

# Dirt, Gravel, and Low Volume Road Maintenance Program

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December 8, 2023



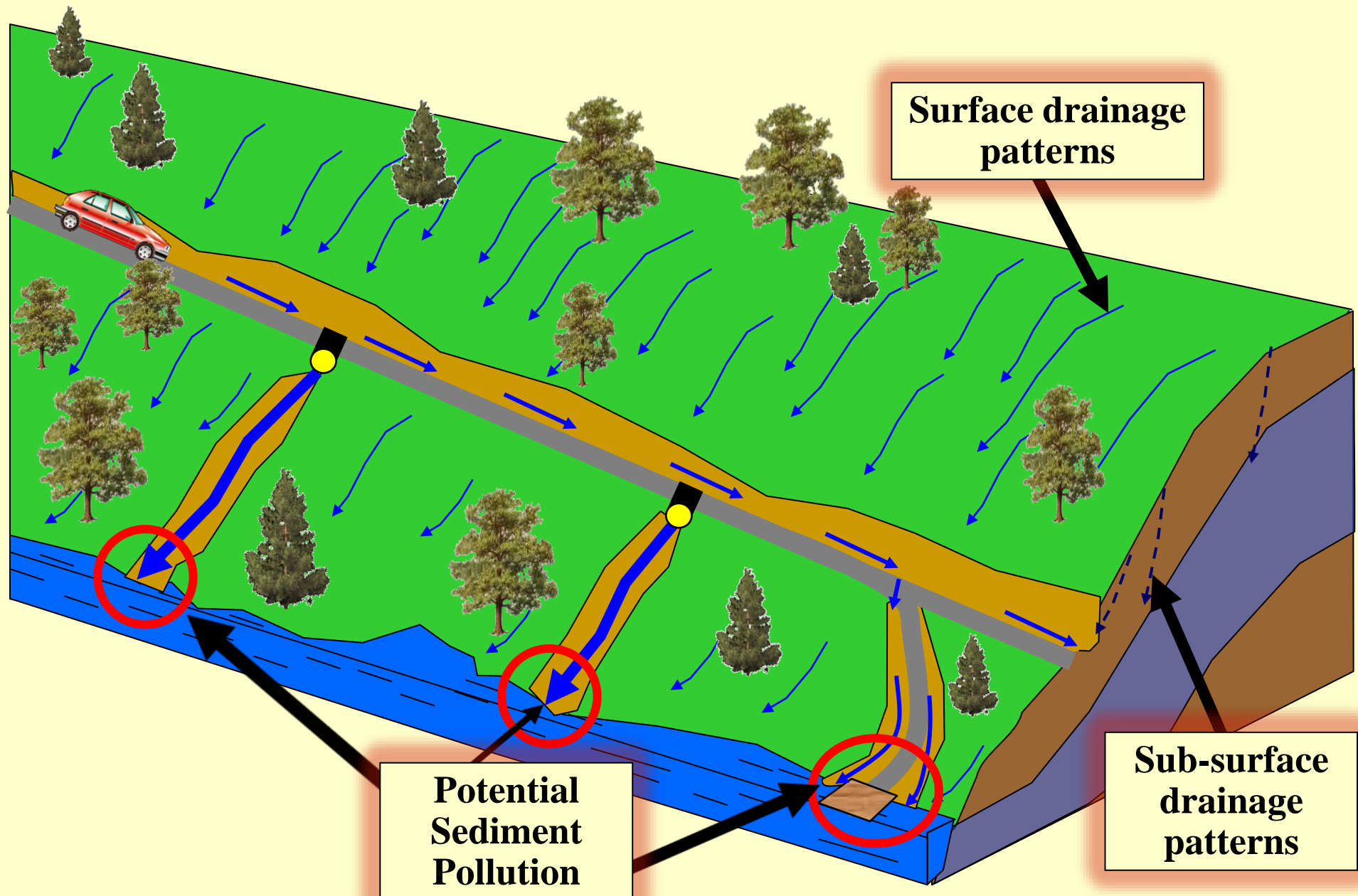
# Program Purpose

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- Reduce Concentrated Drainage
- Reduce Sediment Pollution
- Reduce Impact of Road on Land
- Reduce long-term maintenance costs and frequency.

