Dirt Gravel and Low Volume Road Program

WEBINAR

2/27/2025, 9am

Working Outside the Right-of-Way

SCC

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CDGRS

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Blair County Conservation District

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Working outside the Right-of-Way

Presentation Outline

- What is the ROW & why work off ROW?
- Eligible off ROW work
- Permission from landowners
- What to do if you can’t get off ROW permission
- Example projects
- Other funding sources

Working outside the Right-of-Way

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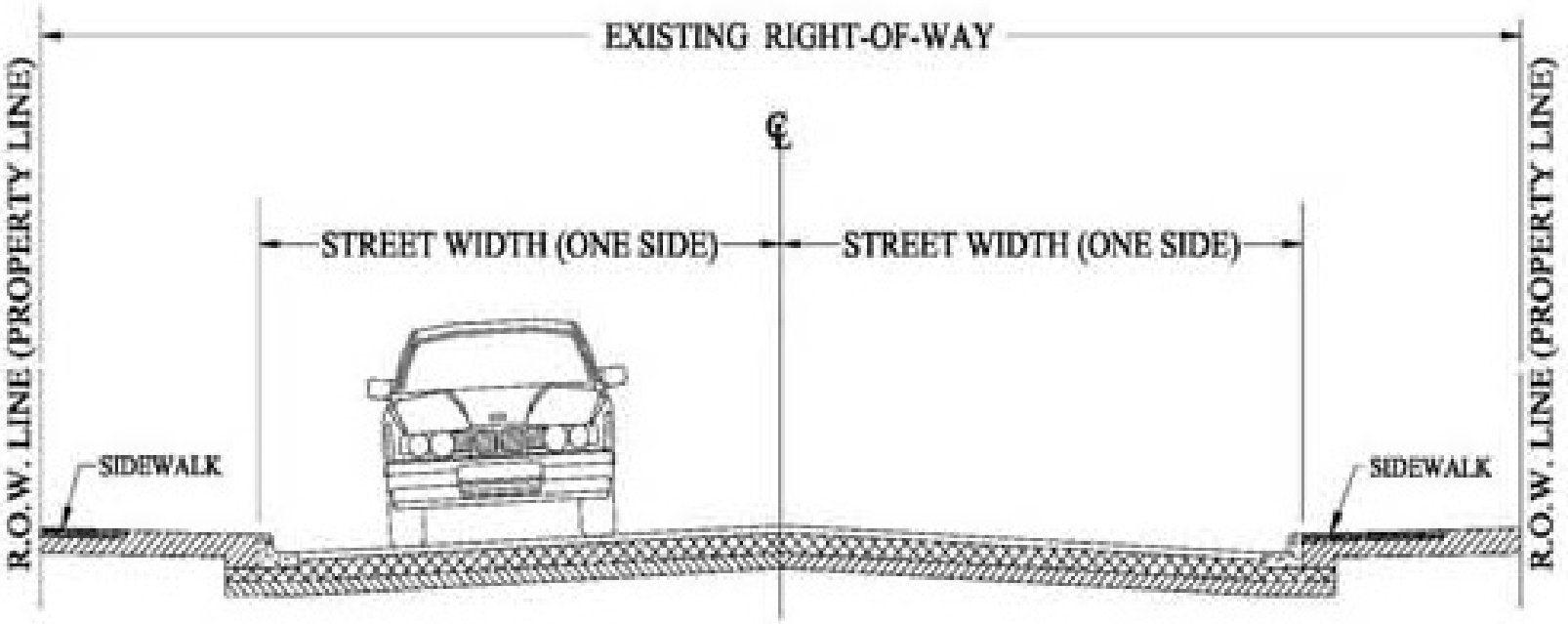
Working off the Right-of-Way

Right-of-way (ROW):

- **Publicly owned road corridor.**
- **Typically 33’ width** (16.5’ from road Centerline) for municipal roads.
- Exceptions do apply, sometime up to 50’.



http://old.mcallen.net/landingpages/lp_engineering/roa_permits.aspx

Where can DGLVR funds be spent?

DGLVR projects are on public roads

- Eligible applicants are local, county, or state public entities
  - that maintain public roads open to public vehicle travel
- The **entity that owns the right of way** is the determining factor
- DGLVR contracts and payments can only be made with the entity that owns the road

Where can DGLVR funds be spent?

- Working outside the road right-of-way is an allowable Program expense
- Only when:
  - the off right-of-way impact is having a direct negative effect on a public road
  - AND addressing the off right-of-way impact is directly necessary to the successful completion of the project on the public road.

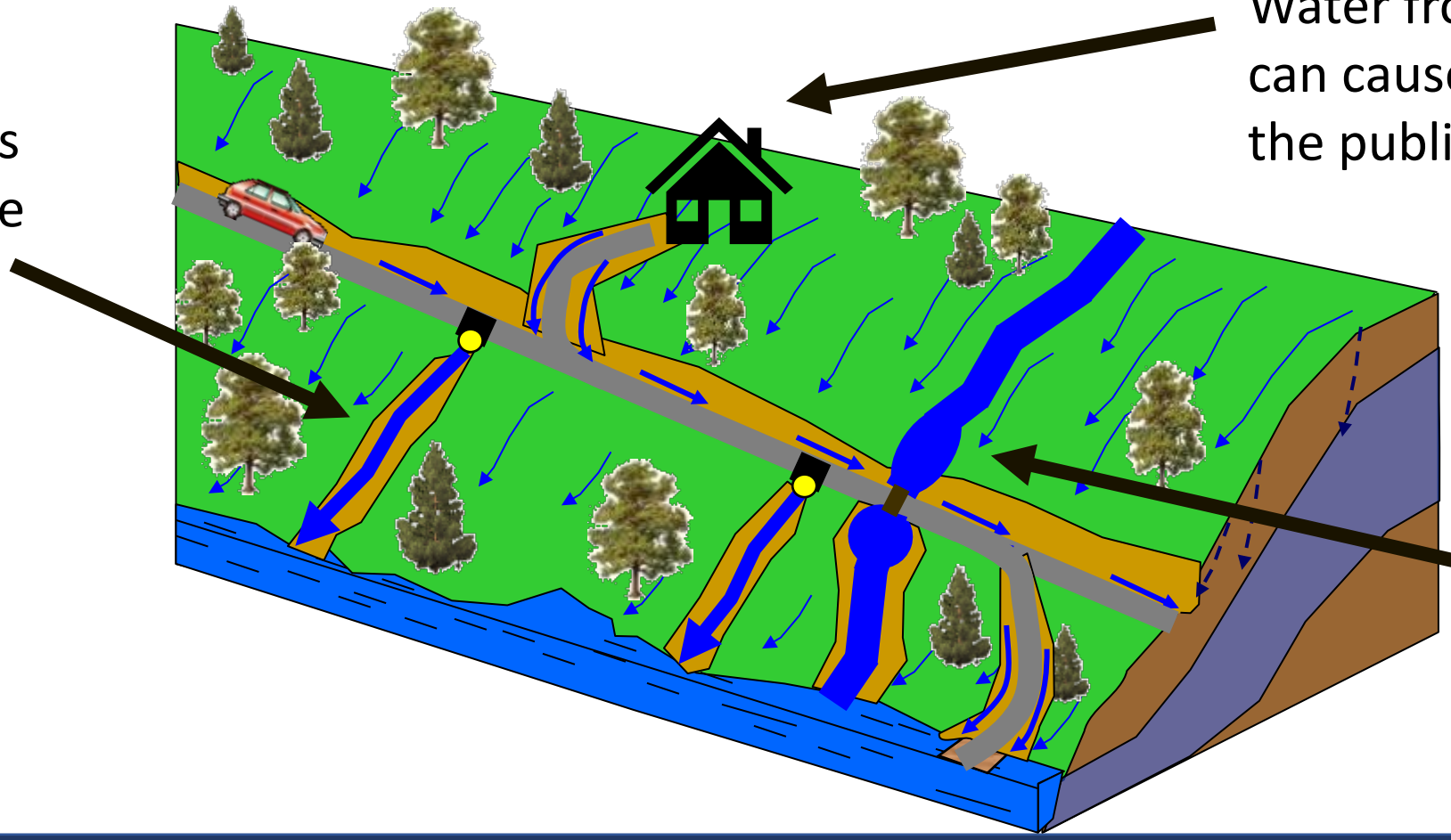
Why work off Right-of-Way?

Why work off Right-of-Way?

Why Work off ROW?

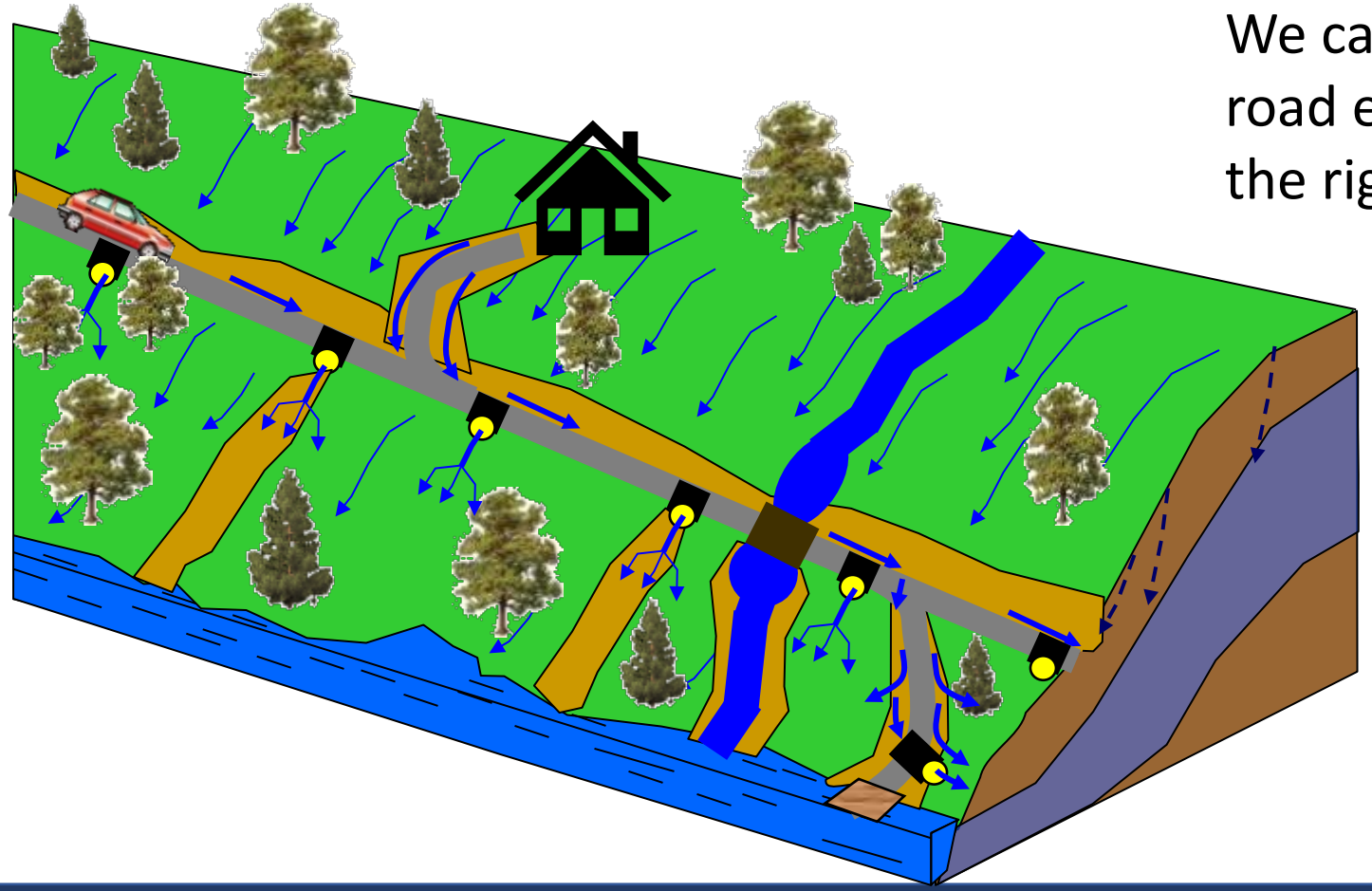
Water from uphill can cause issues on the public road

