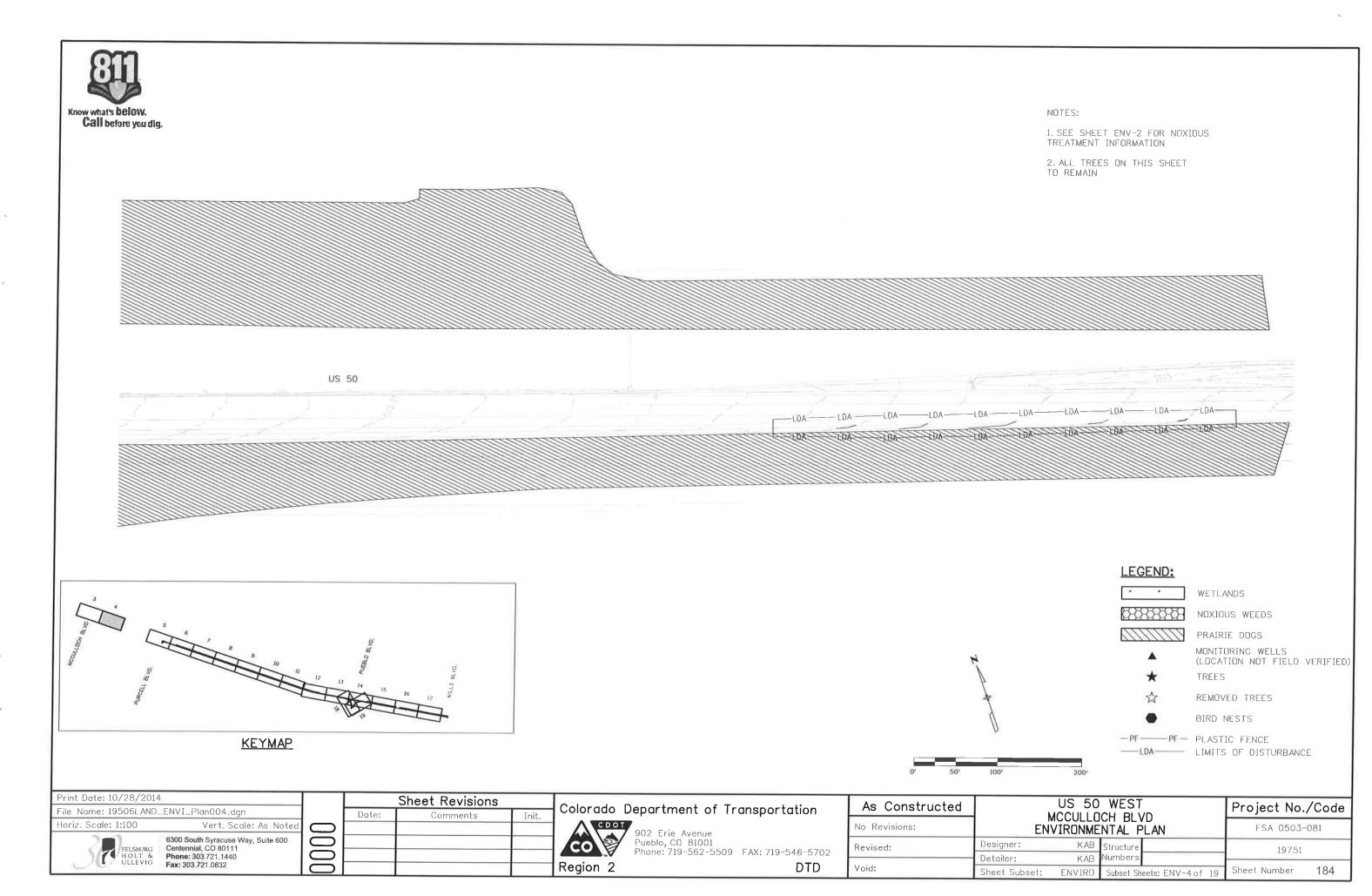
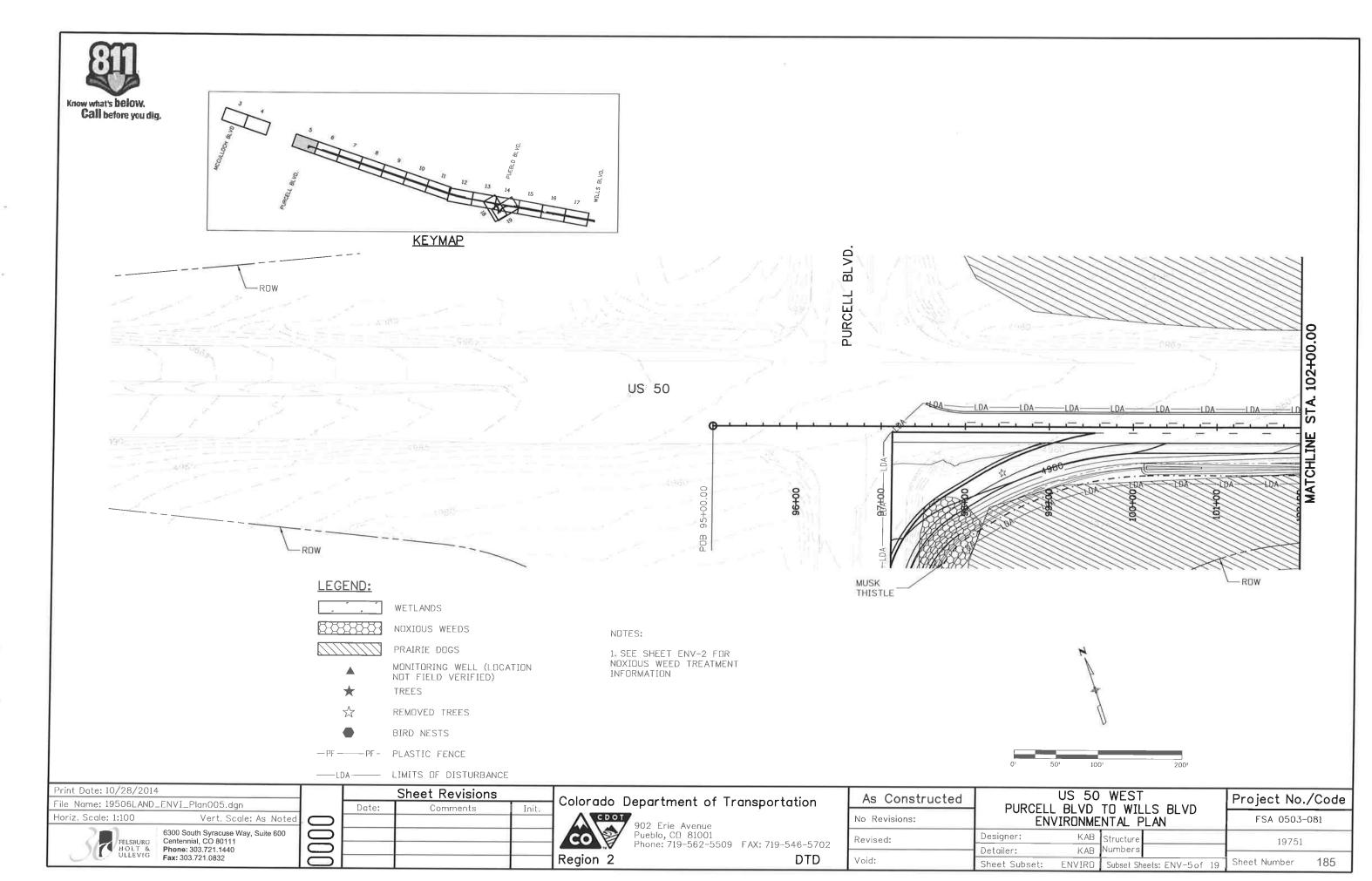
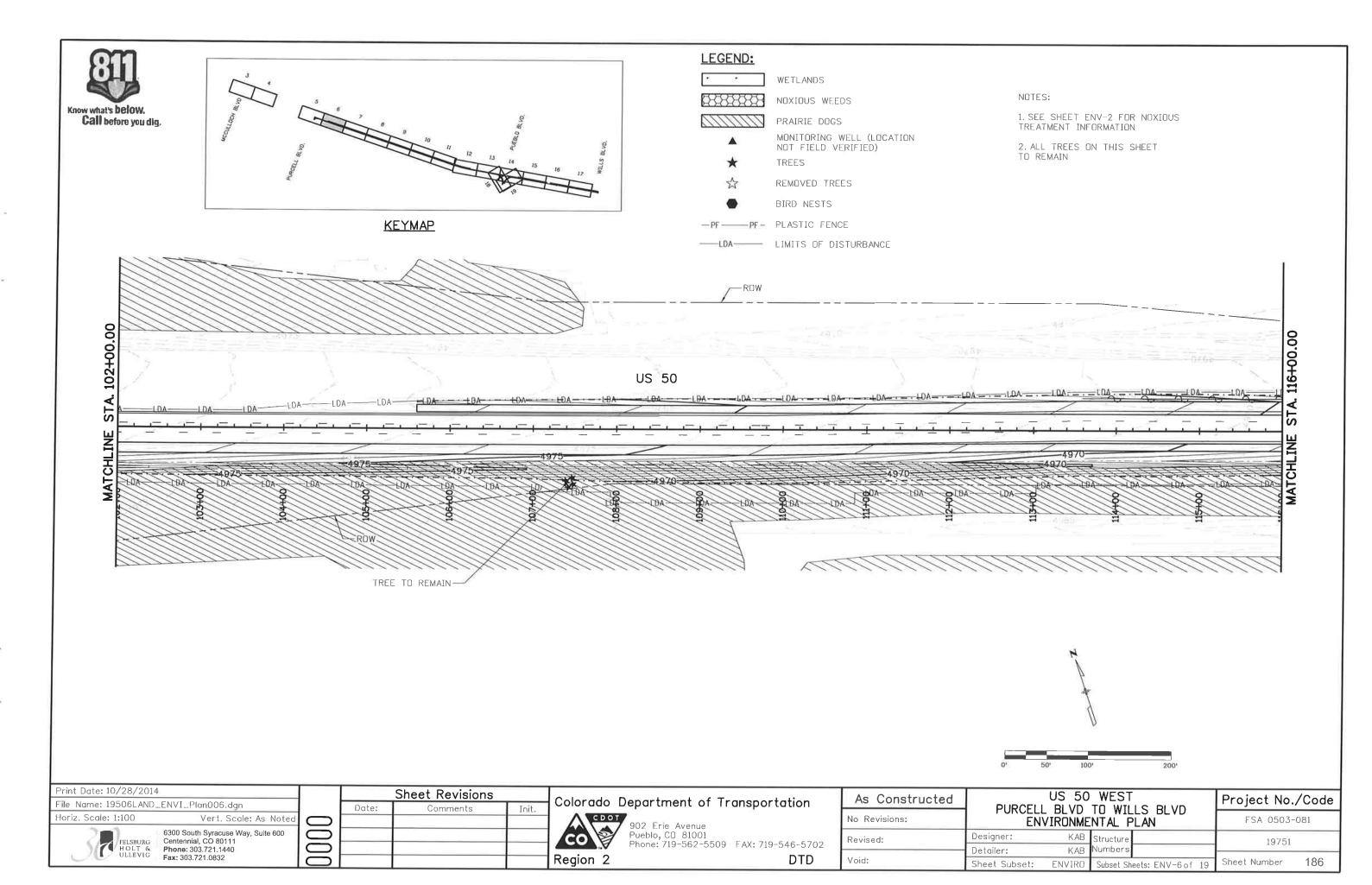
