W.6.F.4.

Memorandum Date: August 31, 2009
Order Date: September 16, 2009

TO: Board of County Commissioners

DEPARTMENT: Public Works

PRESENTED BY: Bill Morgan, County Engineer

AGENDA ITEM TITLE: In the Matter of Recommending Bridge Repair and Replacement Projects and Requesting Authorization to Submit Applications for Funding Under the 2014-2015 Federal Highway Bridge Program

I. MOTION

Move approval of the Order.

II. AGENDA ITEM SUMMARY

The Oregon Department of Transportation (ODOT) has solicited requests for funding of projects for bridge replacement and rehabilitation under the 2014-2015 federal Highway Bridge Program (HBP). Staff is requesting Board Authorization to submit requests for consideration for funding for two bridges under this program, Goodpasture Covered Bridge and Layng (Mosby Creek) Covered Bridge.

III. BACKGROUND/IMPLICATIONS OF ACTION

A. Board Action and Other History

In the past, the Board has expressed the desire to seek grant opportunities to help defray the costs of maintaining Lane County's covered bridges.

B. Policy Issues

Submittal of these funding requests for the rehabilitation or replacement of these two bridges is consistent with the County's policy of pursuing intergovernmental revenue whenever possible.

C. Board Goals

Repair or replacement of these two bridges is consistent with the County Goals of contributing "to appropriate community development in the area of transportation and telecommunications infrastructure, housing, growth management and land development", and protection of the "public's assets by maintaining, replacing or upgrading the County's investments in systems and capital infrastructure". Also in the *Lane County Strategic Plan* under Section B-3(d)(6), it is stated that "Operation, maintenance, and preservation (OM&P) of the existing County road system will receive the highest priority."

D. Financial and/or Resource Considerations

If one or both of the requests for funding are approved, and the Board authorizes the projects, a match in the amount of 10.27% of project costs will be required. This is estimated to be

$174,590 if both projects were to be approved. The 2010-2014 Lane County Public Works Capital improvement Program includes $325,000 under the category of Covered Bridge Rehabilitation in the FY 09-10 period. This funding could be reprogrammed to allow for the required match should the grants be approved, or additional funding could be provided out of Road Fund reserves in connection with the adoption of the 2011-2015 Capital Improvement Program in the Spring of 2010.

Both Goodpasture Covered Bridge and Layng (Mosby Creek) need rehabilitation or repair in order to retain their load-carrying capacity and to address significant deterioration in their structural elements. If the grants are not applied for and received, the work will need to be funded solely using county road funds or will need to be delayed until other funding or grants can be identified. Award of one or both of these grants will allow Road Funds to be spent elsewhere within the County system.

E. Analysis

The submittal of Candidate Bridges is due to ODOT on September 18, 2009. The Local Agency Bridge Selection Committee (LABSC) will complete the selection process and make funding recommendations for rehabilitation or replacement for scoping for 2014-2015 construction.

The primary selection criteria for approval of project funding under the 2014-2015 HBP is the Technical Rating System (TRS) a major component of which is the bridge's sufficiency rating. The sufficiency rating for a bridge is composed based on an overall evaluation of its structure, whether it exhibits functional obsolescence, is structurally deficient, and on the condition of the various components comprising the bridge. A sufficiency rating of 100 percent would therefore represent an entirely sufficient bridge and a zero percent sufficiency rating would represent an entirely insufficient or deficient bridge. Only bridges with a sufficiency rating of 50% or less are to be considered for funding under this program. Goodpasture Covered Bridge has a sufficiency rating of 35.2, and Layng Road (Mosby Creek) Covered Bridge has a sufficiency rating of 25.7.

A summary of the known conditions and recommendations for each bridge is as follows:

Goodpasture Covered Bridge - is a 71-year old timber structure with a 165-ft long main span. Several splices along the bottom chords of the covered trusses are broken and are held together with heavy steel tie-rod assemblies. The main truss has developed a 3" sag over its 71 year life. The original floor beams are damaged and have been reinforced with glulams sandwiched to both sides of each beam. These old repairs add significant dead load and interfere with inspection. The bridge provides the only link to a residential community and an expansive, multi-use national forest. No known public detour route has been identified in the event it becomes necessary to either post the bridge for a restricted load rating or take it out of service because of continued deterioration of a structural failure. The current Average Daily Traffic (ADT) for this bridge is 955.

The proposed solution is to post-tension the bottom chord of the main span, replace the floor beams and any other decayed primary structural members. Post-tensioning adds several steel rods to the bottom chord of the main timber truss and are then tightened to about 65,000 lbs each. This will take the sag out of the bridge and provide additional load capacity.

Currently, Lane County has received a $140,000 National Historic Covered Bridge Program grant to put a new roof on the bridge. The proposed work on the bridge will require that the roof of the house be removed, so this work has been postponed pending the outcome of the grant applications. If Lane County receives this grant, the work will be combined into one project.

