

City of Tacoma, Public Works Department,
Tacoma Rail Mountain Division
Petitioner,

vs.

Pierce County Planning & Public Works
Respondent.

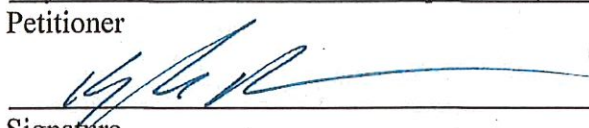
DOCKET NO. TR-

PETITION TO MODIFY A
HIGHWAY-RAIL GRADE
CROSSING

USDOT CROSSING NO.:917-918M

The Petitioner asks the Washington Utilities and Transportation Commission to approve modification of a highway-rail grade crossing under RCW 81.53.060. Modifications can include constructing supplemental safety measures such as median barriers, realigning highway or railroad tracks, widening highways, constructing multiple tracks, or changes to crossing surfaces that alter the dimensions of an existing surface, the angle at which the tracks intersect a highway, or the vertical alignment of a crossing (i.e., to accommodate track super-elevation, or changes in railroad or roadway grade).

Section 1 – Petitioner’s Information

City of Tacoma, Public Works Department, Tacoma Rail Mountain Division Petitioner
 Signature
2601 SR 509 North Frontage Road Street Address
Tacoma, WA 98421 City, State and Zip Code
Mailing Address, if different than the street address
Kyle Kellem Contact Person Name
253-377-3554 kkellem@cityoftacoma.org Contact Phone Number and E-mail Address

Section 2 – Respondent's Information

Pierce County Planning & Public Works Respondent
4301 South Pine Street, Suite 600 Street Address
Tacoma, WA 98409 City, State and Zip Code
Mailing Address, if different than the street address
Brian D. Stacy, P.E., County Engineer Contact Person Name
253-798-7257 bstacy@co.pierce.wa.us Contact Phone Number and E-mail Address

Section 3 – Crossing Location

1. Existing highway/roadway	Canyon Road East	
2. Existing railroad	Tacoma Rail – Mountain Division	
3. GPS location	47° 05' 29" N 122° 21' 27" W	
4. Railroad mile post (nearest tenth)	MP 13.2C	
5. City	Frederickson	Pierce County

Section 4 – Railroad Information

1. Railroad company	<u>Tacoma Rail – Mountain Division</u>		
2. Type of railroad at crossing	<input checked="" type="checkbox"/> Common Carrier	<input type="checkbox"/> Logging	<input type="checkbox"/> Industrial
	<input type="checkbox"/> Passenger	<input type="checkbox"/> Excursion	
3. Type of tracks at crossing	<input checked="" type="checkbox"/> Main Line	<input type="checkbox"/> Siding or Spur	
4. Number of tracks at crossing	<u>1</u>		
5. Average daily train traffic, freight	<u>10 per week</u>		
	Authorized freight train speed <u>10 MPH</u>	Operated freight train speed	<u>10 MPH</u>
6. Average daily train traffic, passenger	<u>0</u>		
	Authorized passenger train speed _____	Operated passenger train speed	_____

Section 5 – Proposed Temporary Crossing

1. Will a temporary crossing be installed?	Yes _____	No <u>X</u>
2. If so, describe the purpose of the crossing and the estimated time it will be needed		

3. Will the petitioner remove the crossing at completion of the activity requiring the temporary crossing?		
	Yes _____	No _____
Approximate date of removal _____		

Section 6 – Current Highway Traffic Information

1. Name of roadway/highway Canyon Road East

2. Roadway classification Major Arterial (Pierce County), Urban Principle Arterial (Federal)

3. Road authority Pierce County Planning & Public Works

4. Average annual daily traffic (AADT) 23,400 (2015)

5. Number of lanes 4

6. Roadway speed 45 mph

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

8. If so, trucks are what percent of total daily traffic? 11.2 %

9. Is the crossing part of an established school bus route? Yes No X*

10. If so, how many school buses travel over the crossing each day? 135*

11. Describe any changes to the information in 1 through 10, above, expected within ten years:
Widening of roadway to provide a two-way left turn lane and sidewalks in 2018

* Bethel School District bus garage is located 0.9 miles south of crossing.

Section 7 – Proposed Crossing Modification

1. Please provide a detailed description of the proposed changes to the crossing. Describe the justification for the proposed changes as well as the effects of proposed changes on warning devices, advance warning signs, pavement markings, etc.

Warning Devices – No change

Advance warning signs – No change

Reconstruct and lengthen the existing asphalt rail crossing to accommodate the planned
2018 widening of Canyon Road East from 48 feet to 79 feet. The widened roadway will
match the existing roadway widths north and south of the rail crossing. The roadway
widening project will include the construction of curb and gutter, sidewalks meeting
ADA requirements, storm drainage piping and treatment facilities, street lighting, and a
new traffic signal at 184th Street East.

Pavement Markings – new railroad crossing pavement markings will be added as
part the roadway widening project.

