u> 2A 1, 2
Depth (inches): Remarks: YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requ Surface Water (A1) High Water Table (A2) Saturation (A3) X Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	uired; check all that apply) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4)	Secondary Indicators (2 or more requi Water-Stained Leaves (B9) (MLR 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Image ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3)	<u>ired)</u> 2A 1, 2
Depth (inches): Remarks: YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requ 	uired; check all that apply) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C	Secondary Indicators (2 or more requi Water-Stained Leaves (B9) (MLR 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Image ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) 6) X FAC-Neutral Test (D5)	ired) A 1, 2
Depth (inches):	uired; check all that apply) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C Stunted or Stressed Plants (D1) (LRR 4	Secondary Indicators (2 or more requi	ired) A 1, 2
Depth (inches):	uired; check all that apply)	Secondary Indicators (2 or more requi Water-Stained Leaves (B9) (MLR 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Image ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) 6) X FAC-Neutral Test (D5)	ired) A 1, 2
Depth (inches):	uired; check all that apply)	Secondary Indicators (2 or more requi	ired) A 1, 2
Depth (inches):	uired; check all that apply) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C Stunted or Stressed Plants (D1) (LRR 4 y (B7) Other (Explain in Remarks) ce (B8)	Secondary Indicators (2 or more requi	ired) A 1, 2 ery (C
Depth (inches):	uired; check all that apply)	Secondary Indicators (2 or more requi	ired) A 1, 2

(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: North I-25 Re-evaluation	City/County: El Paso County	Sampling	Date: 1/26/12 & 3/9/12
Applicant/Owner: <u>Colorado Department of Transportation</u>		State: <u>CO</u> S	Sampling Point: 9:Wetland X
Investigator(s): <u>Chuck Schrader, PKM Design Group, Inc.</u>	Section, Township, Range	T 12 S., R 67 W., S. 12	
Landform (hillslope, terrace, etc.): roadside ditch	Local relief (concave,	convex, none): <u>concave</u>	Slope (%): <u>8-40</u>
Subregion (LRR): LRR E	Lat: <u>39.026906</u>	Long: <u>104.832404</u>	Datum: NAD 83
Soil Map Unit Name: <u>Kettle-Rock Outcrop Complex</u>		NWI class	sification: <u>PEM/PSS</u>
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes X	No (If no, explain in	Remarks.)
Are Vegetation, Soil, or Hydrologys	ignificantly disturbed? No	Are "Normal Circumstance	es" present? Yes X No
Are Vegetation, Soil, or Hydrology n	aturally problematic? No	(If needed, explain any ans	swers in Remarks.)
SUMMARY OF FINDINGS - Attach site man	showing sampling poin	t locations transacts	s important features etc

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u>X</u> Yes <u>X</u> Yes <u>X</u>	No No No	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No
Remarks:					

	Absolute		Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1.	<u>% Cover</u>	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
Sopling/Shruk Stratum (Diat aiza)	0	_ = Total C	Cover	Total Number of Dominant Species Across All Strata: 2 (B)
Sapling/Shrub Stratum (Plot size:) 1. <u>Salix exigua</u>	30	<u>Y</u>	OBL	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
	30	= Total	Cover	Prevalence Index worksheet:
				Total % Cover of:Multiply by:
Herb Stratum (Plot size:)				$\frac{1}{\text{OBL species}} = \frac{60}{\text{x 1}} = \frac{60}{\text{x 2}}$
1. <u>Typha latifolia</u>	30	Y	OBL	FACW species 10 $x^2 = 20$
2. <u>Phalaris arundinacea</u>	10	<u> </u>	FACW+	FAC species x 3 =
	40	- Tatal C		FACU species x 4 =
	40	= Total C	over	UPL species x 5 =
Woody Vine Stratum (Plot size:)				Column Totals: <u>70</u> (A) <u>80</u> (B)
1				
2				Prevalence Index = B/A = <u>1.14</u>
	0		over	Hydrophytic Vegetation Indicators:
% Bare Ground in Herb Stratum 20				1 - Rapid Test for Hydrophytic Vegetation
				X 2 - Dominance Test is >50%
				<u>X</u> 3 - Prevalence Index is $\leq 3.0^{1}$
				4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
				5 - Wetland Non-Vascular Plants ¹
				Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Hydrophytic Vegetation Present? Yes <u>X</u> No
Remarks:				

Profile Description: (Describe to t	the depth nee				or confirm	the absenc	e of indicators.)
Depth <u>Matrix</u> (inches) Color (moist)	% Co	lor (moist)	x Features %	Type ¹	Loc ²	Texture	Remarks
· · · · · · · · · · · · · · · · · · ·				<u> </u>			
<u> </u>	10	YR 5/6	0-2			loam	few mottles
				·	<u> </u>		
					<u> </u>		
¹ Type: C=Concentration, D=Depletion	on, RM=Redu	ced Matrix, CS	=Covered	or Coate	d Sand Gra	ains. ² Lo	ocation: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable	e to all LRRs	, unless other	wise note	d.)		Indicat	tors for Problematic Hydric Soils ³ :
Histosol (A1)	_ Sa	ndy Redox (St	5)			2 0	cm Muck (A10)
Histic Epipedon (A2)		tripped Matrix					ed Parent Material (TF2)
Black Histic (A3)		oamy Mucky N			MLRA 1)		ery Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)		oamy Gleyed I				Ot	her (Explain in Remarks)
Depleted Below Dark Surface (A		epleted Matrix				³ Indian	
Thick Dark Surface (A12) Sandy Mucky Mineral (S1)		edox Dark Sur	. ,	7)			tors of hydrophytic vegetation and land hydrology must be present,
Sandy Gleyed Matrix (S4)		ledox Depress		()			ess disturbed or problematic.
Restrictive Layer (if present):							
Type [.]							
Type:						Hydric So	il Present? Yes X No
Type: Depth (inches): Remarks:						Hydric So	il Present? Yes <u>X</u> No
Depth (inches):						Hydric So	il Present? Yes <u>X</u> No
Depth (inches): Remarks:						Hydric So	il Present? Yes <u>X</u> No
Depth (inches): Remarks:						Hydric So	il Present? Yes <u>X</u> No
Depth (inches): Remarks:		ck all that apply	/)				il Present? Yes X No
Depth (inches): Remarks: IYDROLOGY Wetland Hydrology Indicators:		ck all that apply		es (B9) (e	xcept	<u>Sec</u>	
Depth (inches): Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one		Water-Stai			xcept	<u>Sec</u>	ondary Indicators (2 or more required)
Depth (inches): Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1)		Water-Stai	ned Leave 1, 2, 4A, a		xcept	<u>Sec</u>	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2,
Depth (inches): Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) High Water Table (A2)		Water-Stai	ned Leave 1, 2, 4A, a (B11)	nd 4B)	xcept	<u>Sec</u>	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Depth (inches): Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) High Water Table (A2) Saturation (A3)		Water-Stai MLRA Salt Crust	ned Leave 1, 2, 4A, a (B11) vertebrates	nd 4B)	xcept	<u>Sec</u>	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
Depth (inches): Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) High Water Table (A2) Saturation (A3) X Water Marks (B1)		Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen	ned Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od	nd 4B) s (B13) or (C1)		<u>Sec</u>	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Depth (inches): Remarks:		Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen	ned Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od Rhizospher	nd 4B) s (B13) or (C1) es along	Living Root	<u>Sec</u> 	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Depth (inches): Remarks:	required; cheo	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen Oxidized F	ned Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od Rhizospher of Reduce	nd 4B) s (B13) or (C1) es along d Iron (C4	Living Root	<u>Sec</u> 	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
Depth (inches): Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) High Water Table (A2) Saturation (A3) X Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	required; cher	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen Oxidized R Presence o	ned Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od thizospher of Reduces n Reduction	nd 4B) s (B13) or (C1) es along d Iron (C4 on in Tilled	Living Root	<u>Sec</u> ts (C3) 	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3)
Depth (inches): Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one 	required; chea	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen Oxidized R Presence o Recent Iro	ned Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od Rhizospher of Reduces n Reduction Stressed	nd 4B) or (C1) es along d Iron (C4 on in Tilleo Plants (D	Living Root	<u>Sec</u> ts (C3)) <u>X</u>	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (inches): Remarks: IYDROLOGY Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one</u> 	required; chea	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen Oxidized R Presence o Recent Iroo Stunted or	ned Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od Rhizospher of Reduces n Reduction Stressed	nd 4B) or (C1) es along d Iron (C4 on in Tilleo Plants (D	Living Root	<u>Sec</u> ts (C3)) <u>X</u>	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Depth (inches): Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one 	required; chea	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen Oxidized R Presence o Recent Iroo Stunted or	ned Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od Rhizospher of Reduces n Reduction Stressed	nd 4B) or (C1) es along d Iron (C4 on in Tilleo Plants (D	Living Root	<u>Sec</u> ts (C3)) <u>X</u>	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Depth (inches): Remarks: IYDROLOGY Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one</u> 	required; chea - - - - - - - - - - - - - - - - - - -	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen Oxidized R Presence o Recent Iroo Stunted or	ned Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od chizospher of Reduce n Reduction Stressed plain in Ref	nd 4B) or (C1) es along d Iron (C4 on in Tilled Plants (D marks)	Living Roof) J Soils (C6 1) (LRR A)	<u>Sec</u> ts (C3)) <u>X</u>	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Depth (inches): Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one	required; chea	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen Oxidized R Presence o Recent Iroo Stunted or Other (Exp	ned Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od Rhizospher of Reduce n Reductio Stressed plain in Rei nches):	nd 4B) or (C1) es along d Iron (C4 on in Tilled Plants (D marks)	Living Roof) d Soils (C6 1) (LRR A)	<u>Sec</u> ts (C3)) <u>X</u>	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Depth (inches): Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one	required; chea 	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen Oxidized R Presence o Recent Iroo Stunted or Other (Exp	ned Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od thizospher of Reducer n Reduction Stressed plain in Ref nches):	nd 4B) or (C1) es along d Iron (C4 on in Tilled Plants (D marks)	Living Roof) d Soils (C6) 1) (LRR A)	<u>Sec</u> ts (C3)) <u>X</u> 	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)

Remarks:

Hydrology from highway and stormwater runoff.

Project/Site: North I-25 Re-evaluation	City/County: El Paso County	Sampling Dat	te: 1/26/12 & 3/9/12
Applicant/Owner: <u>Colorado Department of Transportation</u>		State: <u>CO</u> San	npling Point: <u>10:Wetland J</u>
Investigator(s): <u>Chuck Schrader, PKM Design Group, Inc.</u>	Section, Township, Range:	<u>T 12 S., R 67 W., S. 12/T 12</u>	S., R 66 W., S. 7
Landform (hillslope, terrace, etc.): Smith Creek drainage	Local relief (concav	e, convex, none): <u>concave</u>	Slope (%): <u>0-10</u>
Subregion (LRR): LRR E	Lat: <u>39.024130</u>	Long: <u>104.831684</u>	Datum: NAD 83
Soil Map Unit Name: <u>Ustic Torrifluvents, Loamy</u>		NWI classifica	tion: <u>PEM/PSS</u>
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes X	No (If no, explain in Re	emarks.)
Are Vegetation, Soil, or Hydrologys	ignificantly disturbed? No	Are "Normal Circumstances"	oresent? Yes X No
Are Vegetation, Soil, or Hydrology n	aturally problematic? No	(If needed, explain any answe	ers in Remarks.)
SUMMARY OF EINDINGS Attach aita man	showing compling noin	t locations transacts i	mnortant factures ato

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u>X</u> No Yes <u>X</u> No Yes <u>X</u> No	 Is the Sampled Area within a Wetland?	Yes <u>X</u>	No
Remarks:				

VEGETATION – Use scientific names of plants.

