

Restoration of KFA Roadways and Roadside Drainage **Guidelines that Apply to Residents, Developers and Contractors**

This document applies to residents, developers and contractors who are:

- Constructing a new home or structure in Keyes Ferry Acres (KFA)
- Adding a new driveway access to a KFA property
- Planning to pave an already existing driveway or entryway

At any construction site for a new home or outbuilding, adjoining road surfaces and roadside drainage are vulnerable to damage. If constructing a new structure or paving an existing driveway, this document outlines practices intended to promote nearby road restoration and proper drainage provisions upon completion of the project. To help maintain our roadways and control road maintenance costs covered by annual road dues, these guidelines are presented to assist homeowners, developers and contractors implement these measures as part of their total project planning.

The reason for these guidelines is to ensure that when:

- **Constructing a new structure:** upon project completion, the roadway adjacent to the construction site will be repaired and drainage implemented or restored, correcting any damage caused by large deliveries or heavy machinery.
- **Installing a new driveway:** plans will conform to minimal design specifications.
- **Planning to pave a new or already existing driveway:** functional drainage measures will be incorporated to minimize runoff flowing onto the adjacent roadway.

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Part One. Road and Roadside Restoration Guidelines

'Good Neighbor' Practices. The intent of these *Guidelines* is to encourage a 'Good Neighbor' ethos: that is, those residents, developers, or contractors responsible for new construction give their assurance to neighbors that damage caused during the project will be corrected when the project is complete, restoring the adjacent roadway or (re)building the runoff management configuration.

At new construction sites, heavy machinery use, increased traffic, and oversize deliveries take a toll on the surrounding road condition and drainage structures. Each site is unique so no single specific rule can be applied. The following provisions are meant to provide a general standard that the lot owner, developer or contractor shall meet upon completion of their construction project. The intent is that new destruction will not be left as the result of new construction.

Length of roadway involved. The length of road referred to by these guidelines is the section running parallel to the front lot line of the construction site—starting 100 feet before one lot front corner and continuing 100 feet beyond the other lot front corner. Damage to any section of that road shall be restored as follows:

- **road foundation and surface** shall be restored to a condition comparable to (or better than) the immediately adjacent roadway. That is, the road condition adjacent to the construction area should match the condition of the road extending each direction away from the site. For example, the road section in front of the construction site needs to be restored to a smoothly graded gravel surface if the road leading to, and away from, the construction site is smoothly graded gravel road. If the adjacent road is tar & chip surface or asphalt, damage in the construction area needs to be repaired to match that condition (or provide sufficient funds to KFAMA so that a repair can be made when a future resurfacing project is undertaken).

Width of area where drainage concerns apply. The section of concern includes the full width of the construction site at the boundary line running beside the adjacent main road. Properly functioning drainage along this section shall be restored or built as follows:

- **sloped compacted roadside shoulders** shall be built or rebuilt.

- **an appropriate drainage channel** such as a ditch or swale shall be dug which properly directs drainage down slope and away from the road. This channel should extend the full length of the front lot line alongside the road's edge. Due to the narrow thirty (30) foot road right-of-way, the bottom of the ditch or swale shall be located at the lot line and the backslope shall be on the lot. As appropriate, this channel shall functionally adjoin any nearby existing culvert/s, drainage channel/s ditch/es or swale/s.

Part Two. Private Entryway Installation Guidelines

Purpose for entryway design guidelines. Water is generally an enemy to maintaining good road surfaces. To protect community-owned roads from accelerated deterioration, runoff management is key. Containing runoff depends on proper design at the juncture where private entryways adjoin the main road. The ideal opportunity to install a culvert and necessary ditching is when installing, upgrading, or paving an existing driveway. Implementing good drainage practices helps the Association's effort to contain the cost of maintaining and improving KFA roads. Culverts benefit the homeowner as well. Determining if the driveway design should include a drainage culvert is in the best interest of all.

Driveway Installation Plan NOTICE! Please submit a proposed design plan to KFAMA for review **prior** to installing a new driveway or paving an existing driveway.

Private property owners, developers or contractors are asked to submit their driveway installation plans for KFAMA review. There is **NO SUBMISSION FEE**, and the plan need not be elaborate—a sample sketch is provided to show the requested details (see final page). A submitted plan allows KFAMA to assess or augment the plan based on familiarity with water drainage patterns. While the goal is to contain runoff that might otherwise flow onto the community-owned road, the plan should also benefit the homeowner by preventing later problems in their yard resulting from poor drainage.

Design specifications - introduction. When a property owner is planning a new entry to their lot from a KFA road, the driveway shall be built to conform to recommended specifications. Design specifications apply in the following instances –

- 1) **at a new structure construction site** (home or outbuilding): when planning the entryway to the property
- 2) **at an already-developed lot**: when planning to add an alternate or additional entry
- 3) **at an already existing driveway or entryway**: when planning to pave that driveway/entry.

