# Stream Crossing Replacement Policy (Excerpt from 7.1 of DGLVR Administrative Manual)

## 7.1 Stream Crossing Structural Replacements

This section applies to stream crossing replacements (not road drainage "cross pipes") funded by the Dirt, Gravel, and Low-Volume Road (DGLVR) Program on <u>both</u> Low-Volume and Dirt and Gravel roads. Refer to Chapter 1 of the *DGLVR Stream Crossing Replacement Technical Manual* for additional discussion of the background, purpose, and intended benefits of the policies detailed here.

## 7.1.1 Background

**Replacement Structures:** One of the DGLVR Program's major goals of stream crossing replacements is to ensure that structures that are funded by the DGLVR Program are designed and implemented properly to achieve stream continuity through the roadway. Stream continuity refers to the connectivity and continuation of typical streambed features (profile, slope, width, composition, grade controls, pools) along its length upstream, downstream, and through a road crossing structure. DGLVR projects often reconnect segments of stream that have been disconnected and vertically offset by an undersized road crossing. New structures funded by the DGLVR Program must be wide enough to allow for construction of a functional stream channel through the crossing. This includes bank margins, low flow channel, grade controls, and other stream features. Construction of a bankfull-width stream channel through wider-than-bankfull-width structures will not only accommodate the hydraulic capacity of the stream but will also allow for better stream function through the road regarding flood resiliency, sediment and debris transport, and aquatic organism passage.

**Existing Structure Eligibility for Replacement:** Another major goal of the DGLVR stream crossing replacements is to limit paying for replacement of stream crossing structures to locations that are negatively impacting streams and the aquatic environment. The best overall approximation of environmental impact from a crossing is the width of the existing structure opening related to the bankfull width of the channel. A channel's bankfull width is the width of flow at a "dominant channel forming flow stage" where sediment and bed material is moved most effectively through the stream system, typically associated with a one-to-two-year recurrence interval for Pennsylvania. Stream crossing structures that are significantly less than the channel's bankfull width are typically associated with many problems, including gravel deposition upstream of the road, excessive stream scour and erosion downstream of the road, flooding, and washouts. DGLVR site eligibility policy (detailed in section 7.1.2.2) limits paying for structural replacement on existing pipes over 4' in diameter to only those locations where the existing structure is less than 75 percent of the bankfull channel width. These structures are most likely to be causing negative stream impacts and are most likely to be sources of perpetual maintenance and road impacts to road owners (gravel bar removal, erosion, etc.).

## 7.1.2 DGLVR Stream Crossing Replacement Policy

This section details the DGLVR Stream Crossing replacement policy for eligibility, new structures, and additional responsibilities of the conservation district.

## 7.1.2.1 Policy for Structure Installation

All stream crossing replacements funded in whole or in part with DGLVR funds, or listed as in-kind on a DGLVR Project, must follow the DGLVR Stream Crossing Design & Installation Standard, unless an "Exemption from DGLVR Stream Crossing Standard" (see section 7.1.3) is applicable. The Standard and its attachments are available online at <u>https://www.dirtandgravel.psu.edu/</u> For projects receiving an Exemption from DGLVR Stream Crossing Standard, other site-specific requirements apply (see section 7.1.3).

## 7.1.2.2 Policy for Stream Crossing Eligibility for Replacement

Eligibility criteria for replacing stream crossings, in whole or in part, with DGLVR funds:

• **Small Pipes:** Existing stream crossing structures with an opening width less than or equal to 48" are <u>automatically</u> eligible for replacement regardless of their relationship to the bankfull channel width, as long as they are replaced according to DGLVR Policy.

• **Multiple Pipes:** Existing stream crossings consisting of multiple (side-by-side) pipes are <u>automatically</u> eligible for replacement regardless of their relationship to the bankfull channel width, as long as they are replaced according to DGLVR Policy. This automatic eligibility applies to multiple pipes only, not multi-cell or multi-opening bridges.