The Chartenne (Distribute	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species? Status	Number of Dominant Species
1. <u>Salix fragilis</u>	10	<u> </u>	That Are OBL, FACW, or FAC: (A)
2. <u>Salix amyg</u> daloides	5	<u> </u>	Total Number of Dominant
	15	= Total Cover	Species Across All Strata: (B)
<u>Sapling/Shrub Stratum</u> (Plot size:) 1. Salix exigua	30	Y OBL	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
			Prevalence Index worksheet:
	30	= Total Cover	Total % Cover of: Multiply by:
			OBL species <u>50</u> x 1 = <u>50</u>
Herb Stratum (Plot size:)			FACW species <u>15</u> x 2 = <u>30</u>
1. <u>Typha latifolia</u>	20	N OBL	FAC species <u>10</u> x 3 = <u>30</u>
2. Phalaris arundinacea	10	N FACW+	FACU species x 4 =
			UPL species x 5 =
	30	_= Total Cover	Column Totals: <u>75</u> (A) <u>110</u> (B)
Woody Vine Stratum (Plot size:)			Prevalence Index = $B/A = 1.47$
,			
1			Hydrophytic Vegetation Indicators:
1 2			Hydrophytic Vegetation Indicators:
1			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation
1 2			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X2 - Dominance Test is >50%
1 2			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting
1 2			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
1 2			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹
1 2			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must
1 2			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.01 4 - Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants1 Problematic Hydrophytic Vegetation1 (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation1

US Army Corps of Engineers

Profile Descriptio Depth	Matrix	o ille dep	in needed i		x Feature				e of indicators.
	olor (moist)	%	Color (m	noist)	<u>x reature</u> %	Type ¹	Loc ²	Texture	Remarks
) YR 3/1								few mottles
	11(3/1					·		<u>Sanuy Ioann</u>	1ew mones
						·			
						. <u> </u>			
Type: C=Concen							d Sand G		ocation: PL=Pore Lining, M=Matrix.
lydric Soil Indica	ators: (Applica	ble to all	LRRs, unle	ss other	rwise not	ed.)			tors for Problematic Hydric Soils ³ :
Histosol (A1)			-	Redox (S					cm Muck (A10)
Histic Epipedo				d Matrix	. ,				ed Parent Material (TF2)
Black Histic (A				-			MLRA 1)		ery Shallow Dark Surface (TF12)
Hydrogen Sulf	ilde (A4) w Dark Surface	(11)	<u>X</u> Deplete	-	Matrix (F2)		Ot	her (Explain in Remarks)
Thick Dark Su		(ATT)			rface (F6)			³ Indica	tors of hydrophytic vegetation and
Sandy Mucky	()				Surface (F				and hydrology must be present,
Sandy Gleyed					ions (F8)	.,			ess disturbed or problematic.
Restrictive Layer					, ,				·
Type:	· · /								
Туре:	,							Hydric So	il Present? Yes X No
Type: Depth (inches):	,							Hydric So	il Present? Yes <u>X</u> No
Туре:	,							Hydric So	il Present? Yes <u>X</u> No
Type: Depth (inches):	,							Hydric So	il Present? Yes <u>X</u> No
Type: Depth (inches):	,							Hydric So	il Present? Yes <u>X</u> No
Type: Depth (inches):	,							Hydric So	il Present? Yes <u>X</u> No
Type: Depth (inches): Remarks:	,							Hydric So	il Present? Yes <u>X</u> No
Type: Depth (inches): Remarks: YDROLOGY								Hydric So	il Present? Yes <u>X</u> No
Type: Depth (inches): Remarks: YDROLOGY Wetland Hydrolog	gy Indicators:			that appl	 				il Present? Yes X No
Type: Depth (inches): Remarks: YDROLOGY Yetland Hydrolog Primary Indicators	gy Indicators: (minimum of or		d; check all f		y) ined Leav	es (B9) (e	xcept	<u>Sec</u>	
Type: Depth (inches): Remarks: YDROLOGY Yetland Hydrolog Primary Indicators Surface Water	gy Indicators: (minimum of or r (A1)		d; check all f	ater-Sta			xcept	<u>Sec</u>	ondary Indicators (2 or more required)
Type: Depth (inches): Remarks: YDROLOGY Yetland Hydrolog Primary Indicators Surface Water High Water Ta	gy Indicators: (minimum of or r (A1) able (A2)		<u></u>	ater-Stai	ined Leav 1, 2, 4A, a		xcept	<u>Sec</u>	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Type: Depth (inches): Remarks: YDROLOGY Vetland Hydrolog Primary Indicators Surface Water High Water Ta Saturation (A3	gy Indicators: (minimum of or r (A1) able (A2) 3)		<u>d; check all 1</u> W Sa	ater-Stai MLRA alt Crust	ined Leave 1, 2, 4A, a (B11)	and 4B)	xcept	<u>Sec</u>	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 , 4A, and 4B) Drainage Patterns (B10)
Type: Depth (inches): Remarks: YDROLOGY Wetland Hydrolog Primary Indicators Surface Water High Water Ta Saturation (A3 X Water Marks (I	gy Indicators: (minimum of or r (A1) able (A2) 3) B1)		<u>d; check all f</u> W Si Ad	ater-Stai MLRA alt Crust quatic Inv	ined Leave 1, 2, 4A, a (B11) vertebrate	and 4B) s (B13)	xcept	Seco 	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 , 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Type: Depth (inches): Remarks: YDROLOGY Yetland Hydrolog Primary Indicators Surface Water High Water Ta Saturation (A3 X Water Marks (I X Sediment Dep	gy Indicators: (minimum of or r (A1) able (A2) B1) osits (B2)		d; check all f W Sa At	ater-Stai MLRA alt Crust quatic Inv ydrogen	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oo	and 4B) s (B13) dor (C1)	-	<u>Sec</u>	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9
Type: Depth (inches): Remarks: YDROLOGY YOROLOGY Vetland Hydrolog Primary Indicators Surface Water High Water Ta Saturation (A3 X Water Marks (I X Sediment Dep X Drift Deposits (gy Indicators: (minimum of or r (A1) able (A2) 3) B1) osits (B2) (B3)		d; check all f W Si Ar H O	ater-Stat MLRA alt Crust quatic Inv ydrogen xidized F	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oo Rhizosphe	and 4B) s (B13) dor (C1) res along	Living Roc	<u>Sec</u>	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2)
Type: Depth (inches): Remarks: YDROLOGY Yetland Hydrolog Primary Indicators Surface Water High Water Ta Saturation (A3 X Water Marks (I X Sediment Depo X Drift Deposits (Algal Mat or C	gy Indicators: (minimum of or r (A1) able (A2) 3) B1) osits (B2) (B3) crust (B4)		d; check all 1 W Si Ai Ai O Pi	ater-Stat MLRA alt Crust quatic Inv ydrogen xidized F resence	ined Leav 1, 2, 4A, a (B11) vertebrate Sulfide Oo Rhizosphe of Reduce	and 4B) s (B13) dor (C1) res along ed Iron (C4	Living Roc	<u>Sec</u> 	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3)
Type: Depth (inches): Remarks: YDROLOGY YOROLOGY Vetland Hydrolog Primary Indicators Surface Water High Water Ta Saturation (A3 X Water Marks (I X Sediment Dep X Drift Deposits (gy Indicators: (minimum of or r (A1) able (A2) 3) B1) osits (B2) (B3) crust (B4) (B5)		d; check all f W Si Ai Ai O Pi R	alt Crust quatic Inv ydrogen xidized F resence ecent Iro	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oa Rhizosphe of Reduce n Reduction	and 4B) s (B13) dor (C1) res along ed Iron (C4 on in Tiller	Living Roc	<u>Sec</u> 	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2)
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Type: Depth (inches): Remarks: YDROLOGY Yetland Hydrolog Primary Indicators Surface Water High Water Ta Saturation (A3 X Water Marks (I X Sediment Depo X Drift Deposits (Algal Mat or C Iron Deposits (Surface Soil C Undation Vis	gy Indicators: (minimum of or r (A1) able (A2) B1) osits (B2) (B3) crust (B4) (B5) cracks (B6) sible on Aerial In	ne required	d; check all f W Si Ai O Pi Ri Si 7) O	alt Crust quatic Inv ydrogen xidized F resence ecent Iro tunted or	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oo Rhizosphe of Reducte in Reducti Stressed	and 4B) s (B13) dor (C1) res along ed Iron (C4 on in Tilled Plants (D	Living Roo I) d Soils (C6	<u>Sec</u> 	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Type: Depth (inches): Remarks: YDROLOGY Vetland Hydrolog Primary Indicators Surface Water High Water Ta Saturation (A3 X Water Marks (I X Sediment Depo X Drift Deposits (Algal Mat or C Iron Deposits (Surface Soil C Surface Soil C Sparsely Vege	gy Indicators: (minimum of or r (A1) able (A2) 3) B1) osits (B2) (B3) Crust (B4) (B5) Cracks (B6) sible on Aerial In etated Concave	ne required	d; check all f W Si Ai O Pi Ri Si 7) O	alt Crust quatic Inv ydrogen xidized F resence ecent Iro tunted or	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oo Rhizosphe of Reducte in Reducti Stressed	and 4B) s (B13) dor (C1) res along ed Iron (C4 on in Tilled Plants (D	Living Roo I) d Soils (C6	<u>Sec</u> 	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Type: Depth (inches): Remarks: YDROLOGY Wetland Hydrolog Primary Indicators Surface Water High Water Ta Saturation (A3 X Water Marks (I X Sediment Depo X Drift Deposits (Algal Mat or C Iron Deposits (Surface Soil C Surface Soil C Inundation Vis Sparsely Vege	gy Indicators: (minimum of or r (A1) able (A2) 3) B1) osits (B2) (B3) crust (B4) (B5) cracks (B6) bible on Aerial In etated Concave 1s:	nagery (B Surface (I	d; check all 1 W Si Ai Ai Ai Pi Ri Si 7) O B8)	ater-Stai MLRA alt Crust quatic Im ydrogen xidized F resence ecent Iro tunted or ther (Exp	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oo Rhizosphe of Reduce n Reduction Stressed blain in Re	and 4B) s (B13) dor (C1) res along ed Iron (C4 on in Tiller Plants (D marks)	Living Roo }) d Soils (C6 1) (LRR A	<u>Sec</u> 	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Type: Depth (inches): Remarks: YDROLOGY Wetland Hydrolog Primary Indicators Surface Water High Water Ta Saturation (A3 X Water Marks (I X Sediment Depo X Drift Deposits (Algal Mat or C Iron Deposits (Surface Soil C Undation Vis	gy Indicators: (minimum of or r (A1) able (A2) 3) B1) osits (B2) (B3) Crust (B4) (B5) Crust (B4) (B5) Cracks (B6) Sible on Aerial In etated Concave Is: esent? Ye	nagery (B Surface (I	d; check all f W Si Ai O Pi Ri Si 7) O	alt Crust quatic Inv ydrogen xidized F resence ecent Iro tunted or ther (Exp Depth (i	ined Leave ined Leave (B11) vertebrate Sulfide Oc Rhizosphe of Reduce n Reducti Stressed blain in Re	and 4B) s (B13) dor (C1) res along ed Iron (C4 on in Tilled Plants (D marks)	Living Roc) d Soils (C6 1) (LRR A	<u>Sec</u> 	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: North I-25 Re-evaluation	City/County: El Paso County	Sampling	g Date: <u>1/26/12 & 3/9/12</u>
Applicant/Owner: <u>Colorado Department of Transportation</u>		State: CO	Sampling Point: <u>11: Wetland K</u>
Investigator(s): Chuck Schrader, PKM Design Group, Inc.	Section, Township, Range:	T 12 S., R 66 W., S. 7	
Landform (hillslope, terrace, etc.): _ Monument Branch/Smith	Creek Channel Local relief (c	oncave, convex, none):	concave Slope (%): 8-15
Subregion (LRR): LRR E	Lat: <u>39.013491</u>	Long: 104.828952	Datum: NAD 83
Soil Map Unit Name: <u>Tomah-Crowfoot Loamy Sands</u>		-	NWI classification: <u>PEM/PSS</u>
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes X N	lo (If no, explain	in Remarks.)
Are Vegetation, Soil, or Hydrology si	gnificantly disturbed? No	Are "Normal Circumstand	ces" present? Yes <u>X</u> No
Are Vegetation, Soil, or Hydrology na	aturally problematic? No	(If needed, explain any a	nswers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing sampling point	locations, transec	ts, important features, etc.