Stabilization is needed where water leaves the road



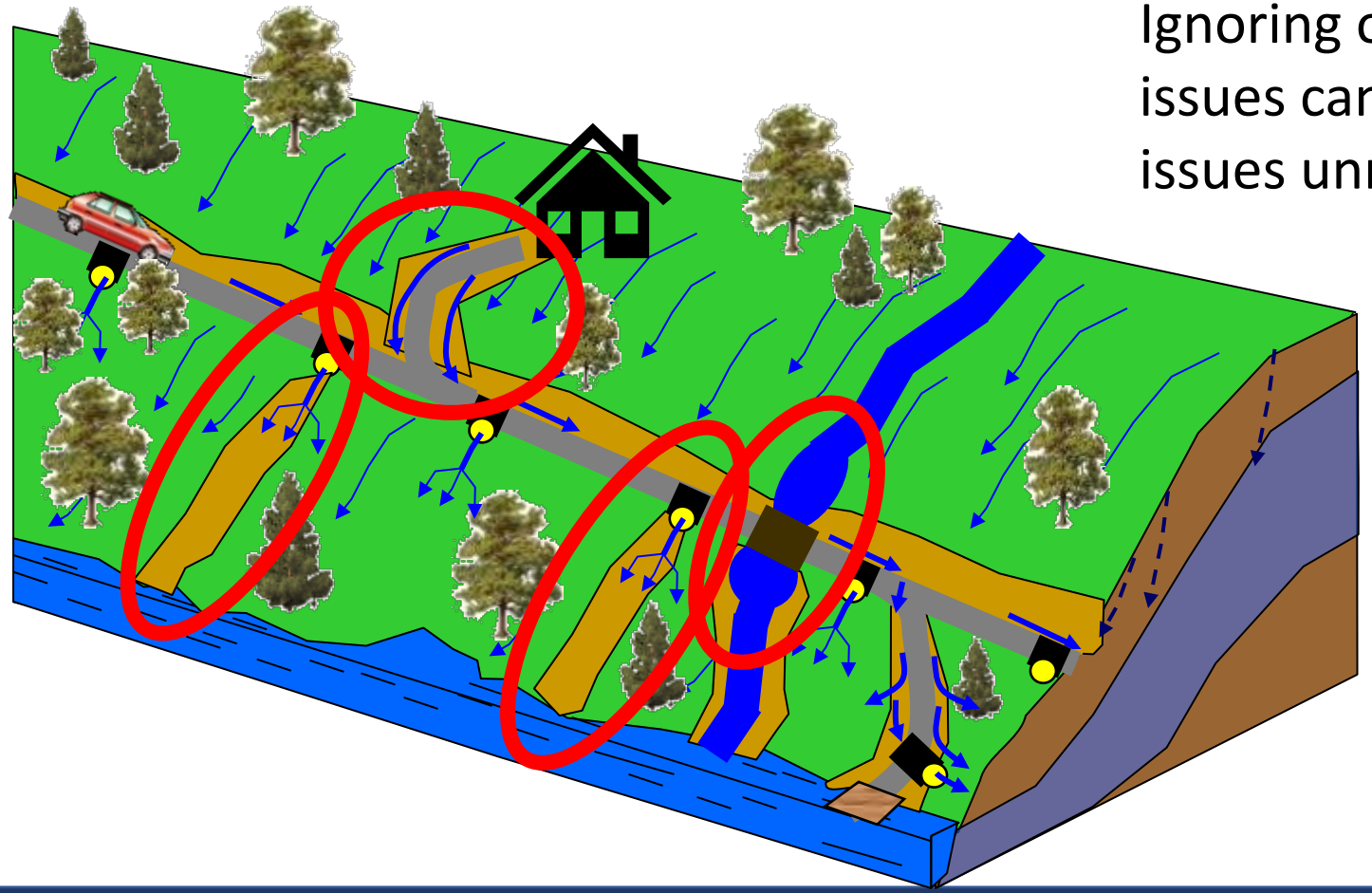
Stream instability near roads needs to be fixed and often extends off ROW

Why work off ROW?



We can’t always solve road erosion issues in the right-of-way

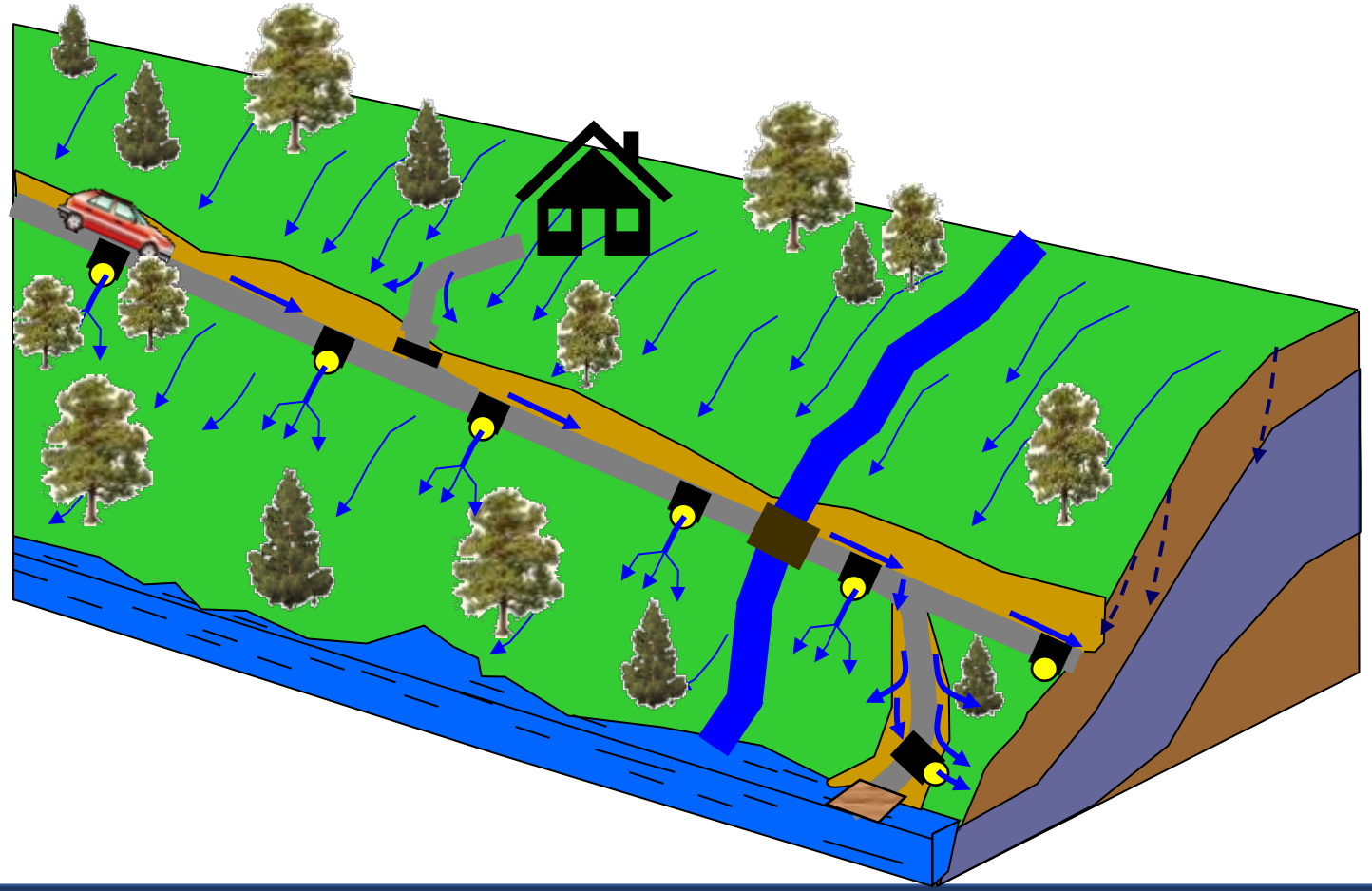
Why work off ROW?



Ignoring off ROW water issues can leave erosion issues unresolved

Why work off ROW?

Many DGLVR Projects require work outside the right-of-way to fully correct erosion issues



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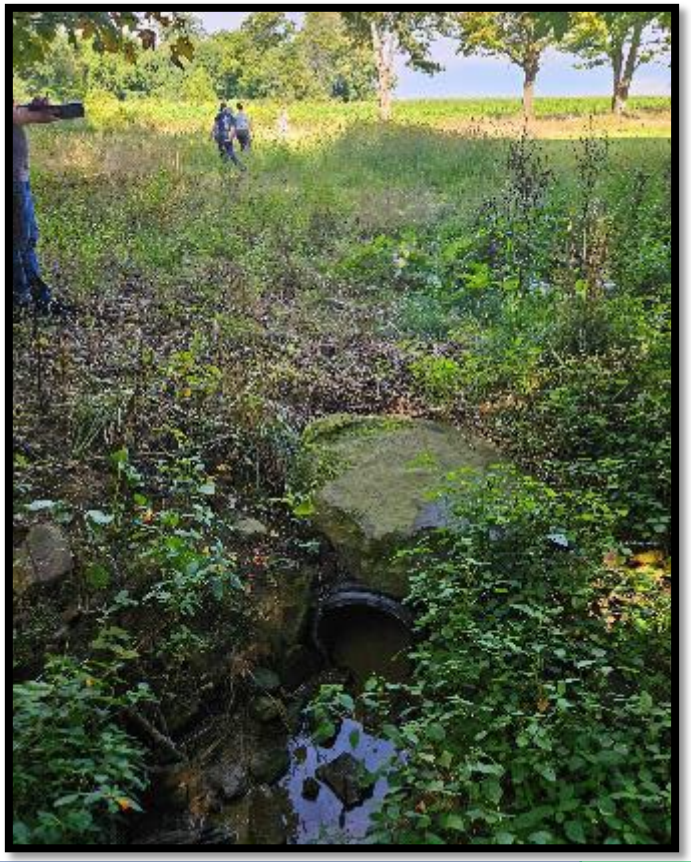
Working off the Right-of-Way

Administrative Manual Section 3.7.4.8

Funds can be spent on activities outside the right-of-way only when:

- It is part of a larger project on a public road.
- The issue on the public road cannot be effectively resolved within the right-of-way with traditional ESM practices.
- The district determines it is directly necessary as part of the successful completion of the project on the public road.