• All Other Structures: For existing single-opening structures with an opening width over 48", only structures with a "structure opening width to bankfull channel width" ratio of 75% or less are eligible for replacement with DGLVR Program funds.

• SCC Notification: Conservation districts are required to notify the State Conservation Commission (SCC) of proposed stream crossing replacements as soon as practical <u>before a contract is signed</u>. An online notification system is available by logging in to the Center for Dirt and Gravel Road Studies website (same log-in as accessing the GIS system) at <u>www.dirtandgravelroads.org</u>.

Note: When measuring the width of an existing structure, measure the most limiting width (for example: the narrowest pipe in a series of "necked-down" pipes, or the narrowest point perpendicular to the flow between abutments of a skewed bridge).

## 7.1.2.3 Where the DGLVR Stream Crossing Policy Applies

All stream crossing replacements funded in whole or in part with DGLVR funds, or listed as in-kind on a DGLVR Project, must follow the DGLVR Stream Crossing Design & Installation Standard, unless an "Exemption from DGLVR Stream Crossing Standard" (see section 7.1.3) is applicable. The Standard and its attachments are available online at <a href="https://www.dirtandgravel.psu.edu/">https://www.dirtandgravel.psu.edu/</a>. For projects receiving an Exemption from DGLVR Stream Crossing Standard, other site-specific requirements apply (see section 7.1.3).

For DGLVR Program purposes, the stream crossing policy outlined here applies to situations where streams, including intermittent channels, with identified bed and banks are flowing into the road or the uphill ditch. See section 7.1.3 for more information on Automatic and SCC-requested exemptions from the DGLVR Stream Crossing Standard. Contact the State Conservation Commission in questionable circumstances.

Routine maintenance of stream crossing structures is not eligible for DGLVR funding. This applies both to stream crossing structures that are ineligible to be replaced with DGLVR funds or are eligible for replacement with DGLVR funds but are not being replaced. For these structures, no work may be performed directly on the stream crossing structure or its components unless the structure is replaced according to DGLVR Program Policy. "Work" includes, but is not limited to, culvert lining, extending undersized stream crossings, bridge deck repairs, and adding or replacing headwalls and endwalls to an existing stream crossing structure. The policies and qualifications for replacement with DGLVR Program funds outlined here and in the DGLVR Stream Crossing Design & Installation Standard **do not exempt projects from any permitting or engineering requirements**.

### 7.1.2.4 Policy Limiting Engineering and Consulting Costs

As outlined in section 3.7.4.7, Program funds can be used to cover engineering, permitting, or similar consultant costs, but such costs are limited to a combined maximum of 20 percent of the total contract amount between the district and the grant recipient, not to exceed \$25,000. A Request for Proposals (RFP) is available on the Center for Dirt and Gravel Road Studies website. This document is highly recommended for use in hiring an engineer/consultant for stream crossing projects.

## 7.1.2.5 Conservation District Education Requirements

**Education Requirements for Conservation Districts:** Effective July 1, 2023, at least one conservation district staff member must have completed the DGLVR Program's "Stream Crossing Replacement Certification Training" and received a certificate of completion before the QAB can recommend or the conservation district Board can approve a contract for a project involving a stream crossing replacement. A Stream Crossing Replacement Re-Certification Training must be taken once every three years to maintain staff certification. This training requirement does not apply to crossings that qualify for an automatic exemption from the DGLVR Stream Crossing Standard (see section 7.1.3.1).