Mosby Creek Covered Bridge - is an 83-year old timber structure with a 90-ft long main span located on Layng Road southeast of Cottage Grove, and it has an ADT of 278. This bridge requires replacement of structural truss members (bottom chords, diagonals and some top chords) that have deteriorated over time. Replacement of decayed stringers, floor beams and the timber decking is also needed. In order to perform this work, the roof and the house must be removed.

Lane County submitted a $1,000,000 grant request to the National Historic Covered Bridge Program (NHCBP) in June 2009. We are awaiting word on the NHCBP grant; until the results of this application are known, staff feels it is prudent to submit this grant request.

Project costs are estimated to be $700,000 for Goodpasture Covered Bridge and $1,000,000 for Layng (Mosby Creek) Covered Bridge. Funding is being requested in the amount of 89.73% of project costs, or $628,110 for Goodpasture Covered Bridge and $897,300 for Layng (Mosby Creek) Covered Bridge.

In order to satisfy the requirements set forth in the *Administrative Procedures Manual*, Chapter 1, Section 2A, the following questions need to be answered when a Board Agenda item relates to approval of a grant or any project or proposal with limited duration funding:

1. What is the match requirement, if any, and how is that to be covered for the duration of the grant?

A. For this program, the match requirement is 10.27% of the total project costs, currently estimated to be $71,890 for the work on Goodpasture Covered Bridge, and $102,700 for the proposed work on Layng Covered Bridge, based on respective total costs of $700,000 and $1,000,000.

2. Will the grant require expenditures for Material and Services of capital not fully paid for by the grant?

A. The project will be competitively bid by ODOT as a Capital Improvement Project and will require that the Road Fund cover the match as well as any overages that may include expenditures for Materials and Services. The project and construction contract will be administered by ODOT.

3. Will the grant fund be fully expended before the County funds need to be spent?

A. Yes. This will be addressed under a reimbursement agreement, wherein the Road Fund will be used to reimburse the State for project costs according to the match split (89.73%/10.27%).

4. How will the administrative work of the grant be covered if the grant funds don't

cover it?

A. Grant funds will cover this activity in proportion to the match split, with the balance to come from the Road Fund.

5. Have grant stakeholders been informed of the grant sunsetting policy so there is no misunderstanding when the funding ends? Describe plan for service if grant funding does not continue.

A. This grant is a one-time, project-specific allocation that will need to be completed with the agreed-to timeline. There is no expectation that there will be continued funding.

6. What accounting, auditing and evaluation obligations are imposed by the grant conditions?

A. A final report is required under the grant conditions. The report will include a description of the work completed, financial summary, photo documentation and any historical information about the structure.

7. How will the department cover the accounting, auditing, and evaluation obligations? How are the costs for these obligations covered, regardless whether they are in the department submitting the grant or a support service department? Does the department acknowledge that the County will need to cover these costs and it is an appropriate cost incurred by support service departments?

A. These activities will be managed by Public Works staff utilizing, among other tools, the Cost Accounting System, Field Engineering staff and Road Maintenance staff. Costs associated with these activities will be covered by the grant based on the match split.

8. Are there any restrictions against applying the County full cost indirect charge?

A. Yes, since the Highway Bridge Program (HBP) uses Federal funds which are passed through the State, we will need to use a Federal Indirect Charge.

9. Are there unique or unusual conditions that trigger additional county work effort or liability, i.e. maintenance of effort requirements or supplanting prohibitions or indemnit obligations?

A. Based on past experience with similar grant programs with ODOT, it is expected that mutually-acceptable language can be incorporated into the Intergovernmental Agreement (IGA) that will precede the grant funding for these project(s).

10. Grants involving technology issues require Information Services Department review and approval prior to submission to the Board to ensure compatibility with existing county systems and development tools.

A. This grant will not involve technology issues.

11. Information Services Department sign-off is required for all Agenda items requesting funding for new or enhanced computer applications/systems that will

interface with existing county systems/infrastructure.

A. This is not an IS-related project.

12. If this is a grant funded computer/software applications project:

a. who is the project sponsor? Who will assume responsibility for the new system after it is developed? A. Not Applicable.

b. Who will actually develop the new system/application? A. Not applicable.

c. What will happen to the software application/system after the grant funding has ended? A. Not applicable

d. Who will pay for ongoing maintenance and staff costs, if any? A. Not applicable.

F. Alternatives/Options

1. Approve the Order authorizing staff to submit applications for Goodpasture and Layng (Mosby Creek) Covered Bridges for funding under the 2014-2015 HBP, and delegating authority to the County Administrator to execute the grant documents if the grant funding is approved.

2. Deny the order and/or direct staff otherwise.

IV. RECOMMENDATION

Option 1.

V. TIMING/IMPLEMENTATION

Action by the Board is required today in order to meet the September 18, 2009 deadline for submitting HBP funding requests to ODOT.

VI. FOLLOW-UP

The applications for HBP funding for the two subject bridges will be submitted to ODOT by the September 18, 2009 deadline.

VII. ATTACHMENTS

1. Copy of ODOT solicitation letter.

2. Project Prospectus for each bridge.

IN THE BOARD OF COUNTY COMMISSIONERS
OF LANE COUNTY, OREGON

ORDER NO.