Working off the Right-of-Way

Administrative Manual Section 3.7.4.8

Funds can be spent on activities outside the right-of-way only when:

- It is limited in scope to:
  - cost-effective ESM practices that directly reduce impacts to the public road.
  - only address the area necessary to reduce impacts to the public road.

Working off the Right-of-Way

Administrative Manual Section 3.7.4.8

Funds can be spent on activities outside the right-of-way only when:

- The grant recipient has obtained written permission from the landowner.
  - Districts must keep a copy of the signed landowner consent form with the project file for any work performed off the right of way.
  - Districts can use their own form, or the example provided in manual, <u>but must use something</u>!


Consent, license and release agreement

between _____ (road-owning entity) and _____ (landowner)

Whereas,

BACKGROUND: The _____ (He

and the undersigned have agreed that employees, agents o

enter the undersigned's land to cut, open, maintain, clea

undersigned's lands as deemed necessary by the Road Owni

the benefit of the undersigned and all residents. The undersigned ack

informed of and understands the scope of the work which the Road Owning Entity intend

on his/her lands for this purpose.

For and in consideration of the benefits accruing from proper maintenance of

ned's drainage facilities, I/we, the undersigned, intending to

the above-described property for purposes of implementing the practices descried in the "scope of work" above, and for the future maintenance of those practices. This consent shall be valid and effective for the life expectancy of the practices implemented.

4. Releas

for himself/themselves, their spouse, personal

ssigns, forever release and discharge Road Owning

nts and employees and any other persons or entities

ning Entity (Released Parties) of and from any and all

f any and all natures whatsoever, including but not

amage or bodily injury which may arise from or be in

any acts or omissions of the Release Parties relating to the practices descried in the "scope of work" above, and for the future maintenance of those practices

5. Binding on Successors: This Consent, License and Release shall be binding on Grantors successors, representatives and assigns.

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Word Version Available Online

www.dirtandgravelroads.org

Working off the Right-of-Way

Administrative Manual Section 3.7.4.8

Funds can be spent on activities outside the right-of-way only when:

- Prior written approval of the Commission is required before a contract can be signed:
  - Where off-right-of-way work is more than **35% of the total** project costs (including program funds and in-kind contributions)
  - Where work extends more than **500 feet off of the right-of-way**.
- Call or email DGLVR SCC staff to request permission in these cases. A site visit is often required.

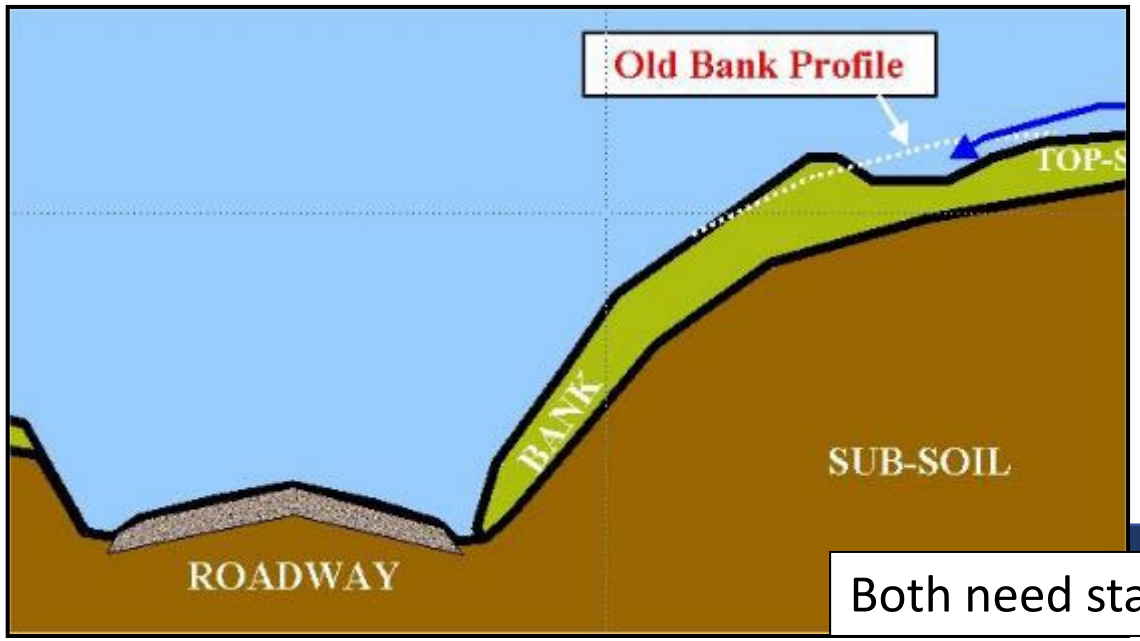
Example off ROW practices

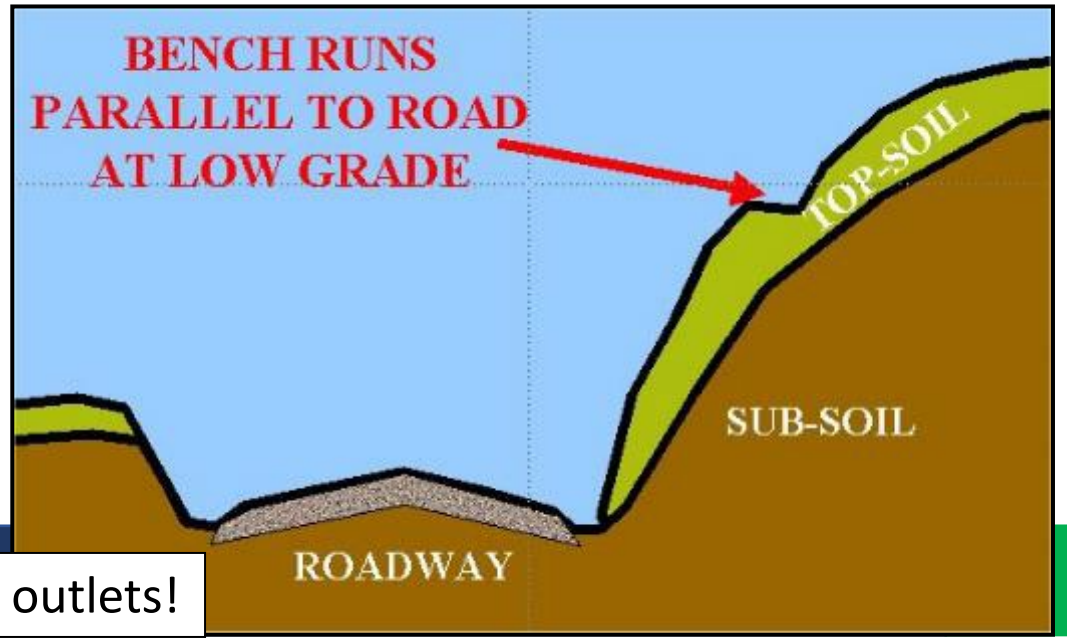
DIVERSION SWALES **vs** **BANK BENCHES**

Channel shaped ⟷ **Flat**

Sloped for water flow ⟷ **Very gentle slope**

Designed to carry water ⟷ **Designed to slow water**



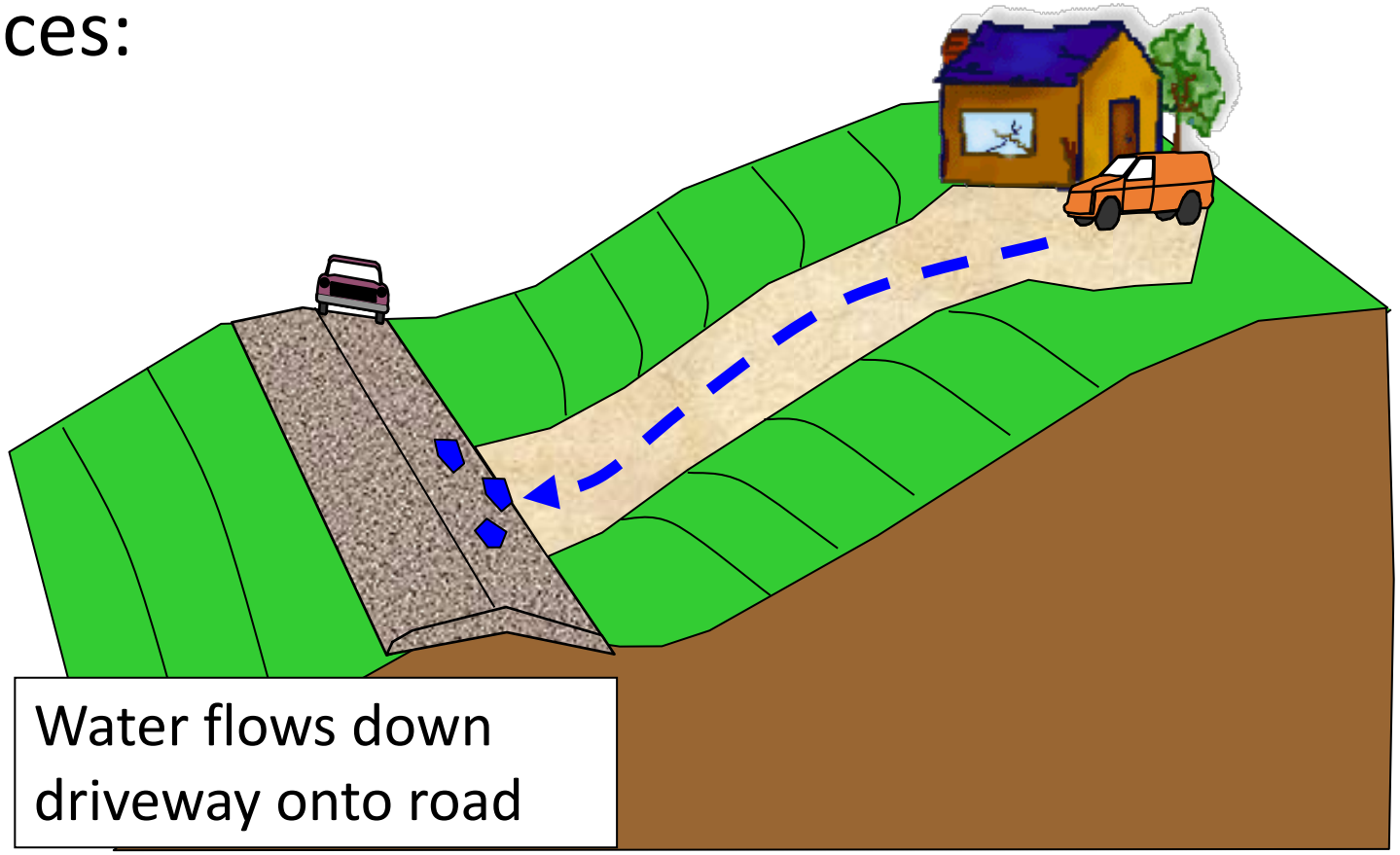


Both need stable outlets!