**Better Roads = Cleaner Streams**

PA Dirt and Gravel Road Program

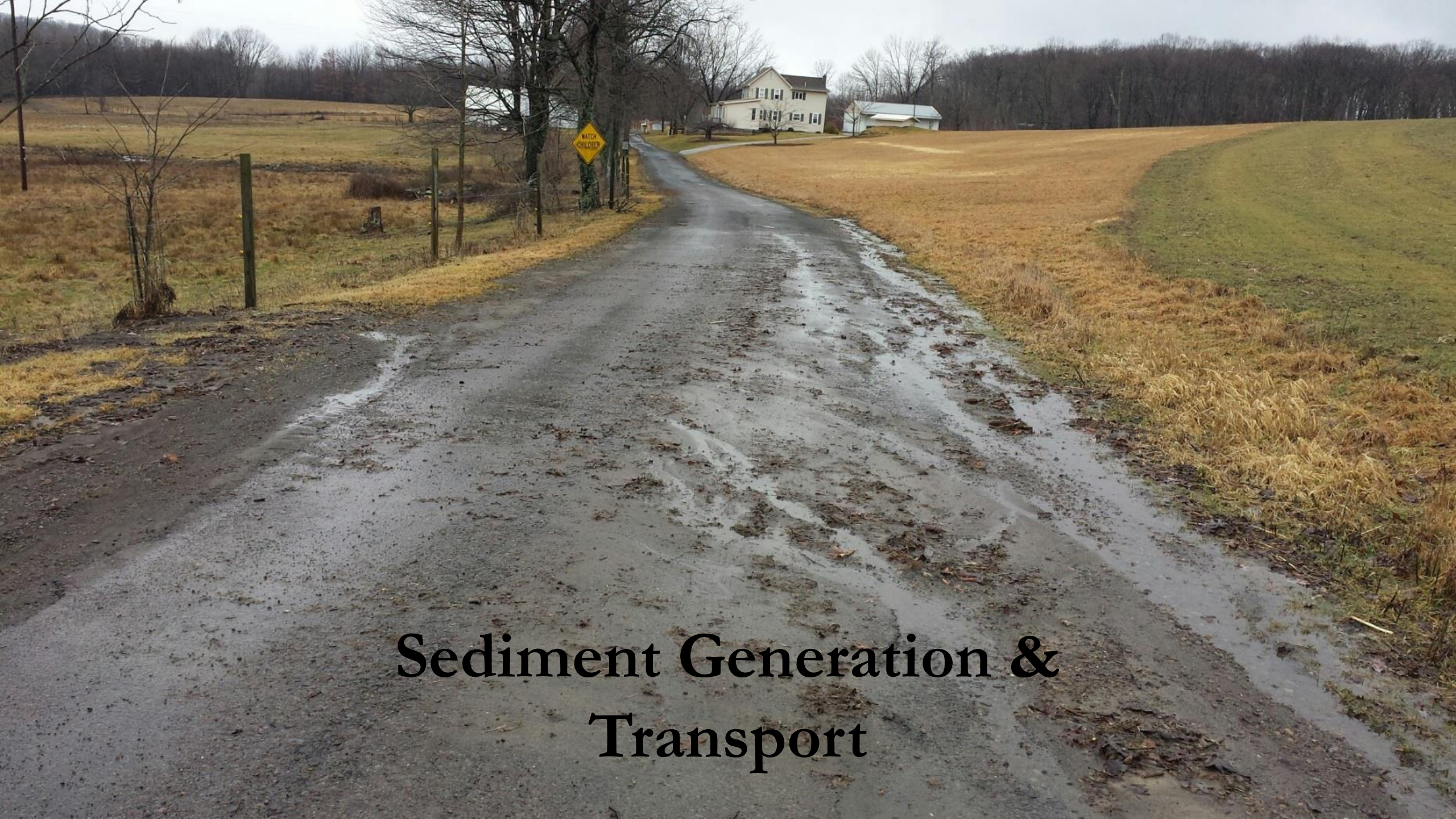


Surface drainage patterns

Potential Sediment Pollution

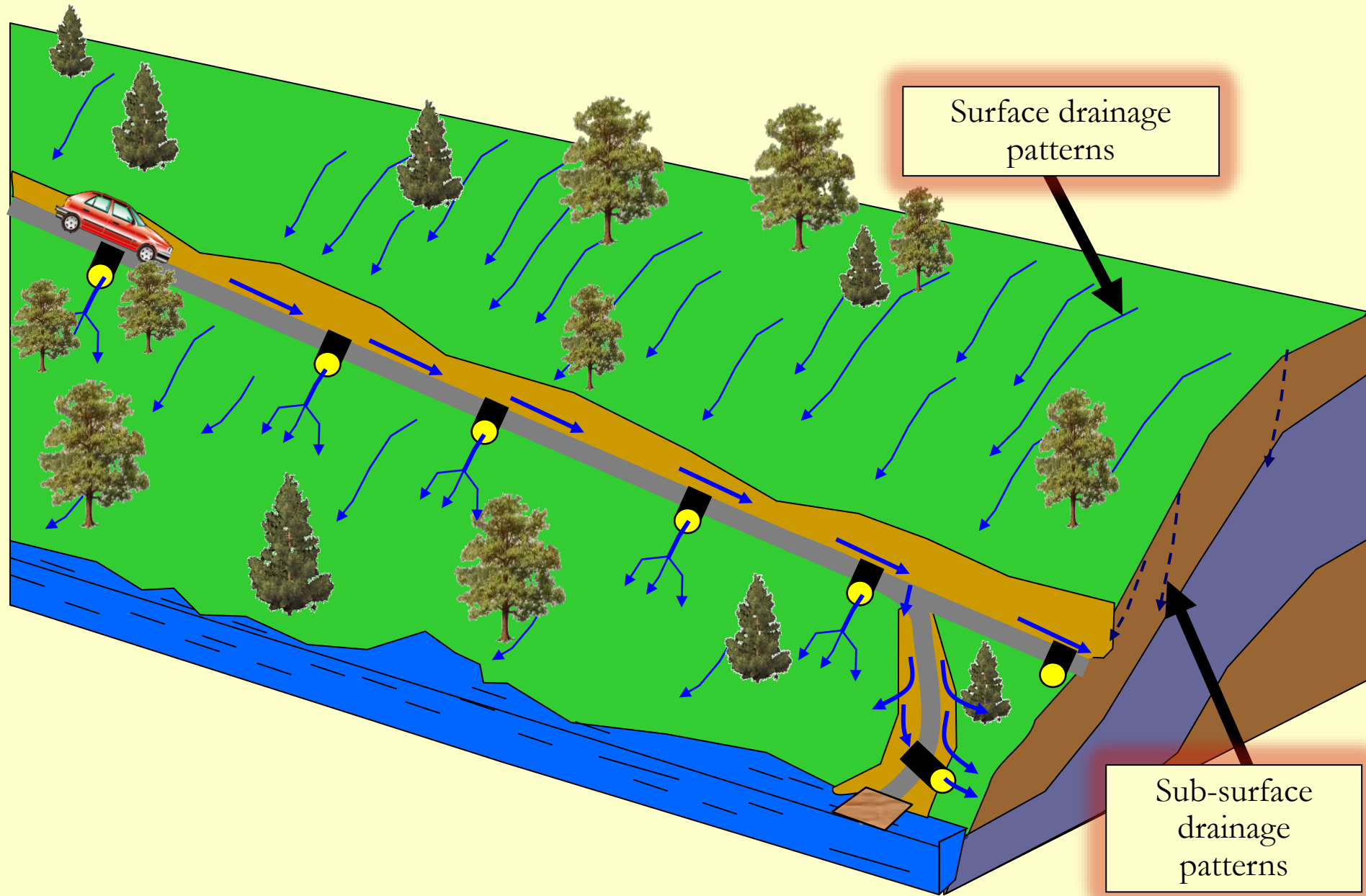
Sub-surface drainage patterns





# Sediment Generation & Transport

# PA Dirt and Gravel Road Program



# Project Highlights: Before



# Project Highlights: After







# Funding Sources

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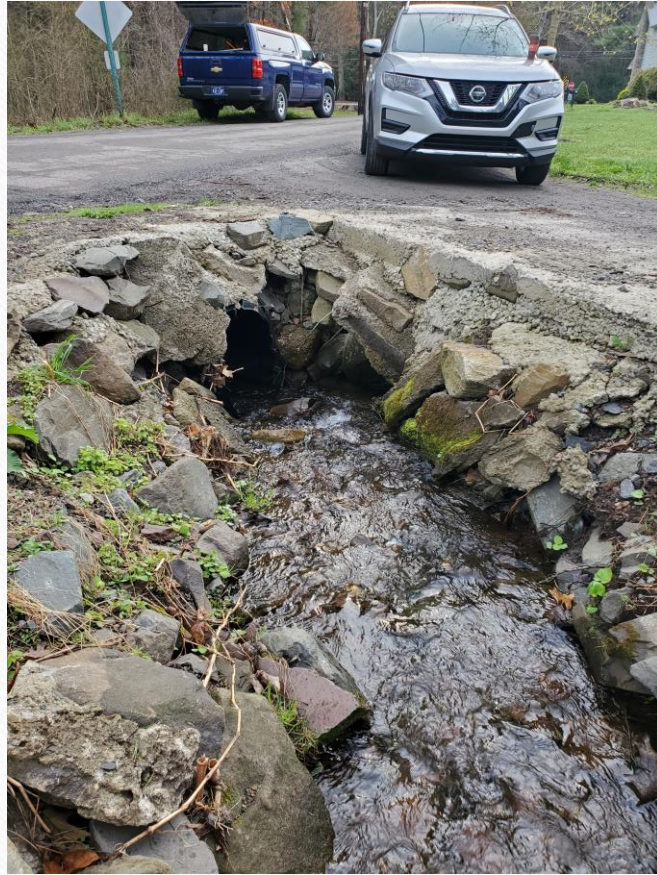
- Materials
  - DSA, Asphalt, Stone, Pipes, Drain Tile, Fabric, Seed, Mulch etc.
- Equipment
  - Grader, Backhoe, Trucks, Paver, Roller (Any equipment used during project)
- Labor
  - Contracted or municipality labor