## 7.1.2.6 Conservation District Requirements

- Conservation Districts are required to hold meetings including:
  - **Pre-application:** Meeting, typically held with grant applicant before application submittal.
  - **Pre-design:** If an engineer is required by permitting or DGLVR standard, then a predesign meeting must be held. On-site meeting, typically held with grant applicant and project engineer, occurs after the grant applicant signs a contract with the conservation district for DGLVR funding and hires an engineer, and before design and permitting.
  - **Pre-construction:** On-site meeting, typically held with grant recipient, project engineer, and sub-contractor (if applicable), prior to starting construction.
- **Conservation Districts are required to attend a bid site showing (if held):** On-site meeting, typically held with the grant recipient, project engineer, and potential bidders/contractors, for structure installation before bids are due. These meetings are highly recommended but at the discretion of the grant recipient.
- A "Stream Crossing Eligibility Determination" (Appendix H) must be completed by the conservation district and kept in the project file for all stream crossing replacements, even those with an exemption from the DGLVR Stream Crossing Standard. This form requires measurement of the bankfull channel and existing structure to determine DGLVR Program eligibility.

- Stream crossing replacements nearly always extend outside the road right-of-way. Applicants are strongly encouraged to get verbal permission from landowners for off right-of-way work before contracting. Before working outside the right-of-way, the grant recipient must obtain written permission from the landowner. Landowner permission should be sought as early as possible in the funding process, ideally before contracting, to ensure the project can be implemented as planned. A sample landowner agreement is provided at <u>www.dirtandgravelroads.org</u>. Districts and grant recipients can use their own landowner agreements as long as they are in a form and manner similar to the sample provided. Districts must keep a copy of the signed landowner consent form with the project file for any work performed off the right of way. If landowner permission is required to achieve stream continuity and meet the DGLVR Stream Crossing Standard, but cannot be obtained, the project cannot be completed. Contact the SCC in questionable circumstances. This off-ROW policy is detailed in section 3.7.4.8 of the *DGLVR Administrative Manual*.
- A site assessment must be completed for each stream crossing prior to the QAB recommending the project for funding. This site assessment must be completed by the conservation district or their designee and must be used to support development of cost estimates and the grant application. A site assessment includes obtaining a longitudinal profile and a minimum of two cross-sections of the existing stream channel. The longitudinal profile and cross sections can be used by the conservation district to review future surveys and project plans to ensure they meet DGLVR Program policies and the DGLVR Stream Crossing Standard. The longitudinal profile and cross sections must be completed in accordance with section IV. K of the DGLVR Stream Crossing Design and Installation Standard. Additional details for completing longitudinal profiles and cross sections are available in Chapter 4 of the Stream Crossing Technical Manual and in the technical bulletins attached to the Stream Crossing Technical Manual. If, later in the design process, the design engineer completes their own site assessment to support their project design, the conservation district staff is required to be on-site while the site assessment is being performed by the engineer and/or surveyor. The conservation district's role during the engineer's site assessment is to observe and assist with the longitudinal profile and cross sections and ensure that all important data points are obtained. The site assessment requirement does not apply to sites that are eligible for an automatic Exemption from the DGLVR Stream Crossing Standard but does apply to sites that may later receive an Exemption from the DGLVR Stream Crossing Standard through the SCC (see section 7.1.3.2).
- If a project is required to be designed by an engineer, the grant recipient or engineer must provide all permit applications, Site Assessment, and design plans and specifications (per DGLVR stream crossing replacement standard) to the conservation district. The conservation district must review the documents and provide written confirmation to the grant recipient or engineer that these submitted documents comply with DGLVR policy and the Stream Crossing Standard before they are submitted (or resubmitted) for permit review. The purpose of this review is to verify consistency with DGLVR policies and the Stream Crossing Standard, not to review engineering calculations or permit completeness. "Consistency" and "deficiency" form letters for conservation district use can be found on the Center's website.