Example off ROW practices

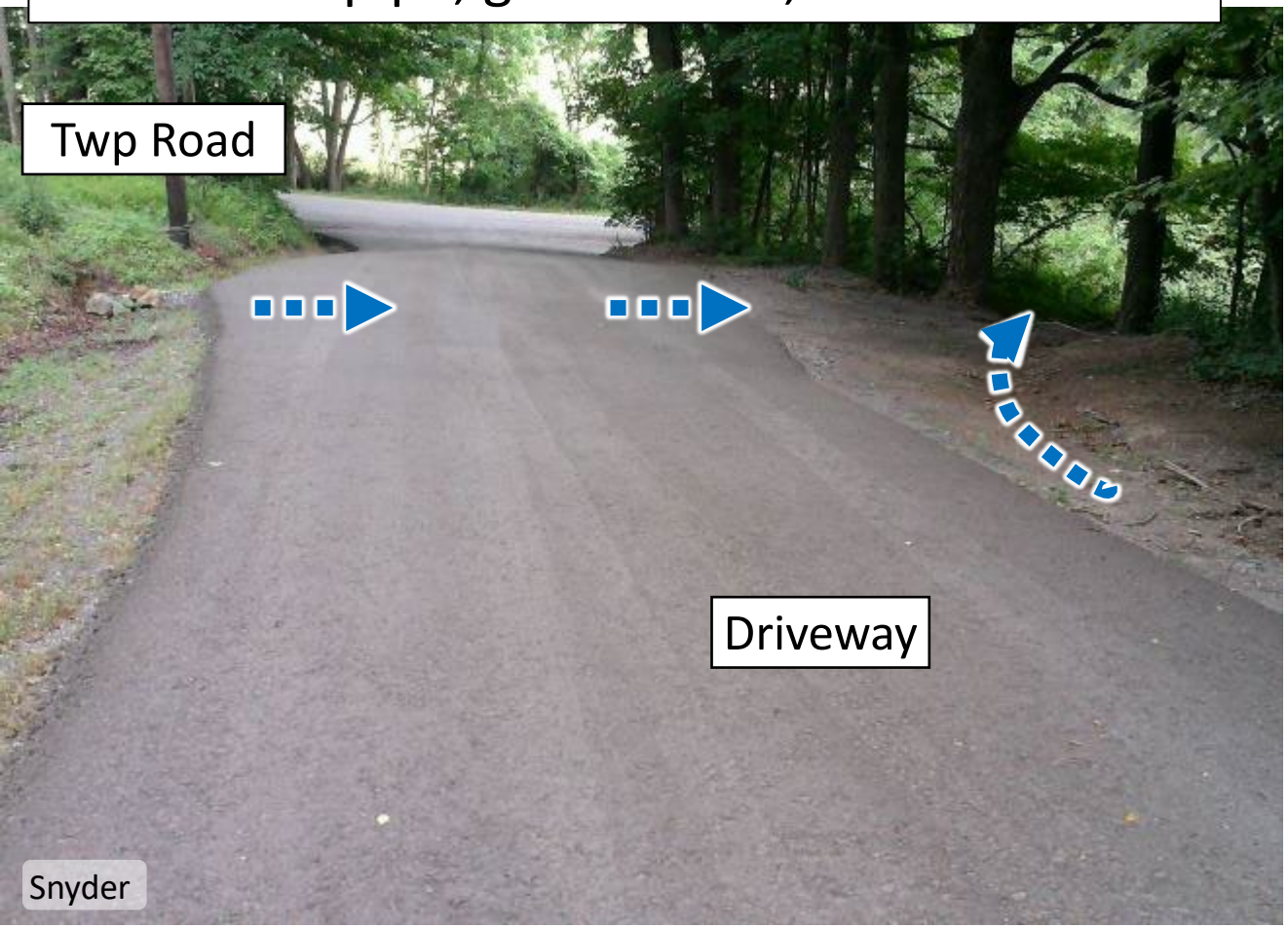
Example off ROW practices

- Drainage from access roads can be addressed with a wide variety of ESM practices:
  - Road fill
  - Crown or side slope
  - Cross pipes
  - Turn out
  - Grade break
  - Broad-based dip
  - Any ESM practice needed