  - Engineering costs (up to 20%)

# Off Right of Way Funding

- Directly impacting water quality concern or causing road to fail
- 500' off of the right of way
- Diversion, Waterway, Driveways etc.
- Must obtain signed form from landowner to do ORW work



# Project Highlights: Before

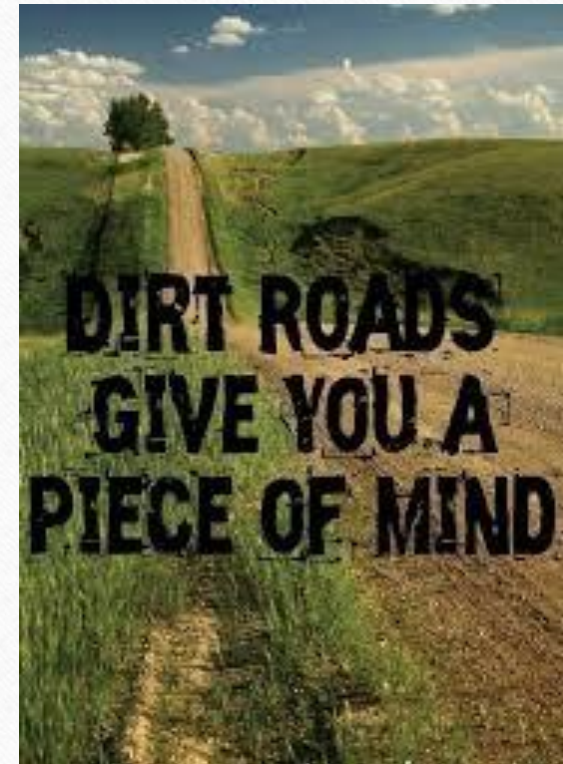


# Project Highlights: After



# Eligibility

- Public entity that owns roads.
  - Municipalities, Penn-Dot, Fish and Boat Commission, PA Game Commission etc.
- Federal roads and Private roads are **NOT** eligible
- Conservation District will notify applying agencies if they are eligible or not
- Eligible Roads:
  - Dirt and Gravel Roads
    - Unbound and Gradable Surfaces
  - Low Volume Roads
    - Surface bound with asphalt, oil or other binder top.
    - Includes Tar and Chip
    - 500 vehicles or less per day requirement



# The Process Of The Roads Program



# Municipality Roles

- What are my roles as a Municipality?
  - Own and Maintain Roads
  - Contacting the Conservation District on specific projects.
    - Pre-Application site visit is **Required!**
  - Apply to Conservation District for funding.
    - In order to be considered eligible the applying agency must attend the **required** 2 day ESM training course. Certification lasts for 5 years.
  - Complete the work either themselves or have the option to contract it out.
  - Obtain any permits necessary to complete project.
  - PA One Call