(**IN THE MATTER OF RECOMMENDING**
(**BRIDGE REPAIR AND REPLACEMENT**
(**PROJECTS AND REQUESTING**
(**AUTHORIZATION TO SUBMIT APPLICATIONS**
(**FOR FUNDING UNDER THE 2014-2015**
(**FEDERAL HIGHWAY BRIDGE PROGRAM**
(

WHEREAS, Public Works staff is requesting Board authorization to submit requests for funding of local bridge projects to Oregon Department of Transportation (ODOT) under the 2014-2015 federal Highway Bridge Program; and

WHEREAS, staff has identified Goodpasture Covered Bridge (Br. 39C118) and Layng (Mosby Creek) Covered Bridge (Br. 39C241) as two candidates for funding of repair or replacement; and

WHEREAS, scoping for said two bridges will be undertaken in 2010, and if either or both projects are approved for funding construction of said projects would be undertaken in 2014-2015; and

WHEREAS, Lane Manual 21.137 sets forth policy regarding grant application and requires Board approval of the preliminary application and acceptance of any grant award greater than $100,000; **NOW, THEREFORE, IT IS HEREBY**

ORDERED, that the Board authorizes the submission of 2014-2015 HBP applications to ODOT for the above-referenced bridges prior to the September 18, 2009 deadline; and

IT IS FURTHER ORDERED, that the Board of County Commissioners delegate authority to the County Administrator to execute the grant documents.

IT IS FURTHER ORDERED that this Order shall be entered into the records of the Board of Commissioners of the County.

DATED this _____ day of _____, 2009.

APPROVED AS TO FORM
Date: 4-3-09 Lane County
OFFICE OF LEGAL COUNSEL

_____
Chair,
Board of County Commissioners

ATTACHMENT 1

Oregon
Theodore R. Kulongoski, Governor

Department of Transportation
Transportation Building
355 Capitol St. NE, Rm. 301
Salem, OR 97301-3871

FILE CODE:

May 22, 2009

To: All Local Agencies

Subject: Request for Local Highway Bridge Program Projects (LHBP)

The Local Agency Bridge Selection Committee (LABSC) is soliciting local bridge projects for funding under the federal Highway Bridge Program (HBP). Only bridges listed in the National Bridge Inventory Standards (NBIS) are eligible. The primary selection criteria will be the Technical Ranking System (TRS). The TRS though is not the sole criteria used by the LABSC for selecting which bridges will be recommended for funding. Any Investment will be strategic in nature to ensure that freight corridors are maintained. The current Bridge Priority Selection Policy is attached. Also attached are lists of all City and County bridges that are eligible for HBP funding. This solicitation we have broke the list down to an On and Off System and if the bridges meet the criteria for replacement and or rehabilitation, or just rehabilitation.

ATTACHMENT 1

The HBP eligibility list is based on the National Bridge Inventory as of April 2009. If a more recent NBIS inspection, or load rating conducted following ODOT load rating procedures shows that a bridge would now be eligible, please complete the Bridge Prospectus. Bridges will be presented to FHWA on an individual basis to be added to the eligibility list.

The LABSC will complete the selection process and make funding recommendations this autumn for rehabilitation or replacement projects for scoping for 2014-2015.

Your submittal of Candidate Bridges for rehabilitation or replacement is due **September 18, 2009**.

The Local Agency HBP Applications Instructions are attached and includes an outline of the format and forms for local agency submittals for HBP funding. This letter, the outline of the format, and forms for local agency submittals for HBP funding are available electronically at:

http://www.oregon.gov/ODOT/HWY/BRIDGE/local_agency.shtml

The guidelines developed in 2004 separate bridges less than 30,000 square feet ("small bridges") for those over 30,000 square feet ("large bridges").

- Small bridges- The TRS will be applied to bridges with decks less than 30,000 square feet.
- Large bridges- The LABSC will determine the ranking system for bridges over 30,000 square feet.

There has been a traditional split in funding for small and large bridges based on the deck area of eligible bridges. Using the latest information, the funding would be divided with 79 percent going to small bridges and 21 percent going to large bridges. There are no pre-determined amounts for county bridges or for city bridges.

The HBP program currently requires a 10.27 percent funding match. Recipients must provide at least 10.27 percent of the project cost. Note that the projects submitted under this request will be funded under a new highway bill that is currently being developed, so details such as the match may change.

The Local Agency Guidelines (LAG) manual provides information and guidance to help local public agencies to access Federal Highway Administration (FHWA) funding for local transportation-related projects.

ATTACHMENT 1

This should be used as a reference for bridge proposals and is available electronically at:

http://www.oregon.gov/ODOT/HWY/LGS/Certification.shtml#LAG_Manual

Listed below are the ODOT Region Local Liaison's.