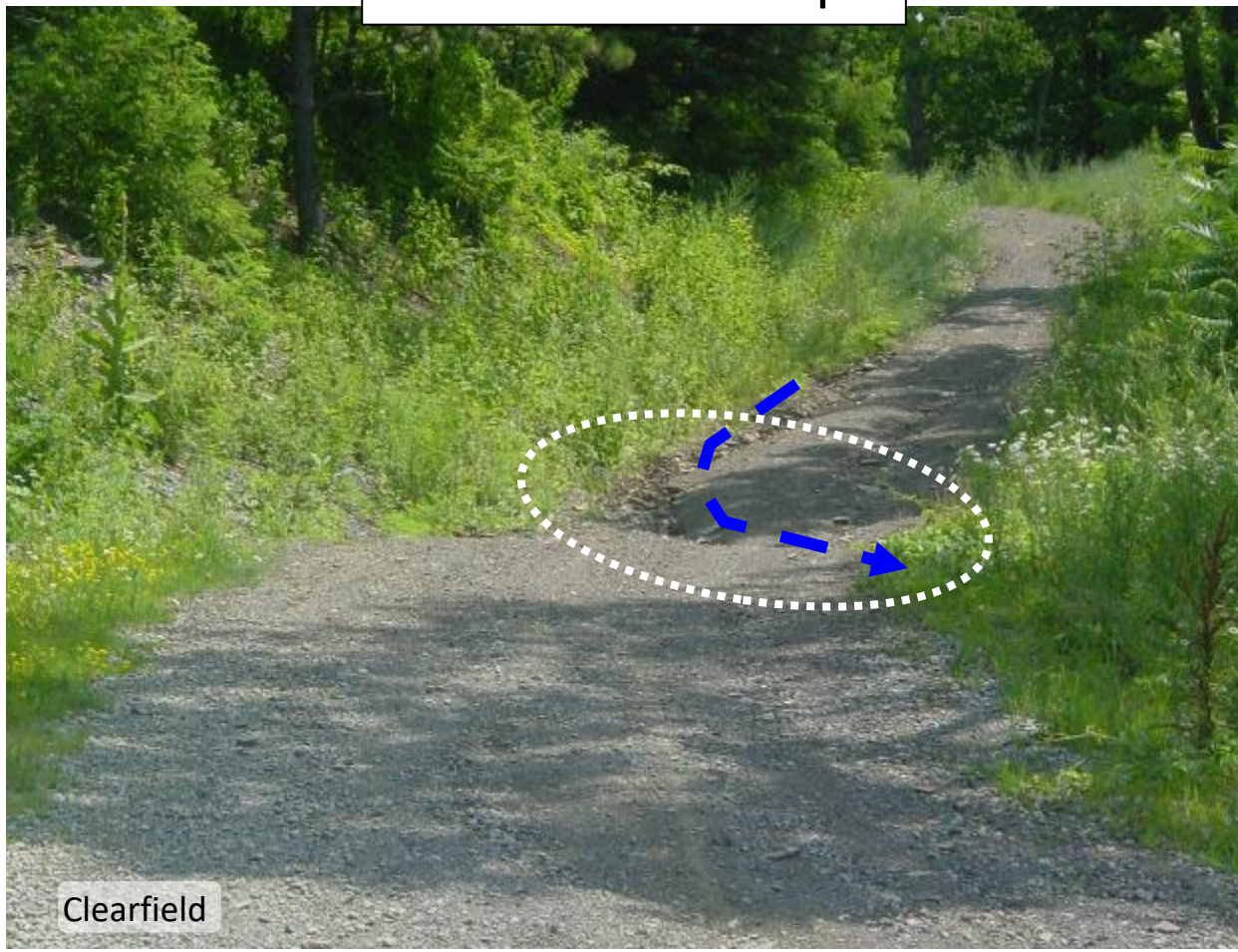


Example off ROW practices

Shallow pipe, grade break, and turnout



Broad-Based Dip

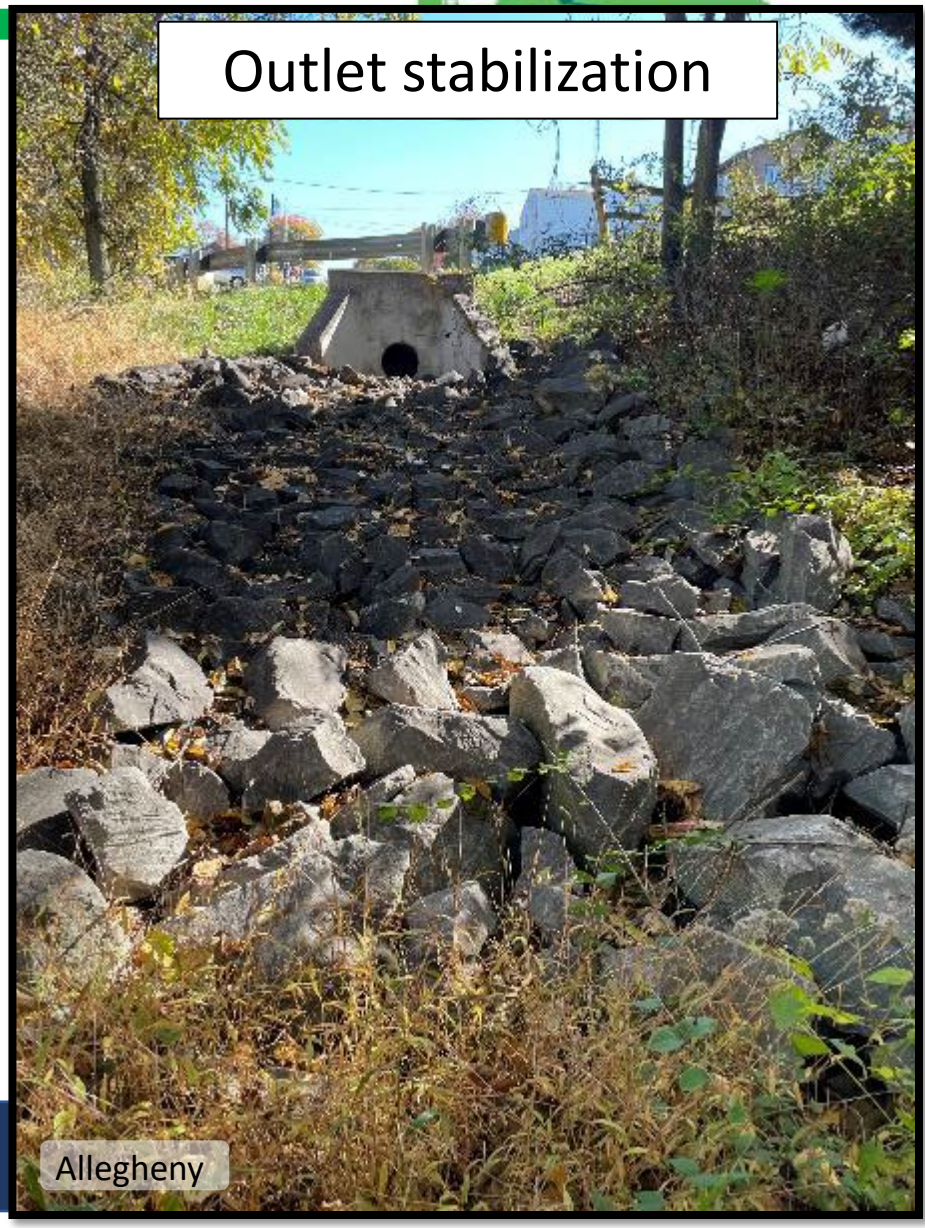


Example off ROW practices

Stormwater detention & infiltration

Westmoreland

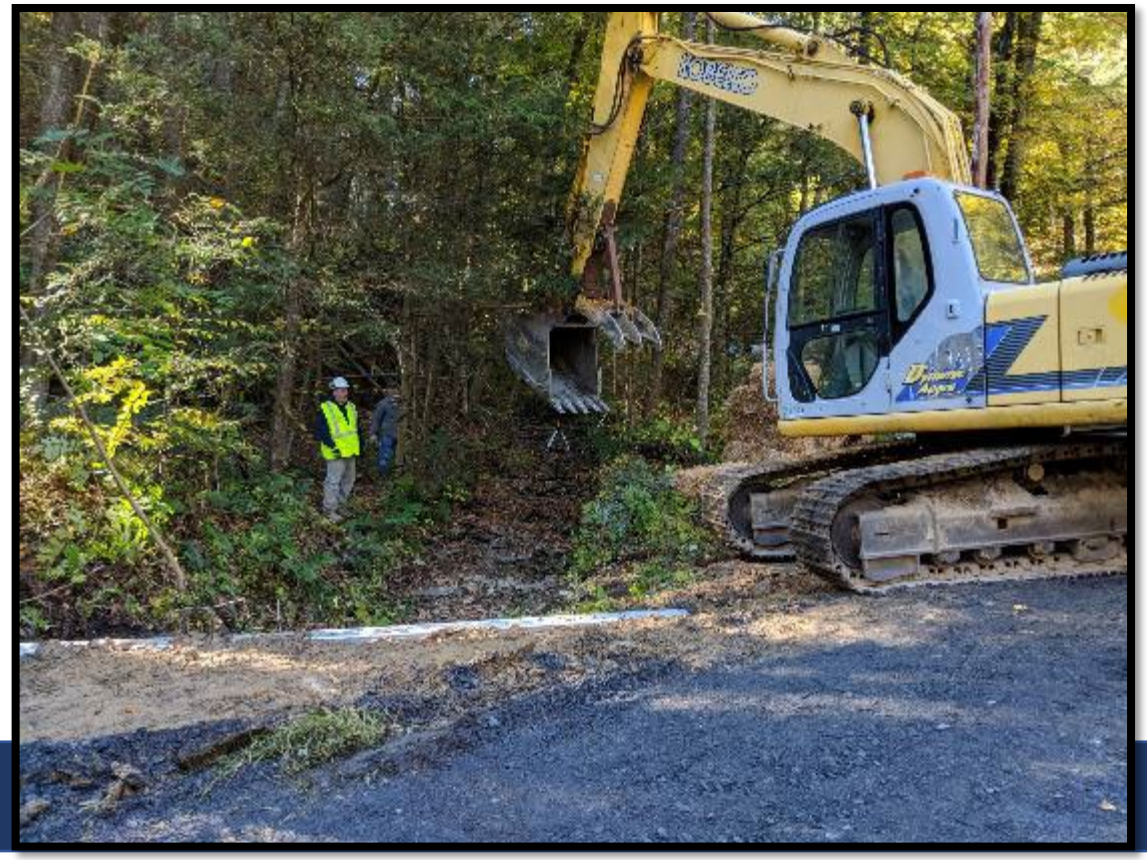
Outlet stabilization

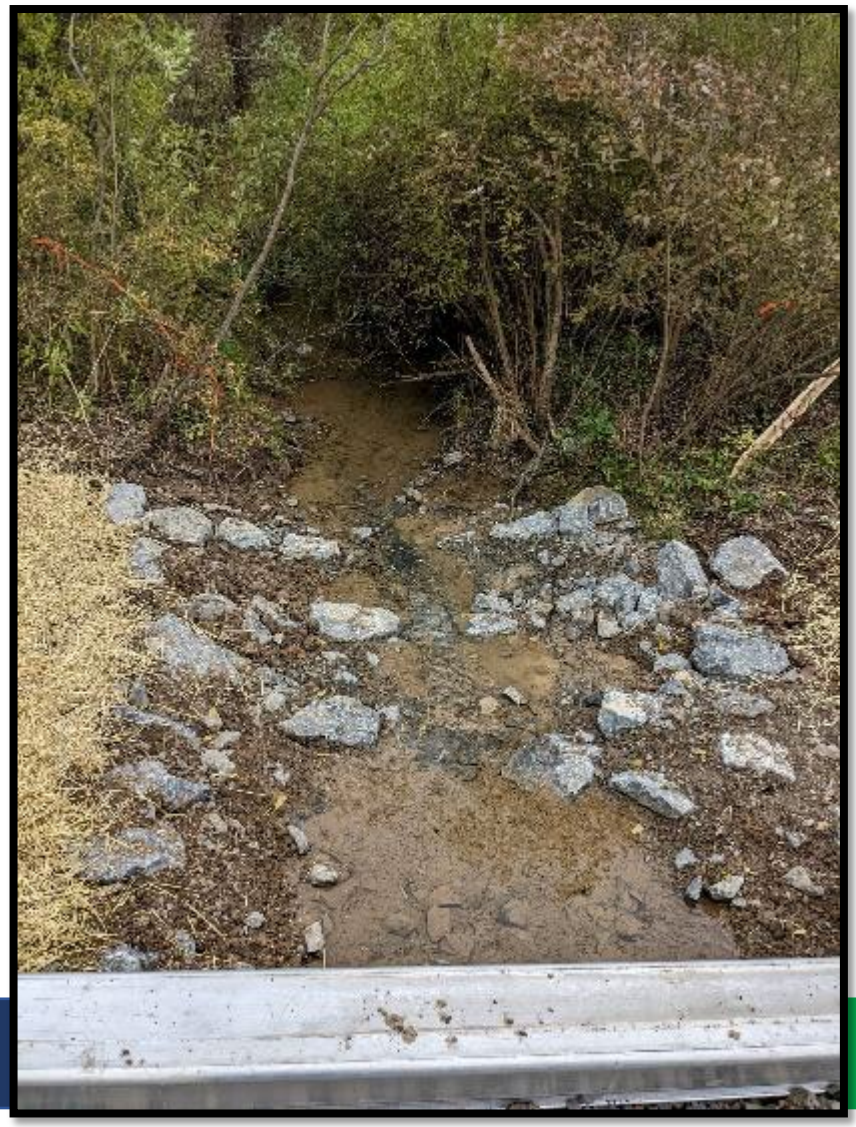


Allegheny

Example off ROW practices

Stream crossing replacements require stabilizing the stream channel upstream and downstream of the road





Working outside the Right-of-Way

Presentation Outline

- What is the ROW & why work off ROW?
- Eligible off ROW work
- ***Permission from landowners***
- What to do if you can't get off ROW permission
- Example projects
- Other funding sources

Working off the Right-of-Way

- Written landowner permission:
  - Required before working outside the right-of-way.
  - Suggested when off-right-of-way impacts are expected, even if work is done within right-of-way.
    - New pipes and turnouts.
    - Subsurface drainage (French mattress & underdrain)
    - Driveway issues.
    - Road fill jobs.

Working off the Right-of-Way

- 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.

Project Life Cycle

1. Education and outreach
2. Pre-application meeting
3. Receive & review application
4. QAB meeting
5. CD Board meeting
6. Contracting
7. Preparing for Construction
   - If applicable: Design, permitting, bidding
   - Pre-construction meeting
8. Construction
9. Completion

Start talking about off-ROW permission during project planning

Local control: districts can require written off-ROW permission to be submitted:

- with the grant application
- before the QAB meeting
- before signing a contract
- etc.

Must have written off-ROW permission before working off ROW

Working off the Right-of-Way

How to get landowner permission

- The grant recipient is responsible for obtaining written landowner permission.
- The road owner is the one who has to maintain the project and work with the landowner long term.
- However, the conservation district can help with these conversations.

Working off the Right-of-Way

Example ask for landowner permission:

- Can we put in a new cross pipe that outlets water on your property?

Working off the Right-of-Way

Example ask for landowner permission:

- Can we put in a new cross pipe that outlets water on your property?
- The only cross pipe outlet the landowner is familiar with:

Working off the Right-of-Way

Example ask for landowner permission:

- Can we put in a new cross pipe that outlets water on your property?
- The only cross pipe outlet the landowner is familiar with:

Probably not going to get permission

X

Working off the Right-of-Way

How to get landowners on board?

- Offer your assistance to the road owner – go with them to ask landowners for permission to work on their property.
  - Use your expertise in conservation, the DGLVR Program, and talking to road owners when talking to the landowner.
  - Explain ESM principles:
    - Goal is to prevent erosion.
    - Break up stormwater between many outlets so only a small amount of water comes out at each outlet.
    - Or if stormwater is being collected, talk about benefits of detention/infiltration/stabilization at the outlet.
- Districts can ask for CDGRS and/or SCC involvement as well.

Working off the Right-of-Way

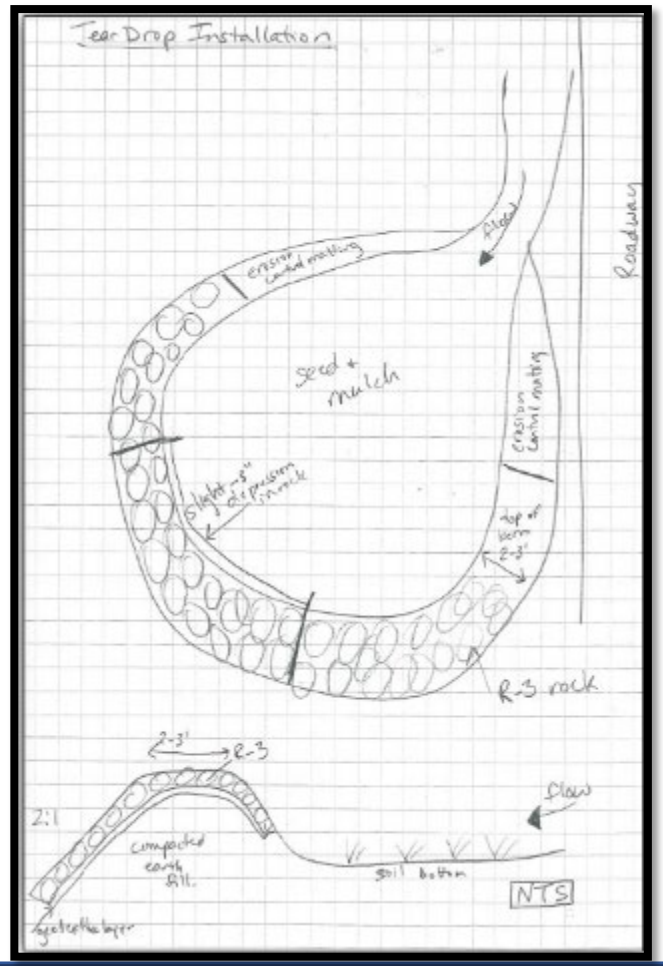
How to get landowners on board?