SECTION 9106 OF THE PENNSYLVANIA VEHICLE CODE  
**DIRT, GRAVEL AND LOW VOLUME ROAD MAINTENANCE  
GRANT APPLICATION**

|                                        |  |                                      |  |                                                                                                                                                          |  |                          |  |
|----------------------------------------|--|--------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------|--|
| Project Location: County _____         |  | Project Location: Municipality _____ |  | <b>District Use Only</b><br>Application Type: DGR <input type="checkbox"/> LVR <input type="checkbox"/><br>Funded Site ID: _____<br>Date Received: _____ |  |                          |  |
| ESM Certified Person _____             |  | Position _____                       |  |                                                                                                                                                          |  | Certification Date _____ |  |
| Official Name of Applying Agency _____ |  |                                      |  |                                                                                                                                                          |  |                          |  |
| Mailing Address _____                  |  |                                      |  |                                                                                                                                                          |  |                          |  |
| Contact Person _____                   |  | Phone _____                          |  | Fax _____                                                                                                                                                |  | E-Mail _____             |  |

|                                                                                              |  |                                                                                             |  |
|----------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------|--|
| Road Name / ID Number _____                                                                  |  | Affected Stream or Tributary _____                                                          |  |
| Proposed Project Start Date _____                                                            |  | Proposed Project Completion Date _____                                                      |  |
|                                                                                              |  | Existing Road Surface Type: <input type="checkbox"/> Unpaved <input type="checkbox"/> Paved |  |
| Is project considered an emergency? <input type="checkbox"/> Yes <input type="checkbox"/> No |  |                                                                                             |  |

1. The applicant is required to identify and obtain all necessary permits before starting the project.
2. Identify the proposed work elements:  Ditches Improved  Ditch Outlets Added  Off Right-of-Way Improvements  
 Road Banks Improved  Road Base Improved  Road Surface Stabilized  
 Stream Crossings Improved  Storm Water Improvements  Vegetative Management  Other \_\_\_\_\_
3. The applicant is required to obtain the DSA Specification and Certification form prior to DSA placement.
4. Complete Attachment B "Project Work Plan" including a sketch of proposed project. Attach a locational map with the project highlighted.
5. Project cost estimate: (summarize costs here and attach detailed documentation if needed)

| Grant Requested Funds |           |       |              | In-Kind Contributions |           |       |             |
|-----------------------|-----------|-------|--------------|-----------------------|-----------|-------|-------------|
| Materials             | Equipment | Labor | Engineering* | Materials             | Equipment | Labor | Engineering |
| See Attachment A1     |           |       |              | See Attachment A2     |           |       |             |

|                                     |
|-------------------------------------|
| Grant Requested..... \$ _____       |
| In-Kind Contributions..... \$ _____ |
| Total Project Value..... \$ _____   |

\*For Grant Requested Funds, Engineering costs cannot exceed 10% of the total grant amount requested.

\_\_\_\_\_ Applicant Signature \_\_\_\_\_ Date

SECTION 9106 OF THE PENNSYLVANIA VEHICLE CODE  
**DIRT, GRAVEL AND LOW VOLUME ROAD MAINTENANCE  
PROJECT WORK PLAN**

|                                                                                                     |                          |            |
|-----------------------------------------------------------------------------------------------------|--------------------------|------------|
| Applicant _____                                                                                     | Road Name / ID Num _____ | Date _____ |
| <div style="border: 1px solid black; width: 100%; height: 400px; background-color: #e0e0e0;"></div> |                          |            |

- Instructions:**
- Draw a sketch of the proposed project that includes:
    - All Proposed Work (i.e., Cross Pipes, Stream Crossings, Other ESM Practices)
    - Project Road Length in Feet or Miles
    - Nearest Intersection and/or Reference Landmarks
    - Known Utilities
    - North Arrow
  - Attach a copy of a locational map with the project highlighted
  - Attach additional project details as necessary



Dial 8-1-1 or 1-800-242-1776 not less than 3 business days nor more than 10 business days prior to the start of excavation.


North Arrow

Project Length = \_\_\_\_\_ feet / miles (circle one)



# Project Ranking

- All Applications considered
- Criteria need to be met
  - Road Shape, Slope
  - Distance to Stream
  - Ditch Evaluation
  - Quality Stream
  - In-Kind Contribution
  - And More



**Luzerne Conservation District Dirt, Gravel, and Low-Volume Road Grant Application Ranking**

**SECTION 1: APPLICATION VALIDATION**

Does this road site negatively impact a stream, lake, wetland, or other water body? YES NO  
 Will the proposed project reduce environmental impacts to a water body? YES NO  
 Is someone from the applying entity "ESM Certified" within the past 5 year? YES NO  
 Does the proposed application meet all SCC requirements (non-pollution, pipe size, etc.) YES NO  
 Does the proposed application meet all policies adopted by the local County QAB? YES NO  
 Has the applicant identified and agreed to obtain all necessary permits? YES NO  
**LVR ONLY:** If the traffic count is known at this point, is it 500 vehicles per day or less? YES NO *unstable*

(note traffic count is required before contract is signed)  
 If any of the questions above are answered "NO", the application is currently not eligible for funding.