- If a project is required to be bid out for construction, the grant recipient or engineer must provide all draft bid packages to the conservation district. The conservation district must review the draft documents and provide written confirmation to the grant recipient or engineer that those draft bid documents comply with DGLVR policy and the Stream Crossing Standard before they are provided to potential bidders. The purpose of this review is to verify consistency with DGLVR policies and the Stream Crossing Standard, not to review engineering calculations or bidding requirements. It is up to the grant recipient to comply with applicable bidding requirements. "Consistency" and "deficiency" form letters for conservation district use can be found on the Center's website.
- Conservation districts must be on-site regularly during construction to ensure that DGLVR Program policies and the Stream Crossing Standard are being met. At a minimum, the conservation district must be onsite during the installation of "Critical Stages of Construction" as defined in the DGLVR Stream Crossing Standard.
- In situations where no current stream crossing exists and a new crossing is to be installed, DGLVR Program policy must still be followed. The conservation district must contact the SCC for eligibility guidance. This requirement does not apply to sites that receive an exemption from the DGLVR Stream Crossing Standard (see section 7.1.3).
- Conservation districts must complete the "Project Lifecycle Checklist" (Appendix J) during the planning and implementation of stream crossing replacements, and the form must be kept in the project file. This requirement does not apply to sites that receive an exemption from the DGLVR Stream Crossing Standard (see section 7.1.3).

### 7.1.3 Exemptions from the DGLVR Stream Crossing Standard: Sitespecific Exemptions to Following the Standard

The State Conservation Commission (SCC) recognizes that it is not always practical, cost effective, or biologically beneficial to complete a comprehensive stream continuity project in certain situations. Stream crossing replacements vary drastically around the state, and this section on exemptions from the DGLVR Stream Crossing Standard is designed to provide maximum leeway for the conservation district and SCC to adapt to unique situations. <u>The exemptions from the DGLVR Stream Crossing Standard discussed in this section only exempt projects from DGLVR requirements and do not exempt projects from any applicable permit requirements from <u>DEP or other entities.</u></u>

## 7.1.3.1 Automatic Exemptions from the DGLVR Stream Crossing Standard

The following existing conditions may be, <u>at the discretion of the conservation district</u>, considered "Exempt from the DGLVR Stream Crossing Standard" without SCC approval for channels with a bankfull width of 4' or less and:

- The defined bed and bank coming to the road does not extend more than 500' upslope of the road ditch, or
- The drainage area of the bed and bank coming to the road is 20 acres or less.

Complete the "Automatic Exemption from the DGLVR Stream Crossing Standard" form (Appendix I) and keep it in the project file. Automatic exemptions still need to be reported in the SCC notification system.

## 7.1.3.2 SCC Approval for Exemptions from the DGLVR Stream Crossing Standard

Occasionally, circumstances may exist where a conservation district would like to request an exemption from the DGLVR Stream Crossing Standard from the SCC on a larger stream that does not qualify for an automatic exemption as outlined in 7.1.3.1. These situations must be handled individually, and a signed "SCC Exemption from the DGLVR Stream Crossing Standard" form must be obtained from the SCC and kept in the project file. Examples of some conditions where an exemption from the DGLVR Stream Crossing Standard may be requested:

- Small channels that fall outside the automatic exemptions above.
- Crossings with extensive outlet drops that would make establishing connectivity impossible or prohibitively expensive for the amount of habitat improvement it would provide.
- Other stream crossings with special circumstances.

A signed "SCC Approval for Exemption from the DGLVR Stream Crossing Standard Request" form (Appendix I) must be kept in the project file.

## 7.1.3.3 Details for Exemptions from the DGLVR Stream Crossing Standard

## What is waived with an Exemption from DGLVR Stream Crossing Standard (either automatic or SCC):

- The need to follow the DGLVR Stream Crossing Design and Installation Standard,
- The need to achieve stream continuity as it relates to slope, streambed material depth, and establishing grade control within the structure, and
- The need to establish a low-flow channel and bank margins through the structure.

