

IOWA UTILITIES BOARD

IN RE:

EXECUTIVE ORDER 10 — REVIEW OF RESTORATION OF AGRICULTURAL LANDS DURING AND AFTER PIPELINE CONSTRUCTION RULES [199 IOWA ADMINISTRATIVE CODE CHAPTER 25]

DOCKET NO. RMU-2023-0009

ORDER OPENING DOCKET AND SETTING TECHNICAL CONFERENCE AND COMMENT DEADLINE

On January 10, 2023, Gov. Kim Reynolds issued Executive Order Number 10 (Executive Order), which put a moratorium on agency rulemaking and directed agencies, including the Utilities Board (Board), to engage in a comprehensive evaluation of existing rules. The goals of the Executive Order include increasing public input in the rulemaking process, eliminating rules that do not provide substantial benefits to Iowans, reducing the page and word count of the Iowa Administrative Code, and reducing restrictive rule language. As a part of the comprehensive review, agencies are required to repeal each rules chapter and evaluate whether the chapter, or a portion of the chapter, should be re-promulgated. To assist agencies in performing their comprehensive reviews, the Iowa Department of Management developed and published forms and processes.

Pursuant to the Executive Order, the Board is conducting comprehensive reviews of each chapter of its administrative rules, and the Board will open the above-captioned docket for purposes of conducting a comprehensive review of chapter 9, which contains the Board's Restoration of Agricultural Lands During and After Pipeline Construction

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rules. Attached to this order as Attachment A is the Board's retrospective analysis (Red Tape Review Rule Report) of chapter 9, which the Board will publish on the Board's website as required by section III.B of the Executive Order. Attached to this order as Attachment B is the Board's draft regulatory analysis of chapter 9, which the Board will submit in the legislative Rules Management System for publication in the Iowa Administrative Bulletin. Finally, attached to this order as Attachment C is a draft version of chapter 9 that the Board is evaluating whether to re-promulgate.

The Board is also scheduling a technical conference for May 7, 2024. Participation may occur in person or by webinar. The purpose of the technical conference is to receive comments regarding the draft regulatory analysis and the proposed version of chapter 9 to be re-promulgated. Additionally, the Board is accepting written comments concerning the regulatory analysis and the proposed re-promulgated version of chapter 9 through May 7, 2024. The Board will use the oral and written comments received to prepare a final version of the regulatory analysis, which will be uploaded in this docket and published on the Board's website.

IT IS THEREFORE ORDERED:

1. Docket No. RMU-2023-0009 is opened for purposes of conducting a comprehensive review of 199 Iowa Administrative Code chapter 25 pursuant to Executive Order Number 10.
2. A technical conference is set for 2 p.m. May 7, 2024, in the Utilities Board hearing room, located at 1375 East Court Avenue, Des Moines, Iowa. Interested persons may appear in person or by webinar. Information for attending by webinar can be found on the Utilities Board's website on the Hearing and Meeting Calendar page.

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3. Comments regarding the draft regulatory analysis or the proposed re-promulgated version of chapter 9 shall be filed by 4:30 p.m. May 7, 2024.

UTILITIES BOARD

Erik M. Helland 2024.03.14 11:15:08 -05'00'

Joshua Byrnes Date: 2024.03.14
12:47:40 -05'00'

ATTEST:

Keetah A Horras Date: 2024.03.14
15:05:46 -05'00'

Sarah Martz Date: 2024.03.14
14:29:00 -05'00'

Dated at Des Moines, Iowa, this 14th day of March, 2024.

**Red Tape Review Rule Report
(Due: September 1, 2025)**

Department Name:	Iowa Utilities Board	Date:	March 12, 2024	Total Rule Count:	11
IAC #:	199	Chapter/ SubChapter/ Rule(s):	199—9	Iowa Code Section Authorizing Rule:	Iowa Code §§ 479.29, 479B.20
Contact Name:	Carter Wright	Email:	Carter.wright@iub.iowa.gov	Phone:	515-725-7353

PLEASE NOTE, THE BOXES BELOW WILL EXPAND AS YOU TYPE

What is the intended benefit of the rule?

Chapter 9 is intended to benefit agricultural land that is to have a pipeline constructed on it, and to help said land be restored to its original standard and usefulness so the owner can continue their normal uses on the land after construction has been completed.

Is the benefit being achieved? Please provide evidence.

The benefit is being achieved through the implementation of minimum standards that require utilities to properly care for and return the land to its original state after construction has completed. Additionally, the rule allows for individual plans to be negotiated and used for land at the owner's and utilities discretion.

What are the costs incurred by the public to comply with the rule?

There are some costs, such as requiring utilities to follow certain standards or practices, and those costs can be passed on to customers through rates. Additionally, the landowners may have additional requests regarding their land's restoration that could cost that landowner time and research as to how it would affect the minimum standards in the rule.

What are the costs to the agency or any other agency to implement/enforce the rule?

The Board has the costs of standard reviews as the restoration plan is provided along with the petition and exhibits, and all can be reviewed at the same time.

Do the costs justify the benefits achieved? Please explain.

Chapter 9 provides the minimum standards necessary for agricultural land to be returned to its original state after the construction of a pipeline. This is justifying the costs as the landowner can properly use their land after a pipeline has been constructed, and the only additional costs are to the company constructing the pipeline.

Are there less restrictive alternatives to accomplish the benefit? YES NO

If YES, please list alternative(s) and provide analysis of less restrictive alternatives from other states, if applicable. If NO, please explain.

There are no other less restrictive alternatives. The minimum standards along with the option for individualized plans that is within the rule meets the requirements of Code that necessitated its creation without overburdening utilities or landowners with exact specifics that must be met. The

rule instead of requiring exact methods only sets the minimum requirements for agricultural land to be properly restored and allows the utilities, and landowners through agreements, to determine the specific methods to meet the standards.

Does this chapter/rule(s) contain language that is obsolete, outdated, inconsistent, redundant, or unnecessary language, including instances where rule language is duplicative of statutory language? [list chapter/rule number(s) that fall under any of the above categories]

PLEASE NOTE, THE BOXES BELOW WILL EXPAND AS YOU TYPE

- 9.1-Removed restrictive language and updated language for clarity.
- 9.2-Removed restrictive language.
- 9.3-Removed restrictive language.
- 9.4-Removed restrictive language and updated language for clarity.
- 9.5-Removed restrictive language and updated language for clarity.
- 9.8-Removed restrictive language and updated language for clarity.

RULES PROPOSED FOR REPEAL (list rule number[s]):

N/A

RULES PROPOSED FOR RE-PROMULGATION (list rule number[s] or include rule text if available):

CHAPTER 9
RESTORATION OF AGRICULTURAL LANDS DURING AND AFTER PIPELINE CONSTRUCTION

199—9.1(479,479B) General information.

9.1(1) Authority and purpose. The rules in this chapter are adopted by the Iowa utilities board pursuant to the authority granted to the board in Iowa Code sections 479.29 and 479B.20 to establish standards for the restoration of agricultural lands during and after pipeline construction. These rules constitute the minimum standards for restoration of agricultural lands disturbed by pipeline construction. These rules do not apply to land located within city boundaries, unless the land is used for agricultural purposes, or to interstate natural gas pipelines.

When a project-specific land restoration plan is required pursuant to Iowa Code section 479.29(9) or 479B.20(9), following notice and comment, the board may impose additional or more stringent standards as necessary to address issues specific to the nature and location of the particular pipeline project. Where a project-specific land restoration plan is not needed pursuant to Iowa Code section 479.29(9) or 479B.20(9), the rules in this chapter shall constitute the minimum land restoration standards for any pipeline construction.

9.1(2) Definitions. The following words and terms, when used in these rules, have the meanings indicated below:

“*Affected person*” means any person with a legal right or interest in the property, including, but not limited to, a landowner, a contract purchaser of record, a person possessing the property under a lease, a record lienholder, and a record encumbrancer of the property.

“*Agricultural land*” means any land devoted to agricultural use, including, but not limited to, land used for crop production, cleared land capable of being cultivated, hay land, pasture land, managed woodlands and woodlands of commercial value, truck gardens, farmsteads, commercial agricultural-related facilities, feedlots, rangeland, livestock confinement systems, land on which farm buildings are located, and land used to implement management practices and structures for the improvement or conservation of soil, water, air, and related plant and animal resources.

“Board” means the utilities board created in Iowa Code Chapter 474.

“County inspector” means a professional engineer who is licensed under Iowa Code chapter 542B, who is familiar with agricultural and environmental inspection requirements and who is designated by the county board of supervisors to be responsible for completing an on-site inspection for compliance with this chapter and Iowa Code chapters 479 and 479B.

“Drainage structures” or *“underground improvements”* means any permanent structure used for draining agricultural lands, including tile systems and buried terrace outlets.

“Hazardous liquid” means crude oil, refined petroleum products, liquefied petroleum gases, anhydrous ammonia, liquid fertilizers, liquefied carbon dioxide, alcohols, and coal slurries.

“Person” means individual, corporation, limited liability company, government or governmental subdivision or agency, business trust, estate, trust, partnership or association, or any other legal entity as defined in Iowa Code section 4.1(20).

“Pipeline” means any pipe, pipes, or pipelines used for the transportation or transmission of any solid, liquid, or gaseous substance, except water, within or through Iowa.

“Pipeline company” means any person engaged in or organized for the purpose of owning, operating, or controlling pipelines.

“Pipeline construction” means activity associated with installation, relocation, replacement, removal, or operation or maintenance of a pipeline that disturbs agricultural land, but does not include work performed during an emergency, tree clearing, or topsoil surveying completed on land under easement with written approval from the landowner. Emergency means a condition involving clear and immediate danger to life, health, or essential services, or a risk of a potentially significant loss of property. When the emergency condition ends, pipeline construction will be in accordance with these rules.

“Proper notice to the county inspector” means that the pipeline company and its contractors shall keep the county inspector continually informed of the work schedule and any changes to the schedule, and shall provide at least 24 hours’ written notice before commencing or continuing any construction activity to be inspected by the county inspector, including, but not limited to, right-of-way staking, clearing, boring, topsoil removal and stockpiling, trenching, tile marking, tile screening, tile repairs, backfilling, decompaction, cleanup, restoration, or testing at any project location. The pipeline company may request that the county inspector designate a person to receive such notices. If proper notice is given, construction may begin regardless of the county inspector’s presence on the site.

“Soil conservation practices” means any land conservation practice recognized by federal or state soil conservation agencies, including, but not limited to, grasslands and grassed waterways, hay land planting, pasture, and tree plantings.

“Soil conservation structures” means any permanent structure recognized by federal or state soil conservation agencies, including, but not limited to, toe walls, drop inlets, grade control works, terraces, levees, and farm ponds.

“Surface drains” means any surface drainage system, such as shallow surface field drains, grassed waterways, open ditches, or any other conveyance of surface water.

“Till” means to loosen the soil in preparation for planting or seeding by plowing, chiseling, discing, or similar means. For the purposes of this chapter, agricultural land planted using no-till planting practices is also considered tilled.

“Topsoil” means the uppermost layer of the soil with the darkest color or the highest content of organic matter, generally referred to as the “A” horizon. In areas where the “A” horizon is determined by a certified professional soil scientist to be less than 12 inches, the topsoil depth shall include both the “A” and the “Bw” horizons as determined by the March 2017 United States Department of Agriculture Soil Survey Manual. Topsoil depth is to be determined under the supervision of a certified professional soil scientist.

“Underground storage” means storage of either natural gas or hazardous liquid in a subsurface stratum or formation of the earth.

“Wet conditions” means adverse soil conditions due to rain events, antecedent moisture, or ponded water, where the passage of construction equipment may cause rutting that mixes topsoil and subsoil, may prevent the effective removal or replacement of topsoil and subsoil, may prevent proper decompaction, or may damage underground tile lines.

199—9.2(479,479B) Filing of land restoration plans. Pursuant to Iowa Code sections 479.29 and 479B.20, a land restoration plan is required for any pipeline construction that requires a permit from the board and for any proposed amendment to an existing permit that involves pipeline construction, relocation, or replacement. The land restoration plan

shall be filed with the appropriate petition and be identified as Exhibit I. For pipelines that do not need a permit from the board and that are constructed across agricultural land, the pipeline company shall have on file with the board a general land restoration plan covering pipelines that do not need a permit from the board.