**SECTION 2: APPLICATION RANKING**

**SEVERITY OF PROBLEM**

1. "Modified" Worksite Assessment:

a. Road Sediment in Stream: none-0 Slight-5 Moderate-10 Severe-15 \_\_\_\_\_ (15)  
 b. Wet Site Conditions: Dry-0 Saturated Ditches-3 Roadside Springs-5 \_\_\_\_\_ (10)  
 Flow in Ditches-7 Saturated Base-10  
 c. Road Surface Condition \_\_\_\_\_ (15)  
 i. LVR EVALUATION: Pavement Condition: good-0 fair, some cracking-5  
 Poor, cracking, unevenness-7 Damaged-10 Severely Damaged-15  
 ii. D&G EVALUATION: Hard Gravel-0 Mixed Stone-5 Soft Stone-7 Mixed  
 stone/dirt/dust-10 Severe Dust-15  
 d. Road Slope: <5%-0 5-10%-5 >10%-10 \_\_\_\_\_ (10)  
 e. Road Shape (cross-slope/crown): Good-0 Fair-3 Poor-5 \_\_\_\_\_ (5)  
 f. Slope to Stream: <30%-0 30-60%-3 >60%-5 \_\_\_\_\_ (5)  
 g. Distance to Stream: >100'-0 50'-100'-3 <50'/crossing-5 \_\_\_\_\_ (5)  
 h. Outlets to Stream: None-0 Near Stream-3 Directly to Stream-5 \_\_\_\_\_ (5)  
 i. Outlet/Bleeder Stability: Stable-0 Moderate-3 Unstable-5 \_\_\_\_\_ (5)  
 j. Road Ditch Stability: Stable-0 Fair-3 Poor-7 Unstable-10 \_\_\_\_\_ (10)  
 k. Road Bank Stability: Stable-0 Fair-3 Poor-7 Unstable-10 \_\_\_\_\_ (10)  
 l. Average Canopy Cover: Moderate-0 Minimal-3 Heavy-5 \_\_\_\_\_ (5)  
 m. Off-ROW Impacts resolved: None-0 Minimal-3 Some-7 Many-10 \_\_\_\_\_ (10)  
 n. Roadside Safety Hazards: None-0 Minimal-3 Some-7 Many-10 \_\_\_\_\_ (10)

Modified Assessment Subtotal: \_\_\_\_\_ (120)

Township: \_\_\_\_\_ 5/16/2023  
 Road Name: \_\_\_\_\_  
 Date of Assessment: \_\_\_\_\_

|                             |                           |
|-----------------------------|---------------------------|
| Select Type of Application: |                           |
| <input type="checkbox"/>    | Unpaved (Dirt and Gravel) |
| <input type="checkbox"/>    | Paved (Low Volume Road)   |

2. Classification of stream or waterbody impacted:  
 Warmwater Fishery-10 Coldwater Fishery-20 HQ/EV/TS drinking water-30 \_\_\_\_\_ (30)

**EFFECTIVENESS OF SOLUTION**

3. Degree to which project remediates impact to waterbody:  
 Slightly-0 Moderately-10 Highly-30 Almost completely-50 \_\_\_\_\_ (50)

4. Degree to which project improves road:  
 Slightly-0 Moderately-5 Highly-10 Extremely high-15 \_\_\_\_\_ (15)

5. Cost effectiveness: How much "environmental benefit per dollar" (benefit per cost)?  
 Low ben/\$-0 Moderate ben/\$-10 High ben/\$-30 Very high ben/\$-50 \_\_\_\_\_ (50)

6. Degree to which project collaborates with other cooperating agencies, projects and or best management practices:  
 None-0 Minimal-10 Some-30 Many-50 \_\_\_\_\_ (50)

**OTHER FACTORS**

7. In-Kind Contributions from Applicant:  
 1 to 10%-5 10-25%-10 Over 25%-15 \_\_\_\_\_ (15)

8. Did applicant contact CD about this specific project before submitting application:  
 No-0 Discussed site details with CD-10 Met w/CD on site-15 \_\_\_\_\_ (15)