Section 8 – Sight Distance

1. Complete the following table, describing the sight distance for motorists when approaching the tracks from either direction after modification.

a. Approaching the crossing from North, the current approach provides an unobstructed view as follows: (North, South, East, West)

Direction of sight (left or right)	Number of feet from proposed crossing	Provides an unobstructed view for how many feet
Right	300	77
Right	200	85
Right	100	76
Right	50	800
Right	25	800
Left	300	67
Left	200	86
Left	100	124
Left	50	280
Left	25	280

b. Approaching the crossing from South, the current approach provides an unobstructed view as follows: (Opposite direction-North, South, East, West)

Direction of sight (left or right)	Number of feet from proposed crossing	Provides an unobstructed view for how many feet
Right	300	33
Right	200	42
Right	100	47
Right	50	52
Right	25	72
Left	300	62
Left	200	67
Left	100	82
Left	50	137
Left	25	800

2. Will the modified crossing provide a level approach measuring 25 feet from the center of the railway on both approaches to the crossing?

Yes X No

3. If not, state in feet the length of level grade from the center of the railway on both approaches to the crossing. _____

4. Will the modified crossing provide an approach grade of not more than five percent prior to the level grade?

Yes X No

3. If not, state the percentage of grade prior to the level grade and explain why the grade exceeds five percent.

Section 9 – Illustration of Modified Crossing Configuration

Attach a detailed diagram, construction plans, drawings, map or other illustration showing the following:

- ◆ The vicinity of the modified crossing.
- ◆ Layout of the railway and highway 500 feet adjacent to the crossing in all directions.
- ◆ Percent of grade.
- ◆ Obstructions of view identified in Section 8.
- ◆ Traffic control layout showing the location of the existing and proposed signage.

Section 10 – Waiver of Hearing by Respondent

Waiver of Hearing

The undersigned represents the Respondent in the petition to modify a highway-railroad grade crossing.

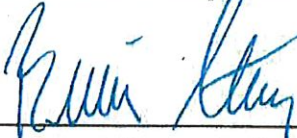
USDOT Crossing No.: 917-918M

We have investigated the conditions at the crossing proposed for modification. We are satisfied the conditions are the same as described by the Petitioner in this docket. We agree the crossing be modified and consent to a decision by the commission without a hearing.

Dated at Tacoma, Washington, on the 11th day of
December, 20 17.

Brian Stacy, P.E., County Engineer

Printed name of Respondent



Signature of Respondent's Representative

County Engineer

Title

253-798-7257 bstacy@co.pierce.wa.us
Phone number and e-mail address

4301 South Pine Street, Suite 600

Tacoma, WA 98409

Mailing address

CANYON ROAD EAST
CRP 5666



DESIGNED BY:	C. HENRY, P.E.	DATE: 04/01/15
CHECKED BY:	S. WINTER	DATE: 04/01/15
APPROVED BY:	A. CHURCHILL, P.E.	DATE: 04/01/15

NO.	DATE	REVISION

NO.	DATE	REVISION

Pierce County
 Planning & Public Works
 Office of the County Engineer
 Tacoma Mail Office Building
 4000 Tacoma Mall
 Tacoma, Washington 98409
 AIA/ASPE Accredited Agency



Approved by:
 BRIAN D. STACY, P.E.
 DATE: _____

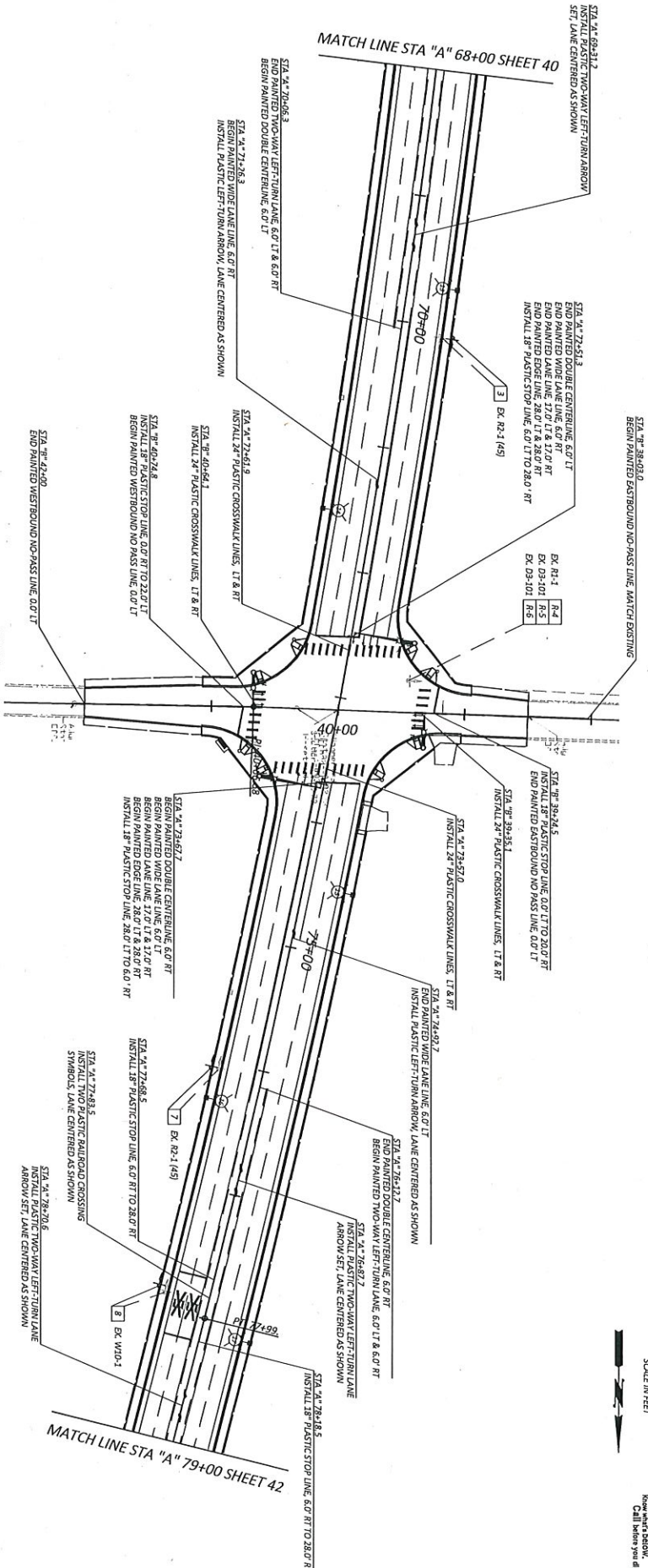
**CANYON ROAD EAST
 192 STREET EAST TO FREDERICKSON INDUSTRIAL
 PARK ROAD EAST
 CHANNELIZATION AND SIGNING PLAN
 CRP 5666**

