

**SUBMITTAL TO THE BOARD OF SUPERVISORS  
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

619A



**FROM:** TLMA - Transportation Department

**SUBMITTAL DATE:**  
August 29, 2013

**SUBJECT:** Cooperative Agreement between the County of Riverside (County) and City of Riverside (City) for Magnolia Avenue Railroad Grade Crossing Traffic Signal and Railroad Grade Crossing Improvements in the Home Gardens Area and Buchanan Street Railroad Grade Crossing Improvements in the City

**RECOMMENDED MOTION:** That the Board of Supervisors:

1. Approve the attached Cooperative Agreement with the City of Riverside for the Magnolia Avenue railroad grade crossing traffic signal and grade crossing improvements at Magnolia Avenue and at Buchanan Street; and
2. Authorize the Chairman of the Board of Supervisors to execute the same.

**Patricia Romo**

**Assistant Director of Transportation**

*Patricia Romo*

Juan C. Perez

Director of Transportation and Land Management

Dt:dt

(Continued On Attached Page)

<b>FINANCIAL DATA</b>	Current F.Y. Total Cost:	\$ 254,501	In Current Year Budget:	Yes
	Current F.Y. Net County Cost:	\$ 0	Budget Adjustment:	No
	Annual Net County Cost:	\$ 0	For Fiscal Year:	2013/2014

<b>SOURCE OF FUNDS:</b> Gas Tax (ABX8-9 Mar 2010 New HUTA (100%))	<b>Positions To Be Deleted Per A-30</b>	<input type="checkbox"/>
There are no General Funds used in this project.	<b>Requires 4/5 Vote</b>	<input type="checkbox"/>

**C.E.O. RECOMMENDATION:**

APPROVE

BY:

*Tina Grande*

Tina Grande

**County Executive Office Signature**

FORM APPROVED COUNTY COUNSEL

BY: *Patricia Romo* DATE: 8/20/13  
MARSHA L. VICTOR

Departmental Concurrence

Policy

Consent

Dept's Recomm.:  
Per Exec. Ofc.:

2013 SEP -3 6W 5:05

**Prev. Agn. Ref.** 6/4/13 3-52 and 3-53 | **District:** 1/1, 2/2 | **Agenda Number:**

3-89

The Honorable Board of Supervisors

RE: Cooperative Agreement between the County of Riverside (County) and City of Riverside (City) for Magnolia Avenue Railroad Grade Crossing Traffic Signal and Railroad Grade Crossing Improvements in the Home Gardens Area and Buchanan Street Railroad Grade Crossing Improvements in the City

August 29, 2013

Page 2 of 2

**BACKGROUND:** This Cooperative Agreement involves work that will install a traffic signal for the eastbound traffic on Magnolia Avenue at the BNSF Railway Company crossing (west of Buchanan Street), connect the traffic signal control system with the railroad crossing signal control system, modify train detection equipment along railroad tracks to provide advance railroad detection of oncoming trains, and upgrade the railroad crossing equipment at both Magnolia Avenue and Buchanan Street railroad grade crossings. These improvements benefit both the County and the City by improving traffic operation and safety at the two railroad grade crossings and facilitating future improvements for a "Quiet Zone" for the Buchanan Street grade crossing.

The traffic signal at the Magnolia Avenue railroad grade crossing will be used as part of the traffic control at the railroad crossing during the construction of the Magnolia Avenue Grade Separation Project.

The cost for constructing the traffic signal at the Magnolia Avenue railroad grade crossing is estimated to be \$150,000. BNSF Railway Company estimates the track and crossing improvements to cost \$209,002 for the Magnolia Avenue crossing and \$137,037 for the Buchanan Street crossing. The County's share is estimated to be \$254,501, consisting of 100% of the traffic signal at the Magnolia Avenue railroad grade crossing and 50% of the Magnolia Avenue crossing improvements. The City's share is estimated to be \$241,538, consisting of 100% of the Buchanan Street crossing improvements and 50% of the Magnolia Avenue crossing improvements.

By Minute Order dated June 4, 2013 (Agenda Item 3-52), the Board of Supervisors approved the Highway-Rail Signal Interface Agreement between the County and BNSF Railway Company for grade crossing improvements and maintenance.

By Minute Order dated June 4, 2013 (Agenda Item 3-53), the Board of Supervisors approved the plans and specifications and authorized the Clerk of the Board to advertise for bids.

BNSF Railway Company and the City of Riverside have entered into a separate maintenance agreement for the Buchanan Street grade crossing.

Gas tax will be used to fund the County's share of the costs.

Annual operation and maintenance costs for the traffic signal are estimated at \$2,500 to be funded by gas tax. There is no maintenance and operation costs to the County for the Magnolia Avenue crossing improvements.

County Counsel has approved the Agreement as to form.

County Project No.: B7-0788

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29

**AGREEMENT BY AND BETWEEN**  
**COUNTY OF RIVERSIDE AND CITY OF RIVERSIDE**  
**FOR**  
**MAGNOLIA AVENUE QUEUE CUTTER TRAFFIC SIGNAL AND**  
**BNSF RAILWAY GRADE CROSSING IMPROVEMENTS PROJECT**

This Agreement entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2013, by and between the County of Riverside, (hereinafter "COUNTY"), and the City of Riverside, (hereinafter "CITY") for the provision of Magnolia Avenue Queue Cutter Traffic Signal and BNSF Railway (hereinafter "BNSF") Grade Crossing Improvements within the City and in the Home Gardens Area of the COUNTY.