	•		U	 ,	<i>,</i> ,	,
Hydrophytic Vegetation Present? Yes	Х	No	_			

Hydric Soil Present? Wetland Hydrology Present?	Yes X No Yes X No	Is the Sampled Area within a Wetland? Yes <u>X</u> No
Remarks:		

	Absolute		Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
	0	_ = Total Cover	Total Number of Dominant Species Across All Strata: 1 (B)
Sapling/Shrub Stratum (Plot size:)			
1. <u>Salix exigua</u>	40	Y OBL	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
	40	= Total Cover	Prevalence Index worksheet:
			Total % Cover of: Multiply by:
Herb Stratum (Plot size:)			OBL species <u>65</u> x 1 = <u>65</u>
1. <u>Typha latifolia</u>	20	N OBL	FACW species x 2 =
2. Juncus arcticus	5	N OBL	FAC species x 3 =
			FACU species x 4 =
	25	= Total Cover	UPL species x 5 =
Woody Vine Stratum (Plot size:)			Column Totals: <u>65</u> (A) <u>65</u> (B)
1			
2			Prevalence Index = B/A =1.0
% Data Crawad in Llack Stratum 25	0	= Total Cover	Hydrophytic Vegetation Indicators:
% Bare Ground in Herb Stratum 25			1 - Rapid Test for Hydrophytic Vegetation
			X 2 - Dominance Test is >50%
			X 3 - Prevalence Index is $\leq 3.0^{1}$
			4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
			5 - Wetland Non-Vascular Plants ¹
			Problematic Hydrophytic Vegetation ¹ (Explain)
			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
			Hydrophytic Vegetation Present? Yes <u>X</u> No
Remarks:			

Profile Desc	ription: (Describ	e to the dep	th need	ed to docu	ment the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix				ox Features		2		
<u>(inches)</u>	Color (moist)	%	Colo	or (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-14								sand/cobbles	·
14-18	10 YR 5/2		10 YR	5/6	0-2			sandy clay	abundant mottles
							<u> </u>		
¹ Type: C=Co	oncentration, D=D	epletion, RM	=Reduce	ed Matrix, C	S=Covered	or Coate	d Sand Gr	ains. ² Loo	cation: PL=Pore Lining, M=Matrix.
	Indicators: (Appl								rs for Problematic Hydric Soils ³ :
Histosol	(A1)		Sa	ndy Redox (S5)			2 cn	n Muck (A10)
Histic Ep	oipedon (A2)			ipped Matrix					Parent Material (TF2)
Black Hi				amy Mucky I	•		MLRA 1)		y Shallow Dark Surface (TF12)
	en Sulfide (A4)			amy Gleyed)		Oth	er (Explain in Remarks)
	d Below Dark Surfa	ace (A11)		oleted Matrix	. ,			³ le dia ata	ors of hydrophytic vegetation and
	ark Surface (A12) /ucky Mineral (S1)			dox Dark Su pleted Dark	, ,	7)			nd hydrology must be present,
-	Bleyed Matrix (S4)			dox Depress		, ,			s disturbed or problematic.
-	Layer (if present)							1	
Type:	,								
	ches):							Hydric Soil	Present? Yes X No
Remarks:	,								
HYDROLO	GY								
	drology Indicator	<u>.</u>							
-	cators (minimum o		d: abaak	all that ann	b ₄)			Saaa	ndary Indicators (2 or more required)
	Water (A1)			Water-Sta			voont		/ater-Stained Leaves (B9) (MLRA 1, 2,
	ater Table (A2)				1, 2, 4A, a		ксері		4A, and 4B)
Saturatio	. ,			Salt Crust		nu 46)			rainage Patterns (B10)
<u>X</u> Water M	. ,				vertebrate	e (B13)			ry-Season Water Table (C2)
	t Deposits (B2)				Sulfide Oc	. ,			aturation Visible on Aerial Imagery (C9)
<u>X</u> Drift Dep							Living Roo		ecomorphic Position (D2)
	at or Crust (B4)				of Reduce				hallow Aquitard (D3)
	oosits (B5)			Recent Iro			,		AC-Neutral Test (D5)
	Soil Cracks (B6)			Stunted o			•		aised Ant Mounds (D6) (LRR A)
	on Visible on Aeria	I Imagery (B		Other (Ex					rost-Heave Hummocks (D7)
	Vegetated Conca			_		,			
Field Obser	-								
Surface Wate	er Present?	Yes	No <u>X</u>	Depth (inches):		_		
Water Table	Present?	Yes							
Saturation P		Yes						and Hydrolog	y Present? Yes <u>X</u> No
(includes cap	oillary fringe)								
Describe Red	corded Data (strea	m gauge, mo	onitoring	well, aerial	pnotos, pre	evious ins	pections),	it available:	

Remarks:

Project/Site: North I-25 Re-evaluation	City/County: El Paso County	Sam	oling Date: <u>1/26/12 & 3/9/12</u>
Applicant/Owner: <u>Colorado Department of Transportation</u>		State: <u>CO</u>	Sampling Point: <u>12:Wetland U/AA & V</u>
Investigator(s): <u>Chuck Schrader, PKM Design Group, Inc.</u>	Section, Township, Range	: <u>T 12 S., R 66 W., S.</u>	7
Landform (hillslope, terrace, etc.): <u>drainage channel</u>	Local relief (concave, convex	, none): <u>concave</u>	Slope (%): <u>3-8</u>
Subregion (LRR): LRR E	Lat: <u>39.017204</u>	Long: <u>104.827437</u>	Datum: NAD 83
Soil Map Unit Name: Pring Coarse Sandy Loam		NWI cl	assification: <u>PEM/PSS</u>
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes X	No (If no, expla	ain in Remarks.)
Are Vegetation, Soil, or Hydrologys	ignificantly disturbed? No	Are "Normal Circums	tances" present? Yes X No
Are Vegetation, Soil, or Hydrology n	aturally problematic? No	(If needed, explain an	y answers in Remarks.)
		4	ante immentant factures ata

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u>X</u> Yes <u>X</u> Yes <u>X</u>	No No No	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No
Remarks:					

Tree Stratum (Plot size:)	Absolute	Dominant Indicator Species? Status	Dominance Test worksheet:
	<u>% Cover</u> 5		Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
1. <u>Salix amygdaloides</u>		<u> </u>	That Are OBL, FACW, or FAC: (A)
	5	_ = Total Cover	Total Number of Dominant Species Across All Strata: 2 (B)
Sapling/Shrub Stratum (Plot size:) 1. Salix exigua	30	Y OBL	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
			Prevalence Index worksheet:
	30	= Total Cover	Total % Cover of: Multiply by:
			OBL species x 1 =
Herb Stratum (Plot size:)			FACW species <u>5</u> x 2 = <u>10</u>
1. <u>Typha latifolia</u>	30	Y OBL	FAC species x 3 =
2. Juncus arcticus	10	N OBL	FACU species x 4 =
	40	= Total Cover	UPL species x 5 =
			Column Totals: <u>75</u> (A) <u>80</u> (B)
Woody Vine Stratum (Plot size:)			
			Prevalence Index = B/A = <u>1.11</u>
1			Prevalence Index = B/A = Hydrophytic Vegetation Indicators:
1 2			
2			Hydrophytic Vegetation Indicators:
			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation
2			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50%
2			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting
2			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X2 - Dominance Test is >50% X3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹
2			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must
2			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is <3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation

Profile Desc	ription: (Describ	e to the dept	n needed to docur	nent the i	indicator	or confirm	the absence	e of indicators.)
Depth	Matrix			x Feature		. 2	- .	- .
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-10	10 YR 3/1				·		silty sandy	few mottles
10-18	10 YR 3/2						sandy clay	
					·			
					·			· ·
¹ Type: C=Co	oncentration, D=De	epletion, RM=	Reduced Matrix, CS	S=Covered	d or Coate	d Sand Gr		ocation: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Appl	icable to all L	RRs, unless othe	rwise not	ed.)		Indicat	ors for Problematic Hydric Soils ³ :
Histosol	()		Sandy Redox (m Muck (A10)
	pipedon (A2)	-	Stripped Matrix					d Parent Material (TF2)
Black Hi	()	-	Loamy Mucky N			MLRA 1)		ry Shallow Dark Surface (TF12)
	en Sulfide (A4) d Below Dark Surfa	-	Loamy Gleyed X Depleted Matrix		2)		Otr	ner (Explain in Remarks)
·	ark Surface (A12)		Redox Dark Su	. ,			³ Indicat	ors of hydrophytic vegetation and
	lucky Mineral (S1)	-	Depleted Dark	• • •				and hydrology must be present,
	Gleyed Matrix (S4)	-	Redox Depress		,			ss disturbed or problematic.
Restrictive I	Layer (if present):							
Туре:								
Depth (ind	ches):						Hydric Soi	il Present? Yes X No
Remarks:								
HYDROLO	CV							
-	drology Indicator						0	
		one required;	check all that appl					ondary Indicators (2 or more required)
	Water (A1)		Water-Sta			xcept		Water-Stained Leaves (B9) (MLRA 1, 2,
Saturatio	ater Table (A2)		Salt Crust	1, 2, 4A, a	ana 4B)		,	4A, and 4B) Drainage Patterns (B10)
X Water M	()		Salt Crust	` '	o (P12)			Dry-Season Water Table (C2)
	nt Deposits (B2)		Hydrogen		. ,			Saturation Visible on Aerial Imagery (C9)
X Drift Dep			Oxidized F			l iving Roc		Geomorphic Position (D2)
-	at or Crust (B4)		Presence		-	-		Shallow Aquitard (D3)
	posits (B5)		Recent Iro					FAC-Neutral Test (D5)
-	Soil Cracks (B6)		Stunted or					Raised Ant Mounds (D6) (LRR A)
	on Visible on Aeria	I Imagery (B7)						Frost-Heave Hummocks (D7)
	Vegetated Conca							
Field Obser	vations:							
Surface Wat	er Present?	Yes N	o <u>X</u> Depth (i	nches):				
Water Table			o X Depth (i					
Saturation P			o X Depth (i				and Hydrolog	gy Present? Yes X No
(includes cap	oillary fringe)							
Describe Re	corded Data (strea	m gauge, mor	itoring well, aerial	pnotos, pr	evious ins	pections),	IT available:	
Remarks:								

Project/Site: North I-25 Re-evaluation	City/County: El Paso County	Sampling Date: 1/2	_ Sampling Date: <u>1/26/12 & 3/9/12</u>		
Applicant/Owner: <u>Colorado Department of Transportation</u>	State: <u>CO</u>	Sampling Point:	13: Wetland L (West)		
Investigator(s): <u>Chuck Schrader</u> , PKM Design Group, Inc.	Section, Township, Range: <u>T 12 S.</u>	, R 66 W., S. 18			
Landform (hillslope, terrace, etc.): <u>drainage channel</u>	Local relief (concave, convex, none)	: <u>concave</u>	Slope (%): <u>8-40</u>		
Subregion (LRR): LRR E	_ Lat: <u>39.003637</u> Long:	104.820289	Datum: NAD 83		
Soil Map Unit Name: <u>Kettle Gravelly Loamy Sands</u>		NWI classification:	PEM/PSS		
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes <u>X</u> No	_ (If no, explain in Remarks	.)		
Are Vegetation, Soil, or Hydrology si	gnificantly disturbed? No Are "No	rmal Circumstances" present	? Yes <u>X</u> No		
Are Vegetation, Soil, or Hydrology n	aturally problematic? No (If neede	ed, explain any answers in R	emarks.)		
SUMMARY OF FINDINGS - Attach site man	howing compling point locati	one transacte impor	tant faaturaa ata		

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X No Yes X No Yes X No	Is the Sampled Area within a Wetland?	Yes <u>X</u>	_ No			
Remarks:							
Sandbar willow, cattail and Juncus west of culvert. Results match 2000 field delineations.							