## Requirements for projects covered by an Exemption from DGLVR Stream Crossing Standard (either automatic or SCC).

If continuity cannot be achieved, the following steps must be taken to ensure stream crossings that receive an exemption from the DGLVR Stream Crossing Standard will still result in a stable crossing that will not lead to accelerated erosion or other issues:

- Any requirements from local, state, and federal laws and all applicable permits are **not** waived as part of this exemption and must be followed.
- New structures must still be a single span at a minimum of 1.25 times or 125% of the bankfull channel width unless otherwise approved by the SCC.
- Ensure the stability of the channel upstream and downstream. Grade controls must be shown on plan drawings if drawings are required.
  - Upstream: Grade control(s) are required immediately (between one and two bankfull widths) upstream of the inlet of the new structure to prevent headcutting (headward erosion lowering channel elevation that moves upstream over time). These grade

controls are typically installed at the existing streambed elevation. If a larger structure is installed in a channel with road height limitations, installing a larger structure below the existing streambed elevation without grade control(s) will likely cause a headcut.

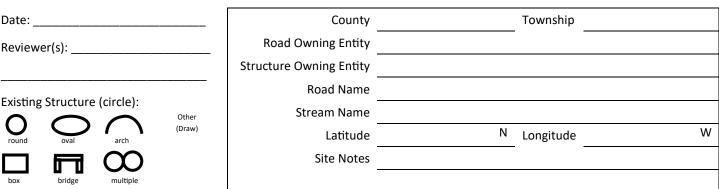
- Downstream: Outlet stabilization is required in the form of grade controls, bank armoring, and/or filling in scour holes. Any grade controls are typically installed at the existing streambed elevation. Pipes may need to be extended further off the road, and the erosion potential caused by any elevation drops must be considered.
- New structures must be properly aligned with the channel, unless this is not feasible due to permitting restrictions or other constructability restraints.
- Consider floodplain connectivity when necessary (e.g., high water by-pass, overflow pipes, etc.).
- If permits and engineered plans are required, conservation districts are required to review all plans and specifications to ensure the project complies with DGLVR policy and requirements before they are submitted for permit review.
- Divert surface runoff and road drainage away from the stream and structure in a manner that prevents erosion and prevents discharges to the stream.
- For projects receiving an exemption from the DGLVR Stream Crossing Standard, other site-specific requirements may apply. If applicable, these will be identified by the SCC on a project-specific basis.

## Appendix H. Stream Crossing Eligibility Determination

Form used to determine eligibility of stream crossing sites for funding, including instructions on bankfull measurements. Form must be kept in project file for all funded stream crossing replacements. See section 7.1 of this manual for additional information.

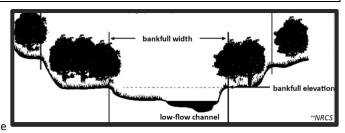
### PA Dirt Gravel and Low Volume Road Program—Stream Crossing Eligibility Determination Form 7/2022

#### Site Information:



<u>Measuring Bankfull Channel Width</u>: Since stream conditions vary, these guidelines are flexible, and the goal is to determine bankfull width of an unaltered "reference reach" of the stream.

Where to take Measurements: Look upstream if possible, trying to find an undisturbed stretch of stream free from influences that may impact cross section (such as debris jams, floodplain obstructions, bedrock outcrops, etc.). Look downstream for measurements if prevented from going upstream. In order to get out of the "area of influence" from the structure, roughly estimate



the bankfull channel width, then go at least 5 times that distance away from the structure before considering taking bankfull measurements. Additional bankfull widths should be measured so that three to five (more preferred) measurements are collected. Subsequent bankfull width measurement should be collected at least 1/2 bankfull width away from the first measurement. Note that it is important to measure bankfull where the best indicators and these locations may be much greater than ½ bankfull width apart. Avoid taking bankfull measurements at unique, unnatural, or temporary features such as log or debris jams, manmade obstructions, bedrock outcrops, hard meander bends, and braided channels. Bankfull measurements can be taken further from the structure if needed if there are no major splits in the channel. **Be flexible** when choosing where to take measurements in order to capture the most representative reaches of the stream.