**RECITALS**

- A. The COUNTY and CITY have determined that there is a great need for an eastbound queue cutter traffic signal on Magnolia Avenue at BNSF grade crossing and BNSF at-grade crossing improvements at the Magnolia Avenue crossing in the County and the Buchanan Street crossing in the CITY.
- B. COUNTY and CITY desire to have one agency take a lead role in the development and implementation of Magnolia Ave queue cutter traffic signal (hereinafter "SIGNAL") and to have BNSF construct grade crossing improvements at both Magnolia Avenue and Buchanan Street crossings (hereinafter "CROSSING") as shown in Exhibit A (Vicinity Map) and Exhibit B (Magnolia Ave Queue Cutter Traffic Signal Plans) in an interest to coordinate the improvements located in both jurisdictions and to reduce overall costs by processing the two separate jurisdictional improvements as one project.
- C. COUNTY and CITY desire to designate COUNTY as the lead agency for the SIGNAL and CROSSING; therefore, COUNTY will provide the administrative, technical, managerial, and support services necessary to develop and implement SIGNAL, and coordinate with BNSF to implement CROSSING.
- D. COUNTY and CITY desire to define herein the terms and conditions under which said SIGNAL and CROSSING is to be administered, environmentally cleared, engineered, coordinated, constructed, managed, maintained and financed.

**AGREEMENT**

NOW THEREFORE, in consideration of the mutual promises contained herein, the parties hereto agree as

1 follows:

2  
3 **SECTION I • COUNTY AGREES:**

- 4 1. To fund one hundred (100) percent of the cost of preparing plans, specifications and estimates (PS&E),  
5 preparing an environmental document and obtaining environmental clearance in accordance with the  
6 California Environmental Quality Act, providing utility coordination and relocation of impacted utilities, and  
7 advertising, awarding and administering a public works construction contract necessary to construct Magnolia  
8 Avenue queue cutter traffic signal.
- 9 2. To fund one-hundred (100) percent of the cost of constructing the Magnolia Avenue queue cutter traffic signal  
10 estimated to be \$150,000.
- 11 3. To fund fifty (50) percent of the cost of constructing the Magnolia Avenue BNSF Railway grade crossing  
12 improvements by BNSF Railway. BNSF's cost estimate for the Magnolia Avenue grade crossing  
13 improvements is shown in Exhibit C, attached hereto and incorporated by this reference.
- 14 4. The COUNTY's share of all costs is estimated to be \$254,501 as shown in Exhibit E, attached hereto and  
15 incorporated by this reference.
- 16 5. To prepare, or cause to be prepared, detailed PS&E documents for the Magnolia Avenue queue cutter traffic  
17 signal and submit to CITY for review and approval.
- 18 6. To identify and locate all utility facilities within the SIGNAL area as part of its SIGNAL design responsibility. If  
19 any existing public and/or private utility facilities conflict with SIGNAL construction, COUNTY shall make all  
20 necessary arrangements with the owners of such facilities for their protection, relocation, or removal. All utility  
21 facilities shall be identified on the SIGNAL plans and specifications, and conflicting utilities shall be denoted.  
22 COUNTY shall require the utility owner and/or its contractors performing the relocation work within CITY's  
23 right of way to obtain a CITY Street Opening permit prior to the performance of said relocation work. CITY  
24 and COUNTY shall coordinate and cooperate in the effort to establish prior rights related to utility  
25 encroachments into each jurisdictions right-of-way.
- 26 7. To make written application to CITY for a no-cost Street Opening permit authorizing entry into CITY's right of  
27 way for the purposes of constructing SIGNAL.

- 1 8. To advertise, award and administer a public works contract for the construction of SIGNAL in accordance with  
2 all applicable laws, including but not limited to the Local Agency Public Construction Act, the California Labor  
3 Code, and in accordance with the permit issued by the Riverside County Transportation Department.
- 4 9. To furnish a representative to perform the function of Resident Engineer during construction of SIGNAL. The  
5 Resident Engineer shall be a Licensed Civil Engineer. If the SIGNAL plans and specifications are prepared by  
6 a private engineering company, the Resident Engineer shall not be an employee of that company. The  
7 Resident Engineer shall also be independent of the construction contractor.
- 8 10. To furnish qualified support staff to assist the Resident Engineer in, but not limited to, construction surveys,  
9 soils and foundation tests, measurement and computation of quantities, testing of construction materials,  
10 checking shop drawings, preparation of estimates and reports, preparation of as-built drawings, and other  
11 inspection and staff services necessary to assure that the construction is performed in accordance with the  
12 PS&E documents.
- 13 11. To construct SIGNAL in accordance with approved PS&E documents.
- 14 12. To provide material testing and quality control conforming to the Caltrans Standard Testing Methods as  
15 provided in Chapter 16 of the Local Assistance Procedures Manual, and to have this testing performed by a  
16 certified material tester.
- 17 13. Invoice City for City's share of the BNSF Railway crossing improvement costs.