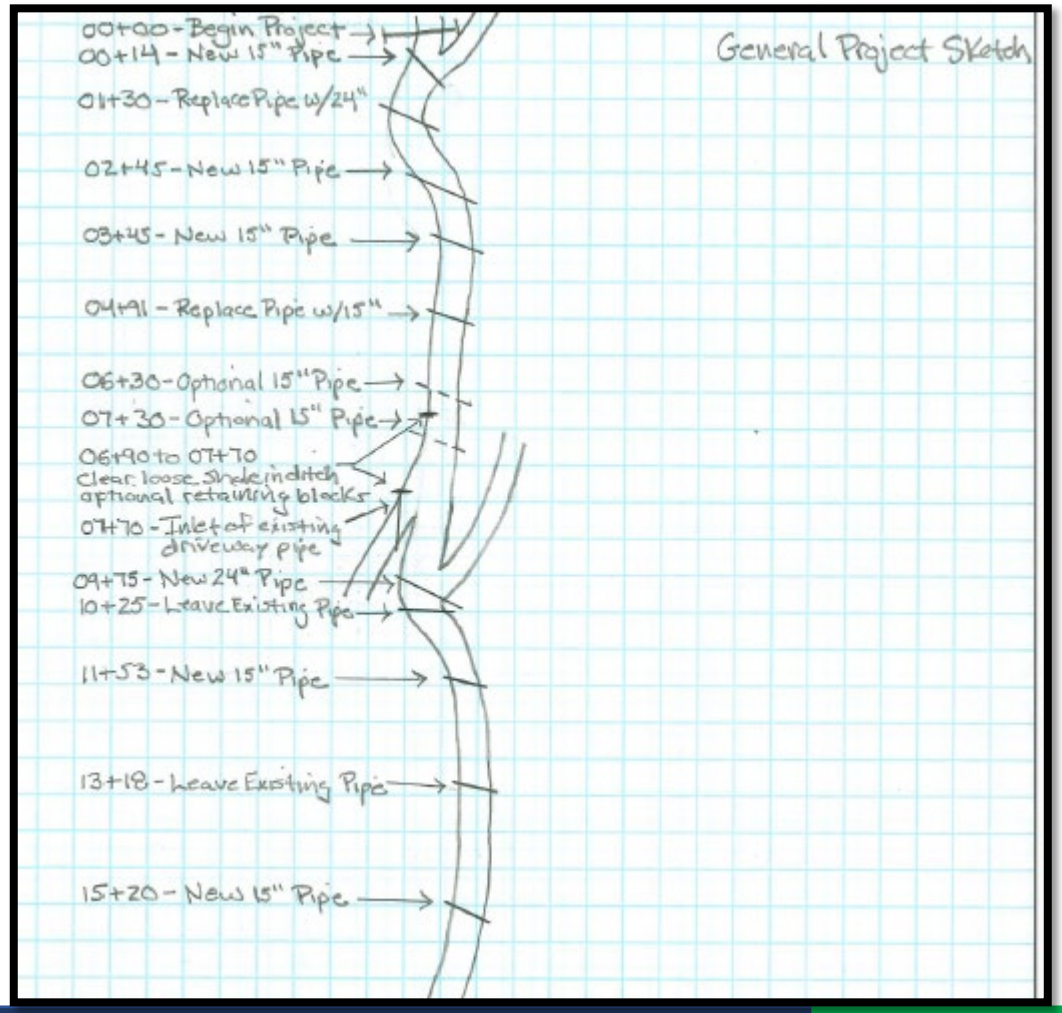
- Meet on site.
- Introduce yourself and explain the conservation district role in the project, including ESM practices/DGLVR goals.
- Share your overall work plan and how the off-ROW work fits into the overall road improvements.
  - Explain how this project solves a problem for the landowner.
- Listen to their concerns.
- Adjust the work plan as needed to address water issues in a way that works for the landowner & road owner.
- Discuss who is responsible for long-term, routine maintenance.
- Invite them to reach out if they have questions or concerns.

Working off the Right-of-Way

How to get landowners on board?

- Use visual aids!
  - **Work plan**

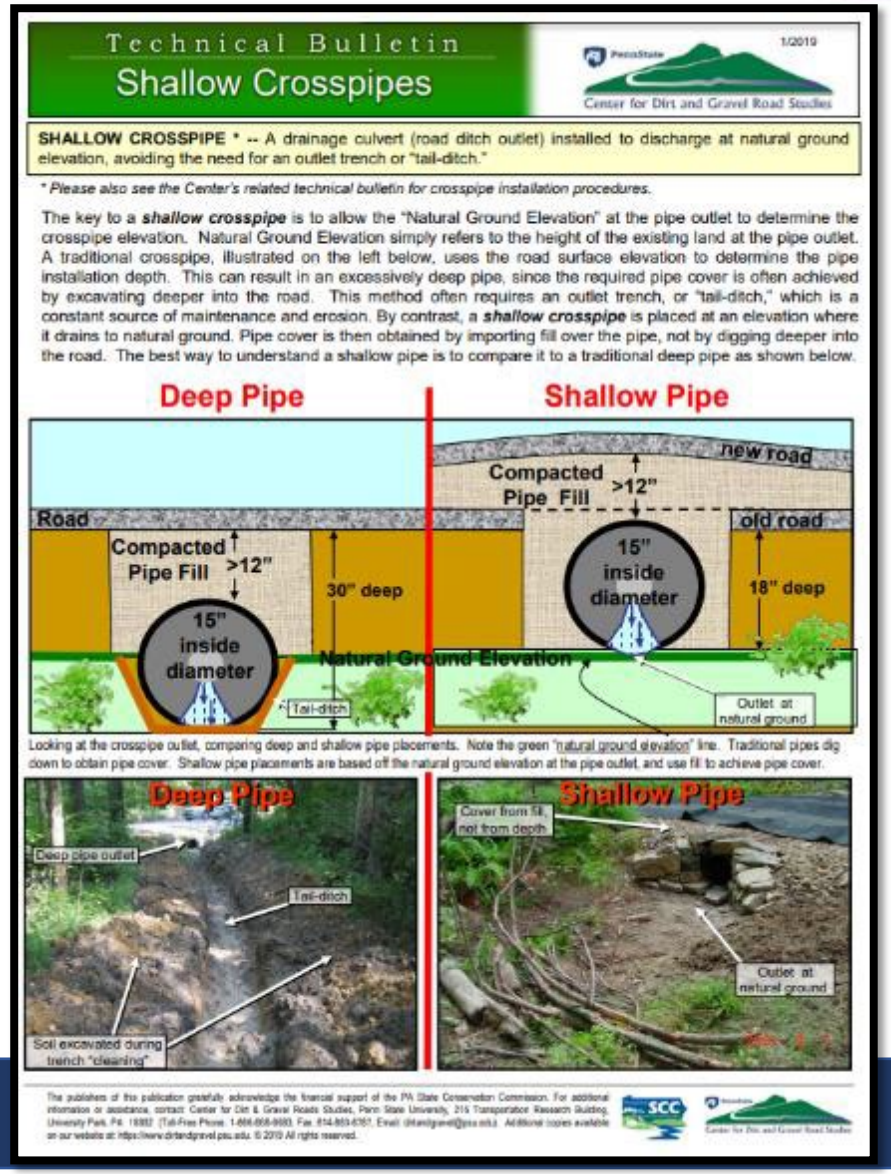




Working off the Right-of-Way

How to get landowners on board?

- Use visual aids!
  - Work plan
  - **Technical bulletins**
  - [Technical Bulletins - Center for Dirt and Gravel Road Studies]



Working off the Right-of-Way

How to get landowners on board?

- Use visual aids!
  - Work plan
  - Technical bulletins
  - **Photos – completed work**

Working off the Right-of-Way

How to get landowners on board?

- Use visual aids!
  - Work plan
  - Technical bulletins
  - **Photos - construction**

Working off the Right-of-Way

How to get landowners on board?

- Use visual aids!
  - Work plan
  - Technical bulletins
  - Photos
  - **Flyers from DGLVR Program**
  - Blank Forms - Center for Dirt and Gravel Road Studies

Funds Available to Fix Water Issues on Public Roads

PA Dirt, Gravel, and Low Volume Road Program

Dirt and Gravel Road project: 1,300 tons of road fill raised and shaped the road to shed stormwater into the ditches. 5 new shallow cross pipes with broad based dips and 6 new turnouts outlet water from the ditches into vegetated areas. 810' of underdrain prevents subsurface water from saturating the roadway. New surface aggregate finished the project.

Water is a leading reason why roads deteriorate.

Improving water management on roads reduces routine maintenance needs, ***saving time and money***.

PA county conservation districts have ***grant funding available*** for public road owners to ***correct water issues on public roads***.

The Dirt, Gravel, and Low Volume Road (DGLVR) Program

provides grant funding to municipal and state entities to fix water issues on public roads that drain to streams, lakes, and wetlands.

Cross pipes are commonly used in DGLVR projects to direct water away from the road and nearby streams.

- Funds can be utilized to improve unpaved roads and paved roads with low traffic (500 cars or fewer).
- Funded projects focus on spreading out and slowing down storm water to prevent roads from washing out.
- Projects can also address subsurface water issues, road base and ditch instability, undersized stream crossings, road bank slides, road surfacing, and more!

Public roads that drain to streams or otherwise impact water quality are likely eligible for DGLVR funding.

Working off the Right-of-Way

How to get landowners on board?

- Use visual aids!
  - Work plan
  - Technical bulletins
  - Photos
  - **Flyers from DGLVR Program**

What is "Stream Continuity"?

Continuity simply means: "uninterrupted connection"

Stream continuity means that the stream is very similar in character upstream, downstream, and through the road crossing. This includes features such as slope, streambed material, channel width and shape, pool/riffle sequencing, and connectivity to its floodplain.

Continuity is a wholistic approach that looks at the entire reach of stream, not just the crossing.

Stream Connectivity in PA

Designing stream crossings for continuity is catching on in PA. A variety of organizations such as the PA State Conservation Commission (SCC), PA Department of Environmental Protection, PA Fish and Boat Commission, PA Game Commission, Trout Unlimited, PA Bureau of Forestry, Western PA Conservancy, and others are actively trying to spread the message of stream continuity. While other standards exist nationally, the documents described on the back are the only PA standard, and only apply for PA DGLVR projects.

More information:

Efforts to design stream crossings for connectivity extend beyond PA. Several states in the Northwest and New England provide standards for stream continuity. The most comprehensive guidance is from the US Forest Service and their "Stream Simulation" approach. More information at: https://www.fs.usda.gov/biology/education/workshops/aop/index.html *(or search USFS Stream Simulation)*

PA Dirt, Gravel, and Low Volume Road Maintenance Program

The PA DGLVR Program provides $28 million annually in grant funding for environmental and road improvement projects on publicly-owned roads. The PA State Conservation Commission (SCC) administers the program at the state level. County conservation districts administer the program within each county. Local public road owning entities, largely townships, apply to their district for funding. www.dirtandgravelroads.org.