Taking Bankfull Measurements: When taking a bankfull measurement, locate bankfull indicators (such as changes in bank slope, depositional features, vegetation changes, and scour features) and stretch a tape across the channel to determine the bankfull width at that elevation. Look for bankfull indicators that line up on both sides of the channel as the bankfull elevation should be level across the channel. Remember that bankfull flows typically occur every 1-2 years, so don't mistake higher benches far outside the channel for bankfull. Additional bankfull determination guidance is available in the Stream Crossing Technical Manual and the Bankfull Width Determination Technical Bulletin.

Bankfull Measurements Taken 3 minimum, more is better			
1	ft	6	ft
2	ft	7	ft
3	ft	8	ft
4	ft	9	ft
5	ft	10	ft

A)	Average Bankfull Channel Width=(ft) average of measurements taken to left
B)	Existing Opening Width=(ft) Measure the most limiting width. For example: the narrowest pipe in a series of "necked-down" pipes, or the narrowest point between abutments of a skewed bridge perpendicular to the flow.
C)	Opening to Bankfull Width Ratio=%

#### Structure Eligibility

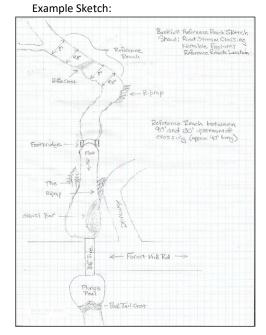
Is the opening width of the existing structure 48" of	or less, or does the structure consist of multiple pipes?	YES	NO

#### For structures with a single opening over 48", is the opening to bankfull width ratio ("C" above) 75% or less? YES NO

If the answer to <u>either</u> question above is "YES," the structure is eligible for replacement with DGLVR funds. In all cases, new structures must follow the DGLVR Stream Crossing Design & Installation Standard unless it qualifies for an exemption from the DGLVR Stream Crossing Design & Installation Standard. Keep a copy of this form in project files.

#### Additional Notes:

Optional: provide an aerial sketch of the existing conditions and the locations where bankfull measurements were taken.



### Appendix I. Exemptions from the Stream Crossing Standard

In certain circumstances, stream crossing replacements may be exempt from following the DGLVR Stream Crossing Design and Installation Standard. The exemption process and site requirements when an exemption is received are detailed in section 7.1.3 of this manual.

<u>Automatic Exemptions</u>: Completed by conservation district for very small channels. No SCC approval needed. Form must be kept in project file.

<u>SCC Granted Exemption</u>: Exemption for larger channels provided by the State Conservation Commission. Form must be kept in project file.

#### PA Dirt Gravel and Low Volume Road Program Automatic Exemption from the DGLVR Stream Crossing Standard Form 7/2022

Purpose: This form is to be used by a Conservation District to identify and record a stream crossing as meeting SCC criteria for an automatic exemption from using the PA State Conservation Commission Dirt, Gravel and Low Volume Road Program Stream Crossing & Installation Sta ndard

Design & Installation Standard.	Site Information:		
Reviewer Information:	County		Township
Date:	Road Owning Entity		
Reviewer(s):	Structure Owning Entity		
	Road Name		
	Stream Name		
	Latitude	N	Longitude W
	Site Notes		
	Drainage Area	acres	
Excerpt from "Automatic Exemptions": for full current policy see admin manual chapter 7.1.3.1         The following existing conditions can be, at the discretion of the Conservation District, considered "DGLVR Standard Exempt" without SCC approval for channels with a bankfull width of 4' or less and:         • The defined bed and bank coming to the road does not extend more than 500' upslope of the road ditch, or,         • The drainage area of the bed and bank coming to the road is 20 acres or less         Standard Exemption Justification:         • Bankfull width of the channel coming to the road:feet, and         • The bankfull width is 4' or less and the channel does not extend more than 500' upslope of the road ditch, or         Length the "bed and banks" channel extends upstream from the road:feet         • The bankfull width is 4' or less and the drainage area of the bed and bank coming to the road is 20 acres or less         Drainage area to road crossing:acres – include a map showing drainage area         Method used to determine drainage area:         Crossings meeting the above criteria can, at the discretion of the Conservation District, be considered automatically exempt from using the PA State Conservation Commission DGLVR Program Stream Crossing Design & Installation Standard. However, sites			
qualifying for an automatic exemption m the Administrative Manual.	ust still follow the requirem	nents in section 7.1.3.3 of	the DGLVR Stream Crossing Policy in

Has someone from the Center/SCC/TU visited the site? YES NO Details: \_\_\_\_\_

Additi

onal Notes:	
	Signature
	Print Name

Keep a copy of this form, and the Stream Crossing Eligibility Determination Form in project files.