18 **SECTION II • CITY AGREES:**

- 19 1. To fund fifty (50) percent of the cost of constructing the Magnolia Avenue BNSF Railway grade crossing  
20 improvements by BNSF Railway. BNSF's cost estimate for the Magnolia Avenue grade crossing  
21 improvements is shown in Exhibit C.
- 22 2. To fund one-hundred (100) percent of the cost of constructing Buchanan Street BNSF Railway grade crossing  
23 improvements by BNSF Railway. BNSF's cost estimate for Buchanan Street grade crossing improvements is  
24 shown in Exhibit D, attached hereto and incorporated by this reference.
- 25 3. The CITY's share of all costs is estimated to be \$241,538 as shown in Exhibit E.
- 26 4. To provide, at no cost to COUNTY, oversight of SIGNAL and to provide prompt reviews and approvals, as  
27 appropriate, of submittals by COUNTY, and to cooperate in timely processing of SIGNAL.
- 28 5. To issue, at no cost to COUNTY or its contractors, upon proper application by COUNTY or COUNTY's  
29

1 contractors, a Street Opening permit authorizing entry onto CITY's right of way to perform survey and other  
2 investigative activities required for Construction of SIGNAL.

- 3  
4 6. To provide a representative to coordinate thorough the COUNTY's Resident Engineer during the construction  
5 of SIGNAL and to verify facilities are constructed in accordance with the approved PS&E documents as  
6 required by this Agreement. It is mutually understood that CITY personnel may observe and inspect all work  
7 being done on SIGNAL, but shall provide any comments to COUNTY personnel who shall be solely  
8 responsible for all communications with COUNTY contractor.  
9  
10 7. To pay within 30 days of receipt all invoices submitted by COUNTY for services rendered in accordance with  
11 this Agreement.

12 **SECTION III • IT IS MUTUALLY AGREED AS FOLLOWS:**

- 13 1. Construction by COUNTY of improvements referred to herein which lie within CITY rights of way shall not  
14 commence until a Street Opening Permit to COUNTY or its contractor, authorizing such work has been issued  
15 by CITY.  
16 2. COUNTY and CITY shall retain or cause to be retained for audit for a period of three (3) years from the date  
17 of final payment, all records and accounts relating to SIGNAL and CROSSING.  
18 3. COUNTY shall cause COUNTY's contractor to maintain in force, until completion and acceptance of the  
19 SIGNAL construction contract, a policy of Contractual Liability Insurance, including coverage of Bodily Injury  
20 Liability and Property Damage Liability, in the amount of \$2,000,000 minimum single limit coverage, and a  
21 policy of Automobile Liability Insurance in the amount of \$1,000,000 minimum. Endorsements to each policy  
22 shall be required which name the CITY, its officers, officials, agents and employees as additionally insured.  
23 COUNTY shall also require COUNTY's contractor to maintain Worker's Compensation Insurance. COUNTY  
24 shall provide Certificates of Insurance and Additional Insured Endorsements which meet the requirements of  
25 this section to CITY prior to the start of construction.  
26 4. Neither COUNTY nor any officer or employee thereof shall be responsible for any damage or liability  
27 occurring by reason of anything done or omitted to be done by CITY under or in connection with any work,  
28 authority or jurisdiction delegated to CITY under this Agreement. It is further agreed that pursuant to  
29 Government Code Section 895.4, CITY shall fully indemnify and hold COUNTY harmless from any liability  
imposed for injury (as defined by Government Code Section 810.8) occurring by reason of anything done or

1 omitted to be done by CITY under or in connection with any work, authority or jurisdiction delegated to CITY  
2 under this Agreement.

3 5. Neither CITY nor any officer or employee thereof shall be responsible for any damage or liability occurring by  
4 reason of anything done or omitted to be done by COUNTY under or in connection with any work, authority or  
5 jurisdiction delegated to COUNTY under this Agreement. It is further agreed that pursuant to Government  
6 Code Section 895.4, COUNTY shall fully indemnify and hold CITY harmless from any liability imposed for  
7 injury (as defined by Government Code Section 810.8) occurring by reason of anything done or omitted to be  
8 done by COUNTY under or in connection with any work, authority or jurisdiction delegated to COUNTY under  
9 this Agreement.

10 6. This Agreement contains the entire agreement of the parties with respect to subject matter hereof, and  
11 supersedes all prior negotiations, understandings or agreements. No supplement, modification, or  
12 amendment of this Agreement shall be binding unless executed in writing and signed by both parties.

13 7. This Agreement and the exhibit herein contain the entire agreement between the parties, and are intended by  
14 the parties to completely state the agreement in full. Any agreement or representation respecting the matters  
15 dealt with herein or the duties of any party in relation thereto, not expressly set forth in this Agreement, is null  
16 and void.

17 8. Nothing in the provisions of this Agreement is intended to create duties or obligations to or rights in third  
18 parties or affects the legal liability of either party to the Agreement by imposing any standard of care with  
19 respect to the maintenance of roads different from the standard of care imposed by law.

