



# Public Services

128 North Second Street • Fourth Floor Courthouse • Yakima, Washington 98901  
(509) 574-2300 • 1-800-572-7354 • FAX (509) 574-2301 • [www.co.yakima.wa.us](http://www.co.yakima.wa.us)

VERN M. REDIFER, P.E. - Director

March 11, 2008

Washington Utilities  
& Transportation Commission (WUTC)

Attn: Kathy Hunter  
P.O. Box 47250  
Olympia, WA  
98504-7250

TR-080479  
RECEIVED  
GENERAL MANAGEMENT  
2008 MAR 13 AM 9:14  
STATE OF WASH.  
UTIL. AND TRANSP.  
COMMISSION

Dear Ms. Hunter:

Yakima County respectfully submits its *Petition to Install Highway-Rail Grade Crossing Active Warning Devices and Disbursement of Funds from the Grade Crossing Protective Fund for the White Swan Branch Line / Barkes Road Crossing.*

The WSB/Barkes Road Crossing [USDOT X-ing # 099246Y and UTC X-ing # 39A14.40] is a significant safety project in the Middle-Western parts of the Yakima Valley. Part of a greater road detour project, the installation of an active warning device will increase the safety and protection of the motoring public and the railroad.

If you have any questions or require additional information, please contact me at 509.574.2344 or [alan.adolf@co.yakima.wa.us](mailto:alan.adolf@co.yakima.wa.us).

Sincerely,

Alan Adolf  
Sr. Transportation Planner

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

	)	DOCKET NO. TR-
	)	
<u>Yakima County (Roads Department)</u>	)	PETITION TO INSTALL HIGHWAY-
Petitioner,	)	RAIL GRADE CROSSING ACTIVE
	)	WARNING DEVICES AND
vs.	)	DISBURSEMENT OF FUNDS
Toppenish, Simcoe & Western Railroad	)	FROM THE GRADE CROSSING
(White Swan Branch Rail Line)	)	PROTECTIVE FUND
c/o Yakima County	)	
	)	
<u>Respondent</u>	)	USDOT CROSSING # 099 246Y
	)	
	)	UTC CROSSING # 39A14.40
.....		

The Petitioner asks the Washington Utilities and Transportation Commission to approving the installation of highway-rail grade crossing warning signals and disbursing funds from the Grade Crossing Protective Fund.

***Section 1 – Petitioner’s Information***

<u>Yakima County Public Services (County Road Department)</u>
Petitioner
<u>128 N. 2<sup>nd</sup> Street, 4<sup>th</sup> Floor, Courthouse,</u>
Street Address
<u>Yakima, WA 98901</u>
City, State and Zip Code
<u>Same as Above</u>
Mailing Address, if different than the street address
<u>Gary N. Ekstedt, P.E. – County Road Engineer</u>
Contact Person Name
<u>(509) 574-2300      gary.ekstedt@co.yakima.wa.us</u>
Contact Phone Number and E-mail Address

**Section 2 – Respondent's Information**

Toppenish, Simcoe & Western Railroad (Owned by Yakima County)  
Respondent

128 N. 2<sup>nd</sup> Street, 4<sup>th</sup> Floor, Courthouse  
Street Address

Yakima, WA 98901  
City, State and Zip Code

Same as above  
Mailing Address, if different than the street address

Ronald Gamache, Chairman, Yakima County Board of County Commissioners  
Contact Person Name

(509) 574-1500      ronald.gamache@co.yakima.wa.us  
Contact Phone Number and E-mail Address

**Section 3 – Crossing Location**

1. Existing highway/roadway Barkes Road (Yakima County)

2. Existing railroad TSWR -- White Swan Branch Line (Yakima County, Washington)

3. USDOT Crossing No. 099 246Y      UTC Crossing No. 39A14.40

4. Located in the NE 1/4 of the NE 1/4 of Sec. 35 , Twp. 11 , Range 17 W.M.

5. GPS location, if known Lat: 46 24 15.53      Long: -120 38 57.48

6. Railroad mile post (nearest tenth) WSBL M.P. 14.4 (Approx.)

7. City \_\_\_\_\_ County Yakima County

**Section 4 – Current Highway Traffic Information**

1. Name of highway Barkes Road

2. Road authority Yakima County Public Services

3. Average annual daily traffic (AADT) 30 (2007) & 1500 (2008 – est.)

4. Number of lanes Two Lanes

5. Roadway speed 50 Mph

6. Is the crossing part of an established truck route? Yes  No

All area roads are farm-to-market, so all roads (including Barkes Road) are truck routes. Fort Road (south) and Branch Road (immediately north) are both classified as Class 4 – [1.2 to 3.6 Trucks/hr.] Truck Emphasis Routes. As a detour route, Barkes Road will, in practicality, undertake such a designation. Yakima County, having paved the route, may designate Barkes Road as a Class 5 after the detour is lifted.