NO.	DESCRIPTION	SNOW CODE	APPROX. EXIST. LOCATION	APPROX. RELOCATED LOCATION	COMMENT
3	SPEED LIMIT	RS-1 (R3)	STA 7+700.0 (191' LT)	STA 7+700.0 (191' LT)	RELOCATE
R-4	STOP SIGN	RS-1	STA 7+720.0 (152' LT)	STA 7+720.0 (152' LT)	REMOVE AT SIGNAL TURN ON
R-5	STREET NAME	OS-101	STA 7+720.0 (152' LT)	STA 7+720.0 (152' LT)	REMOVE AT SIGNAL TURN ON
R-6	STREET NAME	OS-101	STA 7+720.0 (152' LT)	STA 7+720.0 (152' LT)	REMOVE AT SIGNAL TURN ON
8	RAIL GRADE CROSSING	W09-1	STA 7+740.0 (113' RT)	STA 7+740.0 (113' RT)	RELOCATE

NOTE:
 AFTER PRELIMINARY SPOTTING AND BEFORE APPLICATION, NOTIFY CONTRACTING AGENCY 5 DAYS IN ADVANCE FOR FIELD APPROVAL.
 REFER TO PIERCE COUNTY STANDARD DRAWINGS "K" SERIES FOR TRAFFIC CONTROL
 REFER TO PIERCE COUNTY STANDARD DRAWINGS "H" SERIES FOR APPLICABLE SIGNS AND MARKINGS DETAILS

LEGEND

---	EXISTING LANE LINE	+	NEW TRAFFIC SIGN AND POST
---	EXISTING WIDE LANE LINE	+	EXISTING SIGN AND POST
---	EXISTING EDGE LINE	+	SIGN REMOVAL NOTE
---	EXISTING STOP LINE	+	SIGN RELOCATION NOTE
---	LANE LINE	+	NEW LOCATION
---	WIDE LANE LINE	+	MAINTAIN SIGN AND POST
---	EDGE LINE	+	EXISTING SIGN AND POST
---	STOP LINE	+	EXISTING CROSSWALK LINE
---	TURN ARROW MARKING	+	CROSSWALK LINE



40 0 40 80
 SCALE IN FEET
 North Arrow
 Inches = Feet
 Call Number per 8 1/2"

REGION NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
10	WASH.		41	42

DESIGNED BY: C. HENRY, P.E.	STARTED BY: G. DISCALUI
CHECKED BY: S. WALTER	DATE SUBMITTED: APRIL 2015
APPROVED BY: B. STANFIELD, P.E.	DATE APPROVED: November 21, 2017

NO.	DATE	REVISION

NO.	DATE	REVISION

Pierce County
 Planning & Public Works
 Office of the County Engineer
 Tacoma Mail Office Building
 1403 South the Streets, #209
 Tacoma, WA 98409
 1st Floor
 An ADWA Accredited Agency



Office of the County Engineer
 Approved by:
BRIAN D. STACY, P.E.
 COUNTY TRAFFIC ENGINEER