20 9. This Agreement may be executed in one or more counterparts and when a counterpart shall have been  
21 signed by each party hereto, each shall be deemed an original, but all of which constitute one and the same  
22 instrument.

23 10. Except as provided in Section 12940 of the California Government Code, during performance of this  
24 Agreement, the parties shall not discriminate on the grounds of race, religious creed, color, national origin,  
25 ancestry, age, physical handicap, medical condition including the medical condition of Acquired Immune  
26 Deficiency Syndrome (AIDS) or any condition related thereto, marital status, sex or sexual orientation in the  
27 selection and retention of employees and subcontractors and the procurement of materials and equipment.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29


The parties shall also comply with the requirements of the Americans with Disabilities Act in the performance of the Agreement.

- 11. This Agreement shall terminate upon completion of the SIGNAL and CROSSING, and receipt of full payment by CITY for its share of grade crossing improvements cost to COUNTY.
- 12. Ownership and title to all materials, equipment, and appurtenances installed as part of this Agreement will automatically be vested with the jurisdiction for which the improvements reside and no further agreement will be necessary to transfer ownership.



**COUNTY Approvals**

RECOMMENDED FOR APPROVAL:

 Dated: 8/19/13

JUAN C. PEREZ  
Director of Transportation

APPROVAL BY THE BOARD OF SUPERVISORS

\_\_\_\_\_ Dated: \_\_\_\_\_

\_\_\_\_\_  
PRINTED NAME  
Chairman, Riverside County Board of Supervisors

APPROVED AS TO FORM:  
PAMELA J. WALLS, COUNTY COUNSEL

 Dated: 8/20/13  
By Deputy

ATTEST:

\_\_\_\_\_ Dated: \_\_\_\_\_

Kecia Harper-Ihem  
Clerk of the Board (SEAL)

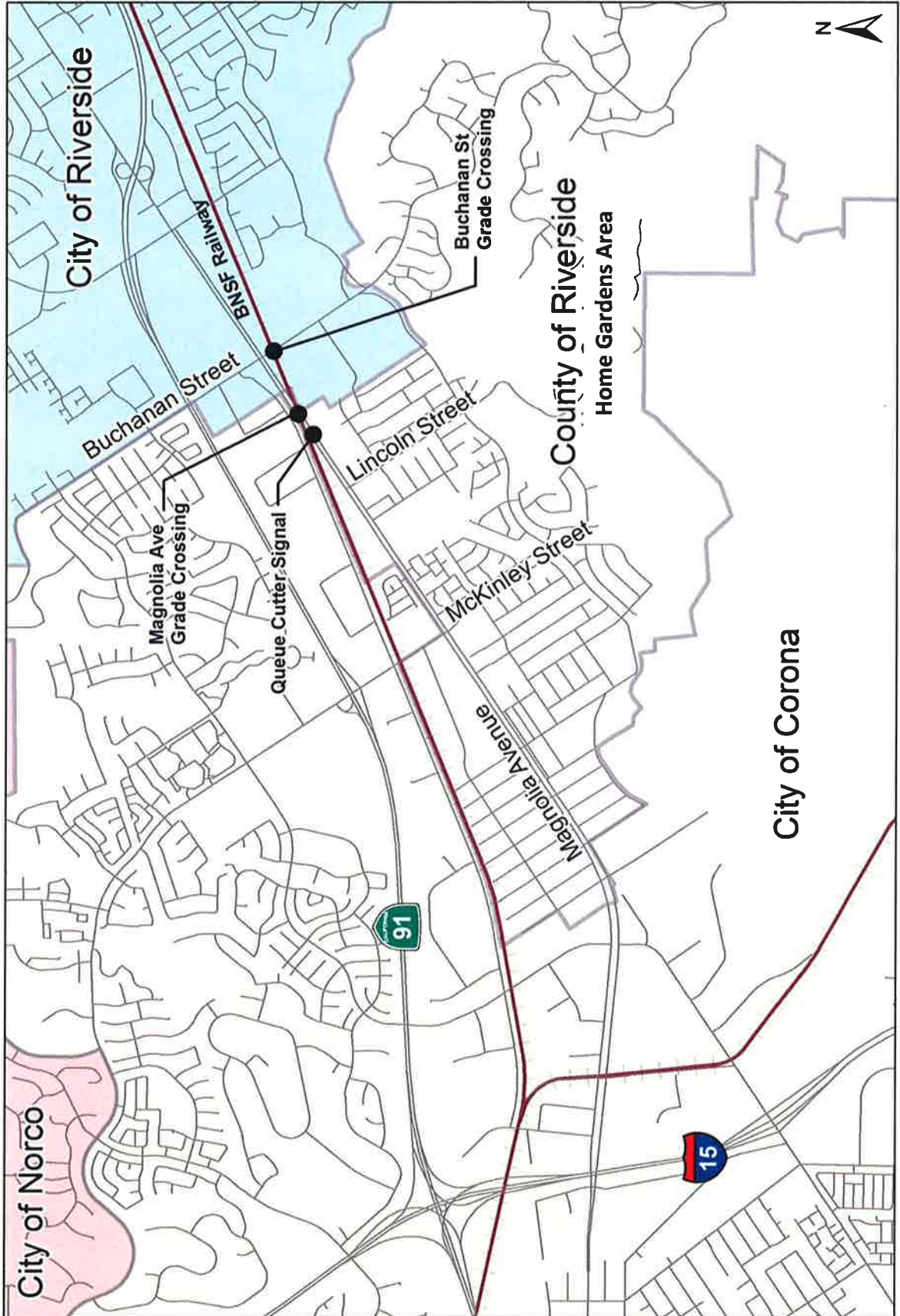
**CITY Approvals**

By: \_\_\_\_\_  
Deanna Lorson, Assistant City Manager

Attest:  
  