7. If so, trucks are what percent of total daily traffic? 2%

8. Is the crossing part of an established school bus route? Yes  No

9. If so, how many school buses travel over the crossing each day? 2 (two)

Per Mt. Adams School District (#209), one morning and one afternoon bus route utilizes this segment of Barkes Road on a daily basis.

10. Describe any changes to the information in 1 through 7, above, expected within ten years:

In May 2008, Barkes Road will be paved to act as a detour route for a Fort Road bridge closure. This will result in an increase of 1500-1750 ADT per day for the length of the bridge reconstruction project. Intersecting roads [Fort Rd. to the South and Branch Road to the North] are both federally classified as rural arterials that service general, industrial, agricultural, and logging traffic on a daily basis.

Yakima County projects a permanent increase in traffic on Barkes Road following the termination of the detour route designation whereas this route is the westernmost north/south connection between Fort and Branch Roads prior to the White Swan community (six miles further west).

**Section 5 – Current Crossing Information**

1. Railroad company Yakima County Public Services

2. Type of railroad at crossing     **Common Carrier**         **Logging**         **Industrial**  
 **Passenger**                     **Excursion**

3. Type of tracks at crossing     **Main Line**         **Siding or Spur**

4. Number of tracks at crossing One

5. Average daily train traffic, freight Two

Authorized freight train speed 25mph        Operated freight train speed 25 mph

6. Average daily train traffic, passenger [0]

Authorized passenger train speed 30mph        Operated passenger train speed 30 mph

7. Describe any changes to the information in 1 through 4, above, expected within ten years:  
Yakima County does not project any changes to the type of use stated in # 1 - # 4 (stated above). The WSBL terminates approximately 7 miles west of this crossing at the Yakama Forest Product Saw Mills. However, amount of use may change as the county develops partnerships with potential shippers.

8. What is the available sight distance from the stop bar (or 25 feet from the tracks if no stop bar) on both approaches to the crossing?  
Available sight distance is unlimited from the stop bar on both approaches to the crossing.

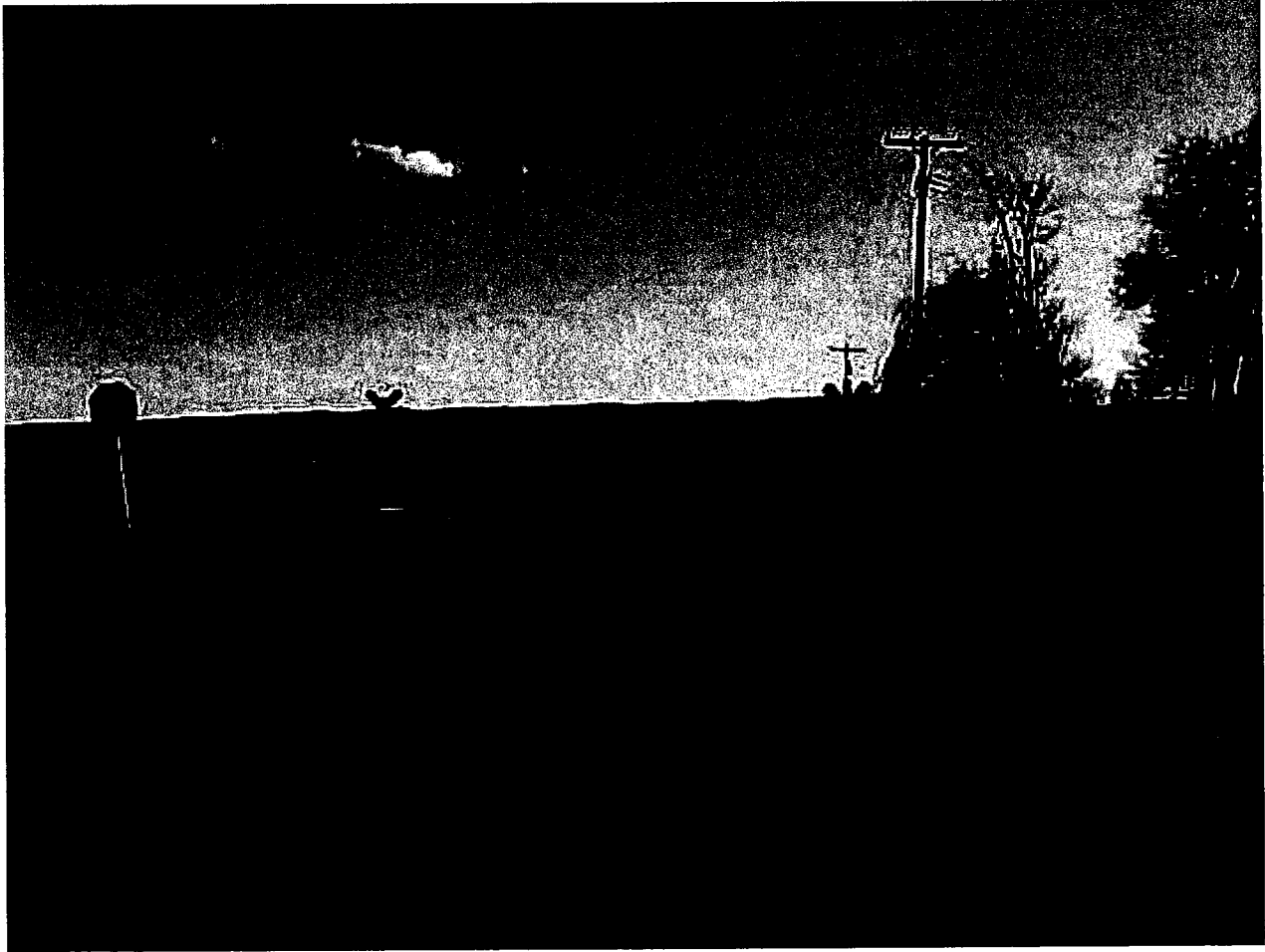
9. If the sight distance is less than 400 feet, describe the structures, roadway or track curvature, visual obstacles or other characteristics that limit sight distance.  
A residential structure (207 feet SW of the crossing) and vegetation partially blocks the view of north bound Barks Road Traffic approaching the crossing. However, there is unobstructed visibility of the western approaches of the track at least 975 feet (and beyond) south of the Barks Road/ WSBL Crossing.