9. Is applicant maintaining recently funded Program projects properly:  
 No-0 Recent projects still functional-10 Yes-15 First time applying-20 \_\_\_\_\_ (20)

10. Past working relationship with applicant:  
 Not Good-0 Fair-10 Good-15 Great-20 (First time applying) \_\_\_\_\_ (20)

11. Does the applicant have any current contracts that are off schedule:  
 Yes-0 No-10 \_\_\_\_\_ (10)

**Point Summary:**  
 Severity of Problem: \_\_\_\_\_ (150 possible points)  
 Effectiveness of Solution: \_\_\_\_\_ (165 possible points)  
 Other Factors: \_\_\_\_\_ (90 possible points)  
**Total Score:**   (395 possible points)

# Funded Site

- If application ranks out project receives funding.
  - 50% of grant request given
  - Additional 20% may be given if need be
  - District will hold 30% of grant request
- Obtain and keep track of all expenses
  - Grant Requested funds and In-Kind funds
  - Keep on file for three years

10-29-2014

**DIRT, GRAVEL AND LOW VOLUME ROAD  
MAINTENANCE PROJECT AGREEMENT BETWEEN  
\_\_\_\_\_ COUNTY CONSERVATION DISTRICT  
AND  
\_\_\_\_\_**

Now, this \_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, the \_\_\_\_\_ County  
Conservation District ("district")  
and \_\_\_\_\_,

known wherein as the "project participant", agree as  
follows:

(1) \_\_\_\_\_ will  
conduct, or cause to be conducted, a road maintenance project on specified portions of \_\_\_\_\_  
in accordance the Application and Work Plan attached hereto.

(2) This project will be conducted in accordance with standards that prohibit the  
use of materials or practices that are environmentally harmful and in accordance with the  
application and work plan attached hereto and incorporated herein. Any changes or  
modifications to the work plan will be performed to the satisfaction of the district.

(3) This project will be conducted in accordance with the "General Contract  
Conditions" required by the State Conservation Commission ("Commission"), the  
"Dirt, Gravel and Low Volume Road Maintenance Program Statement of Policy" as  
adopted by the Commission and as may be amended from time to time, and the  
environmental standards approved by the Quality Assurance Board, which are attached  
hereto and incorporated herein.

(4) The project participant agrees to provide documentation to the district that all  
required federal, state, or local permits have been obtained prior to project  
commencement, and further agrees to comply with all such permits as a condition of  
performing this agreement.

(5) The project participant shall ensure that this contract and all other  
arrangements entered into pursuant to the implementation of this contract are in  
conformance with all applicable local, state, and federal laws, rules, and regulations.

(6) The district agrees to fund the eligible costs for this project in an amount up  
to, but not exceeding, \$ \_\_\_\_\_. This contract can be amended  
using the Program's "Contract Amendment Form" up to an additional 20% of the  
original contract amount identified here, at the discretion of the district.

(7) The project funds will be disbursed by the district to  
\_\_\_\_\_ in accordance with the attached schedule of payments.

# Project Completion Report

- As detailed as possible
- Invoices for both:
  - Grant and In – Kind expenses
- Final inspection of project area.
- Final payment of contract can be paid
- Keep track of records for three years

**Attachment G** SECTION 9106 OF THE PENNSYLVANIA VEHICLE CODE  
to Contract **DIRT, GRAVEL AND LOW VOLUME ROAD MAINTENANCE PROJECT COMPLETION REPORT**

This form is intended to summarize financial expenditures and work completed for ONE PROJECT and must be filled in upon project completion.

County \_\_\_\_\_ Municipality \_\_\_\_\_ Date \_\_\_\_\_

Project Participant \_\_\_\_\_ Work Site ID \_\_\_\_\_ Road Name / ID Number \_\_\_\_\_

| <b>Dirt, Gravel and Low Volume Program Funds</b><br><i>Use actual project costs after receipts are totaled.</i> |          | <b>In-Kind Contributions</b><br><i>Includes grants and services from applicants and other sources.</i> |          |
|-----------------------------------------------------------------------------------------------------------------|----------|--------------------------------------------------------------------------------------------------------|----------|
| <b>Project Commitments:</b>                                                                                     |          | <b>In-Kind Contributions from Grant Recipients:</b>                                                    |          |
| A. Contract Amount.....                                                                                         | \$ _____ | H. Materials.....                                                                                      | \$ _____ |
| B. Amendments (if applicable).....                                                                              | \$ _____ | I. Equipment.....                                                                                      | \$ _____ |
| C. Total Committed (A+B).....                                                                                   | \$ _____ | J. Labor.....                                                                                          | \$ _____ |
| <b>Project Expenditures: (receipts must be submitted)</b>                                                       |          | <b>In-Kind Contributions from Other Sources:</b>                                                       |          |
| D. Materials.....                                                                                               | \$ _____ | K. Other Sources (describe below).....                                                                 | \$ _____ |
| E. Equipment.....                                                                                               | \$ _____ |                                                                                                        |          |
| F. Labor.....                                                                                                   | \$ _____ |                                                                                                        |          |
| G. Total Expenditures (D+E+F).....                                                                              | \$ _____ | L. Total In-Kind Value (H+I+J+K).....                                                                  | \$ _____ |