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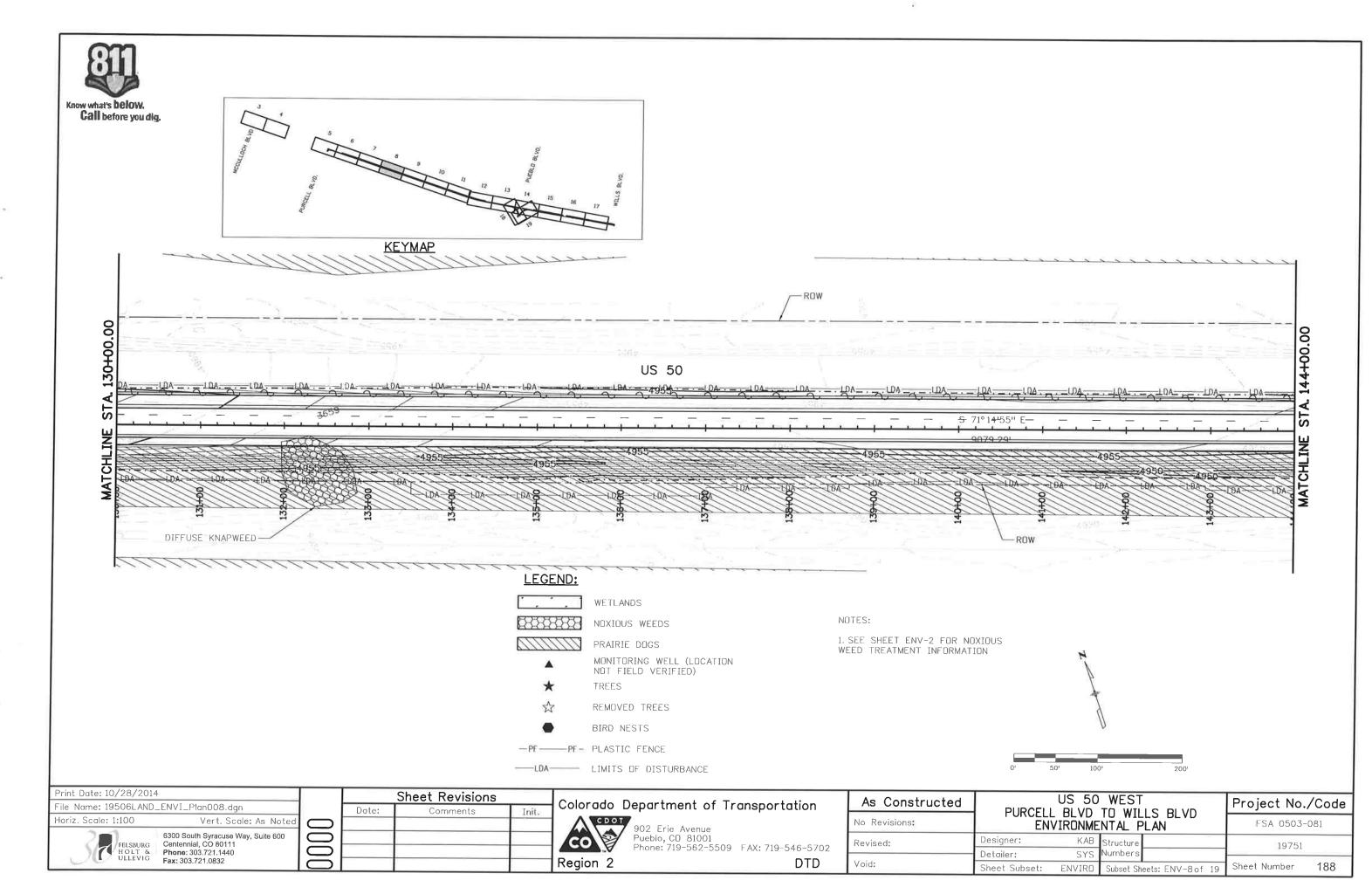