9.2(1) Content of plan. A land restoration plan includes, but is not limited to, the following:

- a. A brief description of the purpose and nature of the pipeline construction project.
- b. A description of the sequence of events that will occur during pipeline construction.
- c. A description of how the pipeline company will comply with rules 199—9.4(479,479B) and 199—9.5(479,479B).
- d. The point of contact for landowner inquiries or claims as provided for in rule 199—9.5(479,479B).
- e. A unique identification number that follows a linearly sequential pattern on each parcel of land over which the pipeline will be constructed.

9.2(2) Plan variations. The board may by waiver allow variations from the requirements in this chapter if the pipeline company requesting a waiver is able to satisfy the standards set forth in rule 199—1.3(17A,474,476) and if the alternative methods proposed by the pipeline company would restore the land to a condition as good or better than provided for in this chapter.

9.2(3) Mitigation plans and agreements. Preparation of a separate land restoration plan may be waived by the board where a pipeline company enters into an agricultural impact mitigation plan or similar agreement with the appropriate agencies of the state of Iowa that satisfies the requirements of this chapter. If a mitigation plan or agreement is used to fully or partially meet the requirements of a land restoration plan, the statement or agreement shall be filed with the board and will be considered to be, or to be part of, the land restoration plan for purposes of this chapter.

199—9.3(479,479B) Procedure for review of plan.

9.3(1) Timing. The board will review the proposed land restoration plan, as established in rule 199—9.2(479,479B), at the same time it reviews the petition. Objections to the proposed plan may be filed as part of the permit proceeding. The pipeline company shall modify the plan as determined by the board.

9.3(2) Distributing approved plan. After the board has approved the plan as part of the board's review and approval of the petition, but prior to construction, the pipeline company shall provide copies of the final plan approved by the board to all landowners of property and persons in possession of the property under a lease that will be disturbed by the construction, the county board of supervisors in each county affected by the project, the county engineer of each affected county, and to the county inspector in each affected county.

199—9.4(479,479B) Staking and clearing of agricultural land.

9.4(1) Easement staking. The pipeline company shall allow the county inspector and the landowner to be present during the staking of the easement. Written notice of the staking shall be provided to the landowner and the county inspector in the same manner as provided for in proper notice to the county inspector. Pipeline construction is prohibited until seven days after the easement is staked unless the landowner waives the seven-day period after the easement staking has been completed. If proper notice is given, easement staking may begin regardless of the county inspector or landowner's presence on the site.

9.4(2) Trees and brush. If trees are to be removed from the easement, the pipeline company shall consult with the landowner to determine if there are trees of commercial or other value to the landowner.

a. If there are trees of commercial or other value to the landowner, the pipeline company shall allow the landowner the right to retain ownership of the trees with the disposition of the trees to be negotiated prior to commencement of land clearing, or if the landowner does not want to retain ownership of the trees, the pipeline company shall hire a forester with local expertise to appraise the commercial value of any timber to be cut for construction of the pipeline. The pipeline company shall compensate the landowner for the full appraised commercial value of any timber removed. The pipeline company shall remove all cleared trees and debris left on or adjacent to the easement.

b. If the trees to be cleared have been determined to have no commercial or other value to the landowner and there is no negotiated agreement between the pipeline company and the landowner for the disposition of the trees in advance of clearing of the easement, removal and disposal of the material shall be completed at the discretion of the pipeline company.

9.4(3) Fencing. The pipeline company may remove all field fences and gates, located within the pipeline company's easement, during clearing of the easement and may construct temporary fences and gates where necessary. Upon completion of the pipeline construction, the pipeline company shall — replace any temporary field fences or gates with permanent field fences or gates. The pipeline company and landowner may negotiate separate agreements regarding field fences and gates. If livestock is present, the pipeline company shall construct any temporary or permanent fences and gates in a manner which will contain livestock.

199—9.5(479,479B) Restoration of agricultural lands.

9.5(1) Topsoil survey.

a. Prior to the removal of any topsoil, the pipeline company conducts a topsoil survey to be performed under the supervision of a certified professional soil scientist across the full extent of the easement for any pipeline that requires a board permit. A minimum of three soil depths shall be physically measured in the field at each cross section as follows: (1) one on the left edge of the easement; (2) one at 15 feet of the centerline of the pipeline on the working side of the right-of-way; and (3) one on the right edge of the working easement. Cross sections shall be taken a minimum of every 500 linear feet for the full extent of the easement. Each parcel of land shall have a minimum of two cross sections.

b. The pipeline company shall provide the results of the topsoil survey to the county board of supervisors, county inspector, county engineer, and affected persons at least six weeks prior to commencing construction.

9.5(2) Topsoil separation and replacement.

a. *Removal.* Topsoil removal and replacement in accordance with this rule is required for any open excavation associated with pipeline construction unless otherwise provided in these rules. The actual depth of the topsoil, as determined by a topsoil survey, shall be stripped from the full extent of the easement. Topsoil shall also be removed and replaced in accordance with these rules at any location where land slope or contour is significantly altered to facilitate construction. Topsoil removal shall not occur during wet conditions.

b. *Soil storage.* The topsoil and subsoil shall be segregated, stockpiled, and preserved separately during subsequent construction operations. The stored topsoil and subsoil shall have sufficient separation to prevent mixing during the storage period. Topsoil shall not be used to construct field entrances or drives, or be otherwise removed from the property, without the written consent of the landowner. Topsoil shall not be stored or stockpiled at locations that will be used as a traveled way by construction equipment without the written consent of the landowner.

c. *Stockpile stabilization.* Topsoil stockpiles shall be stabilized with seeding and mulch within 14 calendar days of stockpiling. Between October 15 and March 15, soil tackifier shall be used in place of seeding and mulch.

d. *Topsoil removal not required.* Topsoil removal is not required where the pipeline is installed by plowing, jacking, boring, or other methods that do not require the opening of a trench. If provided for in a written agreement between the pipeline company and the landowner, topsoil removal is not required if the pipeline can be installed in a trench with a top width of 18 inches or less.

e. *Backfill.* The topsoil and subsoil shall be replaced in the reverse order in which they were excavated from the trench. The depth of the replaced topsoil shall conform as near as possible to the depth of topsoil that was removed. Where excavations are made for road, stream, drainage ditch, or other crossings, the original depth of topsoil shall be replaced as near as possible.

9.5(3) Pumping of water from open trenches.

a. In the event it becomes necessary to pump water from open trenches, the pipeline company shall pump the water in a manner that avoids damaging adjacent agricultural land. Damages from pumping water from trenches include, but are not limited to, inundation of crops and depositing of sediment in fields, pastures, and surface drains.

b. If water-related damages result from pumping water from trenches, the pipeline company shall either compensate the landowner for the damages or restore the land, pasture, surface drains, or similar land, to their preconstruction condition, at the landowner's discretion.

c. Written permission from the landowner is required before the pipeline company can pump water from trenches onto land outside of the pipeline company's easement.

d. All pumping of water shall comply with existing state drainage laws, local ordinances, and federal statutes.

9.5(4) Temporary and permanent repair of drain tile.

a. *Pipeline clearance from drain tile.* Where underground drain tile is encountered, the pipeline shall be installed in such a manner that the permanent tile repair can be installed with at least 12 inches of clearance from the pipeline.

b. *Temporary repair.* The following standards shall be used to determine if temporary repair of agricultural drainage tile lines encountered during pipeline construction is required.

(1) Any underground drain tile damaged, cut, or removed and found to be flowing or which subsequently begins to flow shall be temporarily repaired as soon as practicable, and the repair shall be maintained as necessary to allow for its proper function during construction of the pipeline. The temporary repairs shall be maintained in good condition until permanent repairs are made.

(2) Any underground drain tile damaged, cut, or removed and found to not be flowing shall have the upstream exposed tile line screened or otherwise protected to prevent the entry of foreign material and small animals into the tile system. The downstream tile line entrance shall be capped or filtered to prevent entry of mud or foreign material into the line if water level rises in the trench.

c. *Marking.* Any underground drain tile damaged, cut, or removed shall be marked by placing a highly visible flag in the trench spoil bank directly over or opposite such tile. This marker will remain until the tile has been permanently repaired and the repairs have been approved and accepted by the county inspector. If proper notice is given, construction may begin regardless of the county inspector's presence on the site.

d. *Permanent repairs.* Tile disturbed or damaged by pipeline construction shall be repaired to its original or better condition. Permanent repairs shall be completed within 14 days after the pipeline is installed in the trench and prior to backfilling of the trench over the tile line. The county inspector shall inspect each permanent repair for compliance with this chapter. If proper notice is given, construction shall not be delayed due to a county inspector's failure to be present on site. Permanent repair and replacement of damaged drain tile shall be performed in accordance with the following requirements:

(1) All damaged, broken, or cracked tile shall be removed.

(2) Only unobstructed tile shall be used for replacement.

(3) The tile furnished for replacement purposes shall be of a quality, size, and flow capacity at least equal to that of the tile being replaced.

(4) Tile shall be replaced using a laser transit, or similar instrument or method, to ensure that the tile's proper gradient and alignment are restored, except where relocation or rerouting is required for angled crossings. Tile lines at a sharp angle to the trench shall be repaired in the manner shown on Drawing No. IUB PL-1 at the end of this chapter.

(5) The replaced tile shall be firmly supported to prevent loss of gradient or alignment due to soil settlement. The method used shall be comparable to that shown on Drawing No. IUB PL-1 at the end of this chapter.

(6) Before completing permanent tile repairs, all tile lines shall be examined visually by televising on both sides of the trench over the full extent of the working easement to check for tile that might have been damaged or misaligned by construction equipment. If tile lines are found to be damaged, they must be repaired to operate as well after construction as before construction.

e. *Inspection.* Prior to backfilling of the applicable trench area, each permanent tile repair shall be inspected for compliance by the county inspector. If proper notice is given, construction may begin regardless of the county inspector's presence on site prior to backfilling.

f. *Backfilling.* The backfill surrounding the permanently repaired drain tile shall be completed at the time of the repair and in a manner that ensures that any further backfilling will not damage or misalign the repaired section of the tile line. The county inspector shall inspect that backfill for compliance with this chapter. If proper notice is given, construction may begin regardless of the county inspector's presence on the site.

g. *Subsurface drainage.* Subsequent to pipeline construction and permanent repair, if it becomes apparent the tile line in the area disturbed by construction is not functioning correctly or that the land adjacent to the pipeline is not draining properly, which can reasonably be attributed to the pipeline construction, the pipeline company shall make further repairs or install additional tile as necessary to restore subsurface drainage.

9.5(5) Removal of rocks and debris from the easement.

a. *Removal.* The topsoil, when backfilled, and the easement area shall be free of all rock larger than three inches in average diameter not native to the topsoil prior to excavation. Where rocks over three inches in size are present, their size and frequency shall be similar to adjacent soil not disturbed by construction. The top 24 inches of the trench

backfill shall not contain rocks in any greater concentration or size than exist in the adjacent natural soils. Consolidated rock removed by blasting or mechanical means shall not be placed in the backfill above the natural bedrock profile or above the frost line. In addition, the pipeline company shall examine areas adjacent to the easement and along access roads and shall remove any large rocks or debris that may have rolled or blown from the right-of-way or fallen from vehicles.

b. Disposal. Rock that cannot remain in or be used as backfill shall be disposed of at locations and in a manner mutually satisfactory to the company and the landowner. Soil from which excess rock has been removed may be used for backfill. All debris attributable to the pipeline construction and related activities shall be removed and disposed of properly. For the purposes of this rule, debris includes spilled oil, grease, fuel, or other petroleum or chemical products. Such products and any contaminated soil shall be removed for proper disposal or treated by appropriate in situ remediation.