Region 1	Phone Number
Mahasti Hastings	503-731-8595
Mark Foster	503-731-8288
Michele Thom	503-731-8279
Tom Weatherford	503-731-8238
Region 2	
Ted Keasey	503-986-6903
Kelly Amador	503-986-2650
Michael Starnes	503-986-6920
Region 3	
Scott Adams	541-957-3636
Kelly Sparkman	541-774-6383
Region 4	
Darrell Newton	541-388-6272
Region 5	
Douglas Wright	541-963-1362

Please return your submittal of candidate bridges by **September 18, 2009** to Erick Cain, ODOT Bridge Section, 355 Capitol Street NE, Room 319A, Salem, OR 97301.

Bruce V. Johnson, PE
State Bridge Engineer

BVJ/mp

Cc: Marty Andersen, ODOT Local Bridge Program
Steve Leep, ODOT Program and Funding Services Unit
Cathy Nelson, ODOT Technical Services
Jon Oshel, Association of Oregon Counties
Craig Honeyman, League of Oregon Cities

ATTACHMENT 1

Jack G. Lee, Freight Mobility Section
Michael Bufalino, Freight Mobility Section

Local Agency Owned HBP Eligible Bridges

Project Prospectus, Part 1
Bridge Prospectus - Cost Estimate
Bridge Prospectus – Additional Information
Bridge Prospectus – Requested Changes to NBIS Data
Highway Bridge Program Solicitation Form

A submittal of candidate bridges for funding under HBP must include the following information:

1. A list of the candidate bridges in order of the owner's priority.

2. A completed Project Prospectus, Part I, for each candidate bridge, (two tabs "ProspectusPartI,p1" and "ProspectusPartI,p2") of the LocalBridgeAppForms.xls file make up the Project Prospectus, Part I file. The LocalBridgeAppForms.xls file is available at: http://www.oregon.gov/ODOT/HWY/BRIDGE/local_agency.shtml or http://www.oregon.gov/ODOT/HWY/LGS/ .

3. LAG Project Manual is available as a guideline for more information concerning the selection process as well as filling out the prospectus. http://www.oregon.gov/ODOT/HWY/LGS/Certification.shtml Please note that Cost Estimate fields (gray boxes) on the Project Prospectus, Part I spreadsheets are linked to the Bridge Prospectus Cost Estimate. Completing the Bridge Prospectus Cost Estimate fills in these fields.

4. A Bridge Prospectus Cost Estimate for each candidate bridge. The Bridge Prospectus Cost Estimate furnishes the details of the cost estimate.

   Bridge construction cost summary documents should reflect the costs of construction today. Construction cost data can be obtained from the ODOT Internet cost-estimating page Inter-net address: http://www.oregon.gov/ODOT/HWY/ESTIMATING/index.shtml

5. A Bridge Prospectus – Additional Information form for each candidate bridge. The form ("AdditionalBridgeInfo" tab) is part of the LocalBridgeAppForms.xls file. This form supplies data required for calculation of the final Technical Ranking Score. Please note that

ATTACHMENT 1

"truck" means any vehicle with a gross vehicle weight greater than 26,000 pounds.

(a) Truck Average Annual Daily Traffic (AADT).

- ◇ Preferred data includes actual truck counts, seasonal traffic data converted to AADT, and multi-year truck traffic usage, converted to AADT.
- ◇ "Existing" Truck AADT is the **percent** of truck traffic that crosses the bridge today.
- ◇ "Proposed" Truck AADT is an estimate of the amount of truck traffic that would cross the bridge if the bridge did not have a posted load limit. In addition, "Proposed" Truck AADT may include an estimate of the amount of truck traffic over the bridge when it provides access to a proposed industrial site or other site where jobs may be created.
- ◇ A default Truck AADT will be calculated using an assumption that trucks are 5 **percent** of AADT, if no data is provided.

(b) Detour map and detour length.

- ◇ A detour represents the additional travel that results, or would result, from closing the bridge or closing the bridge to vehicles above a certain vehicle weight.
- ◇ A detour route must have no alignment or load limitations for non-permit trucks.
- ◇ A detour route must be on a road with a functional class that is no lower than one functional class below that of the road carried by the bridge. For example, the detour route for a bridge carrying a major collector would include roads with a functional class of minor collector and above.

(c) Fire truck usage. Is the candidate bridge heavily used by fire trucks? This is a YES / NO response. A YES response indicates that at least 25 percent of responses from a fire station must use the bridge. Please supply with your application a letter from the Fire station that states at least 25% of the responses utilize this structure. If a letter is not included then the default usage will apply of less then 25 percent.

(d) Regional Freight Corridor Analysis. "Regional freight corridor" means a route that carries freight from a resource site (an industrial site, distribution center, forest, or farm) across this bridge to a state highway.

Local agencies must provide a map that identifies the regional freight corridor carried by the proposed bridge. In addition, local agencies must identify the bridges under their jurisdiction that are

on the regional freight corridor by NBIS Bridge Number. Since local roads and streets collect traffic from and distribute traffic to many sites, the map and bridge information must, at minimum, show the route connecting the proposed bridge to a state highway. The information will be used by the LABSC to ensure that the projects it selects enable freight to move unimpeded by load limitations, to the extent possible.