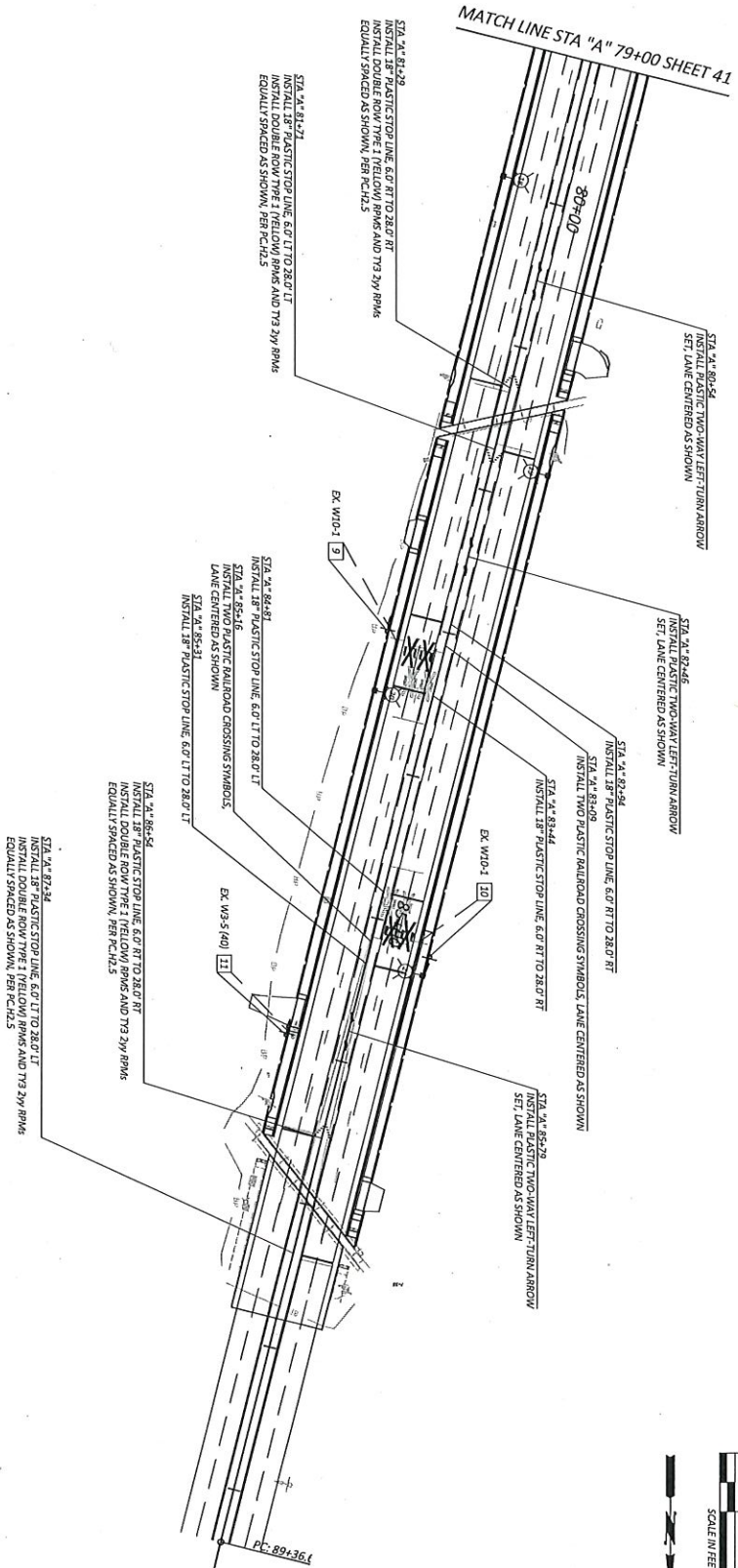
CANYON ROAD EAST
192 STREET EAST TO FREDERICKSON INDUSTRIAL
PARK ROAD EAST
CHANNELIZATION AND SIGNING PLAN
CRP 5666

NO.	DESCRIPTION	SIGN CODE	APPROX. LOC.	APPROX. ALLOCATION	COMMENT
9	RAIL CROSSING	W3-1	STA. 74+82.4 (23.7 FT)	STA. 74+82.4 (23.7 FT)	RECORD
10	RAIL CROSSING	W3-1	STA. 74+80.7 (22.7 FT)	STA. 74+80.7 (22.7 FT)	RECORD
11	RAIL CROSSING	W3-1 (40)	STA. 74+82.0 (24.3 FT)	STA. 74+82.0 (24.3 FT)	RECORD

NOTE:
 AFTER PRELIMINARY SPOTTING AND BEFORE APPLICATION, NOTIFY CONTRACTING
 AGENCY 5 DAYS IN ADVANCE FOR FIELD APPROVAL.

REFER TO PIERCE COUNTY STANDARD DRAWINGS "K" SERIES FOR TRAFFIC
 CONTROL
 REFER TO PIERCE COUNTY STANDARD DRAWINGS "H" SERIES FOR APPLICABLE
 SIGNS AND MARKINGS DETAILS

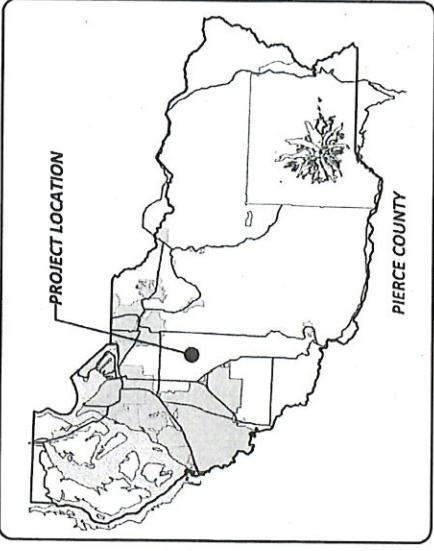
---	EXISTING LANE LINE	→	TURNARROW MARKINGS
---	EXISTING WIDE LANE LINE	+	NEW TRAFFIC SIGN AND POST
---	EXISTING EDGE LINE	+	EXISTING SIGN AND POST
---	EXISTING STOP LINE	+	SIGN REMOVAL NOTE
---	LANE LINE	+	EXISTING LOCATION NOTE
---	EDGE LINE	+	NEW LOCATION
---	STOP LINE	+	MAINTAIN SIGN AND POST
	EXISTING CROSSWALK LINE	+	CROSSWALK LINE