	Absolute Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1.	<u>% Cover Species?</u> Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
Sapling/Shrub Stratum (Plot size:)	0 = Total Cover	Total Number of Dominant Species Across All Strata: (B)
1. <u>Salix exigua</u>	<u>30 Y OBL</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
		Prevalence Index worksheet:
	<u>30</u> = Total Cover	Total % Cover of: Multiply by:
		OBL species <u>65</u> x 1 = <u>65</u>
Herb Stratum (Plot size:)		FACW species <u>5</u> x 2 = <u>10</u>
1. <u>Typha latifolia</u>		FAC species x 3 =
2. Juncus arcticus		FACU species x 4 =
3. Agrostis alba	5 N FACW	UPL species x 5 =
	= Total Cover	Column Totals: (A) (B)
		Prevalence Index = B/A = <u>1.1</u>
Woody Vine Stratum (Plot size:)		Hydrophytic Vegetation Indicators:
1		1 - Rapid Test for Hydrophytic Vegetation
2		X 2 - Dominance Test is >50%
% Bare Ground in Herb Stratum 20	0 = Total Cover	X 3 - Prevalence Index is ≤3.0 ¹
		4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
		5 - Wetland Non-Vascular Plants ¹
		Problematic Hydrophytic Vegetation ¹ (Explain)
		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
		Hydrophytic Vegetation Present? Yes <u>X</u> No
Remarks:		

Profile Desc	ription: (Descri	be to the dep	th needed to	document the	indicator	or confirm	the absence	e of indicators.)
Depth	Matrix	(Redox Feature	s			
(inches)	Color (moist)	%	Color (mois	<u>st) %</u>	Type ¹	Loc ²	Texture	Remarks
0-3	10 YR 3/3					<u> </u>	sandy loam	<u> </u>
3-18	10 YR 3/2		10 YR 4/	3 2-5			silty loam w	//cobbles
					·			
				·	·			
1Turney 0-0							21	
	ncentration, D=D					a Sana Gr		cocation: PL=Pore Lining, M=Matrix.
Histosol			Sandy Rec		cuij			cm Muck (A10)
	vipedon (A2)			Matrix (S6)				ed Parent Material (TF2)
Black His				ucky Mineral (F	1) (excep t	MLRA 1)		ry Shallow Dark Surface (TF12)
Hydroge	n Sulfide (A4)		Loamy Gl	eyed Matrix (F2	2)		Oth	her (Explain in Remarks)
·	Below Dark Sur	. ,	X Depleted				2	
	rk Surface (A12)			ark Surface (F6)				tors of hydrophytic vegetation and
	lucky Mineral (S1 leyed Matrix (S4)			Dark Surface (Fe)	-7)			and hydrology must be present, ess disturbed or problematic.
	ayer (if present)			pressions (Fo)			une	
Type:		•						
	ches):						Hydric Soi	il Present? Yes X No
Remarks:								······································
rtemanto.								
	CV.							
HYDROLO								
-	Irology Indicato							
	ators (minimum o	of one require						ondary Indicators (2 or more required)
	Water (A1)			er-Stained Leav		xcept		Water-Stained Leaves (B9) (MLRA 1, 2,
	ter Table (A2)			ILRA 1, 2, 4A, a	and 4B)			4A, and 4B)
Saturatio	. ,			Crust (B11)	A (D12)			Drainage Patterns (B10)
X Water M	. ,			atic Invertebrate				Dry-Season Water Table (C2)
	t Deposits (B2) oosits (B3)		-	ogen Sulfide O		Living Roo		Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
-	t or Crust (B4)			ence of Reduce	-	-		Shallow Aquitard (D3)
	osits (B5)			ent Iron Reduct				FAC-Neutral Test (D5)
-	Soil Cracks (B6)			ted or Stressed				Raised Ant Mounds (D6) (LRR A)
	on Visible on Aeri	al Imagery (B		er (Explain in Re		-, (,		Frost-Heave Hummocks (D7)
	Vegetated Conc	•••	·		,			
Field Observ		(- /					
Surface Wate	er Present?	Yes	No X De	epth (inches):				
Water Table				epth (inches):				
Saturation Pr				epth (inches):			and Hydrolog	gy Present? Yes <u>X</u> No
(includes cap	illary fringe)							
Describe Rec	corded Data (stre	am gauge, mo	onitoring well, a	aerial photos, pr	evious ins	pections),	it available:	
Remarks:								

Project/Site: North I-25 Re-evaluation	City/County: El Paso County	Sampling Date: <u>1/26/12 & 3/9/12</u>					
Applicant/Owner: <u>Colorado Department of Transportation</u>	State: <u>CO</u>	Sampling Point: <u>14:Wetland W (east)</u>					
Investigator(s): <u>Chuck Schrader, PKM Design Group, Inc.</u> Section, Township, Range: <u>T 12 S., R 66 W., S. 7</u>							
Landform (hillslope, terrace, etc.): <u>drainage channel</u> Local relief (concave, convex, none): <u>concave</u> Slope (%): <u>3-8</u>							
Subregion (LRR): LRR E	_ Lat: <u>39.015440</u> Long: <u>104.826</u>	556 Datum: NAD 83					
Soil Map Unit Name: Pring Coarse Sandy Loam		NWI classification: <u>PEM/PSS</u>					
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes X No (It	f no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrologysi	gnificantly disturbed? No Are "Normal	Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology n	aturally problematic? No (If needed, e	explain any answers in Remarks.)					
	hewing compliant point location.	transata important factures at					

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u>X</u> Yes <u>X</u> Yes <u>X</u>	No No No	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No
Remarks:					

	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:) 1	<u>% Cover</u>	Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
	0	_ = Total Cover	Total Number of Dominant Species Across All Strata:1(B)
Sapling/Shrub Stratum (Plot size:) 1. <u>Salix exigua</u>	5	N OBL	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
	5	= Total Cover	Prevalence Index worksheet:
Herb Stratum (Plot size:)			OBL species <u>65</u> x 1 = <u>65</u>
1. <u>Typha latifolia</u>	60	Y OBL	FACW species x 2 =
	60	= Total Cover	FAC species x 3 = FACU species x 4 =
Woody Vine Stratum (Plot size:)	0		UPL species x 5 =
1			Column Totals: <u>65</u> (A) <u>65</u> (B)
2	0		Prevalence Index = B/A =
% Bare Ground in Herb Stratum 20			Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
			X 2 - Dominance Test is >50%
			<u>X</u> 3 - Prevalence Index is $\leq 3.0^1$
			4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
			5 - Wetland Non-Vascular Plants ¹
			Problematic Hydrophytic Vegetation ¹ (Explain)
			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
			Hydrophytic Vegetation Present? Yes <u>X</u> No
Remarks:			

Profile Desc	ription: (Describe	to the dept	th needed to docu	ment the	indicator	or confirm	n the absence	of indicato	ors.)	
Depth	Matrix		Redo	x Feature	s					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-12	10 YR 3/2	90	10 YR 4/3	0-2			loamy sand	sandy few	v mottles	<u> </u>
					·					
		·			·					
	oncentration, D=Dep					ed Sand G			Pore Lining, M=	
-	Indicators: (Application)				ed.)				plematic Hydric	Soils":
Histosol	· · ·		Sandy Redox (n Muck (A1	,	
·	pipedon (A2)		Stripped Matrix	· /				Parent Ma	()	
	stic (A3)		Loamy Mucky I	•		t MLRA 1)		•	ark Surface (TF	12)
	en Sulfide (A4)		Loamy Gleyed	,	2)		Oth	er (Explain	in Remarks)	
·	d Below Dark Surface	e (A11)	X Depleted Matrix				3			
	ark Surface (A12)		Redox Dark Su	()					phytic vegetatior	
	lucky Mineral (S1)		Depleted Dark	•	-7)				gy must be prese	ent,
	Bleyed Matrix (S4)		Redox Depress	sions (F8)			unles	s disturbed	or problematic.	
Restrictive I	Layer (if present):									
Туре:										
Depth (ind	ches):						Hydric Soil	Present?	Yes X	No
Remarks:										
HYDROLO										
-	drology Indicators:						_			
Primary India	cators (minimum of o	ne required	·						ators (2 or more	
Surface	()		Water-Sta		. , .	xcept	V	Vater-Staine	ed Leaves (B9) (MLRA 1, 2,
High Wa	ater Table (A2)		MLRA	1, 2, 4A, a	and 4B)			4A, and 4	4B)	
Saturatio	n (A3)		Salt Crust	(B11)			Г)rainage Pa	tterns (B10)	

Wetland Hydrology Indicate	ors:						
Primary Indicators (minimum	of one required;	Secondary Indicators (2 or more required)					
Surface Water (A1) Water-Stained Leaves (B9) (except					Water-Stained Leaves (B9) (MLRA 1, 2,		
High Water Table (A2)			MLRA 1, 2, 4A, and 4B)		4A, and 4B)		
Saturation (A3)			Salt Crust (B11)		Drainage Patterns (B10)		
X Water Marks (B1)			Aquatic Invertebrates (B13)		Dry-Season Water Table (C2)		
Sediment Deposits (B2)	ediment Deposits (B2) Hydrogen Sulfide Odor (C1)				Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)	Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3)				Geomorphic Position (D2)		
Algal Mat or Crust (B4) Presence of Reduced Iron (C4)				Shallow Aquitard (D3)			
Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6)				X FAC-Neutral Test (D5)			
Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A)				Raised Ant Mounds (D6) (LRR A)			
Inundation Visible on Aer	ial Imagery (B7)		Other (Explain in Remarks)		Frost-Heave Hummocks (D7)		
Sparsely Vegetated Cond	ave Surface (B8)					
Field Observations:							
Surface Water Present?	Yes No	<u>X</u>	Depth (inches):				
Water Table Present?	Yes No	<u>X</u>	Depth (inches):				
Saturation Present?	Yes No	X	Depth (inches):	Wetland Hy	drology Present? Yes <u>X</u> No		
(includes capillary fringe)							
Describe Recorded Data (stre	am gauge, moni	toring	well, aerial photos, previous inspec	ctions), if availa	adie:		
Remarks:							
Hydrology from upstream run	off and culvert dr	ainage	e, no change from 2000 study.				