### PA Dirt Gravel and Low Volume Road Program SCC Approval for Exemption from the DGLVR Stream Crossing Standard Request Form 7/2022

**Purpose:** This form is to be used by a Conservation District when requesting an SCC exemption from using the PA State Conservation Commission Dirt, Gravel and Low Volume Road Program Stream Crossing Design & Installation Standard. This is for sites that do not qualify for an "automatic exemption" as outlined in section 7.1.3.1 of the Stream Crossing Manual.

Reviewer Information:	Site Information:		
Date:	Coun	ty Township	
Reviewer(s):	Road Owning Enti	ty	
	Structure Owning Enti		
	Road Nan	ne	
	Stream Nan		
	Latitud	de <u>N</u> Longitude	W
	Site Not	es	
	Drainage Ar	ea acres	
Reason for exemption re	<u>equest:</u>		
Project Status:	application/planning	n submitted  Under Contract nnel Width:feet	
<ul> <li>Stream Crossing</li> <li>A longitudinal profile</li> </ul>	ninimum one of existing inlet and outlet) g Evaluation Form (Bankfull measurement e survey may be required. Center/SCC/TU visited the site? YES NC		
Not Approved (m	ust follow DGLVR Standard)	SE ONLY	
	UST TOHOW DGLVK Standardj	Date received:	
Conditionally App	proved. See Reverse for Details		
	-	GLVR standard. However, sites receiving a SCC he DGLVR Stream Crossing Policy in the Admin	
	DGLVR Program Coordinator	(Date)	

Keep a copy of this form, and the Stream Crossing Eligibility Determination Form in project files.

## SCC Approval for Exemption from the DGLVR Stream Crossing Standard Request Form

## **Conditional Approval Details:**

The SCC has granted approval for this site to not follow the DGLVR Stream Crossing Design & Installation Standard as long as the following conditions are met, in addition to the requirements outlined in section 7.1.3.3 of the DGLVR Administrative Manual:



### Appendix J. Stream Crossing Project Lifecycle Checklist

Conservation districts must complete the "Project Lifecycle Checklist" during the planning and implementation of stream crossing replacements, and the form must be kept in the project file. This requirement does not apply to sites that receive an exemption from the DGLVR Stream Crossing Standard (see section 7.1.3).

<b>Stream Crossing Replacement Project: Lifecycle Checklist</b>
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Applicant: \_\_\_\_\_

\_\_\_\_\_ Road Name: \_\_\_\_\_

\_\_\_ Crossing Identifier:\_\_

This checklist is meant to summarize the major events in development and implementation of a stream crossing replacement. This form (but not individual checklists) is required to be completed and kept in project file.

Contact List	Contact Name	Phone Number	E-mail Address
Grant Applicant			
Grant Applicant			
Engineer			
Engineer			
Contractor			
Contractor			

- Pre-Application Meeting: The District is required to hold a preapplication meeting prior to a grant recipient applying for program funds for a stream crossing project. Initial site visit and subsequent follow up visits for project planning. See *Pre-Application Meeting Checklist* for meeting talking points. As a reminder, a longitudinal profile / cross-section survey must be completed prior to QAB recommendation for funding (see below). Submit online notification to SCC if project is likely to be funded.
  - Initial Site Visit Date:\_\_\_\_\_
  - Attendees: \_\_\_\_\_
  - Notes: \_\_\_\_\_

Longitudinal Profile Survey: A longitudinal profile survey must be conducted for each stream crossing prior to the QAB recommending the project for funding. Engineer may utilize the District survey for design or conduct another survey, in concert with the District. Refer to DGLVR Program's Stream Crossing Standard for survey requirements. See *Chapter 4 of Stream Technical Manual* and *Longitudinal Profile Technical Bulletin* for guidance.

guidance.