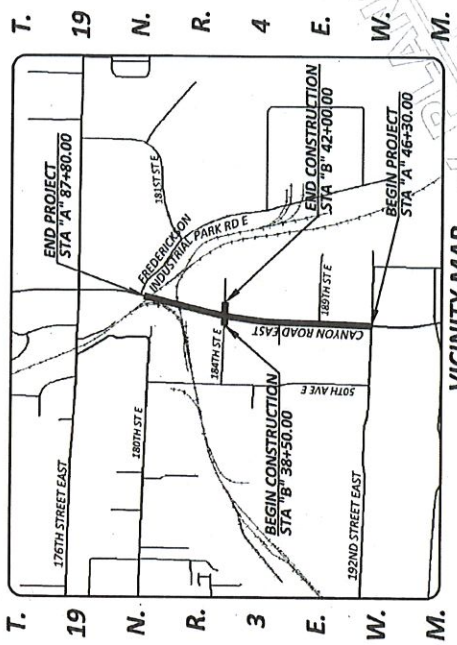
40
0
40
80
SCALE IN FEET

811
 Report a Problem
 Call Before You Dig

REGION NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
10	WASH.		47	47



LOCATION MAP



VICINITY MAP

CANYON ROAD EAST

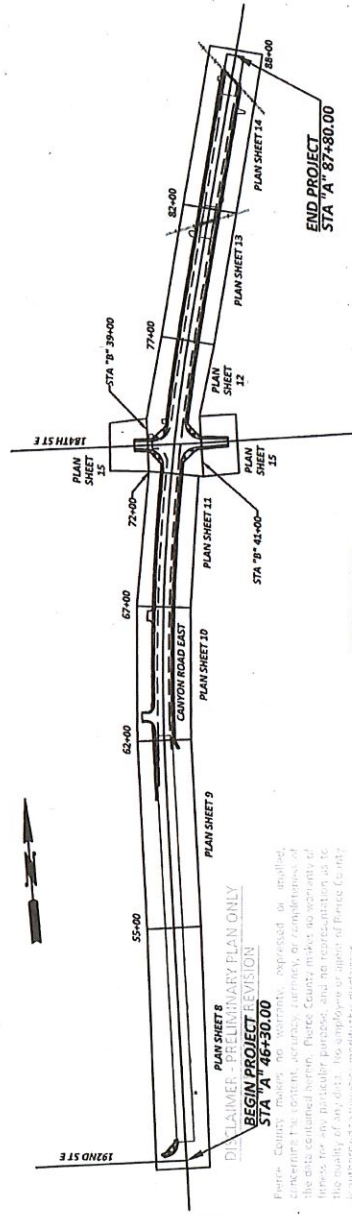
192ND STREET EAST TO FREDERICKSON INDUSTRIAL PARK ROAD EAST

CRP 5666

PROJECT PLANS

COVER SHEET.	1	DRIVEWAY PROFILES.	.22
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QUANTITY TABULATION.	5	STORMWATER POLLUTION PREVENTION PLAN.	.29 - 31
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INDEX



KEY MAP

Disclaimer - PRELIMINARY PLAN ONLY
BEGIN PROJECT REVISION
 STA "A" 46+30.00

Date: _____

DESIGNED BY: C. JAROCK	CHECKED BY: L. JAROCK	DATE SUBMITTED: JUNE 2015	DATE PLOTTED: November 13, 2017
APPROVED BY: R. BURGHIAM, P.E.	REVISION	BY	APPROVED



Office of the County Engineer
 APPROVED BY:
 BRIAN D. STACEY, P.E.
 TRANSPORTATION IMPROVEMENT SECTION MANAGER

Pierce County
 Planning & Public Works
 4301 South Pine Street, Suite 628
 Tacoma, Washington 98409
 401-876-3000