(e) Special Considerations. Local agencies proposing small bridges (less than 30,000 square feet) may provide additional information for use by the LABSC in the project selection process. Special considerations may address:

- ◇ Whether the subject bridge is one of a multiple bridge proposal that would remove load postings from a route.
- ◇ Whether the subject bridge provides access to an industrial site or other site where jobs may be created.
- ◇ Whether the subject bridge is on a route that serves as an emergency detour route for a state highway.
- ◇ For proposals to rehabilitate a bridge rather than to build a replacement bridge, an estimate of the extended life of the bridge and an analysis showing the Sufficiency Rating of the bridge <u>after</u> the rehabilitation project has been completed.

6. (OPTIONAL) <u>A Bridge Prospectus – Requested Changes to NBIS Data</u> form for every bridge where the local agency supplies updated information for the calculation of the Technical Ranking Score. Any changes will be verified and incorporated into the NBIS and the TRS calculation. The form ("ReqNBISDataRevisions" tab) is part of the LocalBridgeAppForms.xls file.

7. This selection cycle we are also adding an additional form 2014-2015 Highway Bridge Program Solicitation Form to fill out. The purpose of this form is to capture information that is necessary to calculate the Technical Ranking System (TRS), but is not captured in the Project Prospectus.

PROJECT PROSPECTUS

PART 1 — PROJECT REQUEST (PAGE 1 OF 2)

KEY ID #

Goodpasture Covered Bridge Structural Rehabilitation

REGION	MAINTENANCE DISTRICT
2	5

STATE HIGHWAY #	HIGHWAY NAME	MILE POST	LENGTH (km)
		FROM .01 TO .06	0.08

URBAN / RURAL	CITY	COUNTY	ROAD/STREET NAME
☐ URBAN ☑ RURAL		Lane	Goodpasture Road

ROUTE #	NHS	HPMS	FC	APPLICANT (IF OTHER THAN STATE)
Lane Co 001094	☐ YES ☑ NO	1	8	Lane County

US CONGRESSIONAL DISTRICT	STATE SENATE DISTRICT	STATE REPRESENTATIVE DISTRICT
4	4	7

COST ESTIMATES (000'S)

PRELIMINARY ENGINEERING	$ 100
RIGHT OF WAY	$ -
ROADWAY	
STRUCTURES	$ 461
SIGNALS	
ILLUMINATION	
TEMPORARY PROTECTION	$ 14
ENGINEERING & CONTINGENCIES	$ 125
TOTAL CONSTRUCTION	$ 600
TOTAL ESTIMATE	$ 700

PROJECT DATA

GRADING		
PAVING		
STRUCTURES		X
SIGNING		
SIGNALS		
ILLUMINATION		
ENVIRONMENTAL CLASS	(1, 2, 3)	2
DESIGN CATEGORY	(1-7)	7
WORK TYPE	(1-13)	5

RIGHT OF WAY

FILES	(#)	0
HECTARES	(#)	0
RELOCATIONS	(#)	0

WORK BY STATE/CONSULTANT/APPLICANT

PRELIMINARY ENGINEERING	(S,C,A)	C
CONSTRUCTION ENGINEERING	(S,C,A)	C
RIGHT OF WAY DESCRIPTIONS	(S,C,A)	
RIGHT OF WAY ACQUISITIONS	(S,C,A)	

CONSTRUCTION

☑ CONTRACT ☐ OTHER
☐ STATE FORCE
☐ CITY FORCE
☐ COUNTY FORCE

RECOMMENDED LET DATE BY FEDERAL FISCAL YEAR:	(QUARTER / YEAR)	RECOMMENDED FUND SOURCE: (PE)	(R/W)	(CONST)

RECOMMENDED PROGRAM REVISIONS

☐ POSTPONE ☐ CANCEL	SECTION	FUNDS	CUR. YR.	ESTM. (000's) $
☐ POSTPONE ☐ CANCEL	SECTION	FUNDS	CUR. YR.	ESTM. (000's) $

ITEM	EXISTING	PROPOSED
TRAVEL LANES (#)	2	2
STRUCTURE (#)	1	1
SIGNALS (#)	0	0
BIKE WAY (Y/N)	N	N
AVERAGE DAILY TRAFFIC	955	
YEAR OF AVERAGE DAILY TRAFFIC	2006	
THROUGHWAY		

DEFINE THE PROBLEM

The bridge is a 71 year old timber structure with a 165-ft long main span. Several splices along the bottom chords of the covered trusses are broken and are held together with heavy steel tie-rod assemblies. The original floor beams are damaged and have been reinforced with glulams sandwiched to both sides of each beam. These repairs add significant dead load and interfere with inspection. The bridge provides the only link to a growing residential community and an expansive, multi-use national forest. The current (2008) sufficiency rating is 35.2.

PROPOSED SOLUTION ATTACH SKETCH MAP

Post-tension the bottom chords of the trusses to provide an alternate load path and relieve the broken timber members of tensile stresses. Replace floor beams with glulam members. Replace other primary structural members found to be decayed. This work would be planned and constructed with a 2008 NHCBP grant for a new lighter weight roof.