By: \_\_\_\_\_  
City Clerk

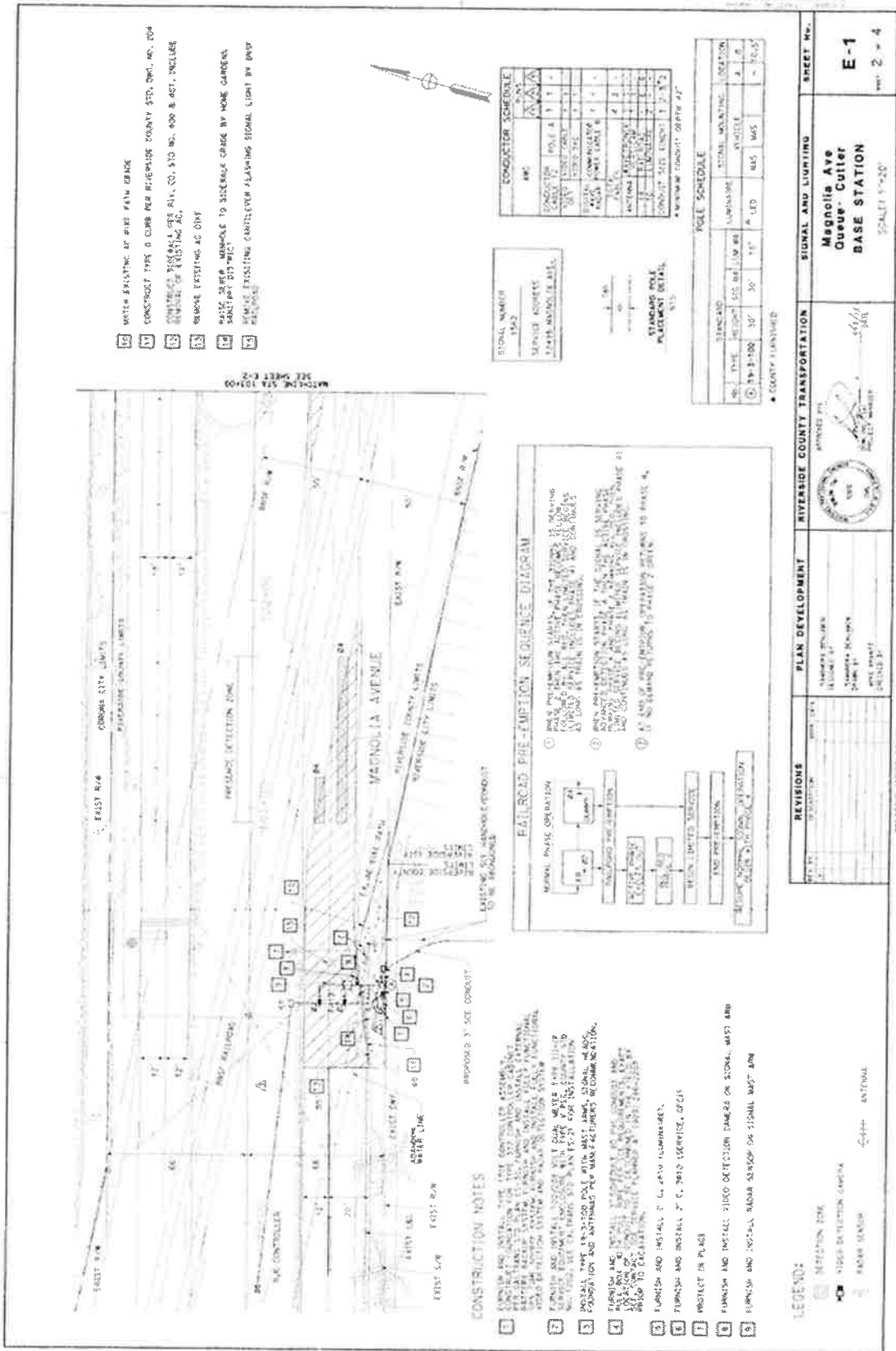
Approved as to form:  
  
By: \_\_\_\_\_  
Deputy City Attorney

EXHIBIT A  
VICINITY MAP



# EXHIBIT B

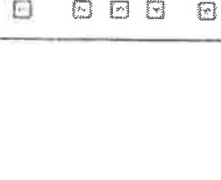
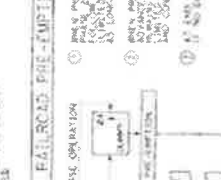
## MAGNOLIA AVE QUEUE CUTTER TRAFFIC SIGNAL PLANS