NO.	DATE	REVISION	BY	APPROVED

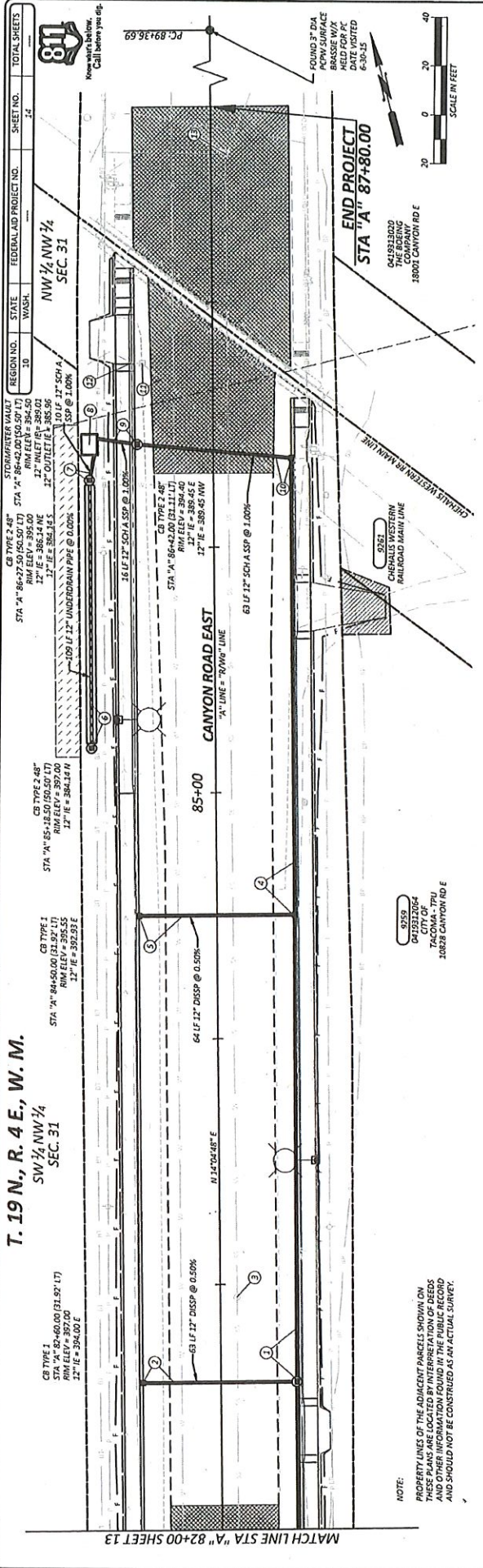
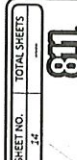
CANYON ROAD EAST
 192ND STREET EAST TO
 FREDERICKSON INDUSTRIAL PARK ROAD EAST
 COVER SHEET
 CRP 5666

T. 19 N., R. 4 E., W. M.

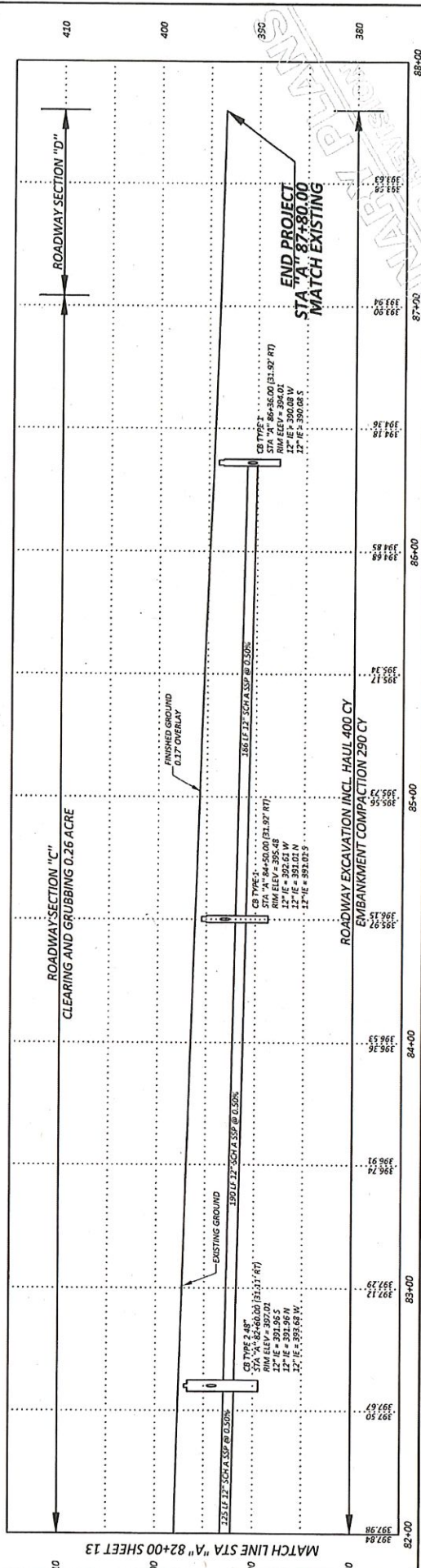
SW 1/4 NW 1/4
SEC. 31

NW 1/4 NW 1/4
SEC. 31

REGION NO. 10
STATE WASH.
FEDERAL AID PROJECT NO.
SHEET NO. 12
TOTAL SHEETS



NOTE:
PROPERTY LINES OF THE ADJACENT PARCELS SHOWN ON THESE PLANS ARE LOCATED BY INTERPRETATION OF RECORDS AND OTHER INFORMATION FOUND IN THE PUBLIC RECORD AND SHOULD NOT BE CONSTRUED AS AN ACTUAL SURVEY.