## *Section 6 – Current Warning Devices*

1. Provide a complete description of the warning devices currently located at the crossing, including signs, gates, lights, train detection circuitry and any other warning devices.

Current warning devices at the Barkes Road / WSBL Crossing consist solely of a set of FRA-standard cross-bucks located on the southern and northern facing lanes of Barkes Road.

Yakima County maintains a standard traffic “Stop” sign at the intersection of Barkes and Branch Roads.



### ***Section 7 – Description of Proposed Changes***

1. Describe in detail the number and type of automatic signals, gates or proposed warning devices, including the proposed circuitry. Include the funding source for the proposed installation.

Yakima County will be installing a standard bi-directional (two-lane) active crossing gate system including shoulder mounts, gates and a 40-foot concrete crossing at the Barkes Road / WSBL Railroad Crossing. Materials for the project will be relocated from the Naches Branch Line ([NBL] – also owned by Yakima County). Funding comes from Yakima County's TSWR Fund (122) account in the amount of \$37,750.00.

Barkes Road reconstruction is funded through local road funds.

Quantities for the active crossing gate system are as follows:

- > One Set (two) of crossing gates
- > One Set (two) of electronic cross-bucks
- > One Set (two) of shoulder mounts
- > One 40-foot concrete crossing
- > One [Safetran Systems Corp.] electronics box (See photo)

The surplus crossing gate system originally was located at the NBL / Old Naches Hwy crossing [M.P. 5.2 -- USDOT # 103902R] and the concrete crossing panels will be relocated from the Lakeside Court (M.P. 3.60 - City of Yakima) / NBL crossing. The NBL was railbanked at MP 2.97.

### ***Section 8 – Illustration of Proposed Warning Devices***

Attach a detailed diagram, drawing, map or other illustration showing the proposed warning devices.

See Attached Design Documents

**Section 9 – Project Cost Information**

1. Breakdown of estimated total cost.

See question #2 (below)

2. Names of the parties contributing to the project and the amount each is contributing.

Project Costs (Crossing Only)

-- Crossing Gate System	-- \$	<b>0.00</b>	-- No Cost (Existing County Inventory)
-- Installation	--	<b>\$57,750.00</b>	
	--	<b>( \$37,750.00)</b>	-- TWSR Fund (122) – [Yakima. Co.]
	--	<b>\$20,000.00</b>	-- <b>Installation Shortfall</b>

**Section 10 – Project Completion Date**

Project completion date:

Yakima County will install the shoulder mounts, gates, and 40-foot concrete crossing within 120 days of receipt of funds.