REQUESTED, REGION ENGINEER	DATE	TRANSP. COMM. APPROVAL DATE	PROGRAM YEAR	FUNDING
X				

1911(8-96)

PROJECT PROSPECTUS

PART 1 — PROJECT REQUEST (PAGE 2 OF 2)

KEY ID # 0

REGION 2

Goodpasture Covered Bridge Structural Rehabilitation

PROJECT JUSTIFICATION

The Goodpasture Covered Bridge is an irreplaceable historic treasure. Adjacent to, and clearly visible from, a major highway (Oregon Hwy 126) it is likely the most noticeable and most photographed covered bridge in Oregon. It is a cultural icon and a source of civic pride. It is also one of the longest covered bridges in the state, with a main span of 165 feet. Functionally, it provides the only access to a growing residential community and a vast, multi-use national forest, other than via circuitous and poorly maintained forest service roads. It now carries heavy traffic, with an ADT of 955 in 2006 of which 10% is trucks including frequent overload and permit vehicles. The current (2008) sufficiency rating is 35.2.

The bridge was constructed in 1938 of native Douglas Fir. The main span is a 165-ft long Howe truss. A 1972 inspection report identifies broken splices in the bottom chords. Repairs were made in the 1980's incorporating heavy steel weldments and tie-rods. During this rehabilitation 6-3/4"x26-1/4" glulams were added to each side of each floor beam. A few years later a very heavy, cement-based composite roof was installed. Although the bridge is not presently load restricted, both trusses of the covered span were found to sag over 3 inches at mid-span in 2006. The present structural system provides no means of restoring positive camber to this span, and it can be expected that the magnitude of the sag will increase with time unless corrective measures are taken. Rehabilitation will include restoration of positive camber in the covered span and strengthening of the bottom chords by post-tensioning. A 2008 NHCBP grant was secured to replace the existing roof with a lighter system. Although the latest (2008) inspection report suggests that insect and decay damage to primary stuctural members is minor, it is anticipated that the need for some additional repair will be discovered after work begins. A thorough inspection by the

There will be no change to horizontal roadway alignment or portal openings. Therefore Desgin Exceptions will be required for horizontal alignment, horizontal and vertical clearances and lane widths. It may be necessary to build enclosures around the post-tensioning anchorages as was done at Lowell Covered Bridge, and if so, this will require coordination with the State Historic Preservation Office (SHPO).

ADDITIONAL INFORMATION FOR PROJECTS REQUESTED BY LOCAL JURISDICTIONS

RESPONSIBLE LOCAL OFFICE TO BE CONTACTED FOR THE FOLLOWING ACTIVITIES:

1. Public Hearing / Citizen Involvement	Kerry Werner	(Office)	541-682-6960	(Phone)
2. Environmental / Planning	Kevin Brown	(Office)	541-682-6969	(Phone)
3. Pre-Engineering	Kerry Werner	(Office)	541-682-6960	(Phone)

THIS OFFICIAL REQUEST IS FROM:

The City of		and/or Lane	County
By		By Bill Morgan	
By		By	
		By	

ADMINISTRATION RECOMMENDATION

PROJECT PROSPECTUS

PART 2 — PROJECT DETAILS

SEE ATTACH DESCRIPTION AND SKETCH MAP

KEY ID # 0

REGION 2

Goodpasture Covered Bridge Structural Rehabilitation

ENTER: S - STATE C - CONSULTANT A - APPLICANT
E - EXISTING N - NO

PERMITS AND DOCUMENTS

STATE CLEARING HOUSE		SIGNS (PERMANENT)	N	STORM SEWER	N	AIRPORT CLEARANCE	N	WETLANDS	N
CITIZEN'S ADVISORY COMM.	A	STRIPING (PERMANENT)	N	LANDSCAPING	N	LAND USE ACTIONS AND PERMITS	N	ENDANGERED SPECIES	N
PHOTOGRAMMETRY	N	PROJECT SIGNING	C	IRRIGATION	N	FLOOD PLAN	N	HAZMAT	N
RECONNAISSANCE SURVEY	N	DETOUR	N	BORROW SOURCE	N	BUILDING	N	HISTORIC RESOURCE	C
PUBLIC HEARING	A	ILLUMINATION	N	MATERIALS SOURCE	N	CORPS OF ENGRS. / DSL REMOVAL / FILL	N	AIR CONFORMITY STUDY	N
FIELD SURVEY	C	RR CROSSING	N	DISPOSAL SITE	N	COAST GUARD	N	DEQ NON-POINT SOURCE WATER	N
VICINITY MAP	C	RR PROTECTION	N	LOCAL AGREEMENT	A	GEOLOGY AND MINERALS	N	ARCHAEOLOGICAL SURVEY	N
SOILS/GEOTECH INVESTIGATION	N	RR SEPARATION	N	SENSITIVE LAND	N	SIGNALS	N	NOISE STUDY	N
HYDRAULIC STUDY	N	RR ENCROACHMENT	N	VALUE ENGINEERING	N	OLD (#)	NEW (#)	SECTION 4(F)	N
				SURPLUS PROPERTY	N	**UTILITIES**	N	**(LIST BELOW)**	