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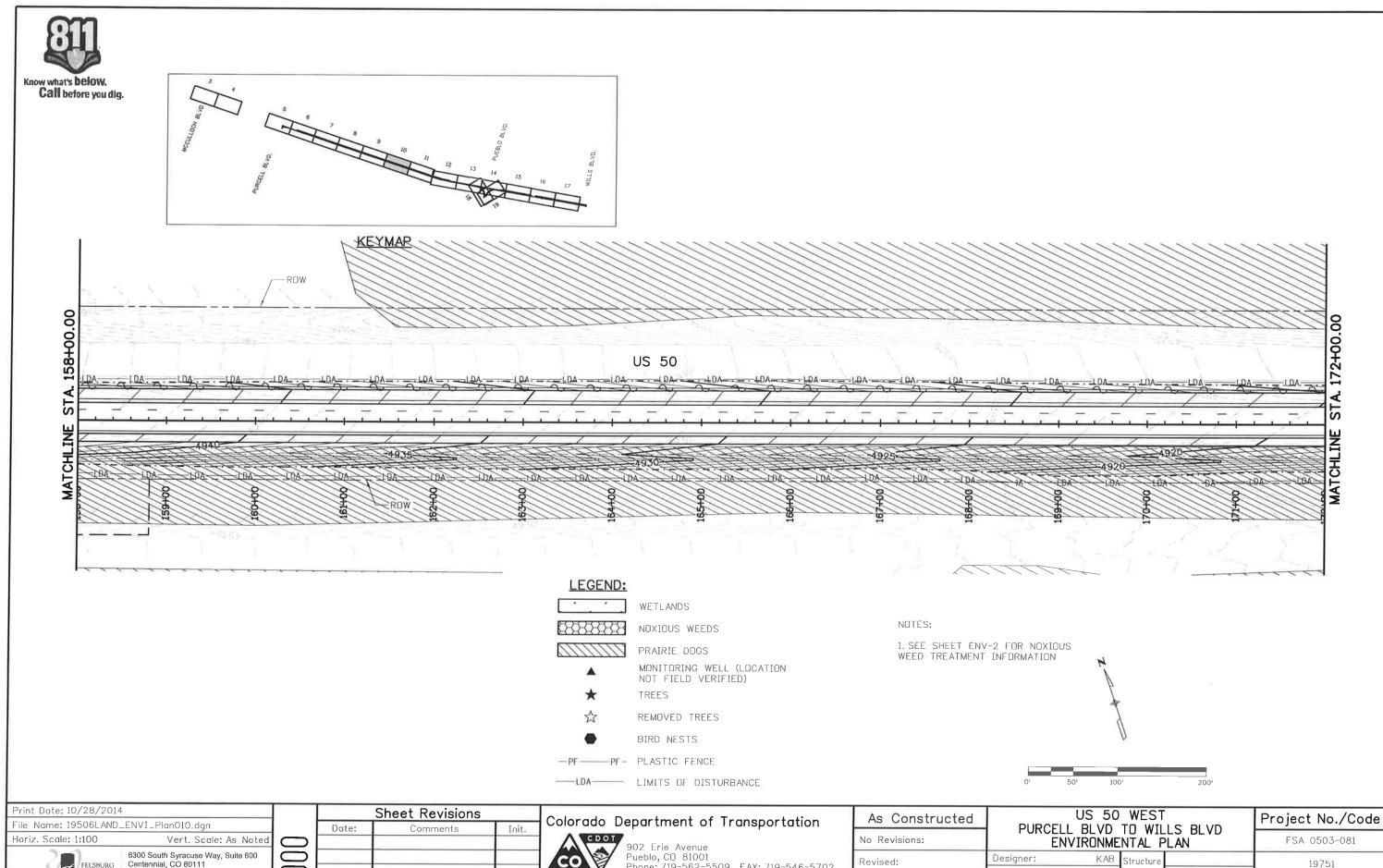