Project Timeline:

Barkes Road Reconstruction Award:	February 2008
Reconstruct Barkes Road:	April 2008
Award Railroad Crossing Contract:	April 2008
Reconstruct Railroad Crossing:	May 2008
Completion of Barkes & Crossing:	May 2008
Closure of Fort Road (Detour):	July 2008



**Section 11 – Waiver of Hearing by Respondent**

**Waiver of Hearing**

The undersigned represents the Respondent in the petition to install highway-rail grade crossing warning signals at the following crossing.

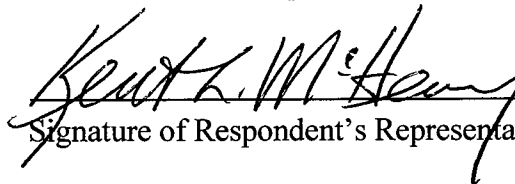
USDOT Crossing No. 099246Y UTC Crossing No. 39A14.40

We have investigated the conditions at the crossing. We are satisfied the conditions are the same as described by the Petitioner in this docket. We agree the warning signals should be installed and consent to a decision by the commission without a hearing.

Dated at Yakima, Washington, on the 11<sup>th</sup> day of MARCH, 20 08.

Kent McHenry, P.E.  
Toppenish, Simcoe, & Western Railroad  
(White Swan Branch Line) c/o Yakima County

Printed name of Respondent

  
Signature of Respondent's Representative

Transportation Engineering Manager

Title

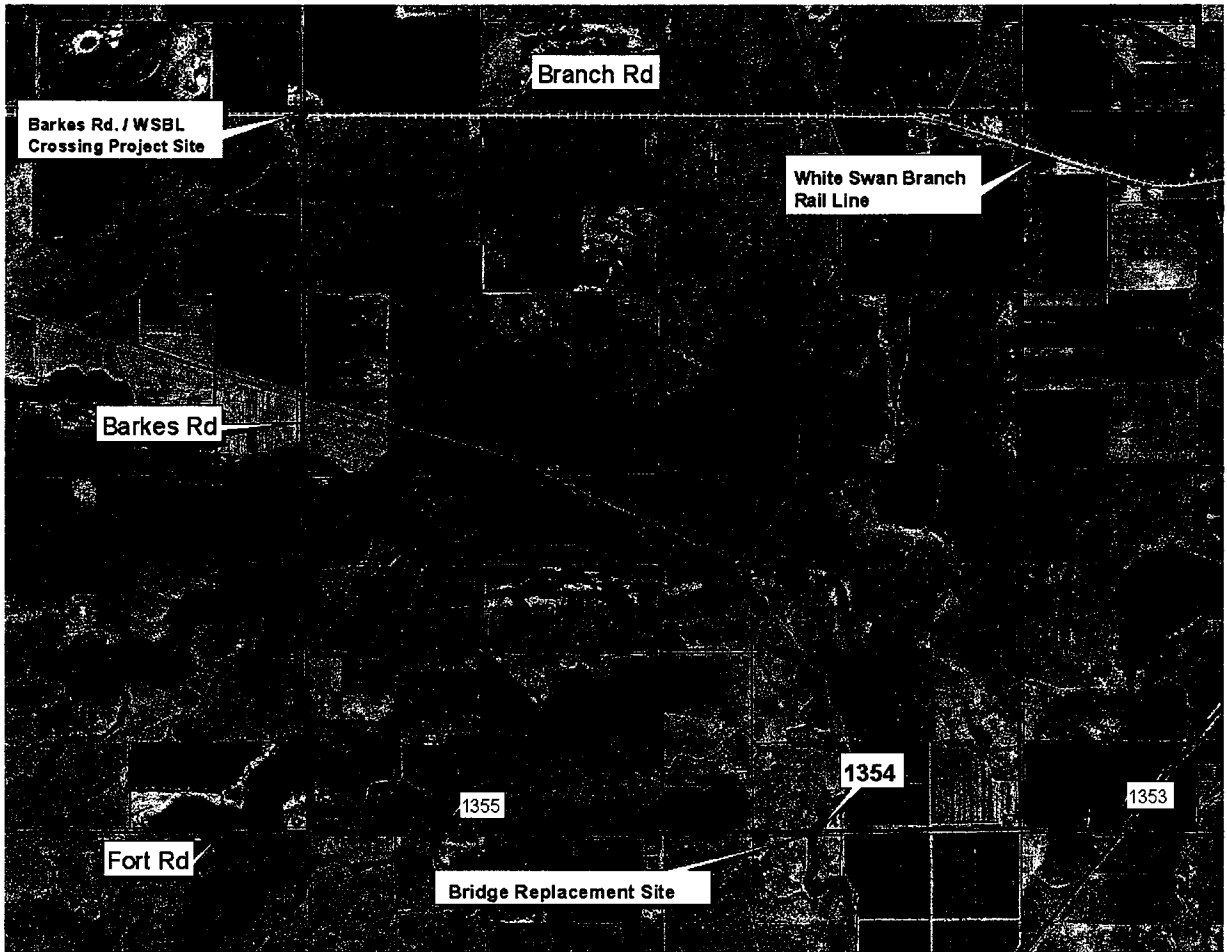
(509) 574-2300 [kent.mchenry@co.yakima.wa.us](mailto:kent.mchenry@co.yakima.wa.us)