Project/Site: North I-25 Re-evaluation	City/County: El Paso County	Sampling Date: <u>1/26/12 & 3/9/12</u>						
Applicant/Owner: <u>Colorado Department of Transportation</u>	State: <u>CO</u>	Sampling Point: <u>15: Wetland L100 (east)</u>						
Investigator(s): <u>Chuck Schrader, PKM Design Group, Inc.</u> Section, Township, Range: <u>T 12 S., R 66 W., S. 18</u>								
Landform (hillslope, terrace, etc.): <u>stream channel and bench</u> Local relief (concave, convex, none): <u>concave</u> Slope (%): <u>8-14</u>								
Subregion (LRR): LRR E	Lat: <u>39.003923</u> Long:	104.819558 Datum: NAD 83						
Soil Map Unit Name: Kettle Gravelly Loamy Sand		NWI classification: <u>PEM/PSSS</u>						
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes X No	(If no, explain in Remarks.)						
Are Vegetation, Soil, or Hydrology sig	gnificantly disturbed? No Are "N	lormal Circumstances" present? Yes X No						
Are Vegetation, Soil, or Hydrology na	aturally problematic? No (If nee	eded, explain any answers in Remarks.)						

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X No Yes X No Yes X No	Is the Sampled Area within a Wetland?	Yes X No
Remarks:			
East of NB I-25.			

	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. Populus deltoides	5	N	FAC	That Are OBL, FACW, or FAC: (A)
2. <u>Salix amygdaloides</u>	5	N	FACW	Total Number of Dominant
				Species Across All Strata: 1 (B)
	10	= Total (Cover	
				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot size:)				Prevalence Index worksheet:
1. <u>Salix exigua</u>	60	Y	OBL	
				Total % Cover of: Multiply by:
	60	= Total Cov	/er	OBL species x 1 =
Herb Stratum (Plot size:)				FACW species <u>5</u> x 2 = <u>10</u>
1. <u>Typha latifolia</u>		<u>N</u>	OBL	FAC species <u>5</u> x 3 = <u>15</u>
2. <u>Carex nebrascensis</u>	5	N	OBL	FACU species x 4 =
				UPL species x 5 =
	15	= Total C	Cover	Column Totals: <u>85</u> (A) <u>100</u> (B)
Woody Vine Stratum (Plot size:)				
1				Prevalence Index = B/A = <u>1.18</u>
1 2				Hydrophytic Vegetation Indicators:
2			over	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation
			over	Hydrophytic Vegetation Indicators:
2			over	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation
2			over	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X2 - Dominance Test is >50%
2			ver	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X2 - Dominance Test is >50% X3 - Prevalence Index is ≤3.01 4 - Morphological Adaptations ¹ (Provide supporting
2			over	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2			over	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.01 4 - Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants1
2			over	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must
2			over	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.01 4 - Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants1 Problematic Hydrophytic Vegetation1 (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation1

Profile Desc	ription: (Descrit	e to the dep	th needed to docur	nent the i	ndicator	or confirm	n the absence	of indicators.)
Depth	Matrix		Redo	x Features	6			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-3	10 YR 3/2		No mottles				silty sand	no mottles
3-16	10 YR 3/2		10 YR 4/4				loamy sand	abundant mottles
				·		·		
				·				
¹ Type: C=Co	oncentration, D=D	epletion, RM:	Reduced Matrix, CS	S=Covered	l or Coate	d Sand G	rains. ² Lo	cation: PL=Pore Lining, M=Matrix.
			LRRs, unless other					ors for Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy Redox (S	S5)			2 cr	n Muck (A10)
Histic Ep	oipedon (A2)		Stripped Matrix	(S6)			Rec	Parent Material (TF2)
Black Hi	()		Loamy Mucky Muc			MLRA 1)		y Shallow Dark Surface (TF12)
	n Sulfide (A4)		Loamy Gleyed)		Oth	er (Explain in Remarks)
·	d Below Dark Surf ark Surface (A12)	ace (A11)	X Depleted Matrix Redox Dark Su				³ Indicate	ors of hydrophytic vegetation and
	lucky Mineral (S1)		Depleted Dark	• •	7)			and hydrology must be present,
-	Gleyed Matrix (S4)		Redox Depress		.,			ss disturbed or problematic.
	Layer (if present)		·	. ,				·
Туре:								
Depth (ind	ches):						Hydric Soil	Present? Yes X No
Remarks:								
HYDROLO	GV							
	drology Indicator	~						
			d; check all that appl				Saaa	ndary Indicators (2 or more required)
	· · · · ·	i one required	·					· · _ · · · · · · ·
	Water (A1)		Water-Sta			ксерт	V	Vater-Stained Leaves (B9) (MLRA 1, 2,
Saturatio	iter Table (A2)		Salt Crust	1, 2, 4A, a (B11)	ina 46)		г	4A, and 4B) Drainage Patterns (B10)
X Water Ma	. ,		Aquatic In	` '	e (B13)			Dry-Season Water Table (C2)
	nt Deposits (B2)		Aquatic III		` '			Saturation Visible on Aerial Imagery (C9)
X Drift Dep			Oxidized F			l ivina Roa		Geomorphic Position (D2)
-	at or Crust (B4)		Presence	•	-	-		Shallow Aquitard (D3)
	oosits (B5)		Recent Iro		•			FAC-Neutral Test (D5)
	Soil Cracks (B6)		Stunted or					Raised Ant Mounds (D6) (LRR A)
	on Visible on Aeria	al Imagery (B				, (rost-Heave Hummocks (D7)
	Vegetated Conca		· <u> </u>		,			
Field Obser	-		,					
Surface Wate	er Present?	Yes _	No X Depth (i	nches):		_		
Water Table			No X Depth (i					
Saturation P			No <u>X</u> Depth (i				and Hydrolog	y Present? Yes <u>X</u> No
(includes cap	oillary fringe)							
Describe Red	corded Data (strea	am gauge, mo	onitoring well, aerial	ohotos, pre	evious ins	pections),	it available:	

Remarks:

Project/Site: North I-25 Re-evaluation	City/County: El Paso Count	У	Sampling Date: <u>1/26/12 & 3/9/12</u>			
Applicant/Owner: <u>Colorado Department of Transportation</u>		State: <u>CO</u>	Sampling Point:	16: Wetland L200 (eas	t)	
Investigator(s): <u>Chuck Schrader, PKM Design Group, Inc.</u>	Section, Township, Rang	e: <u>T 12 S., R 66</u>	W., S. 18			
Landform (hillslope, terrace, etc.): <u>creek bench</u>	Local relief (concave,	convex, none):	concave Slope	e (%): <u>8-40</u>		
Subregion (LRR): LRR E	Lat: <u>39.005116</u>	Long: <u>104.8</u> 2	20227 [Datum: <u>NAD 83</u>		
Soil Map Unit Name: Kettle Gravely Loamy Sand			NWI classifica	ation: <u>PEM/PSS</u>		
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes X	No (If n	o, explain in Remarks.)		
Are Vegetation, Soil, or Hydrologys	ignificantly disturbed? No	Are "Normal C	ircumstances" present	? Yes <u>X</u> No		
Are Vegetation, Soil, or Hydrology n	aturally problematic? No	(If needed, exp	plain any answers in Re	emarks.)		
SUMMARY OF FINDINGS Attach site man	showing compling noi	int locations	transacts impor	tant faaturas ata		

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X No Yes X No Yes X No	Is the Sampled Area within a Wetland?	Yes X No
Remarks:			

	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. <u>Quercus gambelii</u>	5	N	UPL	That Are OBL, FACW, or FAC: 1 (A)
Sapling/Shrub Stratum (Plot size:)	5	_ = Total Co	ver	Total Number of Dominant Species Across All Strata: (B)
1. <u>Salix exigua</u>	30	Y	OBL	Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
	30	= Total C	Cover	Prevalence Index worksheet:
Herb Stratum (Plot size:)				
1. <u>Agrostis alba</u>	20	<u>N</u>	FACW	Total % Cover of: Multiply by:
2. Bromus inermis	10	Ν	NI	OBL species <u>30</u> x 1 = <u>30</u>
	30	= Total (Cover	FACW species <u>20</u> x 2 = <u>40</u>
				FAC species x 3 =
Woody Vine Stratum (Plot size:)				FACU species x 4 =
1				UPL species <u>5</u> x 5 = <u>25</u>
2				Column Totals: 55 (A) 95 (B)
% Bare Ground in Herb Stratum <u>30</u>	0			Prevalence Index = $B/A = 1.73$
				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
				X 2 - Dominance Test is >50%
				X 3 - Prevalence Index is $\leq 3.0^{1}$
				4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
				5 - Wetland Non-Vascular Plants ¹
				Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Hydrophytic Vegetation Present? Yes <u>X</u> No
Remarks:				

	ription: (Descri	-	oth needed to				or confirm	n the abse	ence o	of indicators.)
Depth (inches)	Matri Color (moist)		Color (mo		<u>k Features</u> %	Type ¹	Loc ²	Textur	e	Remarks
				<u></u>						
0-18	10 YR 4/2						·	alluvial		sandy silt with clay
					. <u> </u>					
	oncentration, D=[d Sand Gr			ation: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators: (App	licable to all	LRRs, unles	s other	wise note	ed.)		Indi	icator	s for Problematic Hydric Soils ³ :
Histosol	· /		X Sandy F							Muck (A10)
	ipedon (A2)		Stripped							Parent Material (TF2)
Black Hi	. ,			-			MLRA 1)		-	Shallow Dark Surface (TF12)
	n Sulfide (A4)	5 (0.4.4)		-	Matrix (F2))		—	Othe	r (Explain in Remarks)
	Below Dark Sur	. ,	Deplete					³ lpd	liaatar	a of hydrophytic vocatation and
	ırk Surface (A12) lucky Mineral (S1				face (F6) Surface (F	7)				s of hydrophytic vegetation and id hydrology must be present,
	leyed Matrix (S4		·		ions (F8)	')				disturbed or problematic.
-	ayer (if present									
Type:		•								
Depth (inc								Hydric	Soil I	Present? Yes X No
Remarks:								nyano		
	al danaaita with a	nome vegetet	ive growth							
Sanuy, anuvi	al deposits with s	parse vegetat	ive glowin.							
HYDROLO										
Wetland Hyd	Irology Indicato	rs:								
Primary Indic	ators (minimum)	of one require	d; check all th	nat apply	()			<u> </u>	Secon	dary Indicators (2 or more required)
Surface	Water (A1)		Wa	ater-Stai	ned Leave	es (B9) (e	xcept		Wa	ater-Stained Leaves (B9) (MLRA 1, 2,
High Wa	ter Table (A2)			MLRA [·]	I, 2, 4A, a	nd 4B)				4A, and 4B)
Saturatio	on (A3)		Sa	lt Crust	(B11)				Dr	ainage Patterns (B10)
X Water Ma	arks (B1)		Aq	uatic Inv	vertebrates	s (B13)			Dr	y-Season Water Table (C2)
Sedimer	t Deposits (B2)		Hy	drogen	Sulfide Oc	lor (C1)			Sa	turation Visible on Aerial Imagery (C9)
Drift Dep	osits (B3)		Ox	idized R	hizospher	es along	Living Roo	ots (C3)	Ge	eomorphic Position (D2)
Algal Ma	t or Crust (B4)		Pre	esence o	of Reduce	d Iron (C4	+)		Sh	allow Aquitard (D3)
Iron Dep	osits (B5)		Re	cent Iro	n Reductio	on in Tille	d Soils (C6	3) <u>)</u>	<u>X</u> FA	C-Neutral Test (D5)
Surface	Soil Cracks (B6)		Stu	unted or	Stressed	Plants (D	1) (LRR A)	Ra	aised Ant Mounds (D6) (LRR A)
Inundatio	on Visible on Aer	ial Imagery (B	7) Otl	ner (Exp	lain in Re	marks)			Fro	ost-Heave Hummocks (D7)
Sparsely	Vegetated Cond	ave Surface (B8)							
Field Observ	vations:									
Surface Wate	er Present?	Yes	No_X I	Depth (ii	nches):					
Water Table			No X I	• •	,					
Saturation Pr			No X					and Hvdro	oloav	Present? Yes X No
(includes cap	illary fringe)							-		
Describe Red	corded Data (stre	am gauge, mo	onitoring well,	aerial p	photos, pre	evious ins	pections),	if available	e:	
Remarks:										