Initial Survey Date:

Participants:

Notes:

Was a second (engineer's) survey completed (in concert with the District)? YES NO
Engineer's Survey Date:
Participants:
Notes:

C	Application Submitted Date: Request: \$
C	Contract Date: Contract Amount: \$
C	Notes:
	<b>fessional Design Services</b> : Program funds can be used to cover engineering, permitting, or similar sultant costs, but such costs are limited to a maximum of 20% of the total contract amount between the crict and the grant recipient, with a maximum of \$25,000 total. The use of the DGLVR Program's <i>Stream ssing Replacement Request for Proposal Template</i> or an alternative which incorporates the required serve ails is highly recommended. Preparation or design costs such as engineering or surveying that are incurre ore the contract is signed are not eligible for grant reimbursement but can be counted as in-kind.
r	<u>-Design Meeting</u> : The District, Project Participant, and Engineer/Consultant of record for the project are uired to meet on site prior to the start of the design. District staff may ask technicians from TU, CDGRS or ers to attend and provide assistance. See <i>Pre-Design Meeting Checklist</i> for meeting talking points. <b>Pre-Design Meeting Date:</b>
C	Attendees:
C	Notes:
	plans from outside sources such as the SCC, CDGRS, and TU. This package must include all drawings essary for construction. See <i>Design Plan Review Checklist</i> for review guidance. <b>Date of plan submission: Date of Review:</b>
C	Plan Reviewers:
C	Notes:
r S r	<b>Package Review</b> : If any subcontracted work is needed, grant recipients should follow their own bidding uirements. Bid packets or purchase orders and associated shop drawings for made to order products (exam crossing structures) must be provided to the conservation district for review and approval that they et program policy and the DGLVR Standard prior to acknowledging an order or advertising the bid. See <i>Review Checklist</i> for review guidance. <b>Date of bid package submission: Date of Review:</b>
C	Bid package reviewer:
C	Notes:
	Site Showing: It is recommended that the Grant Recipient hold a bid site showing and invite the engined

Attendees:\_\_\_\_\_

- Notes: \_\_\_
- □ **Construction Notification:** The project participant is required to notify the Conservation District \_\_\_\_\_ days prior to the start of construction.
  - Date of notification: Propo

Proposed Start Date:\_\_\_\_\_

Pre-Construction Meeting: The District is required to hold an on-site meeting prior to project work beginning and should include the grant recipient, contractor (if applicable), and the project engineer. The purpose of this meeting is to ensure all parties understand the construction plans and to answer any questions before project work begins. See *Pre-Construction Meeting Checklist* for meeting talking points.

- Pre-Con Meeting date: \_\_\_\_\_ Proposed Start Date: \_\_\_\_\_
- o Attendees:\_\_\_\_\_
- Notes: \_\_\_\_\_
- Project Inspection: District must be on site regularly to ensure program policies and standard are being met. Ensure any proposed "field changes" to what is on the plan are approved by the design engineer. See Construction Inspection Checklist for guidance. Note inspection visits on the log on this form.
- □ **Project Completion:** District and the grant recipient must meet onsite for a final project walkthrough. It is advantageous to do this immediately following construction with the contractor and engineer, so that minor issues can be addressed while equipment is still on site. See *Project Completion Checklist* for guidance.
  - Completion date:\_\_\_\_\_\_ Inspection Date:\_\_\_\_\_\_

  - Notes: \_\_\_\_\_
  - o \_

<b>EVENT LOG</b> (Log phone calls, site visits, inspections, etc.)			
DATE	EVENT	NOTES	