Phone number and e-mail address

128 N. 2<sup>nd</sup> Street, 4<sup>th</sup> Floor, Courthouse

Yakima, WA 98901

Mailing address



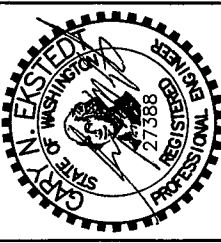
Satetion Systems Corp.  
10000 W. 10th Ave., Suite 100  
Minneapolis, MN 55426  
PART NO. 100-1000  
LIGHTING TRANSFORMER  
PRIMARY 115V/200V  
SECONDARY 12V/24V/36V/48V

MOTION SENSOR  
62590  
Safarim



**BARKES ROAD IMPROVEMENT PROJECT**  
 FORT ROAD TO BRANCH ROAD  
 C 3204

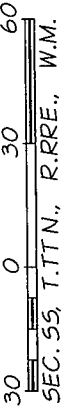
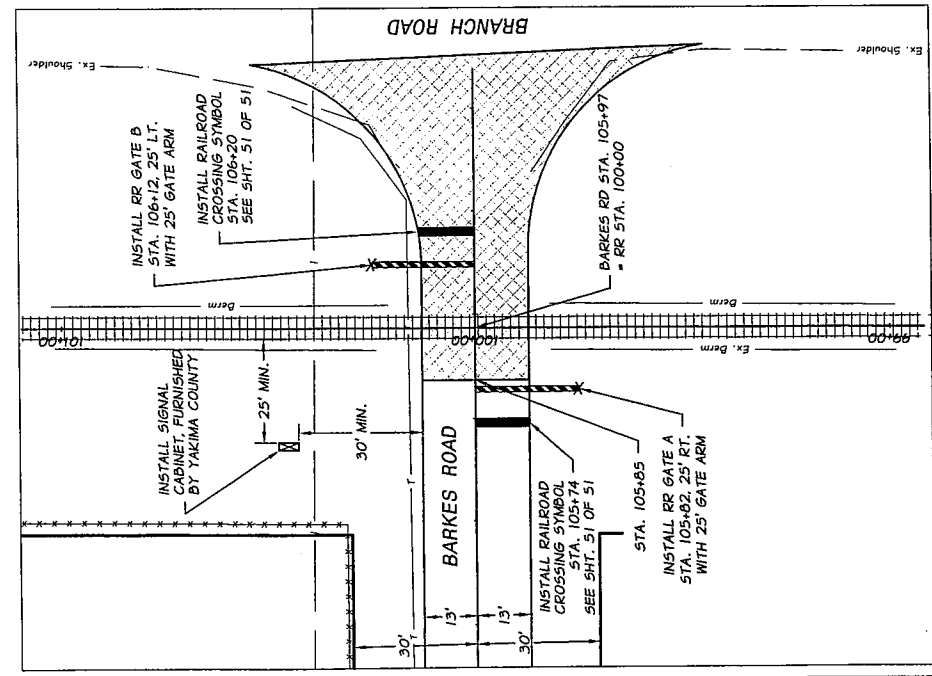
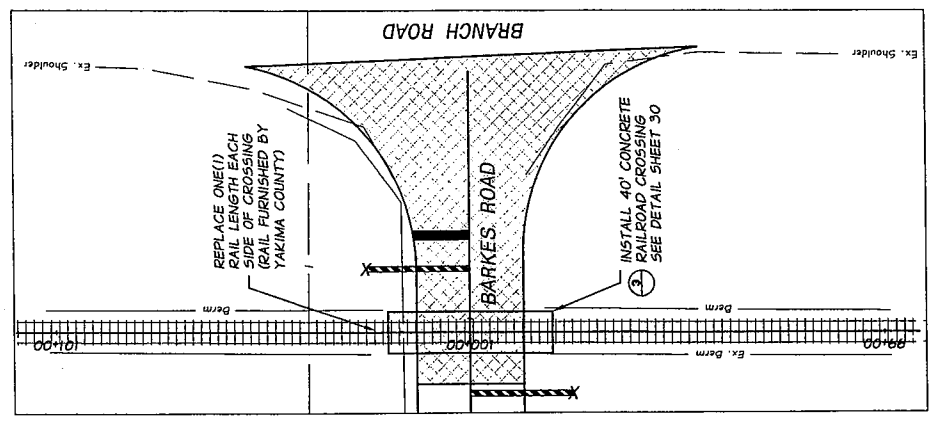
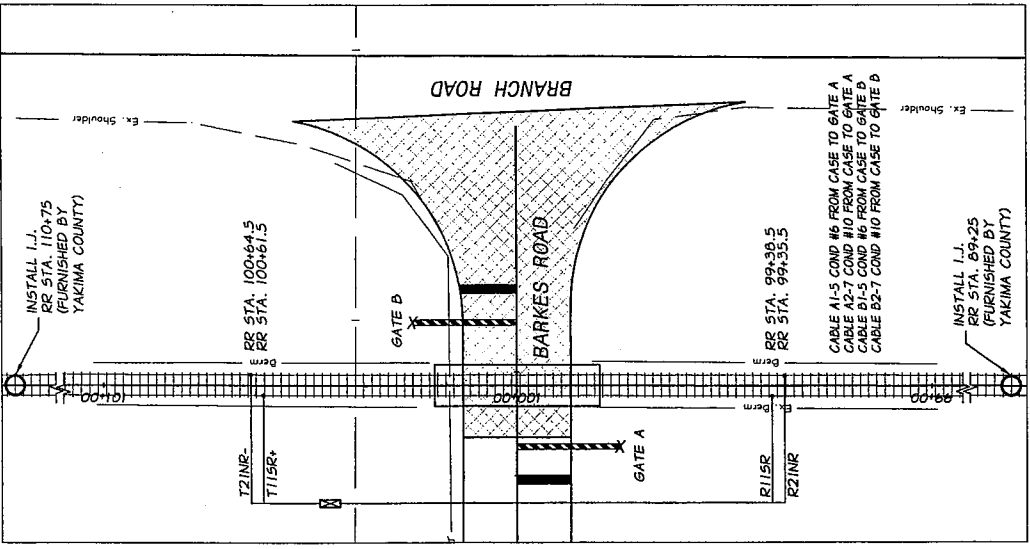
PREPARED UNDER THE DIRECTION OF:



EXPIRES 8/13/09  
 COUNTY ENGINEER  
 DATE: 2-5-08

PROJECT ENGINEER:	KENT MCHENRY
DRAWN BY:	D. KINCAID
CHECKED BY:	K. FRENZEL
REVISIONS:	

**RAILROAD GRADE CROSSING IMPROVEMENTS**



SEC. 55, T. 11 N., R. 11 E., W. 1/2



**BARKES ROAD IMPROVEMENT PROJECT**  
 FORT ROAD TO BRANCH ROAD  
 C 3204

PREPARED UNDER THE DIRECTION OF:  
**CAROL EKSTEDT**  
 REGISTERED PROFESSIONAL ENGINEER  
 NO. 27388  
 EXPIRES 8/13/09  
 COUNTY ENGINEER  
 DATE: 2-5-08

PROJECT ENGINEER:  
 KENT MCHEURY  
 DRAWN BY:  
 D. ENCAID  
 K. FRELIZEL  
 REVISIONS:

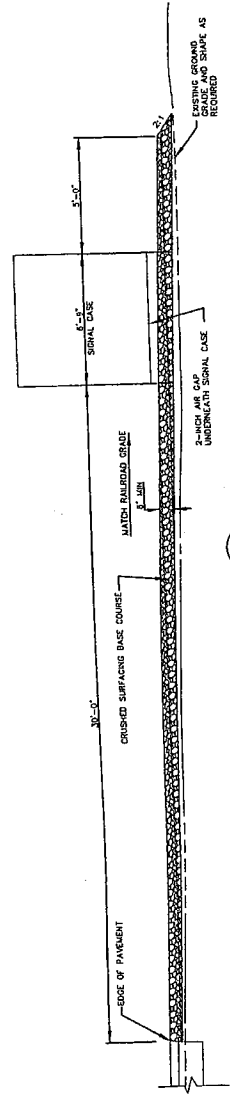
**RAILROAD GRADE CROSSING IMPROVEMENTS**