Project/Site: North I-25 Re-evaluation	City/County: El	Paso County	Sampling Date: 1	/26/12 & 3/9/12
Applicant/Owner: <u>Colorado Department of Transportatio</u> (west)	n	State: <u>CO</u>	Sampling Poi	nt: <u>17:Wetland M (west)</u>
Investigator(s): Chuck Schrader, PKM Design Group, In	c. Section, Tow	nship, Range: <u>T 12 S., F</u>	R 66 W., S. 18	
Landform (hillslope, terrace, etc.): creek drainage	Lo	ocal relief (concave, conv	ex, none): <u>concave</u>	Slope (%): <u>8-40</u>
Subregion (LRR): LRR E	Lat: <u>39.00079</u>	97 Long: 104.	.818651	Datum: NAD 83
Soil Map Unit Name: Kettle Gravelly Loamy Sand			NWI classification:	PSS/PEM
Are climatic / hydrologic conditions on the site typical for	his time of year? Y	es <u>X</u> No	(If no, explain in Remar	ks.)
Are Vegetation, Soil, or Hydrology	significantly distur	bed? No Are "Norm	al Circumstances" prese	ent? Yes X No
Are Vegetation, Soil, or Hydrology	_ naturally problema	atic? No (If needed	, explain any answers in	Remarks.)
SUMMARY OF FINDINGS – Attach site ma	p showing sam	pling point location	ns, transects, imp	ortant features, etc.
Hydrophytic Vegetation Present? Yes X	No	Is the Osmala I Ana		
Hydric Soil Present? Yes X	No	Is the Sampled Area within a Wetland?	Voc V	No
Wetland Hydrology Present? Yes X	No	within a wetland?	Yes <u>X</u>	
Remarks:				

Black Squirrel Creek drainage with upslope runoff and floodplain water flows. Flowing/standing water through channel.

VEGETATION – Use scientific names of plants.

	Absolute		nt Indicator	Dominance Test worksheet:			
Tree Stratum (Plot size:)		<u>species</u> = Total	<u>? Status</u> Cover	Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)			
<u>Sapling/Shrub Stratum</u> (Plot size:) 1. <u>Salix exigua</u>	40	Y	OBL	Total Number of Dominant Species Across All Strata: 2 (B)			
	40	= Tota	l Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)			
				Prevalence Index worksheet:			
Herb Stratum (Plot size:)				Total % Cover of: Multiply by:			
1. <u>Typha latifolia</u>			OBL	OBL species <u>80</u> x 1 = <u>80</u>			
2. <u>Schoenoplectus tabernaemontai</u>	10	Ν	OBL	FACW species x 2 =			
			_	FAC species x 3 =			
	40	_= Total (Jover	FACU species x 4 =			
Woody Vine Stratum (Plot size:)				UPL species x 5 =			
				Column Totals: <u>80</u> (A) <u>80</u> (B)			
1							
2	0			Prevalence Index = B/A = <u>1.0</u> Hydrophytic Vegetation Indicators:			
% Bare Ground in Herb Stratum <u>10</u>			20161	1 - Rapid Test for Hydrophytic Vegetation			
	_			X 2 - Dominance Test is >50%			
				<u>X</u> 3 - Prevalence Index is $\leq 3.0^{1}$			
				4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
				5 - Wetland Non-Vascular Plants ¹			
				Problematic Hydrophytic Vegetation ¹ (Explain)			
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
				Hydrophytic Vegetation Present? Yes <u>X</u> No			
Remarks:				•			

US Army Corps of Engineers

Profile Description: (Describe to the depth needed to document the indicator or of	confirm the absence of indicators.)
Depth Matrix Redox Features	
(inches) Color (moist) % Color (moist) % Type ¹ I	Loc ² Texture Remarks
0-18 10 YR 3/2	some mottles sandy silt
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated S	and Grains. ² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
Histosol (A1) Sandy Redox (S5)	2 cm Muck (A10)
Histic Epipedon (A2) Stripped Matrix (S6)	Red Parent Material (TF2)
Black Histic (A3) Loamy Mucky Mineral (F1) (except MI	LRA 1) Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11) <u>X</u> Depleted Matrix (F3)	2
Thick Dark Surface (A12) Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4) Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):	
Туре:	
Depth (inches):	Hydric Soil Present? Yes X No
Remarks:	
HYDROLOGY	
HYDROLOGY Wetland Hydrology Indicators:	
	Secondary Indicators (2 or more required)
Wetland Hydrology Indicators:	
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	<pre>water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</pre>
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	Multiply and the second states and the secon
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ng Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) Noils (C6) X FAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ng Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) oils (C6) X FAC-Neutral Test (D5) LRR A) Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ng Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) Noils (C6) X FAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ng Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) oils (C6) X FAC-Neutral Test (D5) LRR A) Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ng Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) oils (C6) X FAC-Neutral Test (D5) LRR A) Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ng Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) oils (C6) X FAC-Neutral Test (D5) LRR A) Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ng Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) oils (C6) X FAC-Neutral Test (D5) LRR A) Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ng Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) oils (C6) X FAC-Neutral Test (D5) LRR A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ng Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) oils (C6) X FAC-Neutral Test (D5) LRR A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ng Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) oils (C6) X FAC-Neutral Test (D5) LRR A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ng Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) oils (C6) X FAC-Neutral Test (D5) LRR A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

Project/Site: North I-25 Re-evaluation	City/County: El Paso County	/	Sampling Date: 1/26/1	12 & 3/9/12
Applicant/Owner: Colorado Department of Transportation		State: CO	Sampling Poir	nt: <u>18: Wetland N</u>
Investigator(s): <u>Chuck Schrader, PKM Design Group, Inc.</u>	Section, Township, Range	e: <u>T 12 S., R 66 V</u>	V., S. 32	
Landform (hillslope, terrace, etc.): hillslope l	_ocal relief (concave, convex,	none): <u>concave</u>	Slope (%): <u>5-20</u>	
Subregion (LRR): LRR E	Lat: <u>38.959290</u>	Long: <u>104.80155</u>	5 Datu	im: <u>NAD 83</u>
Soil Map Unit Name: <u>Kutch Clay Loam</u>			NWI classification: Pl	EM/PSS
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes X	No (If no	, explain in Remarks.)	
Are Vegetation, Soil, or Hydrologysi	gnificantly disturbed? No	Are "Normal Cir	cumstances" present?	Yes <u>X</u> No
Are Vegetation, Soil, or Hydrology na	aturally problematic? No	(If needed, expl	ain any answers in Rem	arks.)
SUMMARY OF EINDINGS Attach site man	showing compling poi	nt logations t	roncosto importo	nt factures ato

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u>X</u> Yes <u>X</u> Yes <u>X</u>	No No No	Is the Sampled Area within a Wetland?	Yes X	_ No
Remarks:					
Area of hillside seeps and highway rur	noff.				

	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
Oralias (Ohada Ohadawa - /Districtory	0	_ = Total Cover	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
Sapling/Shrub Stratum (Plot size:) 1. <u>Salix exigua</u>	50	Y OBL	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
	50	= Total Cover	Prevalence Index worksheet:
			Total % Cover of: Multiply by:
Herb Stratum (Plot size:)			OBL species <u>80</u> x 1 = <u>80</u>
1. Typha latifolia	30	Y OBL	FACW species x 2 =
			FAC species x 3 =
	30	= Total Cover	FACU species x 4 =
Woody Vine Stratum (Plot size:)			UPL species x 5 =
1			Column Totals: <u>80</u> (A) <u>80</u>
2			(B)
% Bare Ground in Herb Stratum 10	0	= Total Cover	Prevalence Index = B/A = <u>1.0</u>
			Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
			X 2 - Dominance Test is >50%
			<u>X</u> 3 - Prevalence Index is $\leq 3.0^{1}$
			 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
			5 - Wetland Non-Vascular Plants ¹
			Problematic Hydrophytic Vegetation ¹ (Explain)
			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
			Hydrophytic Vegetation Present? Yes <u>X</u> No
Remarks:			

Profile Desc	cription: (Descril	be to the dep	th neede				or confirm	n the absen	nce of indicators.)
Depth (inchas)	Matrix	%	Calar		x Features		Loc ²	Texture	Demedice
(inches)	Color (moist)	%	Color	(moist)	%	Type ¹	LOC	Texture	Remarks
0-18	10 YR 2/2				·			sandy loa	m no mottles
					·				
1 T			Deduces					2	
	oncentration, D=D Indicators: (App						a Sana G		Location: PL=Pore Lining, M=Matrix. ators for Problematic Hydric Soils ³ :
-						<i>)</i>			•
Histosol	pipedon (A2)			dy Redox (Soped Matrix					2 cm Muck (A10) Red Parent Material (TF2)
	istic (A3)			my Mucky N) (excent	MIRA 1		/ery Shallow Dark Surface (TF12)
	en Sulfide (A4)			ny Gleyed I					Other (Explain in Remarks)
	d Below Dark Sur	ace (A11)		eted Matrix	• • •	,			
·	ark Surface (A12)	()		ox Dark Su				³ Indic	cators of hydrophytic vegetation and
Sandy N	/lucky Mineral (S1)	Dep	leted Dark S	Surface (F	7)		We	etland hydrology must be present,
	Gleyed Matrix (S4)		Red	ox Depress	ions (F8)			ur	nless disturbed or problematic.
Restrictive	Layer (if present)	:							
Туре:			<u> </u>						
Depth (in	ches):							Hydric S	Soil Present? Yes X No
Remarks:									
HYDROLO	CV.								
	drology Indicato	· · ·							
-	cators (minimum c		1. check a	all that apply	v)			Se	condary Indicators (2 or more required)
	Water (A1)			Water-Stai		ne (R0) (n	vcont		_ Water-Stained Leaves (B9) (MLRA 1, 2,
	ater Table (A2)				1, 2, 4A, a		ксері		4A, and 4B)
Saturati				Salt Crust		nu 46)			Drainage Patterns (B10)
X Water M	()			Aquatic Inv	` '	D (D 12)			Dry-Season Water Table (C2)
	. ,			Hydrogen		. ,			- , , ,
	nt Deposits (B2)		—				Living Do		Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
	posits (B3) at or Crust (B4)			Presence		-	-	JIS (C3)	Shallow Aquitard (D3)
	. ,		—					s) <u>v</u>	
	posits (B5) Soil Cracks (B6)			Recent Iro					FAC-Neutral Test (D5)
	Soil Cracks (B6) on Visible on Aeri	al Imagony (P		Stunted or Other (Exp				·)	_ Raised Ant Mounds (D6) (LRR A) _ Frost-Heave Hummocks (D7)
	y Vegetated Conc					nansj			
Field Obser	-	ave Sunace (50)				1		
		Vaa	No. Y	Denth (nahac'				
Surface Wat		Yes							
Water Table		Yes							
Saturation P (includes cap		Yes	N0 <u>X</u>	Depth (i	nches):		Wet	and Hydrol	logy Present? Yes X No