**Project Cost Summary**

M. Total Project Value: (G - L)..... \$ \_\_\_\_\_

Additional Project Notes: \_\_\_\_\_

\_\_\_\_\_ Conservation District Rep. \_\_\_\_\_ Date \_\_\_\_\_ Project Participant Rep. \_\_\_\_\_ Date \_\_\_\_\_

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SECTION 9106 OF THE PENNSYLVANIA VEHICLE CODE  
**DIRT, GRAVEL AND LOW VOLUME ROAD MAINTENANCE PROJECT COMPLETION REPORT**

Use best estimates and complete as much info as possible. Include work completed for both Project Expenditures and In-Kind Contributions.

**Project Totals**

|                                                                                                       |                                                    |
|-------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| <b>Ditch Improvements/Outlets</b>                                                                     | <b>Off Right-of-Way Improvements</b>               |
| Turn Outs Installed..... 1                                                                            | Division Swales Constructed..... 2                 |
| New Cross Pipes Installed..... 2                                                                      | Bank Benches.....                                  |
| Cross Pipes Replaced..... 1                                                                           | Through Drains.....                                |
| Through the Bank Pipes.....                                                                           | Access Drainage Improvements.....                  |
| <b>Road Base</b>                                                                                      | <b>Road Surface Stabilized</b>                     |
| Road Fill Added..... 600 tons                                                                         | DSA Placed..... 503.8 tons                         |
| Full Depth, Chemical, Mechanical Stabilization..... sq yd                                             | Sealed Surface..... sq yd                          |
| Geo Separation Fabric, Grid, or Cell 1350'..... sq yd                                                 | Broad Based Dips..... 2                            |
| Under Drain Added..... ft                                                                             | Grade Breaks.....                                  |
| French Mattresses Constructed..... sq yd                                                              | Dust Suppressant Used..... sq yd                   |
| <b>Road Banks</b>                                                                                     | <b>Structural Storm Water Improvements</b>         |
| Soil Panning..... sq yd                                                                               | Infiltration..... sq yd                            |
| Geo Stabilized Bank..... sq yd                                                                        | Detention..... sq yd                               |
| <b>Road-Stream Interface</b>                                                                          | Dispersion..... sq yd                              |
| High Water Bypass.....                                                                                | <b>Vegetative Management</b>                       |
| In-stream Stabilization Structures.....                                                               | Select Thinning/Pruning..... ft                    |
| Biomining..... sq yd                                                                                  | Seeding/Mulching..... 100 sq yd                    |
| <b>Stream Crossings Replaced</b> (check all that apply and name structure opening width size in feet) |                                                    |
| Stream Crossings Replaced.....                                                                        | Streamless Arch Structures.....                    |
| <input type="checkbox"/> Bridges.....                                                                 | <input type="checkbox"/> Pipe Arch Structures..... |
| <input type="checkbox"/> Circular Culverts.....                                                       | <input type="checkbox"/> Square Culverts.....      |
| <input type="checkbox"/> GRS-IBS Systems.....                                                         |                                                    |
| <b>Other</b>                                                                                          |                                                    |
| All Other Practices Implemented.....                                                                  | List Practices.....                                |

PAGE 2 OF 2

# Other Things to Consider

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- Prevailing Wage
  - Any contracted work including grant materials, equipment or labor, in kind materials must be added to total value
  - In Kind Equipment and municipal labor excluded from total cost
  - \$25,000 total project value
- Low Volume Paved Roads
  - Traffic Counts (Pre – Existing Data, automated count, Level 1 Count (2 hour) and Level 2 Count (12hour))
  - 500 cars or less
- Permits
  - Responsibility of the applying municipality
  - Help fund up to 20% of engineering costs
- PA One Call
- PNDI

Questions?