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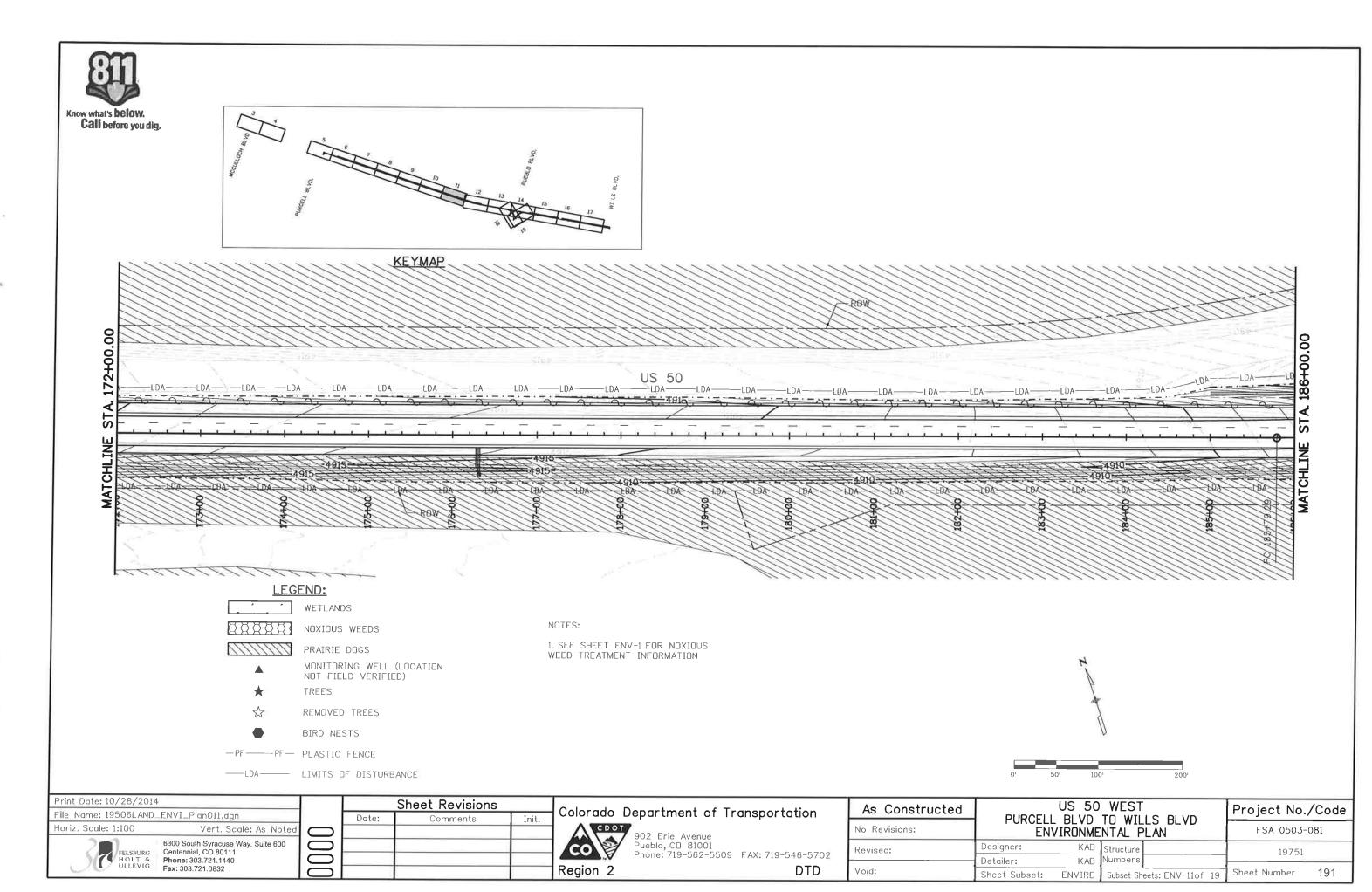
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902 Erie Avenue Pueblo, CD 81001 Phone: 719-562-5509 FAX: 719-546-5702 DTD