(includes capillary fringe)				,			-
Describe Recorded Data (stream gauge,	monitoring v	well, aerial	photos,	previous ir	spections),	if available:

Remarks:

Project/Site: North I-25 Re-evaluation	City/County: El Paso County	Samplin	g Date: <u>1/26/12 & 3/9/12</u>
Applicant/Owner: Colorado Department of Transportation		State: CO	Sampling Point: <u>19: Wetland S</u>
Investigator(s): <u>Chuck Schrader</u> , PKM Design Group, Inc.	Section, Township, Range:	T 12 S., R 66 W., S. 32	
Landform (hillslope, terrace, etc.): <u>creek drainage</u>		nvex, none): <u>concave</u>	
Subregion (LRR): <u>LRR E</u>	Lat: <u>38.961522</u>	Long: <u>104.800783</u>	Datum: NAD 83
Soil Map Unit Name: <u>Kutch Clay Loam</u>		NWI class	sification: <u>PEM/PSS</u>
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes X	No (If no, explain	in Remarks.)
Are Vegetation, Soil, or Hydrology si	gnificantly disturbed? No	Are "Normal Circumstan	ces" present? Yes <u>X</u> No
Are Vegetation, Soil, or Hydrology na	aturally problematic? No	(If needed, explain any a	nswers in Remarks.)
SUMMARY OF FINDINGS Attach site man	howing compling poin	t logations transpo	to important factures ato

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u>X</u> Yes <u>X</u> Yes <u>X</u>	No No No	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No
Remarks:					

	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. <u>Salix amygdaloides</u>	5	N	FACW	That Are OBL, FACW, or FAC: (A)
	5	_ = Total Co	over	Total Number of Dominant Species Across All Strata: 2 (B)
Sapling/Shrub Stratum (Plot size:)				
1. <u>Salix exigua</u>	30	<u> </u>	OBL	Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
	30	= Total Co	over	
				Prevalence Index worksheet:
Herb Stratum (Plot size:)				Total % Cover of: Multiply by:
1. Typha latifolia	40	Y	OBL	OBL species <u>80</u> x 1 = <u>80</u>
2. Juncus arcticus	10	N	OBL	FACW species <u>5</u> x 2 = <u>10</u>
				FAC species x 3 =
	50	= Total Co	ver	FACU species x 4 =
Woody Vine Stratum (Plot size:)				UPL species x 5 =
1				Column Totals: <u>85</u> (A) <u>90</u> (B)
2				
	0		over	Prevalence Index = B/A = <u>1.06</u>
% Bare Ground in Herb Stratum 15				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
				X 2 - Dominance Test is >50%
				\overline{X} 3 - Prevalence Index is $\leq 3.0^1$
				4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
				5 - Wetland Non-Vascular Plants ¹
				Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Hydrophytic Vegetation Present? Yes <u>X</u> No
Remarks:				

SOIL

Depth (inches)	<u>Matrix</u> Color (moist)	%	Redo Color (moist)	x Features		Loc ²	Texture	Remarks
				70	<u> </u>			
0-6	<u>10 YR 3/2</u>	·						<u>/ sand_no mottles</u>
6-18	<u>10 YR 3/2</u>		10 YR 4/6				gravelly loam	y sand abundant mottles
¹ Type: C=0	 Concentration, D=Dep	letion, RM=	Reduced Matrix, CS	S=Covered	d or Coate	d Sand Gr	ains. ² Loc	ation: PL=Pore Lining, M=Matrix.
Hydric Soi	I Indicators: (Applic	able to all	LRRs, unless othe	wise not	ed.)		Indicato	rs for Problematic Hydric Soils ³ :
Histoso	. ,		Sandy Redox (S					n Muck (A10)
	Epipedon (A2)		Stripped Matrix					Parent Material (TF2)
	Histic (A3) gen Sulfide (A4)		Loamy Mucky Muc			MLRA 1)		v Shallow Dark Surface (TF12) er (Explain in Remarks)
	ed Below Dark Surface	e (A11)	<u>X</u> Depleted Matrix)			
·	Dark Surface (A12)	5 (711)	Redox Dark Su				³ Indicato	rs of hydrophytic vegetation and
	Mucky Mineral (S1)		Depleted Dark	• • •				nd hydrology must be present,
Sandy	Gleyed Matrix (S4)		Redox Depress	ions (F8)			unless	s disturbed or problematic.
Restrictive	Exper (if present):							
	,							
Туре:								
Type: Depth (i	nches):						Hydric Soil	Present? Yes <u>X</u> No
Туре:							Hydric Soil	Present? Yes <u>X</u> No
Type: Depth (i							Hydric Soil	Present? Yes <u>X</u> No
Type: Depth (i							Hydric Soil	Present? Yes <u>X</u> No
Type: Depth (i							Hydric Soil	Present? Yes <u>X</u> No
Type: Depth (ii Remarks:	nches):						Hydric Soil	Present? Yes <u>X</u> No
Type: Depth (ii Remarks: IYDROL(Wetland H	nches): DGY ydrology Indicators:							
Type: Depth (ii Remarks: HYDROL(Wetland H Primary Ind	nches): DGY ydrology Indicators: licators (minimum of o		• • • • •				Secon	idary Indicators (2 or more required)
Type: Depth (ii Remarks: IYDROL(Wetland H Primary Ind Surface	nches): DGY ydrology Indicators: licators (minimum of o e Water (A1)		Water-Sta	ined Leave	. , .	xcept	Secon	Idary Indicators (2 or more required) later-Stained Leaves (B9) (MLRA 1, 2
Type: Depth (ii Remarks: IYDROLO Wetland Hy Primary Ind Surface High W	nches): DGY ydrology Indicators: ticators (minimum of o e Water (A1) /ater Table (A2)		Water-Sta MLRA	ined Leave 1, 2, 4A, a	. , .	xcept	<u>Secon</u> W	idary Indicators (2 or more required) 'ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
Type: Depth (ii Remarks: IYDROL(Wetland H Primary Ind Surfact High W Satura	nches): DGY ydrology Indicators: licators (minimum of o e Water (A1) /ater Table (A2) tion (A3)		Water-Sta MLRA Salt Crust	ined Leave 1, 2, 4A, a (B11)	and 4B)	xcept	<u>Secon</u> W Di	Idary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10)
Type: Depth (ii Remarks: IYDROL(Wetland H Primary Ind Surface High W Saturai X Water N	nches): DGY ydrology Indicators: licators (minimum of o e Water (A1) /ater Table (A2) tion (A3) Marks (B1)		Water-Sta MLRA Salt Crust	ined Leave 1, 2, 4A, a (B11) vertebrate	and 4B) s (B13)	xcept	<u>Secon</u> W Di Di	Idary Indicators (2 or more required) later-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2)
Type: Depth (ii Remarks: IYDROLO Wetland H Primary Ind Surface High W Saturat X Water N Sedime	nches): DGY ydrology Indicators: licators (minimum of o e Water (A1) /ater Table (A2) tion (A3) Warks (B1) ent Deposits (B2)		Water-Sta MLRA Salt Crust Aquatic In Hydrogen	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oc	and 4B) s (B13) dor (C1)		<u>Secon</u> W Dr Dr Dr Sa	dary Indicators (2 or more required) 'ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C3
Type: Depth (ii Remarks: IYDROLO Wetland Hy Primary Ind Surface High W Satura' XSedime XSedime XSedime	DGY ydrology Indicators: licators (minimum of o e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)		Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oo Rhizosphe	and 4B) s (B13) dor (C1) res along	Living Roc	<u>Secon</u> W Di Di Di Sa ots (C3) G	Idary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C3 eomorphic Position (D2)
Type: Depth (ii Remarks: IYDROLO Wetland H Primary Ind Surfact Surfact Surfact Surfact Sedime X Sedime X Drift De Algal M	DGY ydrology Indicators: licators (minimum of o e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4)		Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizosphe of Reduce	and 4B) s (B13) dor (C1) res along ed Iron (C4	Living Roc	<u>Secon</u> W Di Di Di Si ots (C3) Gi Si	Idary Indicators (2 or more required) 'ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C4 eomorphic Position (D2) hallow Aquitard (D3)
Type: Depth (ii Remarks: IYDROLO Wetland Hy Primary Ind Surface High W Saturai X Sedime X Sedime X Drift De Algal M Iron De	DGY ydrology Indicators: ticators (minimum of o e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5)		Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizosphe of Reduce n Reduction	and 4B) s (B13) dor (C1) res along ed Iron (C4 on in Tiller	Living Roc I) d Soils (C6	<u>Secon</u> W Di Di Di Di Si ots (C3) Gi Si S) <u>X</u> FA	Idary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C4 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5)
Type: Depth (ii Remarks: IYDROLO Wetland H Primary Ind Surface High W Satura X Vater I Sedime X Drift De Algal M Iron De Surface	DGY ydrology Indicators: <u>dicators (minimum of o</u> e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) e Soil Cracks (B6)	ne required	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizosphe of Reduce n Reductio Stressed	and 4B) s (B13) dor (C1) res along ed Iron (C4 on in Tille Plants (D	Living Roc I) d Soils (C6	<u>Secon</u> W Di Di Di Si ots (C3) Gi Si 5) <u>X</u> FA) Ri	Idary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Type: Depth (ii Remarks: IYDROL(Wetland H Primary Ind 	DGY ydrology Indicators: licators (minimum of o e Water (A1) /ater Table (A2) tion (A3) Warks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Aerial I	ne required	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or 7) Other (Exp	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizosphe of Reduce n Reductio Stressed	and 4B) s (B13) dor (C1) res along ed Iron (C4 on in Tille Plants (D	Living Roc I) d Soils (C6	<u>Secon</u> W Di Di Di Si ots (C3) Gi Si 5) <u>X</u> FA) Ri	Idary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5)
Type: Depth (ii Remarks: IYDROL(Wetland H Primary Ind 	DGY ydrology Indicators: licators (minimum of o e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Aerial I ely Vegetated Concave	ne required	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or 7) Other (Exp	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizosphe of Reduce n Reductio Stressed	and 4B) s (B13) dor (C1) res along ed Iron (C4 on in Tille Plants (D	Living Roc I) d Soils (C6	<u>Secon</u> W Di Di Di Si ots (C3) Gi Si 5) <u>X</u> FA) Ri	Idary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Type: Depth (ii Remarks: TYDROLO Wetland Hy Primary Ind Surface Surface Surface Sedime X Sedime X Sedime Sedime X Drift De Algal M Iron De Surface Surface Surface Surface Surface Surface Surface	DGY ydrology Indicators: licators (minimum of o e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Aerial I ely Vegetated Concave ervations:	ne required magery (B7 Surface (E	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or 7) Other (Exp	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizosphe of Reduce n Reduction Stressed blain in Re	and 4B) s (B13) dor (C1) res along ed Iron (C4 on in Tilleo Plants (D marks)	Living Roc }) d Soils (C6 1) (LRR A	<u>Secon</u> W Di Di Di Si ots (C3) Gi Si 5) <u>X</u> FA) Ri	Idary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)

(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Yes _____ No _X___ Depth (inches): _____

Remarks:

Saturation Present?