SHEET 30 OF 51

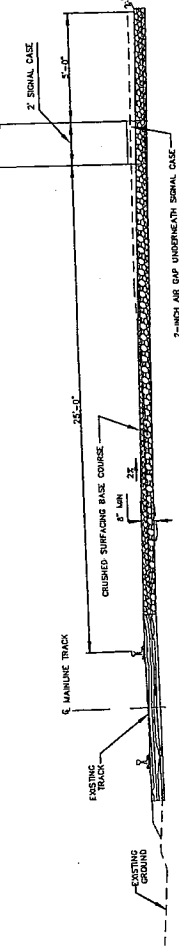
- GENERAL NOTES**
- ALL TRACK WORK REQUIREMENTS SHOWN ON THESE DRAWINGS AND NOT OTHERWISE DETAILED SHALL BE ACCOMPLISHED AS SPECIFIED IN THE 2007 AMERICAN RAILROAD ENGINEERING MANUAL, PART 10, TRACKWORK PLANS AND AREAS MANUAL FOR RAILWAY ENGINEERING.
  - AT ALL TIES TO EXISTING TRACK, THE CONTRACTOR SHALL PROVIDE A SMOOTH PROFILE WITHOUT SHARP GRADE BREAKS.
  - THE TRACK PROFILES AND ALL ELEVATIONS LISTED IN THIS DRAWING SHALL BE REFERRED TO TOP OF RAIL, UNLESS OTHERWISE NOTED.
  - WORK PERFORMED WITHIN THE CLEARANCE ENVELOPE, PER THE RAILROAD ENGINEERING MANUAL, SHALL BE PERFORMED UNDER FLAG PROTECTION AS PROVIDED BY THE WASHINGTON CENTRAL RAILROAD UNLESS OTHER SAFETY PROVISIONS ARE ESTABLISHED BY THE ENGINEER.
  - THE CONTRACTOR SHALL ADHERE TO THE MINIMUM SAFETY REQUIREMENTS FOR CONTRACTORS WORKING ON RAILROAD PROPERTY. THIS DOCUMENT IS INCLUDED IN THE SPECIAL PROVISIONS. IN ADDITION, THE CONTRACTOR SHALL ADHERE TO THE ADDITIONAL SAFETY REQUIREMENTS FOR TRACK MUST BE SAFETY QUALIFIED PRIOR TO THE START OF WORK.

**ABBREVIATIONS**

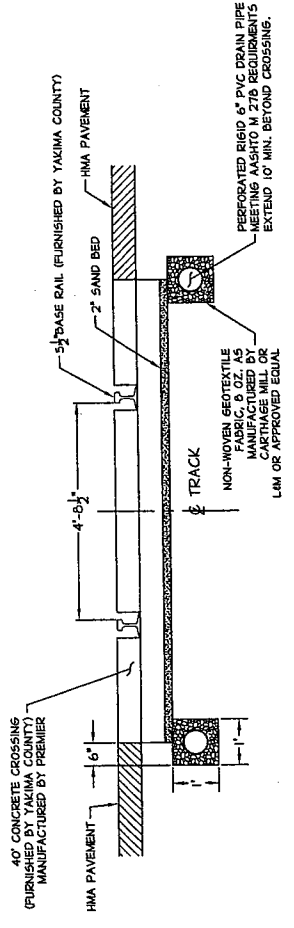
STD STANDARD  
 T.R OR T.O.R TOP OF RAIL  
 TRK TRACK  
 T.F. TRACK FOOT OR TRACK FEET  
 T.P. TRACK POINT  
 T.O. TURNOUT  
 T.T.P. TYPICAL  
 V.C. VERTICAL CURVE  
 R.R. RAILROAD CROSSING  
 I.J. INSULATED JOINT



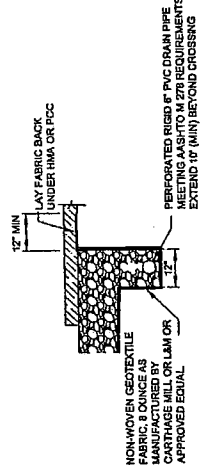
**SIGNAL CASE PAD SECTION**  
 NTS



**SIGNAL CASE PAD TRACK SECTION**  
 NTS



**TYPICAL CONCRETE CROSSING SECTION**  
 NTS



**DRAINAGE TRENCH DETAIL**  
 NTS

**U.S. DOT - CROSSING INVENTORY INFORMATION  
AS OF 3/10/2008**

Crossing No.: **099246Y**      Update Reason: **Changed Crossing**      Effective Begin-Date of Record: **08/21/02**  
 Railroad: **TSW Toppenish Simcoe & Western [TSWR]**      **Current Record**  
*R*  
 Initiating Agency **State**      Type and Position: **Public At Grade**