RIGHT-OF-WAY						COMPANIES
RIGHT OF WAY LIAISON	N	EASEMENTS #		ACCESS CONTROL (Y / N) CURRENT: N	PROPOSED: N	
ACQUISITIONS			RELOCATIONS			
SIMPLE (#)		COMPLEX (#)	BUSINESS (#)		RESIDENTIAL (#)	
0		0	0		0	

DESIGN STANDARDS	DESIGN SPEED	EXCEPTION
AASHTO	40 MPH	Y

TYPICAL SECTION

EXISTING

BIKE PATH	SIDE-WALK	CURB TYPE	PARKING	SHOULDER / BIKELANE	LANE 3	LANE 2	LANE 1	MEDIAN	LANE 1	LANE 2	LANE 3	SHOULDER / BIKELANE	PARKING	CURB TYPE	SIDE-WALK	BIKE PATH
							10	0	10							
							10	0	10							

PROPOSED

SUGGESTED BASE DESIGN

ITEM	NEW WORK (mm)	OVER EXISTING	ITEM	NEW WORK (mm)	OVER EXISTING

STRUCTURE	LENGTH (ft)	WIDTH (ft)	COST	STRUCTURE	LENGTH (M)	WIDTH (M)	COST
BRIDGE 1	165	20	$ 461	BRIDGE 5			
BRIDGE 2				BRIDGE 6			
BRIDGE 3				APPROVED, LOCATION ENGINEER X			DATE
BRIDGE 4				REVISION APPROVED X			DATE

1912 (8-96)

PROJECT PROSPECTUS

PART 1 — PROJECT REQUEST (PAGE 1 OF 2)

KEY ID #:

Layng Covered Bridge Rehabilitation

REGION	MAINTENANCE DISTRICT
2	5

STATE HIGHWAY #	HIGHWAY NAME	MILE POST FROM	TO	LENGTH (km)
				0.00

URBAN	CITY	COUNTY	ROAD/STREET NAME
☑ RURAL		Lane	Mosby Creek Road

ROUTE #	NHS	HPMS	FC	APPLICANT (IF OTHER THAN STATE)
Lane Co 001094	☐ YES ☑ NO	1	8	Lane County

US CONGRESSIONAL DISTRICT	STATE SENATE DISTRICT	STATE REPRESENTATIVE DISTRICT
4	4	7

COST ESTIMATES (000'S)

PRELIMINARY ENGINEERING	$ 200
RIGHT OF WAY	$ -
ROADWAY	
STRUCTURES	$ 700
SIGNALS	
ILLUMINATION	
TEMPORARY PROTECTION	
ENGINEERING & CONTINGENCIES	$ 100
TOTAL CONSTRUCTION	$ 800
TOTAL ESTIMATE	$ 1,000

PROJECT DATA

GRADING		
PAVING		
STRUCTURES		X
SIGNING		
SIGNALS		
ILLUMINATION		
ENVIRONMENTAL CLASS	(1, 2, 3)	2
DESIGN CATEGORY	(1-7)	7
WORK TYPE	(1-13)	5

RIGHT OF WAY

FILES	(#)	0
HECTARES	(#)	0
RELOCATIONS	(#)	0

WORK BY STATE/CONSULTANT/APPLICANT

PRELIMINARY ENGINEERING	(S,C,A)	C
CONSTRUCTION ENGINEERING	(S,C,A)	C
RIGHT OF WAY DESCRIPTIONS	(S,C,A)	
RIGHT OF WAY ACQUISITIONS	(S,C,A)	

CONSTRUCTION

☑ CONTRACT ☐ OTHER
☐ STATE FORCE
☐ CITY FORCE
☐ COUNTY FORCE

RECOMMENDED LET DATE BY FEDERAL FISCAL YEAR:	(QUARTER / YEAR)	RECOMMENDED FUND SOURCE: (PE)	(R/W)	(CONST)

RECOMMENDED PROGRAM REVISIONS

☐ POSTPONE ☐ CANCEL	SECTION	FUNDS	CUR. YR.	ESTM. (000's) $
☐ POSTPONE ☐ CANCEL	SECTION	FUNDS	CUR. YR.	ESTM. (000's) $

ITEM	EXISTING	PROPOSED
TRAVEL LANES (#)	2	2
STRUCTURE (#)	1	1
SIGNALS (#)	0	0
BIKE WAY (Y/N)	N	N
AVERAGE DAILY TRAFFIC	955	
YEAR OF AVERAGE DAILY TRAFFIC	2006	
THROUGHWAY		

DEFINE THE PROBLEM

The bridge is a 83 year old timber structure with a 90-ft long main span. The bridge is in a deteriorated state due to traffic loads, weathering, vandalism and pests. The truss members, stringers and floor beams are all in a state of decay that is affecting the structural integrity and longevity of this historic structure. The bridge is posted for 10 ton loads. The current (2008) sufficiency rating is 25.6.