The DGLVR Program funds a variety of other practices, but typically installs about 60 stream crossing replacements annually. In July of 2022, the SCC, working in collaboration with the Penn State Center for Dirt and Gravel Road Studies and others, approved a comprehensive set of stream crossing documents for program use:

Policy: Requires use of standard and outlines other trainings, reviews, and inspection requirements.

Standard: Design and installation standard for new stream crossings. Provides requirements and information for engineers on project design, construction inspection, and more.

Technical Manual: Comprehensive guidance document in support of the Policy and Standard above. Most of the manual is written for conservation district staff administering projects through the PA DGLVR Program, with chapter 12 being dedicated to design engineers.

Documents: https://dirtandgravel.psu.edu/general-resources/stream-crossing-replacements/ (or search "DGLVR stream crossings")

The above documents are only required for projects funded by the PA DGLVR Program. The documents are publicly available for others interested in stream continuity projects.

Designing Stream Crossings for Connectivity, Continuity, and Storm Resiliency in Pennsylvania

BEFORE

AFTER

Document provided by PSU Center for Dirt and Gravel Road Studies and PA State Conservation Commission

Center for Dirt and Gravel Road Studies

DGLVR Stream Continuity Flyer on Stream Crossings webpage: https://dirtandgravel.psu.edu/stream-crossing-replacements/

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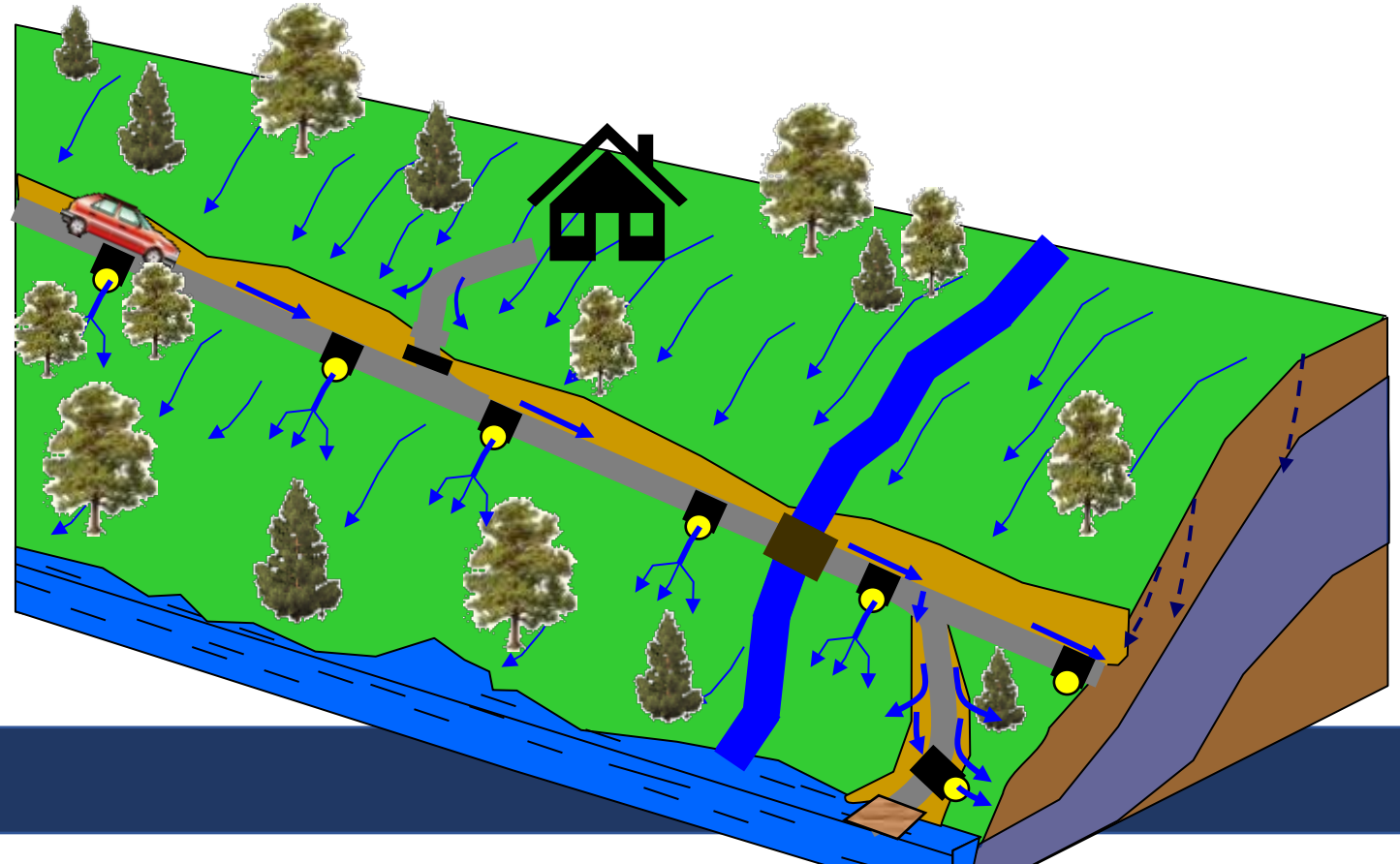
In some cases, landowner permission may be instrumental to implementing a successful DGLVR project (additional culvert outlets for example).



What if you can't get off ROW permission?

- If the road owner tells you that they cannot get landowner permission:
  - Make sure the road owner actually asked the landowner.
  - Ask for details about how the conversation went.
    - Did the landowner truly understand the goals of the project and the impacts to their property?
  - Offer your assistance in asking the landowner again.
    - Use tips from this webinar.

What if you can't get off ROW permission?

- Ask **why** the landowner is not agreeable to the proposed work.
- See if there are **alternatives that the landowner might be agreeable to:**

- **Example**: If an upslope driveway owner doesn't want a grade break, see if they would be okay with a new cross pipe or sectional road fill.

- **Example**: If a landowner doesn't want water in their yard from a new outlet, see if you could plant a small rain garden to help manage extra water or see if there is a different area of the property that the water could be conveyed to with buried pipe or a swale.

What if you can't get off ROW permission?

- In some cases, a viable **alternative may exist to implement a successful plan without landowner permission**.

- **Example**: Can't get permission for enough new cross pipe outlets? Can you install:
  - Enough road fill to obtain sheet flow?
  - Carry the water to a location where you have permission for a stable outlet?
    - Stabilized roadside ditch
      - Rip rap, channel lining, etc.
    - Storm sewer
    - Remember that outlets for concentrated stormwater will require a stabilized outlet (Rip Rap apron, infiltration or detention feature, etc.)

What if you can’t get off ROW permission?

- In other cases, sufficient water quality improvements cannot be made due to landowner constraints. **In such cases, DGLVR funding may be better spent on a different project location.**

- Contact the SCC in questionable circumstances where a lack of landowner permission may hinder successful project implementation.

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Project: Creps Road, Blair County

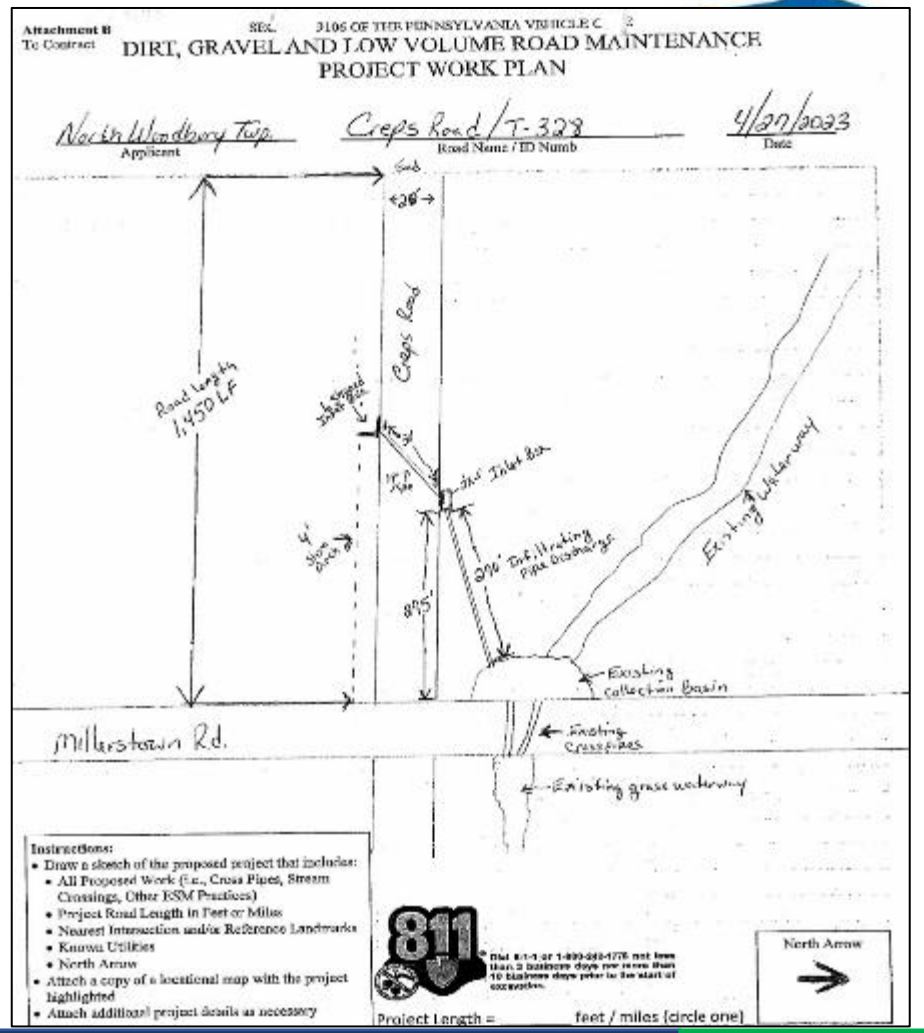
- Creps Road, North Woodbury Township
- The site was very entrenched and had no drainage outlets.
  - long-running ditch on steep road
  - led to erosive stormwater flows and created overly deepened ditches
- The site was ultimately addressed with 2 DGLVR grants to fund work within the ROW
  - Contract 1: $138,689.75 DGR + $23,135.79 In-kind
  - Contract 2: $77,882.20 LVR + $20,843.94 In-kind

Project: Creps Road, Blair County

- Traditional ESM Practices for entrenched roads:
  - Road fill
  - New cross pipes
  - New turnouts
- First proposal: pipe ditch water off-ROW to outlet to existing waterway in farm field
- Landowner & farmer would not allow this
- However, a drainage outlet to remove water from the upslope ditch was essential to control erosion at this site.