**Part I Location and Classification of Crossing**

Division:	<b>YAKIMA VALLEY</b>	State:	<b>WA</b>
Subdivision:	<b>3RD</b>	County:	<b>YAKIMA</b>
Branch or Line Name:	<b>WHITESWAN BR.</b>	City:	<b>In BROWNSTOWN</b>
Railroad Milepost:	<b>0014.42</b>	Street or Road Name:	<b>BARKES ROAD</b>
Railroad I.D. No.:	<b>0447</b>	Highway Type & No.:	<b>CO54950</b>
Nearest RR Timetable Stn:	<b>RUPPLE</b>	HSR Corridor ID:	
Parent Railroad:		County Map Ref. No.:	<b>39-6</b>
Crossing Owner:		Latitude:	<b>46.6039010</b>
ENS Sign Installed:		Longitude:	<b>-120.5103990</b>
Passenger Service:		Lat/Long Source:	
Avg Passenger Train Count:	<b>0</b>	Quiet Zone:	<b>No</b>
Adjacent Crossing with Separate Number:			

**Private Crossing Information:**

Category:	Public Access:		
Specify Signs:	Specify Signs:		
ST/RR A	ST/RR B	ST/RR C	ST/RR D
Railroad Use:			
State Use:			
Narrative:			
Emergency Contact:	Railroad Contact:	State Contact:	

**Part II Railroad Information**

<b>Number of Daily Train Movements:</b>	Less Than One Movement Per Day:	<b>Yes</b>
Total Trains: <b>0</b> Total Switching: <b>0</b>	Day Thru: <b>0</b>	
Typical Speed Range Over Crossing: From <b>25</b> to <b>25</b> mph	Maximum Time Table Speed:	<b>25</b>
Type and Number of Tracks:      Main: <b>1</b> Other: <b>0</b>	Specify:	
Does Another RR Operate a Separate Track at Crossing? <b>No</b>		
Does Another RR Operate Over Your Track at Crossing? <b>No</b>		

**U.S. DOT - CROSSING INVENTORY INFORMATION**  
Continued

Crossing **099246Y**

Effective Begin-Date of Record: **08/21/02**

**Current Record**

**Part III: Traffic Control Device Information**

**Signs:**

Crossbucks:	<b>2</b>	Highway Stop Signs:	<b>0</b>
Advanced Warning:	<b>Yes</b>	Hump Crossing Sign:	
Pavement Markings:	<b>No Markings</b>	Other Signs:	<b>0</b> Specify: <b>0</b>

**Train Activated Devices:**

Gates:	<b>0</b>	4 Quad or Full Barrier:	
Mast Mounted FL:	<b>0</b>	Total Number FL Pairs:	<b>0</b>
Cantilevered FL (Over):	<b>0</b>	Cantilevered FL (Not over):	<b>0</b>
Other Flashing Lights:	<b>0</b>	Specify Other Flashing Lights:	
Highway Traffic Signals:	<b>0</b>	Wigwags:	<b>0</b> Bells: <b>0</b>
Other Train Activated Warning Devices:		Special Warning Devices Not Train Activated:	
Channelization:		Type of Train Detection:	<b>None</b>
Track Equipped with Train Signals?	<b>No</b>	Traffic Light Interconnection/Preemption:	

**Part IV: Physical Characteristics**

Type of Development:	<b>Residential</b>	Smallest Crossing Angle:	<b>60 to 90 Degrees</b>
Number of Traffic Lanes Crossing Railroad:	<b>2</b>	Are Truck Pullout Lanes Present?	<b>No</b>
Is Highway Paved?	<b>No</b>	If Other:	
Crossing Surface:	<b>Timber</b>	Is it Signalized?	
Nearby Intersecting Highway?	<b>Less than 75 feet</b>	Is Crossing Illuminated?	
Does Track Run Down a Street?	<b>No</b>		
Is Commercial Power Available?	<b>Yes</b>		

**Part V: Highway Information**

Highway System:	<b>Non-Federal-aid</b>	Functional Classification of Road at Crossing:	<b>Rural Local</b>
Is Crossing on State Highway System:	<b>No</b>	AADT Year:	<b>1986</b>
Annual Average Daily Traffic (AADT):	<b>000240</b>	Avg. No of School Buses per Day:	<b>0</b>
Estimated Percent Trucks:	<b>15</b>		
Posted Highway Speed:	<b>0</b>		