9.5(6) Restoration after soil compaction and rutting.

a. Agricultural restoration. Agricultural land, including off right-of-way access roads traversed by heavy construction equipment that will be removed, shall be deep tilled to alleviate soil compaction upon completion of construction on the property. If the topsoil was removed from the area to be tilled, the tillage shall precede replacement of the topsoil. At least three passes with the deep tillage equipment shall be made. Tillage shall be at least 18 inches deep in land used for crop production and 12 inches deep on other lands and shall be performed under soil moisture conditions that result in a maximum standard penetration test (SPT) reading of 300 psi pursuant to ASTM D1586-11 performed by a qualified person. Decompaction shall not occur in wet conditions. Upon agreement, this tillage may be performed by the landowners or tenants using their own equipment.

b. Rutted land restoration. Rutted land shall be graded and tilled until restored as near as practical to its preconstruction condition. Rutting shall be remedied before any topsoil that was removed is replaced.

9.5(7) Restoration of terraces, waterways, and other erosion control structures. Existing soil conservation practices and structures damaged by the construction of a pipeline shall be restored to the elevation and grade existing prior to the time of pipeline construction. Any drain tiles or flow diversion devices impacted by pipeline construction shall be repaired or modified as needed. Soil used to repair embankments intended to retain water shall be well compacted. Disturbed vegetation shall be reestablished, including a cover crop when appropriate. Restoration of terraces shall be in accordance with Drawing No. IUB PL-2 at the end of this chapter. The county inspector shall inspect restoration of terraces, waterways, and other erosion control structures for compliance with this chapter. If proper notice is given, construction may begin regardless of the county inspector's presence on the site.

9.5(8) Revegetation of untilled land.

a. Crop production. Agricultural land not in row crop or small grain production at the time of construction, including hay ground and land in conservation or set-aside programs, shall be reseeded, including use of a cover crop when appropriate, following completion of deep tillage and replacement of the topsoil. The seed mix used shall restore the original or a comparable ground cover unless otherwise requested by the landowner. If the land is to be placed in crop production the following year, paragraph 9.5(9) "b" applies.

b. Delayed crop production. Agricultural land used for row crop or small grain production which will not be planted in that calendar year due to the pipeline construction shall be seeded with an appropriate cover crop following replacement of the topsoil and completion of deep tillage. However, cover crop seeding may be delayed if construction is completed too late in the year for a cover crop to become established and in such instances is not required if the landowner or tenant proposes to till the land the following year. The landowner may request ground cover where the construction is completed too late in the year for a cover crop to become established to prevent soil erosion.

c. Weed control. On any easement, including, but not limited to, construction easements and easements relating to valve sites, metering stations, and compression stations, the pipeline company shall provide for weed control in a manner that prevents the spread of weeds onto adjacent lands used for agricultural purposes. Spraying shall be done by a pesticide applicator that is appropriately licensed for spraying of pesticide in Iowa. If the pipeline company fails to control weeds within 45 days after receiving written notice from the landowner, the pipeline company shall be responsible for reimbursing all reasonable costs of weed control incurred by owners of adjacent land.

9.5(9) Future installation of drain tile or soil conservation practices and structures.

a. Future drain tile. The pipeline company shall consult with affected persons regarding plans for future drain tile installation. Where an affected person provides the pipeline company with written plans prepared by a qualified

tile technician for future drain tile improvements before an easement is secured, the pipeline shall be installed at a depth which will allow proper clearance between the pipeline and the proposed future tile installation.

b. Future practices and structures. The pipeline company shall consult with any affected person's plans for future use or installation of soil conservation practices or structures. Where an affected person provides the pipeline company with a design for such practice or structure prepared by a qualified technician before an easement is secured, the pipeline shall be installed at a depth that will allow for future installation of the planned soil conservation practice or structure and that will retain the integrity of the pipeline.

9.5(10) Restoration of land slope and contour. Upon completion of construction, the slope, contour, grade, and drainage pattern of the disturbed area shall be restored as near as possible to its preconstruction condition. However, the trench may be crowned to allow for anticipated settlement of the backfill. Excessive or insufficient settlement of the trench area, which visibly affects land contour or undesirably alters surface drainage, shall be remediated by the pipeline company by means such as regrading and, if necessary, import of appropriate fill material. Disturbed areas in which erosion causes formation of rills or channels, or areas of heavy sediment deposition, shall be regraded as needed. On steep slopes, methods such as sediment barriers, slope breakers, or mulching shall be used as necessary to control erosion until vegetation can be reestablished. The county inspector shall inspect restoration of land slope and contour for compliance with this chapter.

9.5(11) Restoration of areas used for field entrances or temporary roads. Upon completion of construction and land restoration, field entrances or temporary roads built as part of the construction project shall be removed and the land made suitable for return to its previous use. Areas affected shall be regraded as required by subrule 9.5(10) and deep tilled as required by subrule 9.5(6). If by agreement, or at landowner request, and subject to any necessary approval by local public road authorities, a field entrance or road is to be left in place, it shall be left in a graded and serviceable condition. The county inspector shall inspect restoration of areas used for field entrances or temporary roads for compliance with this chapter.

9.5(12) Construction in wet conditions. The county inspector, in consultation with the pipeline company and the landowner or person in possession of the land pursuant to a lease, if present, shall determine when construction should not proceed in a given area due to wet conditions. The county inspector shall have the sole authority to determine whether construction should be halted due to wet conditions. Construction in wet soil conditions shall not commence or continue at times when or locations where the passage of heavy construction equipment may cause rutting to the extent that the topsoil and subsoil are mixed or underground drainage structures may be damaged. To facilitate construction in wet soils, the pipeline company may elect to remove and stockpile the topsoil from the traveled way, install mats or padding, or use other methods acceptable to the county inspector. Topsoil removal, storage, and replacement shall comply with subrule 9.5(2).

9.5(13) Access to land. Nothing in this rule shall prohibit a landowner or person in possession of the land pursuant to a lease from having access to the property. A landowner or person in possession of the land pursuant to a lease shall not disrupt ongoing construction and shall not compromise the safety considerations of the construction. A landowner or person in possession of the land pursuant to a lease shall abide by any and all safety instructions established by the pipeline company during construction.

199—9.6(479,479B) Designation of a pipeline company point of contact for landowner inquiries or claims.

9.6(1) For each pipeline construction project subject to this chapter, the pipeline company shall designate a point of contact for inquiries or claims from affected persons. The designation shall include the name of an individual to contact and a toll-free telephone number, an email address, and an address through which that person can be reached. The pipeline company shall also provide the name of and contact information for the county inspector. This information shall be provided to all affected persons prior to commencement of construction. Any change in the point of contact shall be promptly communicated in writing to affected persons. A designated point of contact shall remain available for all affected persons for at least one year following project completion and for affected persons with unresolved damage claims until such time as those claims are settled.

9.6(2) If requested by an affected person, any notice required to be given to the county inspector shall also be given to the affected person.

199—9.7(479,479B) Separate agreements. This chapter does not preclude the application of provisions for protecting or restoring property that are different from those contained in this chapter, or in a land restoration plan, which are contained in easements or other agreements independently executed by the pipeline company and the landowner. The alternative provision shall not be inconsistent with state law or these rules. The agreement shall be in writing, and the pipeline company shall provide a copy to the county inspector and the board.

199—9.8(479,479B) Notice of violation and halting construction.

9.8(1) Notice of violation. If the county inspector identifies a violation of the standards adopted in this chapter, Iowa Code section 479.29 or 479B.20, or a separate agreement between the pipeline company and the landowner, the county inspector shall give verbal notice, followed by written notice, to the pipeline company and the pipeline company's contractor and require the pipeline company to take corrective action.

9.8(2) Halting construction. A county inspector may temporarily halt construction at the location of the dispute if construction is not in compliance with the standards adopted in this chapter, the land restoration plan, or the terms of an independent agreement between the pipeline company and landowner regarding land restoration or line location until the county inspector consults with a supervisor of the pipeline company or contractor. If, after consultation with a supervisor of the pipeline company or contractor, agreement on corrective action to address the violation cannot be reached, the county inspector may submit a request to the county board of supervisors for resolution of the issue. Construction may ~~not~~ resume at the disputed location after either (1) ~~until~~ the county inspector and supervisor of the pipeline company reach an agreement on a resolution or (2) where the board of supervisors has been contacted, after the board of supervisors has responded or after one business day after contact by the county inspector. If a resolution is not reached, construction may continue; however, the pipeline company will be responsible for any damages or for correcting any violation.

199—9.9(479,479B) Enforcement. A pipeline company shall fully cooperate with county inspectors in the performance of their duties under Iowa Code sections 479.29 and 479B.20, including giving proper notice before staking, clearing, boring, topsoil removal and stockpiling, trenching, tile marking, silt screening, tile repair or backfilling, decompaction, cleanup, restoration, or testing of any easement. The pipeline company shall pay the reasonable costs for any work provided during the pipeline construction by the county inspector. If the pipeline company or its contractor does not comply with the requirements of Iowa Code section 479.29 or 479B.20, with the land restoration plan, or with an independent agreement on land restoration or line location, the county board of supervisors may petition the utilities board for an order requiring corrective action to be taken. The county board of supervisors may also file a complaint with the board seeking imposition of civil penalties.

199—9.10(479,479B) Project completion. The county inspector for each county affected by the pipeline project shall recommend to the county board of supervisors that the pipeline project be considered complete upon completion of restoration of all affected agricultural lands and 70 percent growth is established in locations requiring seeding after receiving written notification by the pipeline company to the same effect. The county board of supervisors shall determine whether the project is completed.

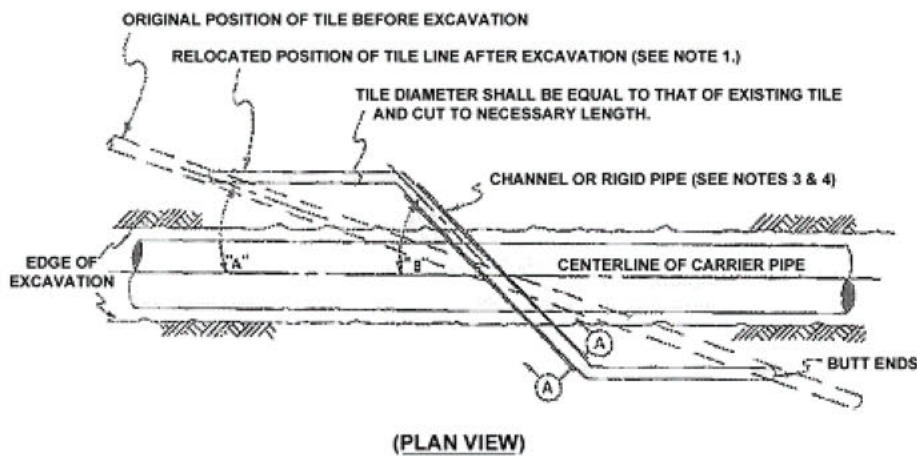
199—9.11(479,479B) Document submittal. Once a project is completed, project documents shall be submitted as follows:

9.11(1) Document turnover. The county inspector shall submit to the county board of supervisors and the pipeline company copies of inspection reports; tile reports and maps; punch lists; notice of violation documents; decompaction agreements; separate agreements, including those that excuse the pipeline company from certain construction responsibilities; and landowner agreements. The documents shall also be available for inspection by the board or an affected person upon request.

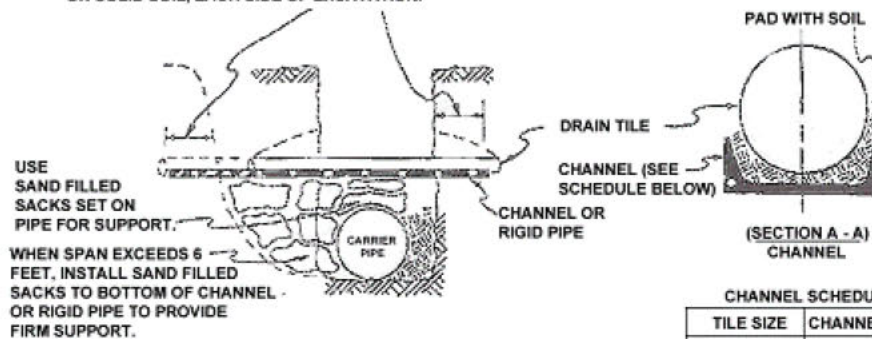
9.11(2) As-built drawings. The pipeline company shall provide the county inspector and affected landowners with copies of pipe alignment as-built drawings and underground drain tile as-built drawings, including the Global Positioning System location of drain tile.