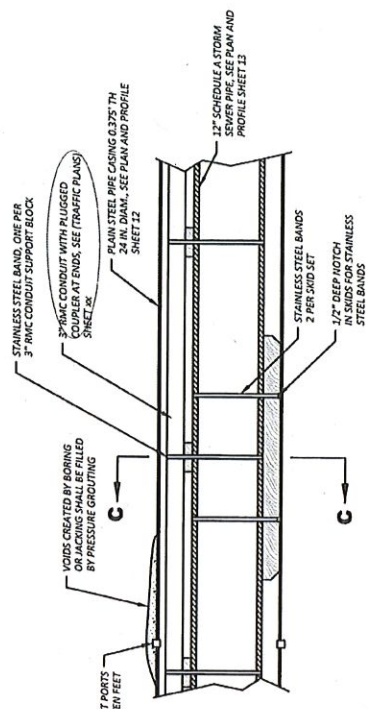
DESIGNED BY: L. SANDOZ CHECKED BY: R. SCHONGA, P.E. APPROVED BY: P. BAUGHMAN, P.E.	DATE SURVEYED: APRIL 2015 DATE PLOTTED: November 15, 2017	PROJECT NO.: 150123004 PROJECT NAME: CANYON ROAD EAST LOCATION: 192ND STREET EAST TO FREDERICKSON INDUSTRIAL PARK ROAD EAST DATE: BY:	APPROVED BY: Office of the County Engineer DATE: BRIAN D. STACEY, P.E. TRANSPORTATION IMPROVEMENT SECTION MANAGER	PIERCE COUNTY Planning & Public Works Office of the County Engineer Tacoma Mail Office Building 1801 South Shoreline Road, Suite 623 Tacoma, Washington 98402 An APWA Accredited Agency	CANYON ROAD EAST 192ND STREET EAST TO FREDERICKSON INDUSTRIAL PARK ROAD EAST PLAN AND PROFILE CRP 5666
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REGION NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
10	WASH.		25	



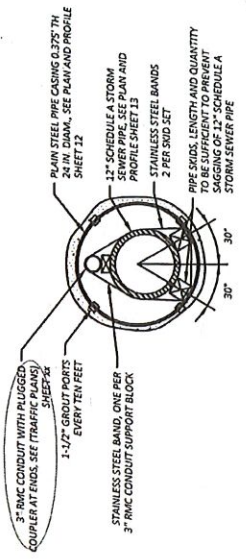
STEEL CASING GENERAL NOTES:

- CARRIER SKIDS SHALL BE SECURELY ATTACHED TO CARRIER PIPE WITH STAINLESS STEEL BANDS (MIN 3 BANDS PER SKID SET)
- CARRIER SKIDS SHALL BE ROUNDED OR BEVELLED ON LEADING EDGE, AND SHALL BE NOTCHED TO RECEIVE SST BANDS
- 3" RMC CONDUIT SHALL BE SECURED TO THE TOP OF THE PLAIN STEEL PIPE CASING AS SHOWN

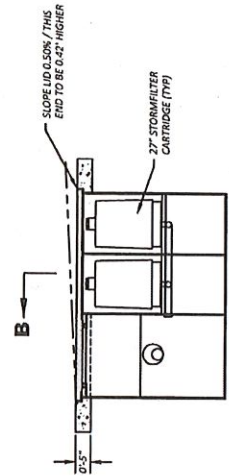


STEEL CASING DETAIL
(NOT TO SCALE)

STA. "A" 81+48.00 (31.11' RT) TO STA. "A" 81+58.00 (31.11' RT)

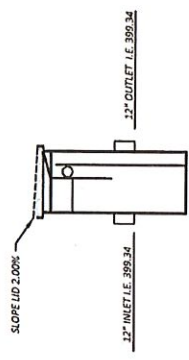


SECTION C-C
(NOT TO SCALE)



2 CARTRIDGE CATCHBASIN STORMFILTER PLAN VIEW
SECTION A-A
(NOT TO SCALE)

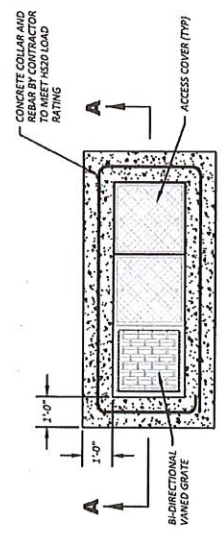
STA. "B" 42+10.00 (24.93' LT)
(CENTER OF INLET GRATE)



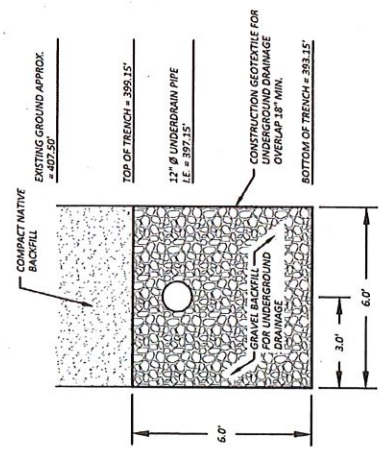
SECTION B-B
(NOT TO SCALE)

STORMFILTER GENERAL NOTES:

- OFF-LINE WATER QUALITY RATE = 0.042 CFS
- SEE SPECIAL PROVISIONS "PRECAST STORMFILTER VAULT"
- STEEL STRUCTURE TO BE MANUFACTURED OF 1/4" THICK STEEL PLATE.
- FILTER CARTRIDGES SHALL BE MEDIA-FILLED, PASSIVE, SIMPSON ACTUATED.
- STORMFILTER CARTRIDGE SHALL BE 27" IN DIAMETER WITH 7" INCHES FILTER MEDIA CONTACT TIME SHALL BE AT LEAST 10 SECONDS.
- EQUIP WITH 4 INCH (APPROXIMATE) LONG STUBS FOR INLET AND OUTLET PIPING. INLET AND OUTLET STUBS IS 12 INCHES IN DIAMETER. CONNECTION TO COLLECTION PIPING CAN BE MADE USING FLEXIBLE COUPLING BY CONTRACTOR. STUBS SHALL BE 12 INCHES LONG.
- GRATES AND LOCKING LIDS TO BE TREATED WITH NON-SIP SURFACING.