- 1. MATCH WITH SHEET E-2
- 2. MATCH WITH SHEET E-1
- 3. MATCH WITH SHEET E-3
- 4. MATCH WITH SHEET E-4
- 5. MATCH WITH SHEET E-5
- 6. MATCH WITH SHEET E-6
- 7. MATCH WITH SHEET E-7
- 8. MATCH WITH SHEET E-8
- 9. MATCH WITH SHEET E-9
- 10. MATCH WITH SHEET E-10
- 11. MATCH WITH SHEET E-11
- 12. MATCH WITH SHEET E-12
- 13. MATCH WITH SHEET E-13
- 14. MATCH WITH SHEET E-14
- 15. MATCH WITH SHEET E-15
- 16. MATCH WITH SHEET E-16
- 17. MATCH WITH SHEET E-17
- 18. MATCH WITH SHEET E-18
- 19. MATCH WITH SHEET E-19
- 20. MATCH WITH SHEET E-20

NO.	TYPE	DESCRIPTION	LOCATION
1	STANDARD	30' x 30' x 10'	100' W. OF EAST AVE
2	STANDARD	30' x 30' x 10'	100' E. OF EAST AVE
3	STANDARD	30' x 30' x 10'	100' W. OF EAST AVE
4	STANDARD	30' x 30' x 10'	100' E. OF EAST AVE

NO.	TYPE	DESCRIPTION	LOCATION
1	STANDARD	30' x 30' x 10'	100' W. OF EAST AVE
2	STANDARD	30' x 30' x 10'	100' E. OF EAST AVE
3	STANDARD	30' x 30' x 10'	100' W. OF EAST AVE
4	STANDARD	30' x 30' x 10'	100' E. OF EAST AVE



**CONSTRUCTION NOTES**

1. FURNISH AND INSTALL THE ONLY APPROVED BY ENGINEER SIGNAL HEADS FOR THIS SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL.
2. FURNISH AND INSTALL THE ONLY APPROVED BY ENGINEER SIGNAL HEADS FOR THIS SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL.
3. FURNISH AND INSTALL THE ONLY APPROVED BY ENGINEER SIGNAL HEADS FOR THIS SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL.
4. FURNISH AND INSTALL THE ONLY APPROVED BY ENGINEER SIGNAL HEADS FOR THIS SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL.
5. FURNISH AND INSTALL THE ONLY APPROVED BY ENGINEER SIGNAL HEADS FOR THIS SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL.
6. FURNISH AND INSTALL THE ONLY APPROVED BY ENGINEER SIGNAL HEADS FOR THIS SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL.
7. FURNISH AND INSTALL THE ONLY APPROVED BY ENGINEER SIGNAL HEADS FOR THIS SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL.
8. FURNISH AND INSTALL THE ONLY APPROVED BY ENGINEER SIGNAL HEADS FOR THIS SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL.
9. FURNISH AND INSTALL THE ONLY APPROVED BY ENGINEER SIGNAL HEADS FOR THIS SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL.
10. FURNISH AND INSTALL THE ONLY APPROVED BY ENGINEER SIGNAL HEADS FOR THIS SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL. SIGNAL HEADS SHALL BE INSTALLED IN THE CENTER OF THE SIGNAL.

**LEGEND:**

- 1. SIGNAL HEAD
- 2. SIGNAL HEAD
- 3. SIGNAL HEAD
- 4. SIGNAL HEAD
- 5. SIGNAL HEAD
- 6. SIGNAL HEAD
- 7. SIGNAL HEAD
- 8. SIGNAL HEAD
- 9. SIGNAL HEAD
- 10. SIGNAL HEAD
- 11. SIGNAL HEAD
- 12. SIGNAL HEAD
- 13. SIGNAL HEAD
- 14. SIGNAL HEAD
- 15. SIGNAL HEAD
- 16. SIGNAL HEAD
- 17. SIGNAL HEAD
- 18. SIGNAL HEAD
- 19. SIGNAL HEAD
- 20. SIGNAL HEAD

**REVISIONS**

NO.	DATE	DESCRIPTION
1	01/15/20	ISSUED FOR PERMIT
2	01/20/20	ISSUED FOR PERMIT
3	01/25/20	ISSUED FOR PERMIT
4	02/01/20	ISSUED FOR PERMIT
5	02/05/20	ISSUED FOR PERMIT
6	02/10/20	ISSUED FOR PERMIT
7	02/15/20	ISSUED FOR PERMIT
8	02/20/20	ISSUED FOR PERMIT
9	02/25/20	ISSUED FOR PERMIT
10	03/01/20	ISSUED FOR PERMIT