Drawing No. IUB PL-1

RESTORATION OF DRAIN TILE



20" MINIMUM LENGTH OF CHANNEL OR RIGID PIPE SUPPORT ON SOLID SOIL, EACH SIDE OF EXCAVATION.

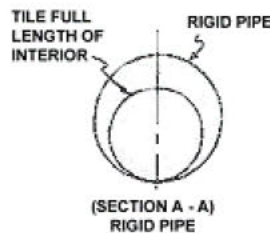


CHANNEL SCHEDULE

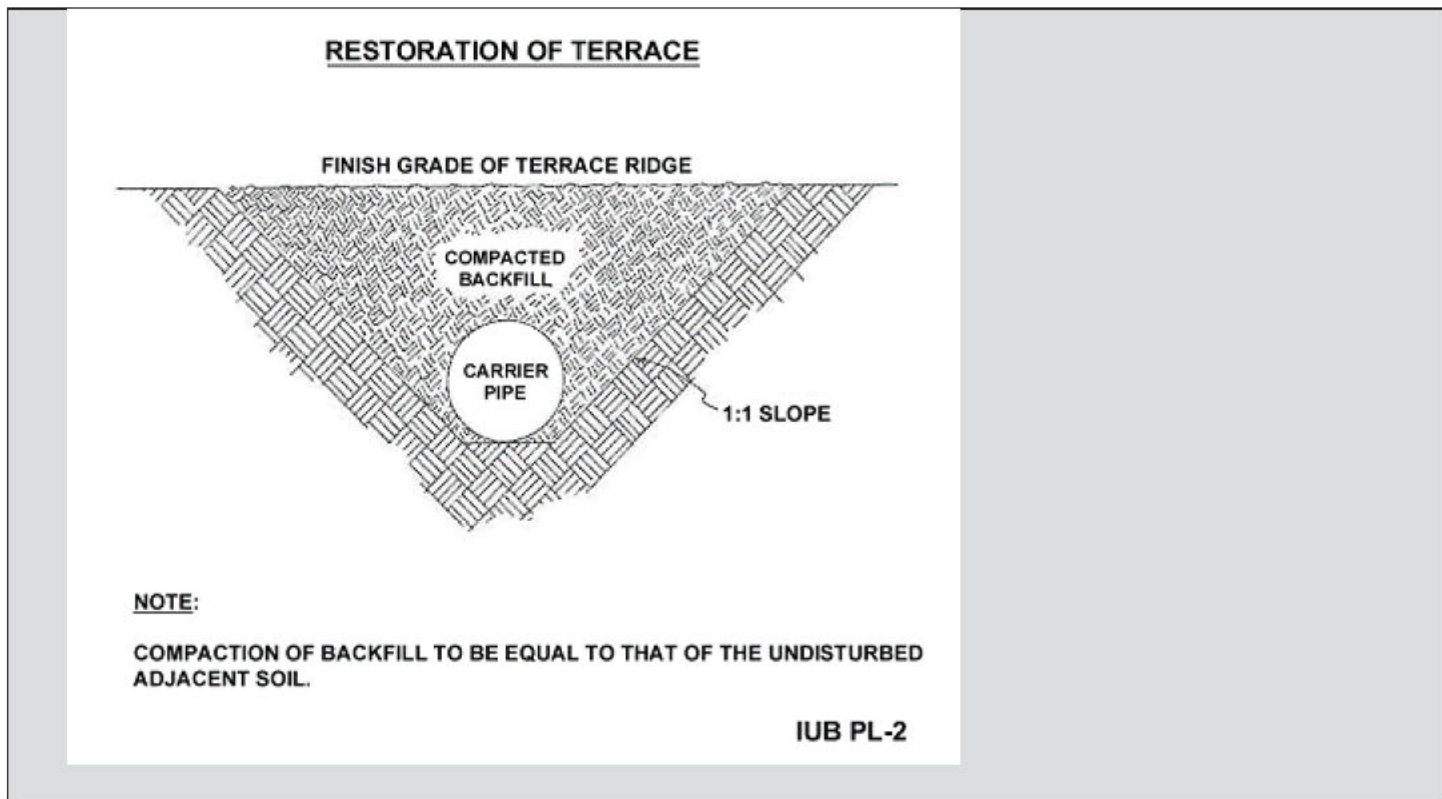
TILE SIZE	CHANNEL SIZE
3"	4" AT 5.4#
4" - 5"	5" AT 6.7#
6" - 9"	7" AT 9.8#
10" & LARGER	10" AT 15.3#

NOTES:

1. TILE SHALL BE RELOCATED AS SHOWN WHEN ANGLE "A" BETWEEN PIPELINE AND ORIGINAL TILE IS LESS THAN 20° UNLESS OTHERWISE AGREED TO BY LANDOWNER AND COMPANY.
2. ANGLE "B" SHALL BE 45° FOR USUAL WIDTHS OF TRENCH. FOR EXTRA WIDTHS, IT MAY BE GREATER.
3. DIAMETER OF RIGID PIPE SHALL BE OF ADEQUATE SIZE TO ALLOW FOR THE INSTALLATION OF THE TILE FOR THE FULL LENGTH OF THE RIGID PIPE.
4. OTHER METHODS OF SUPPORTING DRAIN TILE MAY BE USED IF THE ALTERNATE PROPOSED IS EQUIVALENT IN STRENGTH TO THE CHANNEL SECTIONS SHOWN AND IF APPROVED BY THE LANDOWNER.



Drawing No. IUB PL-2



**For rules being re-promulgated with changes, you may attach a document with suggested changes.*

METRICS

Total number of rules repealed:	0
Proposed word count reduction after repeal and/or re-promulgation	19
Proposed number of restrictive terms eliminated after repeal and/or re-promulgation	41

ARE THERE ANY STATUTORY CHANGES YOU WOULD RECOMMEND INCLUDING CODIFYING ANY RULES?

There are no recommended statutory changes at this time.

TEXT BOXES WILL EXPAND AS YOU TYPE

Agency Name Iowa Utilities Board **Rule #** 199 IAC chapter 9

Iowa Code Section Authorizing Rule 479.29 and 489B.20

State or Federal Law(s) Implemented by the Rule N/A

Public Hearing

A public hearing at which persons may present their views orally or in writing will be held as follows:

Date/Time: 5/7/2024 9 a.m.

Location: Board Hearing Room, 1375 E. Court Ave., Des Moines, IA 50319

Any interested person may submit written comments concerning this regulatory analysis. Written comments in response to this regulatory analysis must be received by the Department no later than 4:30 p.m. on the date of the public hearing. Comments should be directed to:

Contact Name

IT Support

Address

1375 E. Court Ave., Des Moines, Iowa 50319

Email and/or phone number

Phone: 515-725-7300 Email: ITsupport@iub.iowa.gov

Purpose and summary of proposed rule:

Chapter 9 establishes standards for the restoration of agricultural lands during and after pipeline constructions. The rules constitute minimum standards for restoration of agricultural lands disturbed by pipeline construction. These rules do not apply to land located within city boundaries, unless the land is used for agricultural purposes, or to interstate natural gas pipelines.

Analysis of Impact of Proposed Rule

1. Persons affected by the proposed rule

- Classes of persons that will bear the costs of the proposed rule:

Because the proposed rule provides minimum standards for the restoration of agricultural lands that the utilities must meet, it only requires utilities to bear the cost of the rule.

- Classes of persons that will benefit from the proposed rule:

All persons with pipelines proposed to cross their agricultural lands benefit from the rule as it sets the minimum standards that must be met when restoring agricultural land after construction of pipelines.

2. Impact of the proposed rule, economic or otherwise, including the nature and amount of all the different kinds of costs that would be incurred

- Quantitative description of impact:

ATTACHMENT B

There are some additional costs to the utilities as they must meet these minimum standards when restoring agricultural land. There may be some extra time required for the restoration practices to be completed after construction has occurred.

- Qualitative description of impact:

These minimum standards are for the benefit of the owners of that land as it will be returned to better condition than if these standards are not followed.

3. Costs to the state

- Implementation and enforcement costs borne by the agency or any other agency:

There are no additional costs to any agency other than the normal costs of operation for review of petitions of the Board.

- Anticipated effect on state revenues:

There is no anticipated effect on state revenues.

4. Comparison of the costs and benefits of the proposed rule to the costs and benefits of inaction

Having minimum standards for the restoration of agricultural lands after pipeline construction is providing the landowners the minimum level of protection necessary to allow for the continued use of their agricultural land after the pipeline has been constructed. With no minimum standards, there would not be anything requiring actions to protect and restore the agricultural land during and after pipeline construction.

5. Determination if less costly methods or less intrusive methods exist for achieving the purpose of the proposed rule

Because this is minimum standards that a plan provided by the company seeking the permit and reviewed during the standard petition and exhibits review, along with review of the construction and restoration practices by a county determined inspector, this is the least costly and least intrusive method for the rule to be implemented.

6. Alternative methods considered by the agency

- Description of any alternative methods that were seriously considered by the agency:

Because Iowa Code §§ 479.20 and 479B.20 requires rules establishing standards to be made regarding the restoration of agricultural lands, there were not any other methods considered.

- Reasons why they were rejected in favor of the proposed rule:

N/A

Small Business Impact

If the rule will have a substantial impact on small business, include a discussion of whether it would be feasible and practicable to do any of the following to reduce the impact of the rule on small business:

- Establish less stringent compliance or reporting requirements in the rule for small business.
- Establish less stringent schedules or deadlines in the rule for compliance or reporting requirements for small business.

ATTACHMENT B

- Consolidate or simplify the rule's compliance or reporting requirements for small business.
- Establish performance standards to replace design or operational standards in the rule for small business.
- Exempt small business from any or all requirements of the rule.

If legal and feasible, how does the rule use a method discussed above to reduce the substantial impact on small business?

There is no small business impact.

Text of Proposed Rule:

CHAPTER 9

RESTORATION OF AGRICULTURAL LANDS DURING AND AFTER PIPELINE CONSTRUCTION

199—9.1(479,479B) General information.

9.1(1) Authority and purpose. The rules in this chapter are adopted by the Iowa utilities board pursuant to the authority granted to the board in Iowa Code sections 479.29 and 479B.20 to establish standards for the restoration of agricultural lands during and after pipeline construction. These rules constitute the minimum standards for restoration of agricultural lands disturbed by pipeline construction. These rules do not apply to land located within city boundaries, unless the land is used for agricultural purposes, or to interstate natural gas pipelines.

When a project-specific land restoration plan is required pursuant to Iowa Code section 479.29(9) or 479B.20(9), following notice and comment, the board may impose additional or more stringent standards as necessary to address issues specific to the nature and location of the particular pipeline project. Where a project-specific land restoration plan is not needed pursuant to Iowa Code section 479.29(9) or 479B.20(9), the rules in this chapter shall constitute the minimum land restoration standards for any pipeline construction.

9.1(2) Definitions. The following words and terms, when used in these rules, have the meanings indicated below:

“Affected person” means any person with a legal right or interest in the property, including, but not limited to, a landowner, a contract purchaser of record, a person possessing the property under a lease, a record lienholder, and a record encumbrancer of the property.

“Agricultural land” means any land devoted to agricultural use, including, but not limited to, land used for crop production, cleared land capable of being cultivated, hay land, pasture land, managed woodlands and woodlands of commercial value, truck gardens, farmsteads, commercial agricultural-related facilities, feedlots, rangeland, livestock confinement systems, land on which farm buildings are located, and land used to implement management practices and structures for the improvement or conservation of soil, water, air, and related plant and animal resources.

“Board” means the utilities board created in Iowa Code Chapter 474.