Minimum required culvert specifications. To promote consistent community-wide roadside drainage, KFAMA specifies the minimal requirements for pipe material, culvert size—pipe diameter and length—and explains placement relative to the roadway.

When installing a culvert under a driveway – The construction plan for a proposed residential dwelling should (almost always) include a drainage culvert installed under the driveway. At the juncture where the driveway meets the road right-of-way, the culvert shall be installed parallel to the community roadway, inside the lot line.

When a culvert may not be needed – Installing a culvert may not always be required. Though not common, there are locations where drainage does not need to pass under the driveway. A culvert may not be needed at the crest of a hill, for example.

Culvert location placement. Whether the entryway will be surfaced with gravel or paved asphalt, at the juncture where private entry and roadway meet, the drainage pipe shall be placed so that it—

- runs parallel to the roadway.
- meets the setback distance—minimally set back two (2) feet from the edge of the road within the private property line. (This setback protects against culvert pipe damage by vehicles driving too close to the driveway edge when turning into or out of the entry. The goal is to avoid the problem of a collapsed pipe that doesn't drain properly.)

Private entryway design specifications (minimum requirements) –

Driveway width: Twelve (12) feet is the recommended minimal driveway width whether the surface is gravel or paved asphalt. At the juncture where the driveway meets the roadway, a flair (radius) shall be added to the entryway width. This means adding a radius creating a flair at each side of the entry along the road's edge which is minimally twenty-four (24) feet wide in total. (This flair allows vehicles turning into the driveway to stay on the improved surface. The flair helps prevent collapse of the culvert pipe ends by vehicles turning into/out of the entryway.)

Pipe durability, dimensions, and installation recommendations:

Material. The drainage pipe used beneath the driveway/s must be of suitably durable material, structurally strong enough to support vehicle passage on the driveway.

Pipe diameter. Fifteen (15) inches shall be the minimal inside diameter of the culvert pipe. (This minimum diameter conforms to State highway specifications.)

Pipe length. Whether the entryway surface will be gravel or paved, the culvert pipe shall extend a minimum length of three (3) linear feet past each side of the driveway (extra pipe length helps protect the culvert ends from vehicle compression).

Gravel support bed for pipe: To provide a protective support base for the pipe, gravel shall line the ditch that will carry the culvert pipe. The bottom of the ditch shall have at least three (3) inches of gravel for the base layer under the pipe. After placing the pipe on the base layer, gravel shall be backfilled into the ditch up to at least the midline level of the pipe. Once the pipe is secured in place by gravel back-fill, the top of the pipe shall be covered with gravel to a depth recommended by the pipe manufacturer. To protect the pipe from being crushed, twelve (12) inches of gravel is the depth recommended to cover a corrugated metal pipe or HDPE N12 pipe. If more shallow cover will be applied, the use of iron, steel or concrete pipe is recommended.

Culvert installation at a privately owned driveway. There are instances when a KFAMA road project calls for installing a culvert under an existing private driveway. (The installation cost may be borne in part, or entirely, by KFAMA.) Of necessity, the lot owner's cooperation will be sought and, as part of any such project, there are conditions the owner and/or resident should be informed are necessary.

Installing culvert pipe will entail construction work inside the lot owner's private property line. The proper location of culvert placement is previously explained in the section above "*Culvert Location Placement*" (page 4). But to summarize: The culvert pipe under the driveway will run parallel to the main roadway. The pipe shall be set back from the edge of the roadway, located within the lot owner's property line, that is, on the lot. (The setback helps protect the culvert pipe ends from compression damage by vehicles as they turn into, or out from, the entryway.)

KFAMA responsibilities. When a project involves working inside a private property boundary line, KFAMA assumes certain responsibilities. The culvert pipe cost shall be borne by KFAMA. A conscientious effort will be made to keep the lot owner (or their designated representative) informed about the project onset date/time and duration. Upon completion of the project, the area disturbed by construction will be restored as close as reasonably possible to the condition prior to the start of the project. Any special particular concerns the lot owner has must be brought in advance to the attention of a KFAMA representative. (Putting such concerns in writing is advisable.)

Lot owner responsibilities. When work takes place within the private property line, the lot owner must also assume certain responsibilities. Prior to start of construction, the lot owner (or their designated representative) has the obligation to remove valuable plantings or any vulnerable objects from the defined project area. It is imperative

throughout the entire duration of construction work that children, family members and pets **MUST be secured at a prudent safe distance away from the project area and work equipment.**

Signed release. The provisions above are meant to outline the basic general procedure for installing a new culvert at a private driveway. But each situation will present unique circumstances. This simply outlines a general overall procedure. Prior to starting the project, the Association may request a signed release from the lot owner or their designated representative. In consultation with the lot owner, the release will describe how and when the project is expected to proceed.

Driveway Installation Plan – Whether as part of a) new-build construction or, b) adding a new entryway to private property or, c) paving an already existing driveway, an outline of plans shall be submitted to KFAMA for advance approval. Please see the final page for a sample sketch guideline to provide requested information.