**PLAN DEVELOPMENT**

**RIVERSIDE COUNTY TRANSPORTATION**

**SIGNAL AND LIGHTING**

**Magnolia Ave Queue Cutter BASE STATION**

**E-1**

**SCALE: 1"=20'**

**SHEET 2 OF 4**

**NO. 01-0186**

**DATE: 01/15/20**

**DESIGNED BY: [Name]**

**CHECKED BY: [Name]**

**APPROVED BY: [Name]**

**PROJECT NO. [Number]**

**PROJECT NAME: [Name]**

**PROJECT LOCATION: [Address]**

**PROJECT OWNER: [Name]**

**PROJECT CONTACT: [Name]**

**PROJECT PHONE: [Number]**

**PROJECT FAX: [Number]**

**PROJECT EMAIL: [Address]**

**PROJECT WEBSITE: [Address]**

**PROJECT ADDRESS: [Address]**

**PROJECT CITY: [City]**

**PROJECT STATE: [State]**

**PROJECT ZIP: [Zip]**

**PROJECT COUNTY: [County]**

**PROJECT DISTRICT: [District]**

**PROJECT SUBDISTRICT: [Subdistrict]**

**PROJECT PHASE: [Phase]**

**PROJECT STATUS: [Status]**

**PROJECT START DATE: [Date]**

**PROJECT END DATE: [Date]**

**PROJECT BUDGET: [Amount]**

**PROJECT COST: [Amount]**

**PROJECT REVENUE: [Amount]**

**PROJECT PROFIT: [Amount]**

**PROJECT LOSS: [Amount]**

**PROJECT BREAK-EVEN POINT: [Date]**

**PROJECT RISK: [Level]**

**PROJECT COMPLIANCE: [Level]**

**PROJECT LEGAL: [Level]**

**PROJECT ETHICAL: [Level]**

**PROJECT SOCIAL: [Level]**

**PROJECT ENVIRONMENTAL: [Level]**

**PROJECT ECONOMIC: [Level]**

**PROJECT CULTURAL: [Level]**

**PROJECT HISTORICAL: [Level]**

**PROJECT ARCHITECTURAL: [Level]**

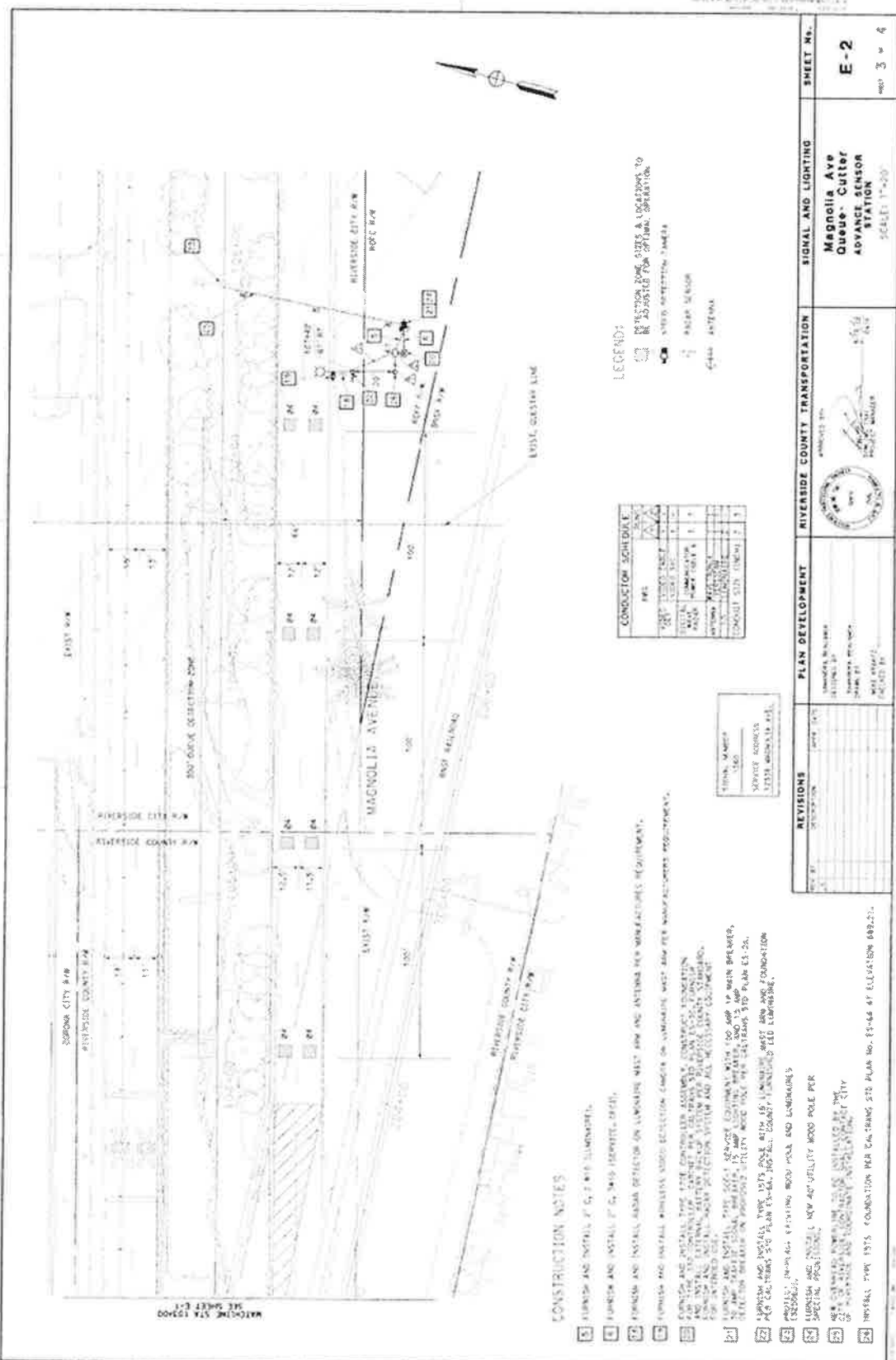
**PROJECT ENGINEERING: [Level]**

**PROJECT SCIENCE: [Level]**

**PROJECT TECHNOLOGY: [Level]**

**PROJECT ARTS: [Level]**

**PROJECT RECREATION: [Level]**



LEGEND:  
 [Symbol] DETECTION ZONE, SIZE & LOCATIONS TO BE ADJUSTED FOR SPINUP OPERATION.  
 [Symbol] VIDEO DETECTION CAMERA  
 [Symbol] PLEAS SENSOR  
 [Symbol] ANTENNA

CONSTRUCTION SCHEDULE	
PER	DATE
PREP	11/15/11
DESIGN	11/15/11
CONSTRUCTION	11/15/11
COMPLETION	11/15/11

CHECKS	
DATE	BY
11/15/11	XXX
11/15/11	XXX

**CONSTRUCTION NOTES**

1. FURNISH AND INSTALL 2" G, 2 W/10' DIMENSIONS.
2. FURNISH AND INSTALL 2" G, 2 W/10' DIMENSIONS.
3. FURNISH AND INSTALL 2" G, 2 W/10' DIMENSIONS.