As Constructed	US 50 WEST PURCELL BLVD TO WILLS BLVD ENVIRONMENTAL PLAN				
No Revisions:					
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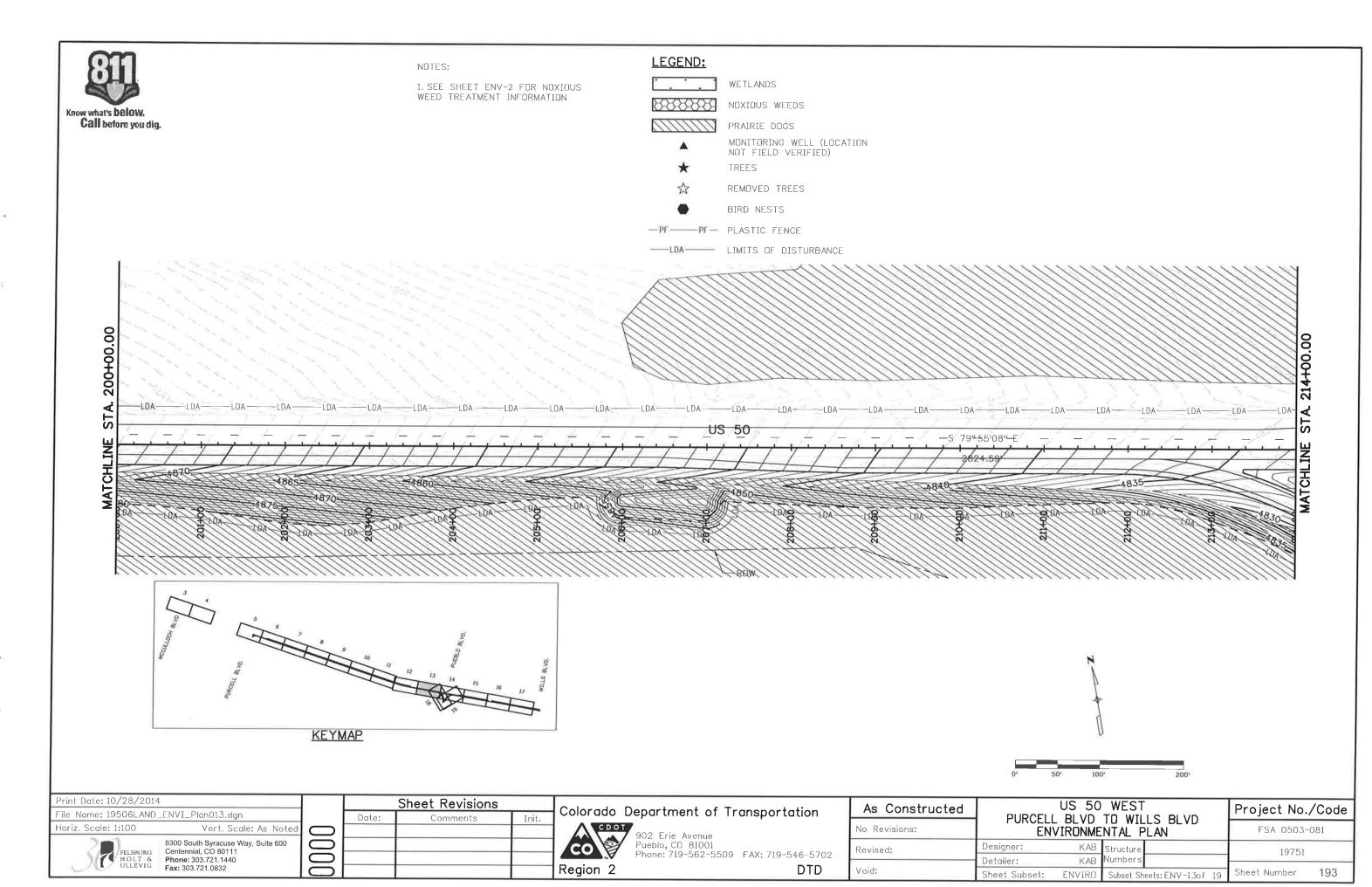
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