TOP VIEW
(NOT TO SCALE)



INFILTRATION TRENCH DETAIL
(NOT TO SCALE)

STA. "B" 42+10.00 (24.93' LT) TO STA. "B" 41+90.00 (24.00' LT)

CANYON ROAD EAST
192ND STREET EAST TO
FREDERICKSON INDUSTRIAL PARK ROAD EAST
DRAINAGE DETAILS
CRP 5666

APPROVED BY: **BRIAN D. STACKY, P.E.**
Office of the County Engineer
TRANSPORTATION INFRASTRUCTURE SECTION/HASAGER
DATE: _____

Pierce County
Planning & Public Works
Office of the County Engineer
4801 South Pacific Way, Suite 618
Tacoma, Washington 98409
An AIAA Accredited Agency

NO.	DATE	REVISION	BY	APPROVED

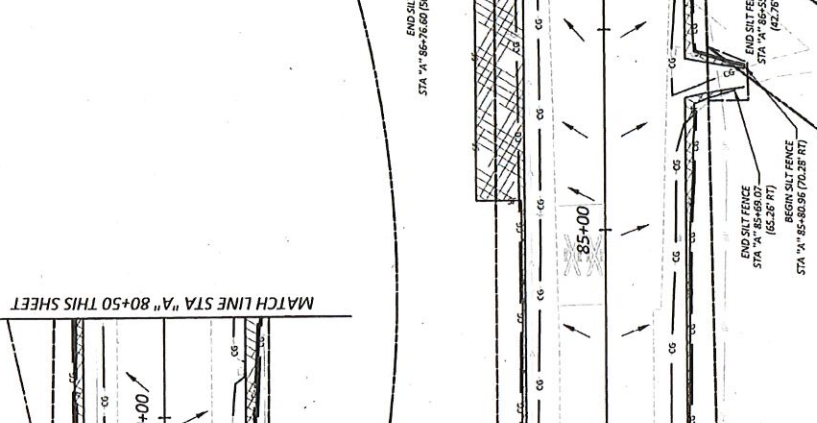
BOOK NO.:	
DESIGNED BY:	G. DUGGALTY
CHECKED BY:	R. SCHONGA, P.E.
DATE SURVEYED:	APRIL 2015
DATE PLOTTED:	November 18, 2017
REVIEWED BY:	P. BAUGHMAN, P.E.



REGION NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
10	WASH.	---	31	31



NOTE: PROPERTY LINES OF THE ADJACENT PARCELS SHOWN ON THIS PLAN ARE BASED ON RECORD PLATS AND OTHER INFORMATION FOUND IN THE PUBLIC RECORDS AND SHOULD NOT BE CONSTRUED AS AN ACTUAL SURVEY.



UNRECORDED SIGN EXHIBIT.
DATED JULY 9, 1989
PER RODWAY 200801083005

CANYON ROAD EAST - RT: 77499.70
"A" LINE = "N/W/4" LINE

DISCLAIMER - PRELIMINARY PLAN
SUBJECT TO REVISION

Pierce County, makes no warranty, express or implied, concerning the accuracy, completeness, or reliability of the information contained herein. Pierce County makes no warranty of fitness for any particular purpose, and no representation of quality of any data. The applicability or accuracy of the information is not warranted or implied by Pierce County.

Scale: _____

CANYON ROAD EAST
"A" LINE = "70/100" LINE

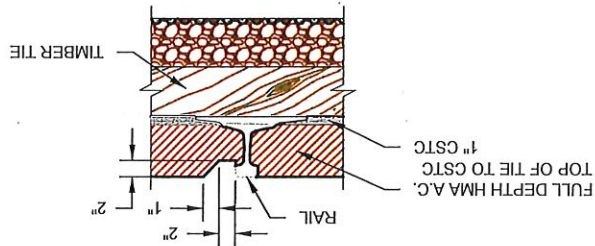
CHENAILS WESTERN RAILROAD SOUTH LEG
CHENAILS WESTERN RAILROAD MAINLINE

NO.	DATE	REVISION	BY	APPROVED

DESIGNED BY: C. JOHNSON
DRAWN BY: G. JOHNSON
CHECKED BY: R. SCHMIDT, P.E.
REVIEWED BY: P. RAJURAMAN, P.E.APPROVED BY: Office of the County Engineer
BRAND D. STACY, P.E.
TRANSPORTATION AND PUBLIC UTILITIES SECTION MANAGER

CANYON ROAD EAST
192ND STREET EAST TO
STORMWATER POLLUTION PREVENTION PLAN
CRP 5666

NTS
ASPHALT FLANGEWAY



NTS
ASPHALT ROAD CROSSING