Wetland Hydrology Present? Yes X No

Project/Site: North I-25 Re-evaluation	City/County: El Paso County	y Samp	oling Date: <u>1/26/12 & 3/9/12</u>	
Applicant/Owner: <u>Colorado Department of Transportation</u>		State: CO	_ Sampling Point: 20: Non-we	tland T
Investigator(s): <u>Chuck Schrader, PKM Design Group, Inc.</u>	Section, Township, Range	e: <u>T 12 S., R 66 W., S. 3</u>	29	
Landform (hillslope, terrace, etc.): <u>overflow channel from c</u>	detention pond Local relie	f (concave, convex, none	e): <u>concave</u> Slope (9	%): <u>1-9</u>
Subregion (LRR): LRR E	Lat: <u>38.981804</u> L	_ong: <u>104.810692</u>	Datum: NAD 83	
Soil Map Unit Name: <u>Blakeland loamy sand</u>		NWI	classification: <u>NA</u>	
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes X	No (If no, expla	ain in Remarks.)	
Are Vegetation, Soil, or Hydrologysi	ignificantly disturbed? No	Are "Normal Circumst	ances" present? Yes X	No
Are Vegetation, Soil, or Hydrology na	aturally problematic? No	(If needed, explain any	y answers in Remarks.)	
SUMMARY OF FINDINGS - Attach site man	showing sampling noi	nt locations trans	ects important feature	s otr

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes <u>NA</u> YesX	No <u>X</u> No No	Is the Sampled Area within a Wetland?	Yes	No <u>X</u>
Remarks:					
Small detention overflow channel that d	id not contain hy	dric vegetation	No wetland delineation form way	s included in	the earlier 2000 study

Small detention overflow channel that did not contain hydric vegetation. No wetland delineation form was included in the earlier 2000 study.

	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1.	<u>% Cover</u>	Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
	0	_ = Total Cover	Total Number of Dominant Species Across All Strata:0(B)
<u>Sapling/Shrub Stratum</u> (Plot size:) 1	0	= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:0 (A/B)
			Prevalence Index worksheet:
Herb Stratum (Plot size:)			Total % Cover of: Multiply by:
1. <u>Agrostis alba</u>	20	N FACW	OBL species x 1 =
2. Bromus inermis	10	N NI	FACW species <u>20</u> x 2 = <u>40</u>
3. Agropyron smithii		N FACU	FAC species x 3 =
			FACU species <u>20</u> x 4 = <u>80</u>
	50	= Total Cover	UPL species <u>10</u> x 5 = <u>50</u>
Woody Vine Stratum (Plot size:)			Column Totals: <u>50</u> (A) <u>170</u> (B)
1			
2			Prevalence Index = B/A = <u>3.4</u>
	0		Hydrophytic Vegetation Indicators:
% Bare Ground in Herb Stratum <u>30</u>		_	1 - Rapid Test for Hydrophytic Vegetation
			2 - Dominance Test is >50%
			3 - Prevalence Index is ≤3.0 ¹
			4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
			5 - Wetland Non-Vascular Plants ¹
			Problematic Hydrophytic Vegetation ¹ (Explain)
			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
			Hydrophytic Vegetation Present? Yes <u>No X</u>
Remarks:			

inches) Color (moist)	%	Color (moist)	%	Type ¹			D a sea a selara
			/0	Type	Loc ²	Texture	Remarks
		·					
		·					
			Coverad			ing 21	
pe: C=Concentration, D=Dep dric Soil Indicators: (Applic					a Sana Gra		Location: PL=Pore Lining, M=Matrix. ators for Problematic Hydric Soils ³ :
				u.)			cm Muck (A10)
Histosol (A1) Histic Epipedon (A2)		Sandy Redox (S5 Stripped Matrix (S5)					Red Parent Material (TF2)
Black Histic (A3)		Loamy Mucky Mir		(except	MLRA 1)		/ery Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)		Loamy Gleyed Ma	• •	(,		Other (Explain in Remarks)
Depleted Below Dark Surface	e (A11)	X Depleted Matrix (F					, , , , , , , , , , , , , , , , , , ,
Thick Dark Surface (A12)		Redox Dark Surfa	ce (F6)			³ Indic	ators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)		Depleted Dark Su)		we	etland hydrology must be present,
Conduc Classed Matrix (C4)		Redox Depression	ns (F8)			un	less disturbed or problematic.
Sandy Gleyed Matrix (S4)							
strictive Layer (if present):							
						Hydric S	oil Present? Yes <u>NA</u> No _
estrictive Layer (if present): Type: Depth (inches): emarks:			ata forms	were av	ailable from	-	oil Present? Yes <u>NA</u> No wetland delineations to indicate soils.
estrictive Layer (if present): Type: Depth (inches): emarks: test pit was dug as hydric veg			ata forms	were av	ailable from	-	
strictive Layer (if present): Type: Depth (inches): marks: test pit was dug as hydric veg DROLOGY	getation wa		ata forms	were av	ailable from	-	
strictive Layer (if present): Type: Depth (inches): marks: test pit was dug as hydric veg DROLOGY etland Hydrology Indicators:	getation wa	s not present and no da	ata forms	were av	ailable from	previous v	wetland delineations to indicate soils.
strictive Layer (if present): Type: Depth (inches): marks: test pit was dug as hydric veg DROLOGY etland Hydrology Indicators: mary Indicators (minimum of o	getation wa	s not present and no da				previous v	wetland delineations to indicate soils.
	getation wa	s not present and no da d; check all that apply) Water-Staine	ed Leaves	s (B9) (e :		previous v	wetland delineations to indicate soils. <u>condary Indicators (2 or more required</u> Water-Stained Leaves (B9) (MLRA 1
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Project/Site: North I-25 Re-evaluation	City/County: El Paso County	Sampli	ng Date: <u>1/26/12 & 3/9/12</u>	
Applicant/Owner: <u>Colorado Department of Transportation</u>		State: CO	Sampling Point: 21:Wetland New Wo	<u>2</u>
Investigator(s): <u>Chuck Schrader, PKM Design Group, Inc.</u>	Section, Township, Range	e: <u>T 13 S., R 66 W., S. 5</u>		
Landform (hillslope, terrace, etc.): <u>stormwater pond</u>	Local relief (concave,	convex, none): <u>concave</u>	e Slope (%): <u>3-8</u>	
Subregion (LRR): LRR E	Lat: <u>38.942857</u> L	ong: <u>104.813475</u>	Datum: <u>NAD 83</u>	
Soil Map Unit Name: <u>Stapleton Sandy Loam</u>		N	WI classification: <u>PEM</u>	
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes X	No (If no, explain	n in Remarks.)	
Are Vegetation, Soil, or Hydrologys	ignificantly disturbed? No	Are "Normal Circumstar	nces" present? Yes <u>X</u> No	
Are Vegetation, Soil, or Hydrology n	aturally problematic? No	(If needed, explain any	answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map	showing sampling poir	nt locations, transe	cts, important features, etc.	

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X No Yes X No Yes X No	Is the Sampled Area within a Wetland?	Yes <u>X</u> No
Remarks:			
Stormwater detention area on east side	e of northbound I-25 constructed aft	er original wetland delineatio	n and study was completed.

	Absolute Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1.	<u>% Cover Species?</u> Status	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
	0 = Total Cover	Total Number of Dominant Species Across All Strata:1(B)
Sapling/Shrub Stratum (Plot size:) 1	0 = Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
		Prevalence Index worksheet:
Herb Stratum (Plot size:)		Total % Cover of: Multiply by:
1. <u>Typha latifolia</u>	70 Y OBL	OBL species <u>70</u> x 1 = <u>70</u>
		FACW species x 2 =
	70 = Total Cover	FAC species x 3 =
Woody Vine Stratum (Plot size:)		FACU species x 4 =
1		UPL species x 5 =
2		Column Totals: <u>70</u> (A) <u>70</u> (B)
% Bare Ground in Herb Stratum <u>20</u>	0 = Total Cover	Prevalence Index = B/A = <u>1.0</u>
		Hydrophytic Vegetation Indicators:
		1 - Rapid Test for Hydrophytic Vegetation
		X 2 - Dominance Test is >50%
		<u>X</u> 3 - Prevalence Index is $\leq 3.0^1$
		4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
		5 - Wetland Non-Vascular Plants ¹
		Problematic Hydrophytic Vegetation ¹ (Explain)
		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
		Hydrophytic Vegetation Present? Yes <u>X</u> No
Remarks:		·

(inches)	Color (moist)	%	Redo Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
		70		70	туре			sandy, sediment deposits
								sandy, sediment deposits
	entration D=Der	letion RM:	=Reduced Matrix, CS	S=Covered	Lor Coate	d Sand Gra	ains ² l (cation: PL=Pore Lining, M=Matrix.
			LRRs, unless othe					ors for Problematic Hydric Soils ³ :
Histosol (A			X Sandy Redox (,			cm Muck (A10)
Histic Epipe			Stripped Matrix					d Parent Material (TF2)
Black Histic			Loamy Mucky	Mineral (F1) (except	MLRA 1)		ry Shallow Dark Surface (TF12)
_ Hydrogen S			Loamy Gleyed)		Ot	her (Explain in Remarks)
	elow Dark Surfac	æ (A11)	Depleted Matrix				3	
	Surface (A12)		Redox Dark Su	• • •	7)			tors of hydrophytic vegetation and and hydrology must be present,
-	ky Mineral (S1) /ed Matrix (S4)		Depleted Dark Redox Depress		7)			ess disturbed or problematic.
	ver (if present):						unic	
	es):						Hydric So	il Present? Yes X No
emarks:							,	
	(
Vetland Hydro	logy Indicators:		t aback all that and				Soo	andan (Indiactors (2 or more required)
Vetland Hydro Primary Indicate	logy Indicators:		d; check all that app					ondary Indicators (2 or more required)
Vetland Hydro	logy Indicators: ors (minimum of c ater (A1)		Water-Sta	ined Leave		xcept		Water-Stained Leaves (B9) (MLRA 1, 2
Vetland Hydro rimary Indicato Surface Wa High Water	ology Indicators: ors (minimum of c ater (A1) Table (A2)		Water-Sta	ined Leave 1, 2, 4A, a		xcept		Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
Vetland Hydro Primary Indicato Surface Wa High Water Saturation (logy Indicators: ors (minimum of c ater (A1) [•] Table (A2) (A3)		Water-Sta MLRA Salt Crust	iined Leave 1, 2, 4A, a (B11)	nd 4B)	xcept		Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10)
Vetland Hydro rimary Indicato Surface Wa High Water Saturation (< Water Mark	ology Indicators: ors (minimum of c ater (A1) Table (A2) (A3) s (B1)		Water-Sta MLRA Salt Crust Aquatic In	ined Leave 1, 2, 4A, a (B11) vertebrates	a nd 4B) s (B13)	xcept		Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
/etland Hydro rimary Indicato	ology Indicators: ors (minimum of c ater (A1) Table (A2) (A3) s (B1) peposits (B2)		Water-Sta MLRA Salt Crust Aquatic In Hydrogen	ined Leave 1, 2, 4A, a (B11) vertebrates Sulfide Oc	and 4B) s (B13) dor (C1)	-		Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C
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