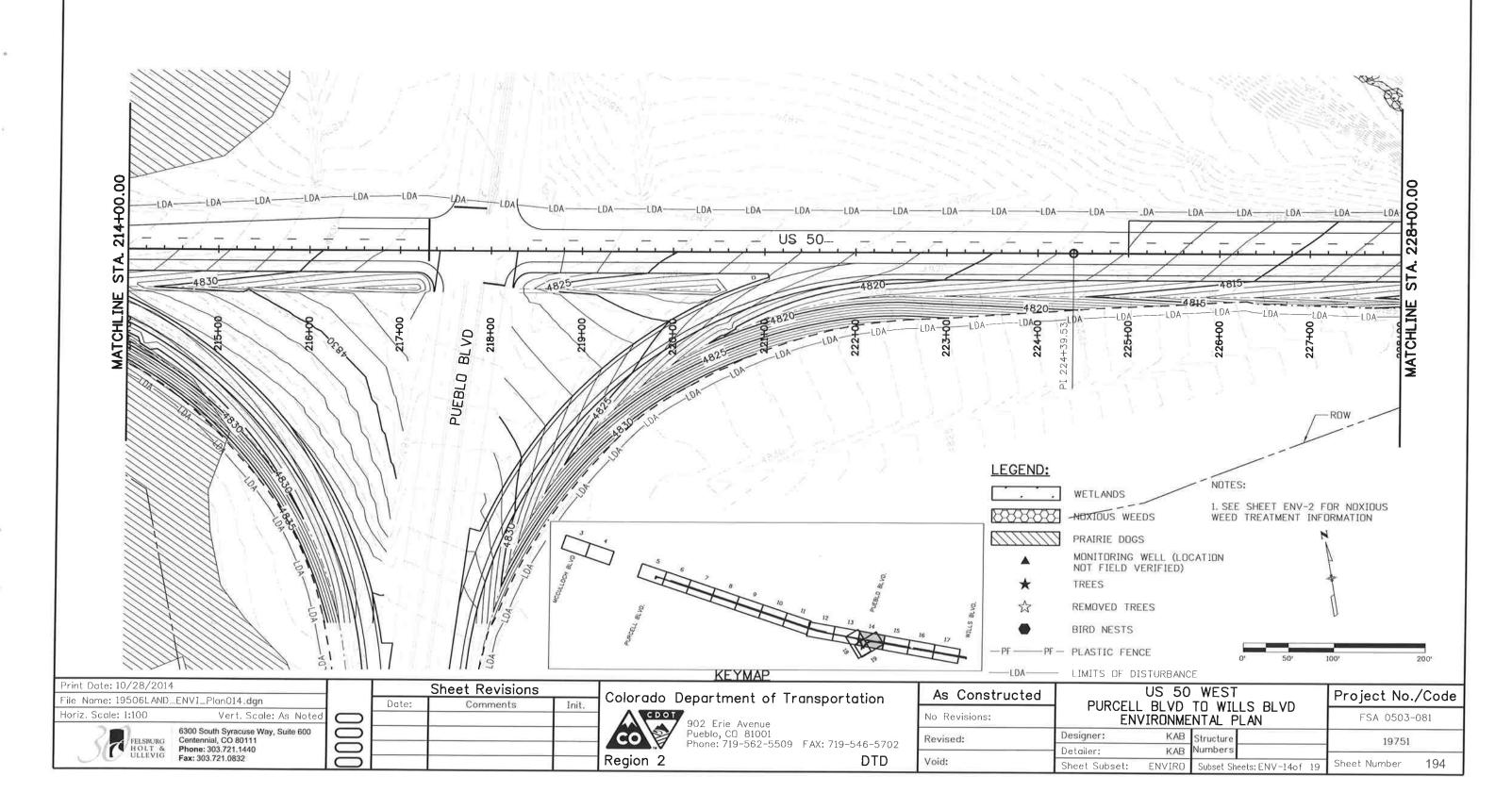
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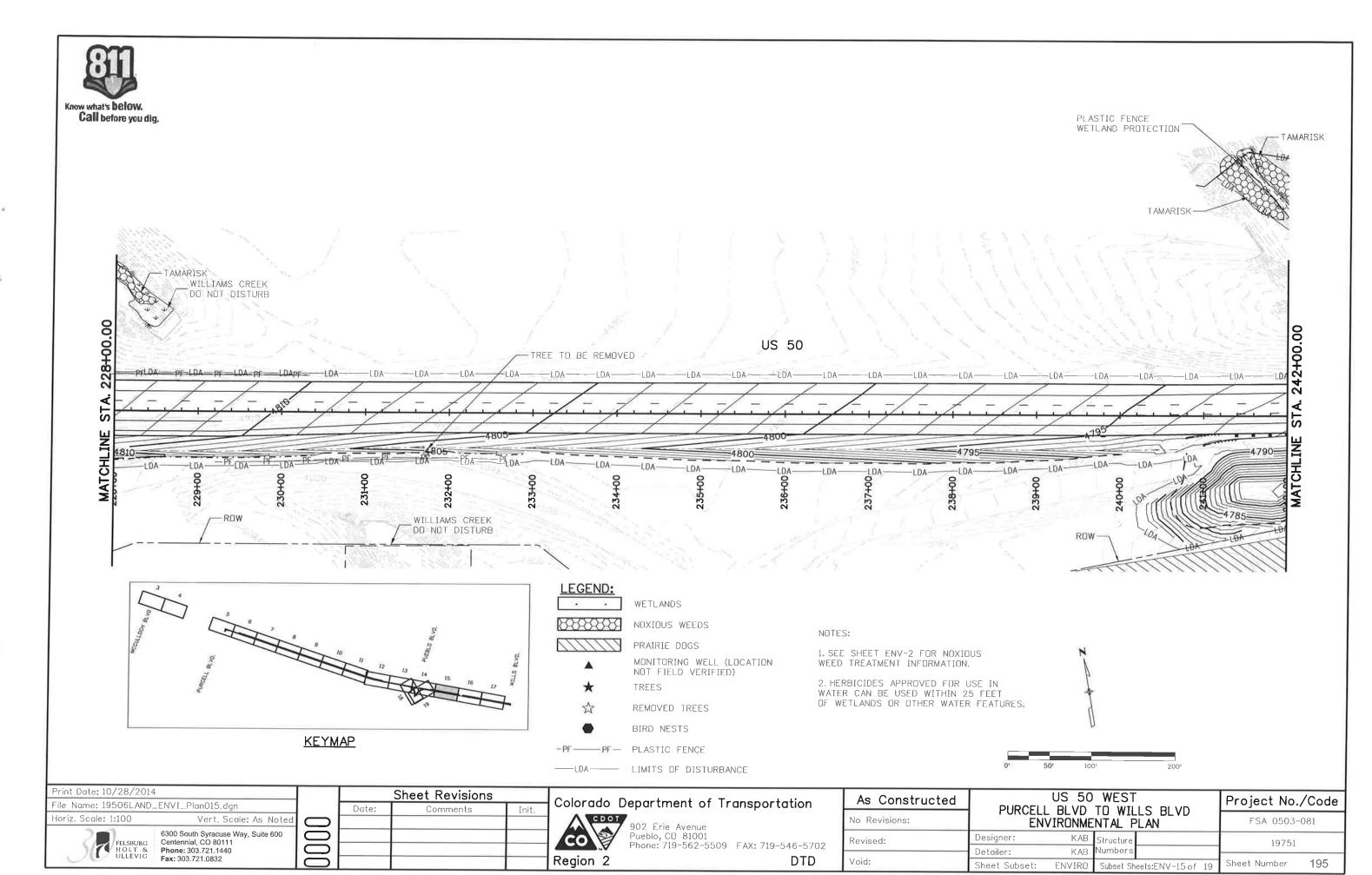
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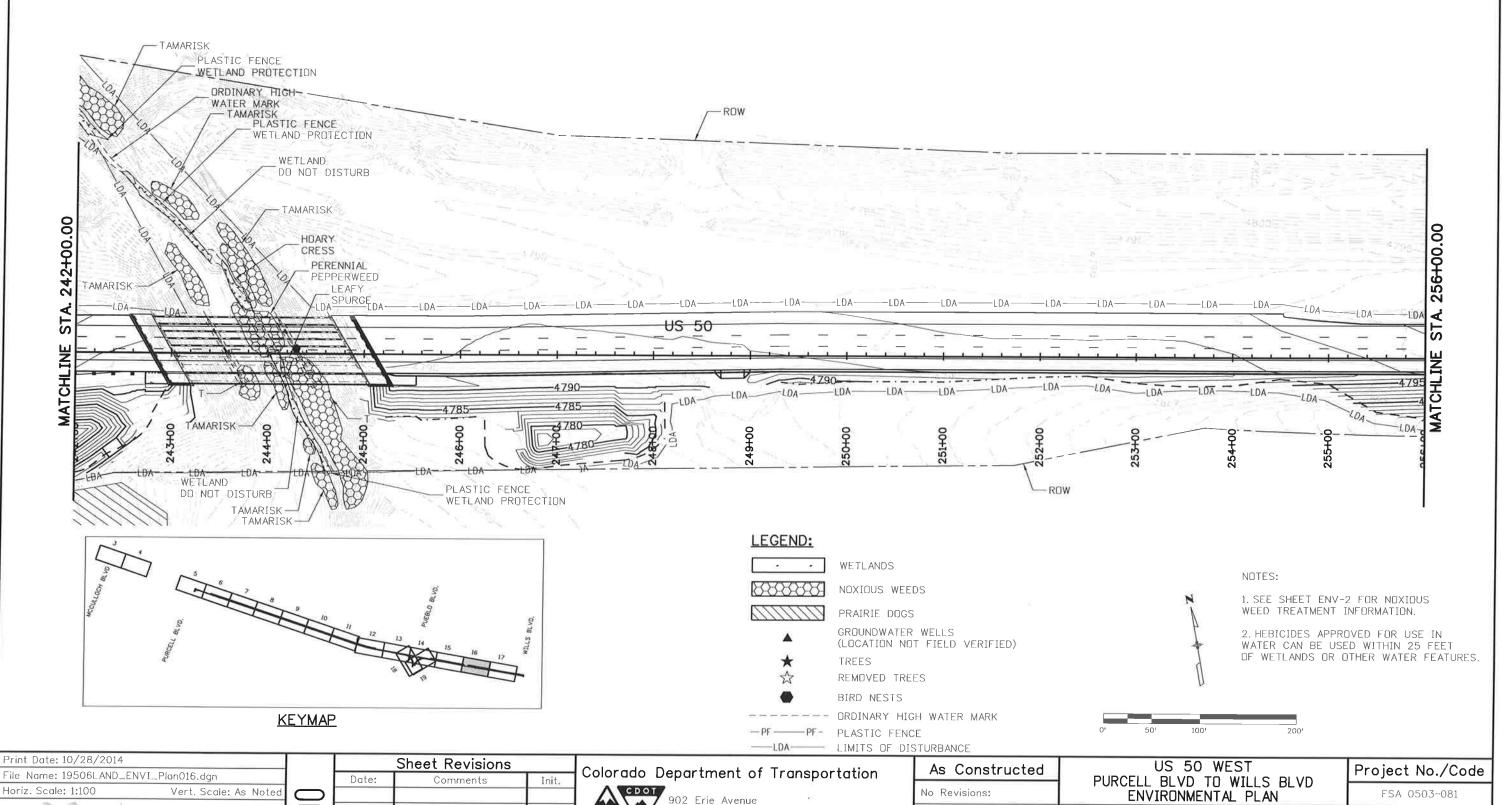