“County inspector” means a professional engineer who is licensed under Iowa Code chapter 542B, who is familiar with agricultural and environmental inspection requirements and who is designated by the county board of supervisors to be responsible for completing an on-site inspection for compliance with this chapter and Iowa Code chapters 479 and 479B.

“Drainage structures” or *“underground improvements”* means any permanent structure used for draining agricultural lands, including tile systems and buried terrace outlets.

“Hazardous liquid” means crude oil, refined petroleum products, liquefied petroleum gases, anhydrous ammonia, liquid fertilizers, liquefied carbon dioxide, alcohols, and coal slurries.

“Person” means individual, corporation, limited liability company, government or governmental subdivision or agency, business trust, estate, trust, partnership or association, or any other legal entity as defined in Iowa Code section 4.1(20).

“Pipeline” means any pipe, pipes, or pipelines used for the transportation or transmission of any solid, liquid, or gaseous substance, except water, within or through Iowa.

“Pipeline company” means any person engaged in or organized for the purpose of owning, operating, or controlling pipelines.

“Pipeline construction” means activity associated with installation, relocation, replacement, removal, or operation or maintenance of a pipeline that disturbs agricultural land, but does not include work performed during an emergency, tree clearing, or topsoil surveying completed on land under easement with written approval from the landowner. Emergency means a condition involving clear and immediate danger to life, health, or essential services, or a risk of a potentially significant loss of property. When the emergency condition ends, pipeline construction will be in accordance with these rules.

“Proper notice to the county inspector” means that the pipeline company and its contractors shall keep the county inspector continually informed of the work schedule and any changes to the schedule, and shall provide at least 24 hours’ written notice before commencing or continuing any construction activity to be

inspected by the county inspector, including, but not limited to, right-of-way staking, clearing, boring, topsoil removal and stockpiling, trenching, tile marking, tile screening, tile repairs, backfilling, decompaction, cleanup, restoration, or testing at any project location. The pipeline company may request that the county inspector designate a person to receive such notices. If proper notice is given, construction may begin regardless of the county inspector's presence on the site.

"Soil conservation practices" means any land conservation practice recognized by federal or state soil conservation agencies, including, but not limited to, grasslands and grassed waterways, hay land planting, pasture, and tree plantings.

"Soil conservation structures" means any permanent structure recognized by federal or state soil conservation agencies, including, but not limited to, toe walls, drop inlets, grade control works, terraces, levees, and farm ponds.

"Surface drains" means any surface drainage system, such as shallow surface field drains, grassed waterways, open ditches, or any other conveyance of surface water.

"Till" means to loosen the soil in preparation for planting or seeding by plowing, chiseling, discing, or similar means. For the purposes of this chapter, agricultural land planted using no-till planting practices is also considered tilled.

"Topsoil" means the uppermost layer of the soil with the darkest color or the highest content of organic matter, generally referred to as the "A" horizon. In areas where the "A" horizon is determined by a certified professional soil scientist to be less than 12 inches, the topsoil depth shall include both the "A" and the "Bw" horizons as determined by the March 2017 United States Department of Agriculture Soil Survey Manual. Topsoil depth is to be determined under the supervision of a certified professional soil scientist.

"Underground storage" means storage of either natural gas or hazardous liquid in a subsurface stratum or formation of the earth.

"Wet conditions" means adverse soil conditions due to rain events, antecedent moisture, or ponded water, where the passage of construction equipment may cause rutting that mixes topsoil and subsoil, may prevent the effective removal or replacement of topsoil and subsoil, may prevent proper decompaction, or may damage underground tile lines.

199—9.2(479,479B) Filing of land restoration plans. Pursuant to Iowa Code sections 479.29 and 479B.20, a land restoration plan is required for any pipeline construction that requires a permit from the board and for any proposed amendment to an existing permit that involves pipeline construction, relocation, or replacement. The land restoration plan shall be filed with the appropriate petition and be identified as Exhibit I. For pipelines that do not need a permit from the board and that are constructed across agricultural land, the pipeline company shall have on file with the board a general land restoration plan covering pipelines that do not need a permit from the board.

9.2(1) Content of plan. A land restoration plan includes, but is not limited to, the following:

- a. A brief description of the purpose and nature of the pipeline construction project.
- b. A description of the sequence of events that will occur during pipeline construction.
- c. A description of how the pipeline company will comply with rules 199—9.4(479,479B) and 199—9.5(479,479B).
- d. The point of contact for landowner inquiries or claims as provided for in rule 199—9.5(479,479B).
- e. A unique identification number that follows a linearly sequential pattern on each parcel of land over which the pipeline will be constructed.

9.2(2) Plan variations. The board may by waiver allow variations from the requirements in this chapter if the pipeline company requesting a waiver is able to satisfy the standards set forth in rule 199—1.3(17A,474,476) and if the alternative methods proposed by the pipeline company would restore the land to a condition as good or better than provided for in this chapter.

9.2(3) Mitigation plans and agreements. Preparation of a separate land restoration plan may be waived by the board where a pipeline company enters into an agricultural impact mitigation plan or similar agreement with the appropriate agencies of the state of Iowa that satisfies the requirements of this chapter. If a mitigation plan or agreement is used to fully or partially meet the requirements of a land restoration plan, the statement

or agreement shall be filed with the board and will be considered to be, or to be part of, the land restoration plan for purposes of this chapter.

199—9.3(479,479B) Procedure for review of plan.

9.3(1) *Timing.* The board will review the proposed land restoration plan, as established in rule 199—9.2(479,479B), at the same time it reviews the petition. Objections to the proposed plan may be filed as part of the permit proceeding. The pipeline company shall modify the plan as determined by the board.

9.3(2) *Distributing approved plan.* After the board has approved the plan as part of the board's review and approval of the petition, but prior to construction, the pipeline company shall provide copies of the final plan approved by the board to all landowners of property and persons in possession of the property under a lease that will be disturbed by the construction, the county board of supervisors in each county affected by the project, the county engineer of each affected county, and to the county inspector in each affected county.

199—9.4(479,479B) Staking and clearing of agricultural land.

9.4(1) *Easement staking.* The pipeline company shall allow the county inspector and the landowner to be present during the staking of the easement. Written notice of the staking shall be provided to the landowner and the county inspector in the same manner as provided for in proper notice to the county inspector. Pipeline construction is prohibited until seven days after the easement is staked unless the landowner waives the seven-day period after the easement staking has been completed. If proper notice is given, easement staking may begin regardless of the county inspector or landowner's presence on the site.

9.4(2) *Trees and brush.* If trees are to be removed from the easement, the pipeline company shall consult with the landowner to determine if there are trees of commercial or other value to the landowner.

a. If there are trees of commercial or other value to the landowner, the pipeline company shall allow the landowner the right to retain ownership of the trees with the disposition of the trees to be negotiated prior to commencement of land clearing, or if the landowner does not want to retain ownership of the trees, the pipeline company shall hire a forester with local expertise to appraise the commercial value of any timber to be cut for construction of the pipeline. The pipeline company shall compensate the landowner for the full appraised commercial value of any timber removed. The pipeline company shall remove all cleared trees and debris left on or adjacent to the easement.

b. If the trees to be cleared have been determined to have no commercial or other value to the landowner and there is no negotiated agreement between the pipeline company and the landowner for the disposition of the trees in advance of clearing of the easement, removal and disposal of the material shall be completed at the discretion of the pipeline company.

9.4(3) *Fencing.* The pipeline company may remove all field fences and gates, located within the pipeline company's easement, during clearing of the easement and may construct temporary fences and gates where necessary. Upon completion of the pipeline construction, the pipeline company shall — replace any temporary field fences or gates with permanent field fences or gates. The pipeline company and landowner may negotiate separate agreements regarding field fences and gates. If livestock is present, the pipeline company shall construct any temporary or permanent fences and gates in a manner which will contain livestock.

199—9.5(479,479B) Restoration of agricultural lands.

9.5(1) *Topsoil survey.*

a. Prior to the removal of any topsoil, the pipeline company conducts a topsoil survey to be performed under the supervision of a certified professional soil scientist across the full extent of the easement for any pipeline that requires a board permit. A minimum of three soil depths shall be physically measured in the field at each cross section as follows: (1) one on the left edge of the easement; (2) one at 15 feet of the centerline of the pipeline on the working side of the right-of-way; and (3) one on the right edge of the working easement. Cross sections shall be taken a minimum of every 500 linear feet for the full extent of the easement. Each parcel of land shall have a minimum of two cross sections.

b. The pipeline company shall provide the results of the topsoil survey to the county board of supervisors, county inspector, county engineer, and affected persons at least six weeks prior to commencing construction.

9.5(2) Topsoil separation and replacement.

a. Removal. Topsoil removal and replacement in accordance with this rule is required for any open excavation associated with pipeline construction unless otherwise provided in these rules. The actual depth of the topsoil, as determined by a topsoil survey, shall be stripped from the full extent of the easement. Topsoil shall also be removed and replaced in accordance with these rules at any location where land slope or contour is significantly altered to facilitate construction. Topsoil removal shall not occur during wet conditions.

b. Soil storage. The topsoil and subsoil shall be segregated, stockpiled, and preserved separately during subsequent construction operations. The stored topsoil and subsoil shall have sufficient separation to prevent mixing during the storage period. Topsoil shall not be used to construct field entrances or drives, or be otherwise removed from the property, without the written consent of the landowner. Topsoil shall not be stored or stockpiled at locations that will be used as a traveled way by construction equipment without the written consent of the landowner.

c. Stockpile stabilization. Topsoil stockpiles shall be stabilized with seeding and mulch within 14 calendar days of stockpiling. Between October 15 and March 15, soil tackifier shall be used in place of seeding and mulch.

d. Topsoil removal not required. Topsoil removal is not required where the pipeline is installed by plowing, jacking, boring, or other methods that do not require the opening of a trench. If provided for in a written agreement between the pipeline company and the landowner, topsoil removal is not required if the pipeline can be installed in a trench with a top width of 18 inches or less.

e. Backfill. The topsoil and subsoil shall be replaced in the reverse order in which they were excavated from the trench. The depth of the replaced topsoil shall conform as near as possible to the depth of topsoil that was removed. Where excavations are made for road, stream, drainage ditch, or other crossings, the original depth of topsoil shall be replaced as near as possible.

9.5(3) Pumping of water from open trenches.

a. In the event it becomes necessary to pump water from open trenches, the pipeline company shall pump the water in a manner that avoids damaging adjacent agricultural land. Damages from pumping water from trenches include, but are not limited to, inundation of crops and depositing of sediment in fields, pastures, and surface drains.

b. If water-related damages result from pumping water from trenches, the pipeline company shall either compensate the landowner for the damages or restore the land, pasture, surface drains, or similar land, to their preconstruction condition, at the landowner's discretion.

c. Written permission from the landowner is required before the pipeline company can pump water from trenches onto land outside of the pipeline company's easement.

d. All pumping of water shall comply with existing state drainage laws, local ordinances, and federal statutes.

9.5(4) Temporary and permanent repair of drain tile.

a. Pipeline clearance from drain tile. Where underground drain tile is encountered, the pipeline shall be installed in such a manner that the permanent tile repair can be installed with at least 12 inches of clearance from the pipeline.

b. Temporary repair. The following standards shall be used to determine if temporary repair of agricultural drainage tile lines encountered during pipeline construction is required.

(1) Any underground drain tile damaged, cut, or removed and found to be flowing or which subsequently begins to flow shall be temporarily repaired as soon as practicable, and the repair shall be maintained as necessary to allow for its proper function during construction of the pipeline. The temporary repairs shall be maintained in good condition until permanent repairs are made.