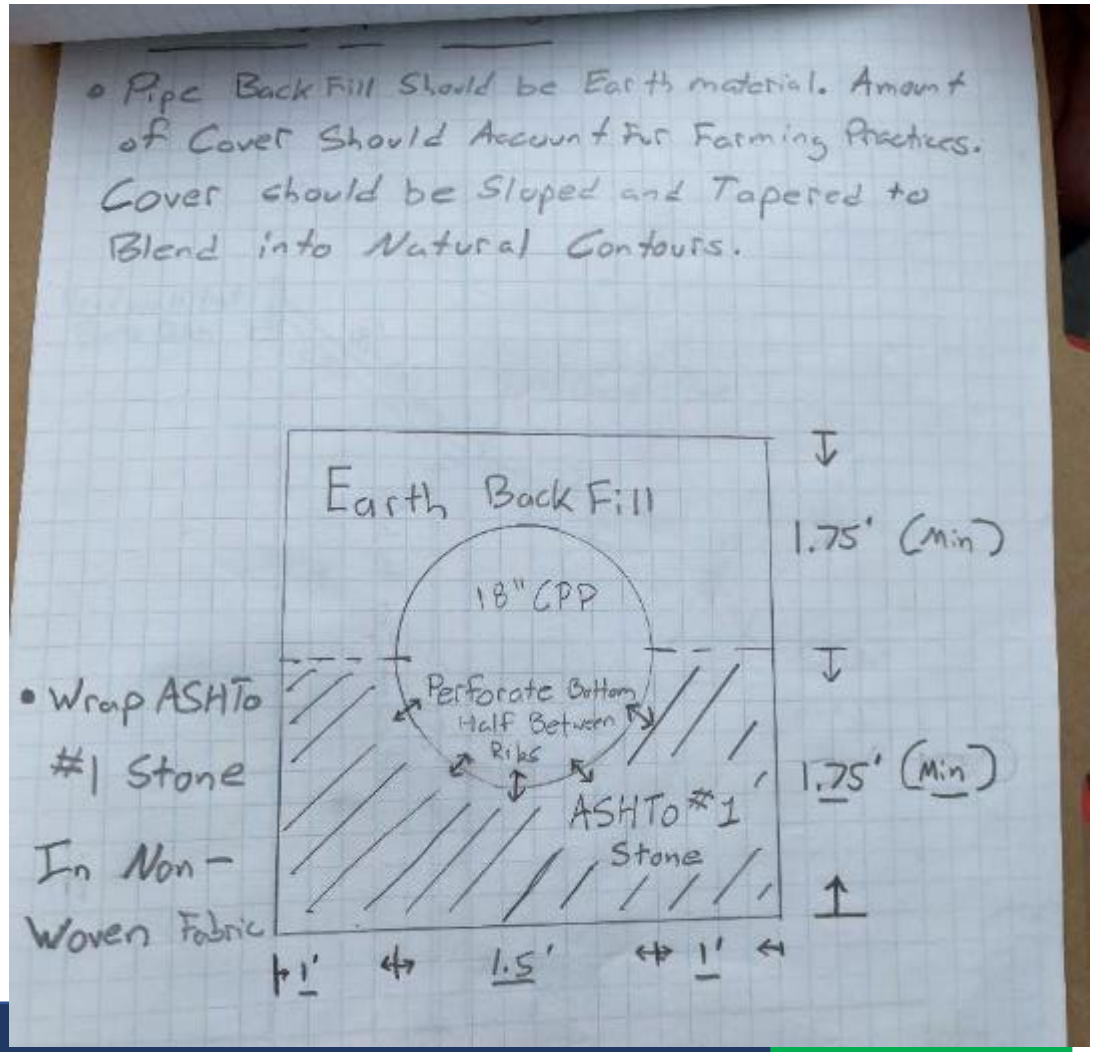
Project: Creps Road, Blair County

- How to handle the water without new surface outlets:
  - Road fill created sheet flow off the downslope side of the road in many areas, eliminating a downslope ditch.
  - The upslope ditch was rock-lined with riprap.
  - A new cross pipe was installed to direct upslope flow to a catch basin downslope of the road.



Project: Creps Road, Blair County

- From the catch basin, flow is directed to a perforated 24” pipe with a constructed infiltration trench paralleling the downslope side of the road.
- The 24” pipe discharges to an inlet box at the bottom of the road at the intersection in the event the infiltration trench is overwhelmed.



Construction Photos

Project: Creps Road, Blair County

- Completed 2023
- Site Length: 2,529 feet
- Practices:
  - 1 new turn out installed
  - 1 new cross pipe installed
  - 286 feet of under drain added
  - 1,074 tons of road fill added
  - 1,199 tons of DSA placed
  - 191 square yards of infiltration achieved
  - 3,566 square yards of seeding and mulching

Project: Creps Road, Blair County

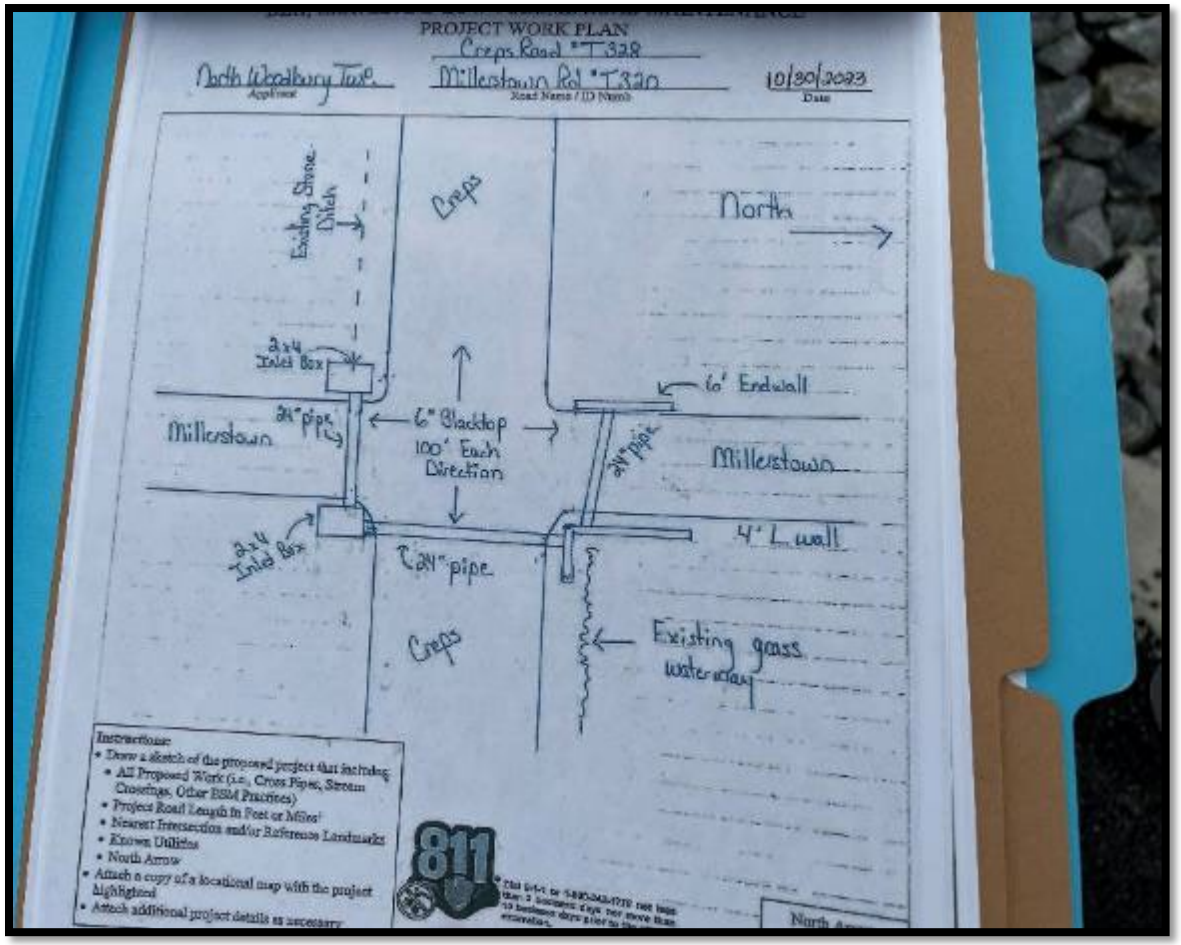
- These combined practices:
  - Remove water from the road
  - Allows water to infiltrate downslope from the road
  - Prevents water from continuing down the road and across the intersection as it did previously

Project: Creps Road, Blair County

- Phase II
- This project is immediately adjacent downslope to the DGR project completed on Creps Road.
- The large volume of stormwater and sediment that previously entered the project area was significantly reduced by the upslope DGR project.
- An existing poorly designed piping system discharged water into the road base, deteriorating the road base and paved road surface.

Project: Creps Road, Blair County

- Inlet boxes and 24” pipe were installed across the intersection to properly convey any stormwater that has not been removed from the roadway on the DGR project site.
- Completed 2024
- Site Length: 390 feet
- Practices:
  - 3 replaced cross pipes
  - New inlet boxes
  - 25 ft underdrain
  - Rip Rap outlet protection
  - 10 sq yd seed/mulch



Failed Piping System Removed

Final Product

New System Installed

Project: Creps Road, Blair County

- New inlet boxes and a combination of cross pipes and storm sewer were installed to better capture any stormwater reaching the site.
- The outlet area was stabilized with riprap to prevent any erosion of the ditch below during high flow events.

Working outside the Right-of-Way

Presentation Outline

- What is the ROW & why work off ROW?
- Eligible off ROW work
- Permission from landowners
- What to do if you can't get off ROW permission
- Example projects
- ***Other funding sources***

Combined Funds

- **Program funds may be combined with other funds to pay for a project.**
  - Outside funding **may be able to do more off ROW work** than DGLVR funds when needed.
  - Detailed accounting of which funds were spent on which portions of the project must be maintained.
  - Other funding sources may be used as matching funds, provided the program funds are used on eligible projects.
  - **Must still adhere to non-pollution standards and ESM practices.**

Combined Funds

- **Recorded webinar on combining funds:**
- **March 9, 2023: Leveraging Other Funding with DGLVR funds**
  - With over $20 million going on the ground with DGLVR projects every year, there are numerous opportunities to use money spent on DGLVR projects as in-kind to obtain additional funding from a variety of sources. This webinar covered those opportunities.
  - Webinar Download (125 MB): MP4 format *(~55 minutes)*
  - Presentation Downloads:
    - Adobe PDF (2.54 MB)
    - MS Powerpoint (5.94 MB)

Combined Funds

- **ACAP funds can be used to address off ROW water issues.**

Combined Funds

From 3/9/23 webinar:

Combining DGLVR and ACAP

- **ACAP:**
  - Applicants are farms / ag operations.
  - Separate contract with farm owner
  - For BMPs that reduce sediment, nitrogen, or phosphorus on ag operations.
  - Has to be in a manure management plan, nutrient management plan, ag E&S plan, or conservation plan.
- **Most likely use of combining funds:**
  - **Improving farm lanes that impact roadways.** Can fund DGLVR ESM practices to fix the farm lane / reduce pollution.
  - **Reducing impacts to road from other "off row" water and sediment sources**
    - Field and barnyard runoff
    - Diversions and swales
    - Streambank stabilization


Questions?