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Region 2

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Detailer:

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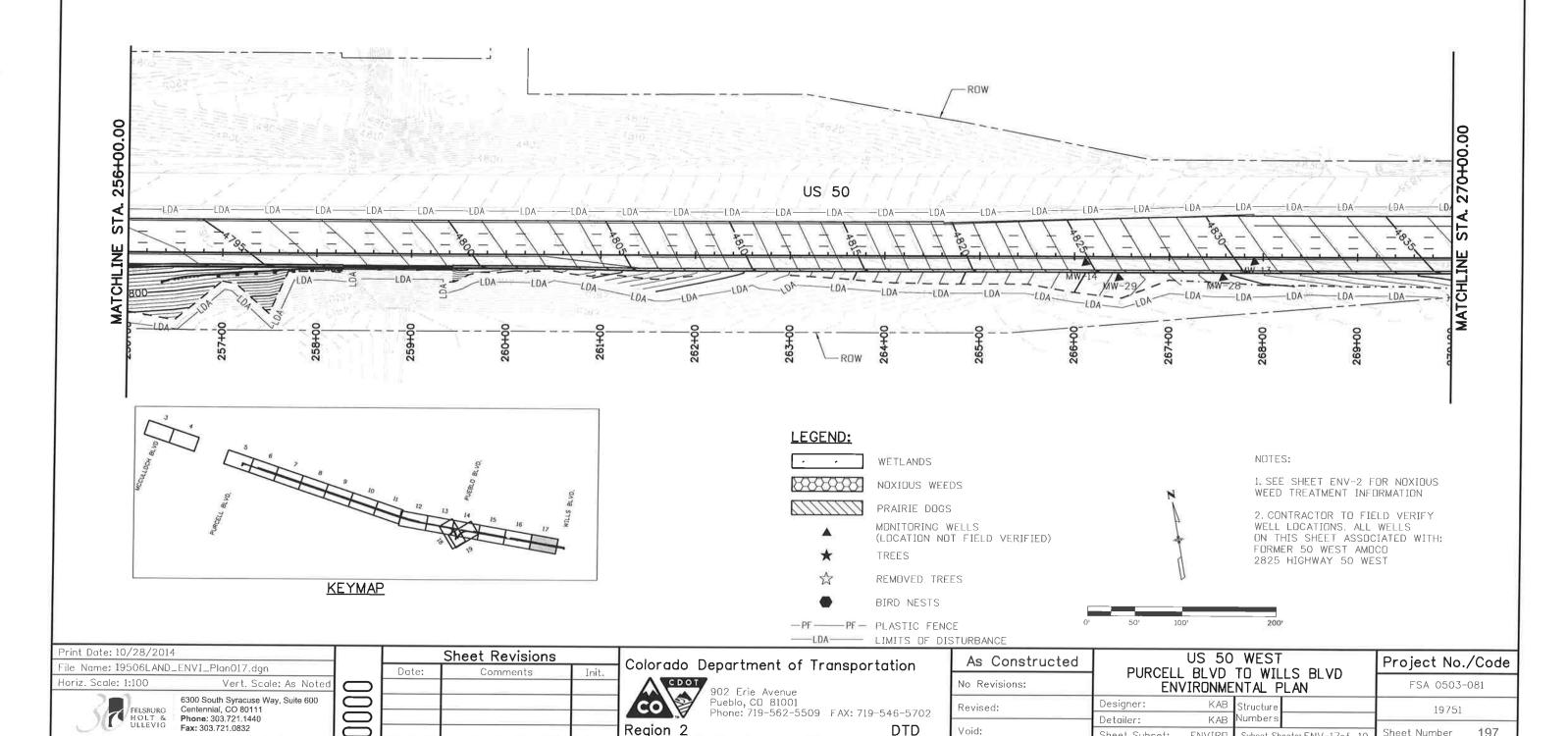
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NOTES:

Kate 12:13:11 PM J:V112407-01/00 - 19056\Landscape\_Environmental\Drawings\19506\LAND\_ENVI\_Plan018.dgn 10/7/2014 CDGT-DefaultPrinter\_V8i.pltcfg CDGT-PenTable.tb Know what's below.

Call before you dig.

# SWMP NOTES

### 1. SITE DESCRIPTION

For Information Only to fulfill the CDPS-SCP (Colorado Discharge Permit System - Stormwater Construction Permit) Update to reflect current project site conditions.

#### A. PROJECT SITE DESCRIPTION:

This project provides for an expansion of 3.3 miles of US-50 Eastbound, from Purcell boulevard to Wills Boulevard, from the current two lane section, to a three lane section. The construction of this project will include full depth replacement of part of one of the existing lanes, widening the roadway to add an additional 12' lane and 12' shoulder, grading to construct a swale to convey runoff to one of two water quality ponds, grading of the two water quality ponds, a storm sewer system to capture and convey the 100-year storm for the eastern portion of the project, and the bridge over Williams Creek will be widened. Once grading activities are completed soil retention blankets and seeding will be applied to the swale and embankment areas.

B. PROPOSED SEQUENCING FOR MAJOR ACTIVITIES: The US-50 Eastbound Widening Project will generally follow the following sequence for events that may impact water quality -

### C. ACRES OF DISTURBANCE:

- 1. Total area of construction site: 41.2 acres
- 2. Total area of disturbance: 28.6 acres
- 3. Acreage of seeding: 20 acres

#### D. EXISTING SOIL DATA:

Local soils are silt loams, silty clay loams and shale. The National Resource Conservation Service (NRCS) has mapped the area, and has identified the following soil types in the project area:

- CsE Cascajo Shale outcrop, 5 to 30 percent slopes. This soil type has a hydraulic soils grouping of "A" that is indicative of soils that are well drained and have low runoff potential and a high infiltration rate.
- Ha Haverson silt loam. This soil type has a hydraulic soils grouping of "B" that is indicative of soils that have a moderate infiltration rate due to the moderately fine to moderately coarse texture.
- He Heldt silty clay loam, 2 to 6 percent slopes. This soil type has a hydraulic soils grouping of "C" that is indicative of soils that have a slow infiltration rate, due to a layer that impedes the downward movement of water due to moderately fine to fine texture.
- LnA Limon silty clay loam, 0 to 2 percent slopes. This soil type has a hydraulic soils grouping of "C" that is indicative of soils that have a slow infiltration rate, due to a layer that impedes the downward movement of water due to moderately fine to fine texture.
- LvB Limon silty clay, 0 to 5 percent slopes. This soil type has a hydraulic soils grouping of "C" that is indicative of soils that have a slow infiltration rate, due to a layer that impedes the downward movement of water due to moderately fine to fine texture.
- MaB Manvel silt loam, 1 to 5 percent slopes. This soil type has a hydraulic soils grouping of "B" that is indicative of soils that have a moderate infiltration rate due to the moderately fine to moderately coarse
- MpA Manzanola silty clay loam, 0 to 2 percent slopes. This soil type has a hydraulic soils grouping of "C" that is indicative of soils that have a slow infiltration rate, due to a layer that impedes the downward movement of water due to moderately fine to fine texture.
- MsD Midway Shale outcrop, 1 to 9 percent slopes. This soil type has a hydraulic soils grouping of "D" that is indicative of soils having a very slow infiltration rate and high runoff potential, due to a prevalence of clays or other impervious materials, such as shales.
- Mv Minnequa Manvel loam. This soil type has a hydraulic soils grouping of "C" that is indicative of soils that have a slow infiltration rate, due to a layer that impedes the downward movement of water due to moderately fine to fine texture.
- PmE Penrose-Minnequa, 1 to 15 percent slopes. This soil type has a hydraulic soils grouping of "D" that is indicative of soils having a very slow infiltration rate and high runoff potential, due to a prevalence of clays or other impervious materials, such as shales.
- PrF Penrose Rock outcrop, 25 to 65 percent slopes. This soil type has a hydraulic soils grouping of "D" that is indicative of soils having a very slow infiltration rate and high runoff potential, due to a prevalence of clays or other impervious materials, such as shales.
- Ra Razor clay loam. This soil type has a hydraulic soils grouping of "C" that is indicative of soils that have a slow infiltration rate, due to a layer that impedes the downward movement of water due to moderately
- SaE Schamber gravelly sandy loam, 5 to 25 percent slopes. This soil type has a hydraulic soils grouping of "A" that is indicative of soils that are well drained and have a high infiltration rate.
- SgD Shingle silty clay loam, 1 to 9 percent slopes. This soil type has a hydraulic soils grouping of "D" that is indicative of soils having a very slow infiltration rate and high runoff potential, due to a prevalence of clays or other impervious materials, such as shales.
- Sh Stoneham loam. This soil type has a hydraulic soils grouping of "B" that is indicative of soils that have a moderate infiltration rate due to the moderately fine to moderately coarse texture.

## E. EXISTING VEGETATION, INCLUDING PERCENT COVER:

Existing vegetation consists of native grasses: Percent Cover of existing vegetation: 60%

POTENTIAL POLLUTANTS SOURCES: See First Construction Activities under Potential Pollutant Sources. The ECS shall prepare a list of all potential pollutants and their locations in accordance with subsection

## RECEIVING WATER:

1. Outfall locations:

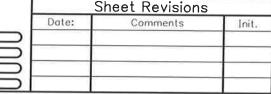
TABLE 1-1

Location	Size	Type	Receiving
97+67.59	30 inch	CSP	Outfall off project site, flows to Williams Creek
108+68.53	30 inch	CSP	Outfall off project site, flows to Williams Creek
122+68.72	27 inch	CSP	Outfall off project site, flows to Williams Creek
123+69.58	36 inch	CSP	3 Pipes, Outfall off project site, flows to Williams Creek
135+28.54	36 inch	CSP	3 Pipes, Outfall off project site. flows to Williams Creek
146+78.35	30 inch	CSP	Ditch outfall to Williams Creek
156+70.47	27 inch	CSP	Ditch outfall to Williams Creek
168+81.54	27 inch	CSP	Outfall off project site, flows to Williams Creek
177+71.79	27 inch	CSP	Outfall off project site, flows to Williams Creek
191+77.26	27 inch	CSP	Outfall off project site, flows to Williams Creek
198+43.96, RT 36'	27 inch	CSP	Conveys ditch flow from north to south side of US 50 to Williams Creek
199+07,77, LT 48'	27 inch	CSP	Conveys ditch flow from south to north side of US 50 to Williams Creek
207+07.17, LT 59'	27 inch	CSP	Conveys ditch flow from north to south side of US 50 to Williams Creek
213+83.49, RT 36'	27 inch	CSP	Williams Creek
215+36.99, RT 36'	27 inch	CSP	Conveys ditch flow from west to east side of Pueblo Blvd to Williams Creek
216+05.96, LT 86'	30 inch	CSP	Conveys ditch flow from south to north side of US 50 to Williams Creek
218+39.91, RT 36°	27 inch	CSP	Williams Creek
219+64.11, LT <b>65</b> *	21 inch	CSP	Conveys ditch flow from south to north side of US 50 to Williams Creek
222+54.93, RT 42'	27 inch	CSP	Williams Creek
247+63.91, RT 73'	27 inch	CSP	Ditch outfall To Wild Horse Dry Creek

- 2. Names of receiving water(s) on site and the ultimate receiving water: Williams Creek and Wildhorse Creek cross the project. The ultimate receiving water is the Arkansas River.
- 3. Distance ultimate receiving water is from project: Approx. 2.8 miles
- H. ALLOWABLE NON-STORMWATER DISCHARGES: No non-stormwater discharges are anticipated for this project.
  - 1. Groundwater and stormwater dewatering: Discharges to the ground of water from construction dewatering activities may be authorized provided that:
    - the source is groundwater and/or groundwater combined with stormwater that does not contain pollutants
    - by the source and BMPs are identified in the SWMP
    - c discharges do not leave the site as surface runoff or to surface waters.
  - 2. If discharges do not meet the above criteria a separate permit from the Department of Health will be required. Contaminated groundwater requiring coverage under a separate permit may include groundwater contaminated with pollutants from a landfill, mining activities, industrial pollutant plumes, underground storage tank, etc.
- I. ENVIRONMENTAL IMPACTS:
  - 1. Wetland Impacts: NO
  - 2. Stream Impacts: YES
  - 3. Threatened and Endangered Species: Suitable habitat present along Wild Horse Dry Creek and Williams Creek for the Northern Leopard Frog and Plains Leopard Frog. Triploid Colorado Checkered Whiptail (State Species of Special Concern), and Massasauga Rattlesnake. Please refer to Environmental Notes for specific requirements for special status species.

Frint Date. 10/20/2014			
File Name: 19056DES_SWI	MP_Notes.dgn		П
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JFS F	J. F. SATD AND ASSDCIATES 5898 South Ropp Street Littleton, Colorado 80120	)	

Drint Date: 10/28/2014





Region 2

	As Constructed	US 50 WEST PURCELL BLVD. TO WILLS BLVD.			Project No./Code	
	No Revisions:	SWMP NOTES		FSA 0503-081		
ı	Revised:	Designer:	LK	Structure	19751	
ŀ		Detailer:	LK	Numbers	15701	
	Void:	Subset:	SN	Subset Sheets: SN1 of 5	Sheet Number 200	