(2) Any underground drain tile damaged, cut, or removed and found to not be flowing shall have the upstream exposed tile line screened or otherwise protected to prevent the entry of foreign material and small animals into the tile system. The downstream tile line entrance shall be capped or filtered to prevent entry of mud or foreign material into the line if water level rises in the trench.

c. Marking. Any underground drain tile damaged, cut, or removed shall be marked by placing a highly visible flag in the trench spoil bank directly over or opposite such tile. This marker will remain until the tile

has been permanently repaired and the repairs have been approved and accepted by the county inspector. If proper notice is given, construction may begin regardless of the county inspector's presence on the site.

d. Permanent repairs. Tile disturbed or damaged by pipeline construction shall be repaired to its original or better condition. Permanent repairs shall be completed within 14 days after the pipeline is installed in the trench and prior to backfilling of the trench over the tile line. The county inspector shall inspect each permanent repair for compliance with this chapter. If proper notice is given, construction shall not be delayed due to a county inspector's failure to be present on site. Permanent repair and replacement of damaged drain tile shall be performed in accordance with the following requirements:

(1) All damaged, broken, or cracked tile shall be removed.

(2) Only unobstructed tile shall be used for replacement.

(3) The tile furnished for replacement purposes shall be of a quality, size, and flow capacity at least equal to that of the tile being replaced.

(4) Tile shall be replaced using a laser transit, or similar instrument or method, to ensure that the tile's proper gradient and alignment are restored, except where relocation or rerouting is required for angled crossings. Tile lines at a sharp angle to the trench shall be repaired in the manner shown on Drawing No. IUB PL-1 at the end of this chapter.

(5) The replaced tile shall be firmly supported to prevent loss of gradient or alignment due to soil settlement. The method used shall be comparable to that shown on Drawing No. IUB PL-1 at the end of this chapter.

(6) Before completing permanent tile repairs, all tile lines shall be examined visually by televising on both sides of the trench over the full extent of the working easement to check for tile that might have been damaged or misaligned by construction equipment. If tile lines are found to be damaged, they must be repaired to operate as well after construction as before construction.

e. Inspection. Prior to backfilling of the applicable trench area, each permanent tile repair shall be inspected for compliance by the county inspector. If proper notice is given, construction may begin regardless of the county inspector's presence on site prior to backfilling.

f. Backfilling. The backfill surrounding the permanently repaired drain tile shall be completed at the time of the repair and in a manner that ensures that any further backfilling will not damage or misalign the repaired section of the tile line. The county inspector shall inspect that backfill for compliance with this chapter. If proper notice is given, construction may begin regardless of the county inspector's presence on the site.

g. Subsurface drainage. Subsequent to pipeline construction and permanent repair, if it becomes apparent the tile line in the area disturbed by construction is not functioning correctly or that the land adjacent to the pipeline is not draining properly, which can reasonably be attributed to the pipeline construction, the pipeline company shall make further repairs or install additional tile as necessary to restore subsurface drainage.

9.5(5) Removal of rocks and debris from the easement.

a. Removal. The topsoil, when backfilled, and the easement area shall be free of all rock larger than three inches in average diameter not native to the topsoil prior to excavation. Where rocks over three inches in size are present, their size and frequency shall be similar to adjacent soil not disturbed by construction. The top 24 inches of the trench backfill shall not contain rocks in any greater concentration or size than exist in the adjacent natural soils. Consolidated rock removed by blasting or mechanical means shall not be placed in the backfill above the natural bedrock profile or above the frost line. In addition, the pipeline company shall examine areas adjacent to the easement and along access roads and shall remove any large rocks or debris that may have rolled or blown from the right-of-way or fallen from vehicles.

b. Disposal. Rock that cannot remain in or be used as backfill shall be disposed of at locations and in a manner mutually satisfactory to the company and the landowner. Soil from which excess rock has been removed may be used for backfill. All debris attributable to the pipeline construction and related activities shall be removed and disposed of properly. For the purposes of this rule, debris includes spilled oil, grease, fuel, or other petroleum or chemical products. Such products and any contaminated soil shall be removed for proper disposal or treated by appropriate in situ remediation.

9.5(6) Restoration after soil compaction and rutting.

a. Agricultural restoration. Agricultural land, including off right-of-way access roads traversed by heavy construction equipment that will be removed, shall be deep tilled to alleviate soil compaction upon completion of construction on the property. If the topsoil was removed from the area to be tilled, the tillage shall precede replacement of the topsoil. At least three passes with the deep tillage equipment shall be made. Tillage shall be at least 18 inches deep in land used for crop production and 12 inches deep on other lands and shall be performed under soil moisture conditions that result in a maximum standard penetration test (SPT) reading of 300 psi pursuant to ASTM D1586-11 performed by a qualified person. Decompaction shall not occur in wet conditions. Upon agreement, this tillage may be performed by the landowners or tenants using their own equipment.

b. Rutted land restoration. Rutted land shall be graded and tilled until restored as near as practical to its preconstruction condition. Rutting shall be remedied before any topsoil that was removed is replaced.

9.5(7) Restoration of terraces, waterways, and other erosion control structures. Existing soil conservation practices and structures damaged by the construction of a pipeline shall be restored to the elevation and grade existing prior to the time of pipeline construction. Any drain tiles or flow diversion devices impacted by pipeline construction shall be repaired or modified as needed. Soil used to repair embankments intended to retain water shall be well compacted. Disturbed vegetation shall be reestablished, including a cover crop when appropriate. Restoration of terraces shall be in accordance with Drawing No. IUB PL-2 at the end of this chapter. The county inspector shall inspect restoration of terraces, waterways, and other erosion control structures for compliance with this chapter. If proper notice is given, construction may begin regardless of the county inspector's presence on the site.

9.5(8) Revegetation of untilled land.

a. Crop production. Agricultural land not in row crop or small grain production at the time of construction, including hay ground and land in conservation or set-aside programs, shall be reseeded, including use of a cover crop when appropriate, following completion of deep tillage and replacement of the topsoil. The seed mix used shall restore the original or a comparable ground cover unless otherwise requested by the landowner. If the land is to be placed in crop production the following year, paragraph 9.5(9) "b" applies.

b. Delayed crop production. Agricultural land used for row crop or small grain production which will not be planted in that calendar year due to the pipeline construction shall be seeded with an appropriate cover crop following replacement of the topsoil and completion of deep tillage. However, cover crop seeding may be delayed if construction is completed too late in the year for a cover crop to become established and in such instances is not required if the landowner or tenant proposes to till the land the following year. The landowner may request ground cover where the construction is completed too late in the year for a cover crop to become established to prevent soil erosion.

c. Weed control. On any easement, including, but not limited to, construction easements and easements relating to valve sites, metering stations, and compression stations, the pipeline company shall provide for weed control in a manner that prevents the spread of weeds onto adjacent lands used for agricultural purposes. Spraying shall be done by a pesticide applicator that is appropriately licensed for spraying of pesticide in Iowa. If the pipeline company fails to control weeds within 45 days after receiving written notice from the landowner, the pipeline company shall be responsible for reimbursing all reasonable costs of weed control incurred by owners of adjacent land.

9.5(9) Future installation of drain tile or soil conservation practices and structures.

a. Future drain tile. The pipeline company shall consult with affected persons regarding plans for future drain tile installation. Where an affected person provides the pipeline company with written plans prepared by a qualified tile technician for future drain tile improvements before an easement is secured, the pipeline shall be installed at a depth which will allow proper clearance between the pipeline and the proposed future tile installation.

b. Future practices and structures. The pipeline company shall consult with any affected person's plans for future use or installation of soil conservation practices or structures. Where an affected person provides the pipeline company with a design for such practice or structure prepared by a qualified technician before an

easement is secured, the pipeline shall be installed at a depth that will allow for future installation of the planned soil conservation practice or structure and that will retain the integrity of the pipeline.

9.5(10) Restoration of land slope and contour. Upon completion of construction, the slope, contour, grade, and drainage pattern of the disturbed area shall be restored as near as possible to its preconstruction condition. However, the trench may be crowned to allow for anticipated settlement of the backfill. Excessive or insufficient settlement of the trench area, which visibly affects land contour or undesirably alters surface drainage, shall be remediated by the pipeline company by means such as regrading and, if necessary, import of appropriate fill material. Disturbed areas in which erosion causes formation of rills or channels, or areas of heavy sediment deposition, shall be regraded as needed. On steep slopes, methods such as sediment barriers, slope breakers, or mulching shall be used as necessary to control erosion until vegetation can be reestablished. The county inspector shall inspect restoration of land slope and contour for compliance with this chapter.

9.5(11) Restoration of areas used for field entrances or temporary roads. Upon completion of construction and land restoration, field entrances or temporary roads built as part of the construction project shall be removed and the land made suitable for return to its previous use. Areas affected shall be regraded as required by subrule 9.5(10) and deep tilled as required by subrule 9.5(6). If by agreement, or at landowner request, and subject to any necessary approval by local public road authorities, a field entrance or road is to be left in place, it shall be left in a graded and serviceable condition. The county inspector shall inspect restoration of areas used for field entrances or temporary roads for compliance with this chapter.

9.5(12) Construction in wet conditions. The county inspector, in consultation with the pipeline company and the landowner or person in possession of the land pursuant to a lease, if present, shall determine when construction should not proceed in a given area due to wet conditions. The county inspector shall have the sole authority to determine whether construction should be halted due to wet conditions. Construction in wet soil conditions shall not commence or continue at times when or locations where the passage of heavy construction equipment may cause rutting to the extent that the topsoil and subsoil are mixed or underground drainage structures may be damaged. To facilitate construction in wet soils, the pipeline company may elect to remove and stockpile the topsoil from the traveled way, install mats or padding, or use other methods acceptable to the county inspector. Topsoil removal, storage, and replacement shall comply with subrule 9.5(2).

9.5(13) Access to land. Nothing in this rule shall prohibit a landowner or person in possession of the land pursuant to a lease from having access to the property. A landowner or person in possession of the land pursuant to a lease shall not disrupt ongoing construction and shall not compromise the safety considerations of the construction. A landowner or person in possession of the land pursuant to a lease shall abide by any and all safety instructions established by the pipeline company during construction.

199—9.6(479,479B) Designation of a pipeline company point of contact for landowner inquiries or claims.

9.6(1) For each pipeline construction project subject to this chapter, the pipeline company shall designate a point of contact for inquiries or claims from affected persons. The designation shall include the name of an individual to contact and a toll-free telephone number, an email address, and an address through which that person can be reached. The pipeline company shall also provide the name of and contact information for the county inspector. This information shall be provided to all affected persons prior to commencement of construction. Any change in the point of contact shall be promptly communicated in writing to affected persons. A designated point of contact shall remain available for all affected persons for at least one year following project completion and for affected persons with unresolved damage claims until such time as those claims are settled.

9.6(2) If requested by an affected person, any notice required to be given to the county inspector shall also be given to the affected person.

199—9.7(479,479B) Separate agreements. This chapter does not preclude the application of provisions for protecting or restoring property that are different from those contained in this chapter, or in a land restoration plan, which are contained in easements or other agreements independently executed by the pipeline company

and the landowner. The alternative provision shall not be inconsistent with state law or these rules. The agreement shall be in writing, and the pipeline company shall provide a copy to the county inspector and the board.

199—9.8(479,479B) Notice of violation and halting construction.

9.8(1) *Notice of violation.* If the county inspector identifies a violation of the standards adopted in this chapter, Iowa Code section 479.29 or 479B.20, or a separate agreement between the pipeline company and the landowner, the county inspector shall give verbal notice, followed by written notice, to the pipeline company and the pipeline company's contractor and require the pipeline company to take corrective action.

9.8(2) *Halting construction.* A county inspector may temporarily halt construction at the location of the dispute if construction is not in compliance with the standards adopted in this chapter, the land restoration plan, or the terms of an independent agreement between the pipeline company and landowner regarding land restoration or line location until the county inspector consults with a supervisor of the pipeline company or contractor. If, after consultation with a supervisor of the pipeline company or contractor, agreement on corrective action to address the violation cannot be reached, the county inspector may submit a request to the county board of supervisors for resolution of the issue. Construction may ~~not~~ resume at the disputed location after either (1) ~~until~~ the county inspector and supervisor of the pipeline company reach an agreement on a resolution or (2) where the board of supervisors has been contacted, after the board of supervisors has responded or after one business day after contact by the county inspector. If a resolution is not reached, construction may continue; however, the pipeline company will be responsible for any damages or for correcting any violation.