PROPOSED SOLUTION ATTACH SKETCH MAP

Dismantle the bridge and replace deteriorated and failed members.

REQUESTED, REGION ENGINEER	DATE	TRANSP. COMM. APPROVAL DATE	PROGRAM YEAR	FUNDING
X				

1911(8-96)

PROJECT PROSPECTUS

PART 1 — PROJECT REQUEST (PAGE 2 OF 2)

KEY ID # 0

REGION 2

Laying Covered Bridge Rehabilitation

PROJECT JUSTIFICATION

The bridge is a 83 year old timber structure with a 90-ft long main span. The bridge is in a deteriorated state due to traffic loads, weathering, vandalism and pests. The truss members, stringers and floor beams are all in a state of decay that is affecting the structural integrity and longevity of this historic structure. The bridge is posted for 10 ton loads. This is one of Lane County's oldest covered bridges and is in close proximity of 3 others.

There will be no change to horizontal roadway alignment or portal openings. Therefore Design Exceptions will be required for horizontal alignment, horizontal and vertical clearances and lane widths. It may be necessary to build enclosures around the post-tensioning anchorages as was done at Lowell Covered Bridge, and if so, this will require coordination with the State Historic Preservation Office (SHPO).

ADDITIONAL INFORMATION FOR PROJECTS REQUESTED BY LOCAL JURISDICTIONS

RESPONSIBLE LOCAL OFFICE TO BE CONTACTED FOR THE FOLLOWING ACTIVITIES:

1. Public Hearing / Citizen Involvement	Kerry Werner	(Office)	541-682-6960	(Phone)
2. Environmental / Planning	Kevin Brown	(Office)	541-682-6969	(Phone)
3. Pre-Engineering	Kerry Werner	(Office)	541-682-6960	(Phone)

THIS OFFICIAL REQUEST IS FROM:

The City of		and/or Lane	County
By		By Bill Morgan	
By		By	
		By	

ADMINISTRATION RECOMMENDATION

PROJECT PROSPECTUS

PART 2 — PROJECT DETAILS

SEE ATTACH DESCRIPTION AND SKETCH MAP

KEY ID # 0

REGION 2

Layng Covered Bridge Rehabilitation

ENTER: S - STATE C - CONSULTANT A - APPLICANT
E - EXISTING N - NO

PERMITS AND DOCUMENTS

STATE CLEARING HOUSE		SIGNS (PERMANENT)	N	STORM SEWER	N	AIRPORT CLEARANCE	N	WETLANDS	N
CITIZEN'S ADVISORY COMM.	A	STRIPING (PERMANENT)	N	LANDSCAPING	N	LAND USE ACTIONS AND PERMITS	N	ENDANGERED SPECIES	N
PHOTOGRAMMETRY	N	PROJECT SIGNING	C	IRRIGATION	N	FLOOD PLAN	N	HAZMAT	N
RECONNAISSANCE SURVEY	N	DETOUR	N	BORROW SOURCE	N	BUILDING	N	HISTORIC RESOURCE	C
PUBLIC HEARING	A	ILLUMINATION	N	MATERIALS SOURCE	N	CORPS OF ENGRS. / DSL REMOVAL / FILL	N	AIR CONFORMITY STUDY	N
FIELD SURVEY	C	RR CROSSING	N	DISPOSAL SITE	N	COAST GUARD	N	DEQ NON-POINT SOURCE WATER	N
VICINITY MAP	C	RR PROTECTION	N	LOCAL AGREEMENT	A	GEOLOGY AND MINERALS	N	ARCHAEOLOGICAL SURVEY	N
SOILS/GEOTECH INVESTIGATION	N	RR SEPARATION	N	SENSITIVE LAND	N	SIGNALS	N	NOISE STUDY	N
HYDRAULIC STUDY	N	RR ENCROACHMENT	N	VALUE ENGINEERING	N	OLD (#)	NEW (#)	SECTION 4(F)	N
RIGHT-OF-WAY				SURPLUS PROPERTY	N	**UTILITIES**	N	**(LIST BELOW)**	

RIGHT OF WAY LIAISON	N	EASEMENTS #	ACCESS CONTROL (Y / N) CURRENT: N PROPOSED: N	COMPANIES

ACQUISITIONS		RELOCATIONS		DESIGN STANDARDS	DESIGN SPEED	EXCEPTION
SIMPLE (#)	COMPLEX (#)	BUSINESS (#)	RESIDENTIAL (#)			
0	0	0	0	AASHTO	40 MPH	Y

TYPICAL SECTION

EXISTING

BIKE PATH	SIDE-WALK	CURB TYPE	PARKING	SHOULDER / BIKELANE	LANE 3	LANE 2	LANE 1	MEDIAN	LANE 1	LANE 2	LANE 3	SHOULDER / BIKELANE	PARKING	CURB TYPE	SIDE-WALK	BIKE PATH
							10	0	10							
							10	0	10							

PROPOSED

SUGGESTED BASE DESIGN

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