For questions or plan submission, please contact a KFAMA representative at: support@kfama.org or by U.S. mail at **Keyes Ferry Acres Maintenance Association, P.O. Box 269, Charles Town, WV 25414** or leave a message by phone at **304/405-4844**.

APRIL 25, 2024 Date this policy was approved and enacted by vote.
(date)

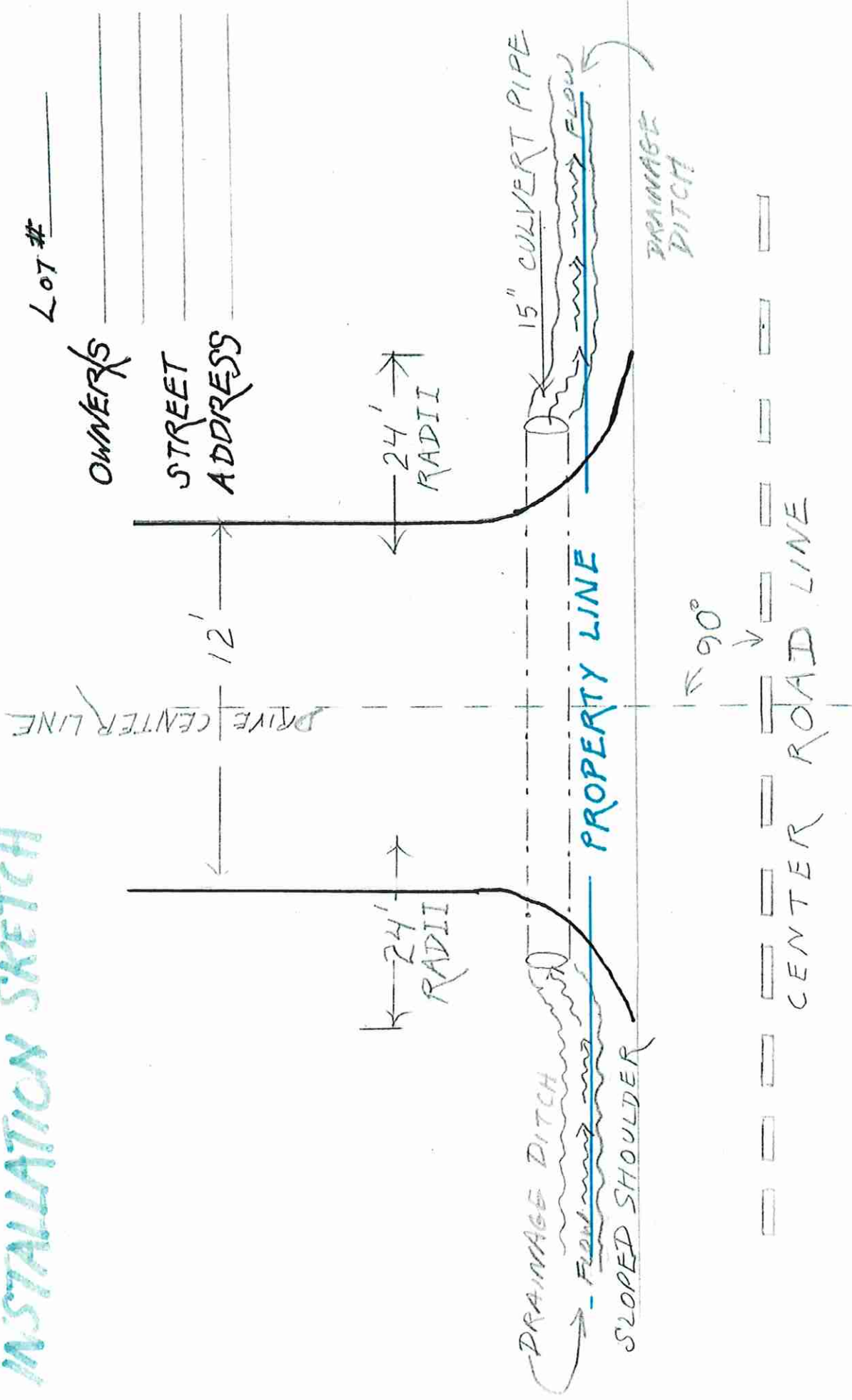
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The author of these guidelines and the authority to enact them

On behalf of all Keyes Ferry Acres lot owners, **Keyes Ferry Acres Maintenance Association, Inc. (KFAMA)** is responsible for the care and maintenance of the subdivision roadways. Maintenance and improvement projects are funded through dues paid annually by each lot owner. Lot owners take investment in their roads seriously and the Association has an obligation to see that detrimental road damage near construction sites does not occur at the expense of those who have borne the cost of prior improvements and upkeep.

SAMPLE ENTRY INSTALLATION SKETCH



ROAD NAME: _____

(NOTE IF OTHER ENTRIES TO PROPERTY)