199—9.9(479,479B) Enforcement. A pipeline company shall fully cooperate with county inspectors in the performance of their duties under Iowa Code sections 479.29 and 479B.20, including giving proper notice before staking, clearing, boring, topsoil removal and stockpiling, trenching, tile marking, silt screening, tile repair or backfilling, decompaction, cleanup, restoration, or testing of any easement. The pipeline company shall pay the reasonable costs for any work provided during the pipeline construction by the county inspector. If the pipeline company or its contractor does not comply with the requirements of Iowa Code section 479.29 or 479B.20, with the land restoration plan, or with an independent agreement on land restoration or line location, the county board of supervisors may petition the utilities board for an order requiring corrective action to be taken. The county board of supervisors may also file a complaint with the board seeking imposition of civil penalties.

199—9.10(479,479B) Project completion. The county inspector for each county affected by the pipeline project shall recommend to the county board of supervisors that the pipeline project be considered complete upon completion of restoration of all affected agricultural lands and 70 percent growth is established in locations requiring seeding after receiving written notification by the pipeline company to the same effect. The county board of supervisors shall determine whether the project is completed.

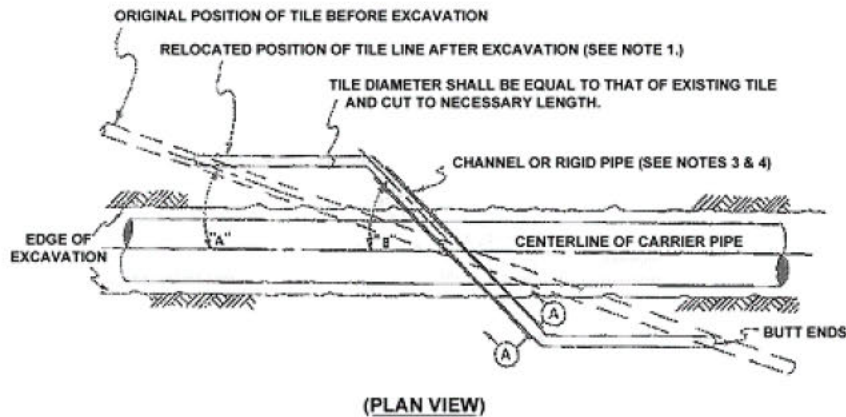
199—9.11(479,479B) Document submittal. Once a project is completed, project documents shall be submitted as follows:

9.11(1) *Document turnover.* The county inspector shall submit to the county board of supervisors and the pipeline company copies of inspection reports; tile reports and maps; punch lists; notice of violation documents; decompaction agreements; separate agreements, including those that excuse the pipeline company from certain construction responsibilities; and landowner agreements. The documents shall also be available for inspection by the board or an affected person upon request.

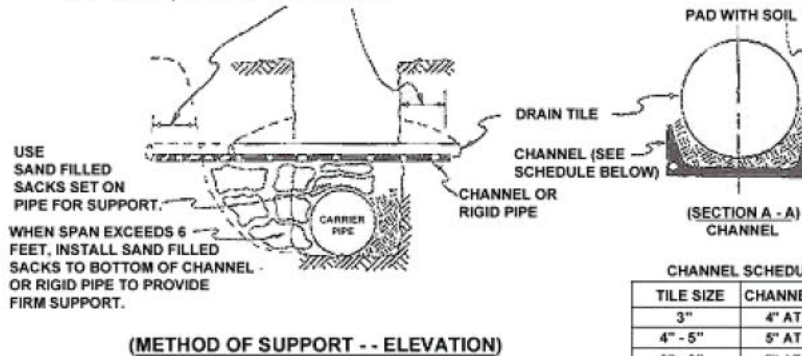
9.11(2) *As-built drawings.* The pipeline company shall provide the county inspector and affected landowners with copies of pipe alignment as-built drawings and underground drain tile as-built drawings, including the Global Positioning System location of drain tile.

Drawing No.IUB PL-1

RESTORATION OF DRAIN TILE



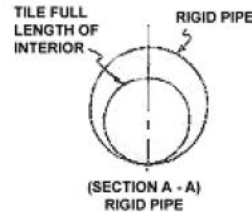
2'0" MINIMUM LENGTH OF CHANNEL OR RIGID PIPE SUPPORT ON SOLID SOIL, EACH SIDE OF EXCAVATION.



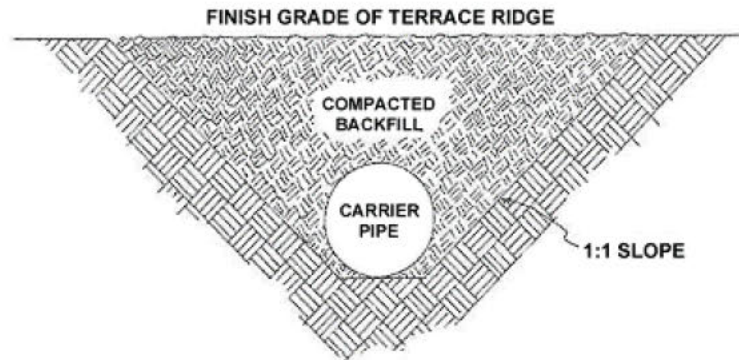
CHANNEL SCHEDULE	
TILE SIZE	CHANNEL SIZE
3"	4" AT 5.4#
4" - 5"	5" AT 6.7#
6" - 9"	7" AT 9.8#
10" & LARGER	10" AT 15.3#

NOTES:

1. TILE SHALL BE RELOCATED AS SHOWN WHEN ANGLE "A" BETWEEN PIPELINE AND ORIGINAL TILE IS LESS THAN 20° UNLESS OTHERWISE AGREED TO BY LANDOWNER AND COMPANY.
2. ANGLE "B" SHALL BE 45° FOR USUAL WIDTHS OF TRENCH. FOR EXTRA WIDTHS, IT MAY BE GREATER.
3. DIAMETER OF RIGID PIPE SHALL BE OF ADEQUATE SIZE TO ALLOW FOR THE INSTALLATION OF THE TILE FOR THE FULL LENGTH OF THE RIGID PIPE.
4. OTHER METHODS OF SUPPORTING DRAIN TILE MAY BE USED IF THE ALTERNATE PROPOSED IS EQUIVALENT IN STRENGTH TO THE CHANNEL SECTIONS SHOWN AND IF APPROVED BY THE LANDOWNER.



RESTORATION OF TERRACE



NOTE:

COMPACTION OF BACKFILL TO BE EQUAL TO THAT OF THE UNDISTURBED ADJACENT SOIL.

IUB PL-2

CHAPTER 9

RESTORATION OF AGRICULTURAL LANDS DURING AND AFTER PIPELINE CONSTRUCTION

199—9.1(479,479B) General information.

9.1(1) Authority and purpose. The rules in this chapter are adopted by the Iowa utilities board pursuant to the authority granted to the board in Iowa Code sections 479.29 and 479B.20 to establish standards for the restoration of agricultural lands during and after pipeline construction. These rules constitute the minimum standards for restoration of agricultural lands disturbed by pipeline construction. These rules do not apply to land located within city boundaries, unless the land is used for agricultural purposes, or to interstate natural gas pipelines.

When a project-specific land restoration plan is required pursuant to Iowa Code section 479.29(9) or 479B.20(9), following notice and comment, the board may impose additional or more stringent standards as necessary to address issues specific to the nature and location of the particular pipeline project. Where a project-specific land restoration plan is not needed pursuant to Iowa Code section 479.29(9) or 479B.20(9), the rules in this chapter shall constitute the minimum land restoration standards for any pipeline construction.

9.1(2) Definitions. The following words and terms, when used in these rules, have the meanings indicated below:

“Affected person” means any person with a legal right or interest in the property, including, but not limited to, a landowner, a contract purchaser of record, a person possessing the property under a lease, a record lienholder, and a record encumbrancer of the property.

“Agricultural land” means any land devoted to agricultural use, including, but not limited to, land used for crop production, cleared land capable of being cultivated, hay land, pasture land, managed woodlands and woodlands of commercial value, truck gardens, farmsteads, commercial agricultural-related facilities, feedlots, rangeland, livestock confinement systems, land on which farm buildings are located, and land used to implement management practices and structures for the improvement or conservation of soil, water, air, and related plant and animal resources.

“Board” means the utilities board created in Iowa Code Chapter 474.

“County inspector” means a professional engineer who is licensed under Iowa Code chapter 542B, who is familiar with agricultural and environmental inspection requirements and who is designated by the county board of supervisors to be responsible for completing an on-site inspection for compliance with this chapter and Iowa Code chapters 479 and 479B.

“Drainage structures” or *“underground improvements”* means any permanent structure used for draining agricultural lands, including tile systems and buried terrace outlets.

“Hazardous liquid” means crude oil, refined petroleum products, liquefied petroleum gases, anhydrous ammonia, liquid fertilizers, liquefied carbon dioxide, alcohols, and coal slurries.

“Person” means individual, corporation, limited liability company, government or governmental subdivision or agency, business trust, estate, trust, partnership or association, or any other legal entity as defined in Iowa Code section 4.1(20).

“Pipeline” means any pipe, pipes, or pipelines used for the transportation or transmission of any solid, liquid, or gaseous substance, except water, within or through Iowa.

“Pipeline company” means any person engaged in or organized for the purpose of owning, operating, or controlling pipelines.

“Pipeline construction” means activity associated with installation, relocation, replacement, removal, or operation or maintenance of a pipeline that disturbs agricultural land, but does not include work performed during an emergency, tree clearing, or topsoil surveying completed on land under easement with written approval from the landowner. Emergency means a condition involving clear and immediate danger to life, health, or essential services, or a risk of a potentially significant loss of property. When the emergency condition ends, pipeline construction will be in accordance with these rules.

“Proper notice to the county inspector” means that the pipeline company and its contractors shall keep the county inspector continually informed of the work schedule and any changes to the schedule, and shall provide at least 24 hours’ written notice before commencing or continuing any construction activity to be inspected by the county inspector, including, but not limited to, right-of-way staking, clearing, boring, topsoil removal and

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stockpiling, trenching, tile marking, tile screening, tile repairs, backfilling, decompaction, cleanup, restoration, or testing at any project location. The pipeline company may request that the county inspector designate a person to receive such notices. If proper notice is given, construction may begin regardless of the county inspector's presence on the site.

"Soil conservation practices" means any land conservation practice recognized by federal or state soil conservation agencies, including, but not limited to, grasslands and grassed waterways, hay land planting, pasture, and tree plantings.

"Soil conservation structures" means any permanent structure recognized by federal or state soil conservation agencies, including, but not limited to, toe walls, drop inlets, grade control works, terraces, levees, and farm ponds.

"Surface drains" means any surface drainage system, such as shallow surface field drains, grassed waterways, open ditches, or any other conveyance of surface water.

"Till" means to loosen the soil in preparation for planting or seeding by plowing, chiseling, discing, or similar means. For the purposes of this chapter, agricultural land planted using no-till planting practices is also considered tilled.

"Topsoil" means the uppermost layer of the soil with the darkest color or the highest content of organic matter, generally referred to as the "A" horizon. In areas where the "A" horizon is determined by a certified professional soil scientist to be less than 12 inches, the topsoil depth shall include both the "A" and the "Bw" horizons as determined by the March 2017 United States Department of Agriculture Soil Survey Manual. Topsoil depth is to be determined under the supervision of a certified professional soil scientist.

"Underground storage" means storage of either natural gas or hazardous liquid in a subsurface stratum or formation of the earth.

"Wet conditions" means adverse soil conditions due to rain events, antecedent moisture, or ponded water, where the passage of construction equipment may cause rutting that mixes topsoil and subsoil, may prevent the effective removal or replacement of topsoil and subsoil, may prevent proper decompaction, or may damage underground tile lines.

199—9.2(479,479B) Filing of land restoration plans. Pursuant to Iowa Code sections 479.29 and 479B.20, a land restoration plan is required for any pipeline construction that requires a permit from the board and for any proposed amendment to an existing permit that involves pipeline construction, relocation, or replacement. The land restoration plan shall be filed with the appropriate petition and be identified as Exhibit I. For pipelines that do not need a permit from the board and that are constructed across agricultural land, the pipeline company shall have on file with the board a general land restoration plan covering pipelines that do not need a permit from the board.