4. FURNISH AND INSTALL 2" G, 2 W/10' DIMENSIONS.
5. FURNISH AND INSTALL 2" G, 2 W/10' DIMENSIONS.
6. FURNISH AND INSTALL 2" G, 2 W/10' DIMENSIONS.
7. FURNISH AND INSTALL 2" G, 2 W/10' DIMENSIONS.
8. FURNISH AND INSTALL 2" G, 2 W/10' DIMENSIONS.
9. FURNISH AND INSTALL 2" G, 2 W/10' DIMENSIONS.
10. FURNISH AND INSTALL 2" G, 2 W/10' DIMENSIONS.
11. FURNISH AND INSTALL 2" G, 2 W/10' DIMENSIONS.
12. FURNISH AND INSTALL 2" G, 2 W/10' DIMENSIONS.
13. FURNISH AND INSTALL 2" G, 2 W/10' DIMENSIONS.
14. FURNISH AND INSTALL 2" G, 2 W/10' DIMENSIONS.
15. FURNISH AND INSTALL 2" G, 2 W/10' DIMENSIONS.
16. FURNISH AND INSTALL 2" G, 2 W/10' DIMENSIONS.
17. FURNISH AND INSTALL 2" G, 2 W/10' DIMENSIONS.
18. FURNISH AND INSTALL 2" G, 2 W/10' DIMENSIONS.
19. FURNISH AND INSTALL 2" G, 2 W/10' DIMENSIONS.
20. FURNISH AND INSTALL 2" G, 2 W/10' DIMENSIONS.

REVISIONS	PLAN DEVELOPMENT	RIVERSIDE COUNTY TRANSPORTATION	SIGNAL AND LIGHTING
NO. BY	DATE	DATE	DATE
1	11/15/11	11/15/11	11/15/11
2	11/15/11	11/15/11	11/15/11
3	11/15/11	11/15/11	11/15/11
4	11/15/11	11/15/11	11/15/11



**Magnolia Ave Queue-Cutter ADVANCE SENSOR STATION**  
 SCALE: 1"=20'  
 SHEET NO. E-2  
 NO. 3 OF 4

**EXHIBIT C**

**MAGNOLIA AVENUE GRADE CROSSING**

**TRACK IMPROVEMENT COST ESTIMATE BY BNSF**



FILL DIRT	10.0 CY N	250	
SURFACE ROCK	10.0 CY N	250	
		<hr/>	
TOTAL OTHER ITEMS COST		7,500	7,500
		<hr/>	
PROJECT SUBTOTAL			188,120
CONTINGENCIES			18,812
BILL PREPARATION FEE			2,070
			<hr/>
GROSS PROJECT COST			209,002
LESS COST PAID BY BNSF			0
			<hr/>
TOTAL BILLABLE COST			209,002

**EXHIBIT D**

**BUCHANAN STREET GRADE CROSSING**

**TRACK IMPROVEMENT COST ESTIMATE BY BNSF**





**EXHIBIT E**

**AGENCY SHARE OF THE BNSF TRACK IMPROVEMENTS COST**

<b>IMPROVEMENTS</b>	<b>TOTAL</b>	<b>CITY</b>	<b>COUNTY</b>
Queue Cutter Traffic Signal	\$ 150,000	\$ 0	\$ 150,000
Magnolia Ave Grade Crossing	\$ 209,002	\$ 104,501	\$ 104,501
Buchanan St Grade Crossing	\$ 137,037	\$ 137,037	\$ 0
<b>Total</b>	<b>\$ 496,039</b>	<b>\$ 241,538</b>	<b>\$ 254,501</b>