9.2(1) Content of plan. A land restoration plan includes, but is not limited to, the following:

- a. A brief description of the purpose and nature of the pipeline construction project.
- b. A description of the sequence of events that will occur during pipeline construction.
- c. A description of how the pipeline company will comply with rules 199—9.4(479,479B) and 199—9.5(479,479B).
- d. The point of contact for landowner inquiries or claims as provided for in rule 199—9.5(479,479B).
- e. A unique identification number that follows a linearly sequential pattern on each parcel of land over which the pipeline will be constructed.

9.2(2) Plan variations. The board may by waiver allow variations from the requirements in this chapter if the pipeline company requesting a waiver is able to satisfy the standards set forth in rule 199—1.3(17A,474,476) and if the alternative methods proposed by the pipeline company would restore the land to a condition as good or better than provided for in this chapter.

9.2(3) Mitigation plans and agreements. Preparation of a separate land restoration plan may be waived by the board where a pipeline company enters into an agricultural impact mitigation plan or similar agreement with the appropriate agencies of the state of Iowa that satisfies the requirements of this chapter. If a mitigation plan or agreement is used to fully or partially meet the requirements of a land restoration plan, the statement or agreement shall be filed with the board and will be considered to be, or to be part of, the land restoration plan for purposes of this chapter.

199—9.3(479,479B) Procedure for review of plan.

9.3(1) *Timing.* The board will review the proposed land restoration plan, as established in rule 199—9.2(479,479B), at the same time it reviews the petition. Objections to the proposed plan may be filed as part of the permit proceeding. The pipeline company shall modify the plan as determined by the board.

9.3(2) *Distributing approved plan.* After the board has approved the plan as part of the board's review and approval of the petition, but prior to construction, the pipeline company shall provide copies of the final plan approved by the board to all landowners of property and persons in possession of the property under a lease that will be disturbed by the construction, the county board of supervisors in each county affected by the project, the county engineer of each affected county, and to the county inspector in each affected county.

199—9.4(479,479B) Staking and clearing of agricultural land.

9.4(1) *Easement staking.* The pipeline company shall allow the county inspector and the landowner to be present during the staking of the easement. Written notice of the staking shall be provided to the landowner and the county inspector in the same manner as provided for in proper notice to the county inspector. Pipeline construction is prohibited until seven days after the easement is staked unless the landowner waives the seven-day period after the easement staking has been completed. If proper notice is given, easement staking may begin regardless of the county inspector or landowner's presence on the site.

9.4(2) *Trees and brush.* If trees are to be removed from the easement, the pipeline company shall consult with the landowner to determine if there are trees of commercial or other value to the landowner.

a. If there are trees of commercial or other value to the landowner, the pipeline company shall allow the landowner the right to retain ownership of the trees with the disposition of the trees to be negotiated prior to commencement of land clearing, or if the landowner does not want to retain ownership of the trees, the pipeline company shall hire a forester with local expertise to appraise the commercial value of any timber to be cut for construction of the pipeline. The pipeline company shall compensate the landowner for the full appraised commercial value of any timber removed. The pipeline company shall remove all cleared trees and debris left on or adjacent to the easement.

b. If the trees to be cleared have been determined to have no commercial or other value to the landowner and there is no negotiated agreement between the pipeline company and the landowner for the disposition of the trees in advance of clearing of the easement, removal and disposal of the material shall be completed at the discretion of the pipeline company.

9.4(3) *Fencing.* The pipeline company may remove all field fences and gates, located within the pipeline company's easement, during clearing of the easement and may construct temporary fences and gates where necessary. Upon completion of the pipeline construction, the pipeline company shall — replace any temporary field fences or gates with permanent field fences or gates. The pipeline company and landowner may negotiate separate agreements regarding field fences and gates. If livestock is present, the pipeline company shall construct any temporary or permanent fences and gates in a manner which will contain livestock.

199—9.5(479,479B) Restoration of agricultural lands.**9.5(1) *Topsoil survey.***

a. Prior to the removal of any topsoil, the pipeline company conducts a topsoil survey to be performed under the supervision of a certified professional soil scientist across the full extent of the easement for any pipeline that requires a board permit. A minimum of three soil depths shall be physically measured in the field at each cross section as follows: (1) one on the left edge of the easement; (2) one at 15 feet of the centerline of the pipeline on the working side of the right-of-way; and (3) one on the right edge of the working easement. Cross sections shall be taken a minimum of every 500 linear feet for the full extent of the easement. Each parcel of land shall have a minimum of two cross sections.

b. The pipeline company shall provide the results of the topsoil survey to the county board of supervisors, county inspector, county engineer, and affected persons at least six weeks prior to commencing construction.

9.5(2) *Topsoil separation and replacement.*

a. Removal. Topsoil removal and replacement in accordance with this rule is required for any open excavation associated with pipeline construction unless otherwise provided in these rules. The actual depth of the topsoil, as determined by a topsoil survey, shall be stripped from the full extent of the easement. Topsoil

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shall also be removed and replaced in accordance with these rules at any location where land slope or contour is significantly altered to facilitate construction. Topsoil removal shall not occur during wet conditions.

b. Soil storage. The topsoil and subsoil shall be segregated, stockpiled, and preserved separately during subsequent construction operations. The stored topsoil and subsoil shall have sufficient separation to prevent mixing during the storage period. Topsoil shall not be used to construct field entrances or drives, or be otherwise removed from the property, without the written consent of the landowner. Topsoil shall not be stored or stockpiled at locations that will be used as a traveled way by construction equipment without the written consent of the landowner.

c. Stockpile stabilization. Topsoil stockpiles shall be stabilized with seeding and mulch within 14 calendar days of stockpiling. Between October 15 and March 15, soil tackifier shall be used in place of seeding and mulch.

d. Topsoil removal not required. Topsoil removal is not required where the pipeline is installed by plowing, jacking, boring, or other methods that do not require the opening of a trench. If provided for in a written agreement between the pipeline company and the landowner, topsoil removal is not required if the pipeline can be installed in a trench with a top width of 18 inches or less.

e. Backfill. The topsoil and subsoil shall be replaced in the reverse order in which they were excavated from the trench. The depth of the replaced topsoil shall conform as near as possible to the depth of topsoil that was removed. Where excavations are made for road, stream, drainage ditch, or other crossings, the original depth of topsoil shall be replaced as near as possible.

9.5(3) Pumping of water from open trenches.

a. In the event it becomes necessary to pump water from open trenches, the pipeline company shall pump the water in a manner that avoids damaging adjacent agricultural land. Damages from pumping water from trenches include, but are not limited to, inundation of crops and depositing of sediment in fields, pastures, and surface drains.

b. If water-related damages result from pumping water from trenches, the pipeline company shall either compensate the landowner for the damages or restore the land, pasture, surface drains, or similar land, to their preconstruction condition, at the landowner's discretion.

c. Written permission from the landowner is required before the pipeline company can pump water from trenches onto land outside of the pipeline company's easement.

d. All pumping of water shall comply with existing state drainage laws, local ordinances, and federal statutes.

9.5(4) Temporary and permanent repair of drain tile.

a. Pipeline clearance from drain tile. Where underground drain tile is encountered, the pipeline shall be installed in such a manner that the permanent tile repair can be installed with at least 12 inches of clearance from the pipeline.

b. Temporary repair. The following standards shall be used to determine if temporary repair of agricultural drainage tile lines encountered during pipeline construction is required.

(1) Any underground drain tile damaged, cut, or removed and found to be flowing or which subsequently begins to flow shall be temporarily repaired as soon as practicable, and the repair shall be maintained as necessary to allow for its proper function during construction of the pipeline. The temporary repairs shall be maintained in good condition until permanent repairs are made.

(2) Any underground drain tile damaged, cut, or removed and found to not be flowing shall have the upstream exposed tile line screened or otherwise protected to prevent the entry of foreign material and small animals into the tile system. The downstream tile line entrance shall be capped or filtered to prevent entry of mud or foreign material into the line if water level rises in the trench.

c. Marking. Any underground drain tile damaged, cut, or removed shall be marked by placing a highly visible flag in the trench spoil bank directly over or opposite such tile. This marker will remain until the tile has been permanently repaired and the repairs have been approved and accepted by the county inspector. If proper notice is given, construction may begin regardless of the county inspector's presence on the site.

d. Permanent repairs. Tile disturbed or damaged by pipeline construction shall be repaired to its original or better condition. Permanent repairs shall be completed within 14 days after the pipeline is installed in the trench and prior to backfilling of the trench over the tile line. The county inspector shall inspect each permanent repair for compliance with this chapter. If proper notice is given, construction shall not be delayed due to a

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county inspector's failure to be present on site. Permanent repair and replacement of damaged drain tile shall be performed in accordance with the following requirements:

(1) All damaged, broken, or cracked tile shall be removed.

(2) Only unobstructed tile shall be used for replacement.

(3) The tile furnished for replacement purposes shall be of a quality, size, and flow capacity at least equal to that of the tile being replaced.

(4) Tile shall be replaced using a laser transit, or similar instrument or method, to ensure that the tile's proper gradient and alignment are restored, except where relocation or rerouting is required for angled crossings. Tile lines at a sharp angle to the trench shall be repaired in the manner shown on Drawing No. IUB PL-1 at the end of this chapter.

(5) The replaced tile shall be firmly supported to prevent loss of gradient or alignment due to soil settlement. The method used shall be comparable to that shown on Drawing No. IUB PL-1 at the end of this chapter.

(6) Before completing permanent tile repairs, all tile lines shall be examined visually by televising on both sides of the trench over the full extent of the working easement to check for tile that might have been damaged or misaligned by construction equipment. If tile lines are found to be damaged, they must be repaired to operate as well after construction as before construction.

e. Inspection. Prior to backfilling of the applicable trench area, each permanent tile repair shall be inspected for compliance by the county inspector. If proper notice is given, construction may begin regardless of the county inspector's presence on site prior to backfilling.

f. Backfilling. The backfill surrounding the permanently repaired drain tile shall be completed at the time of the repair and in a manner that ensures that any further backfilling will not damage or misalign the repaired section of the tile line. The county inspector shall inspect that backfill for compliance with this chapter. If proper notice is given, construction may begin regardless of the county inspector's presence on the site.

g. Subsurface drainage. Subsequent to pipeline construction and permanent repair, if it becomes apparent the tile line in the area disturbed by construction is not functioning correctly or that the land adjacent to the pipeline is not draining properly, which can reasonably be attributed to the pipeline construction, the pipeline company shall make further repairs or install additional tile as necessary to restore subsurface drainage.

9.5(5) Removal of rocks and debris from the easement.

a. Removal. The topsoil, when backfilled, and the easement area shall be free of all rock larger than three inches in average diameter not native to the topsoil prior to excavation. Where rocks over three inches in size are present, their size and frequency shall be similar to adjacent soil not disturbed by construction. The top 24 inches of the trench backfill shall not contain rocks in any greater concentration or size than exist in the adjacent natural soils. Consolidated rock removed by blasting or mechanical means shall not be placed in the backfill above the natural bedrock profile or above the frost line. In addition, the pipeline company shall examine areas adjacent to the easement and along access roads and shall remove any large rocks or debris that may have rolled or blown from the right-of-way or fallen from vehicles.

b. Disposal. Rock that cannot remain in or be used as backfill shall be disposed of at locations and in a manner mutually satisfactory to the company and the landowner. Soil from which excess rock has been removed may be used for backfill. All debris attributable to the pipeline construction and related activities shall be removed and disposed of properly. For the purposes of this rule, debris includes spilled oil, grease, fuel, or other petroleum or chemical products. Such products and any contaminated soil shall be removed for proper disposal or treated by appropriate in situ remediation.

9.5(6) Restoration after soil compaction and rutting.

a. Agricultural restoration. Agricultural land, including off right-of-way access roads traversed by heavy construction equipment that will be removed, shall be deep tilled to alleviate soil compaction upon completion of construction on the property. If the topsoil was removed from the area to be tilled, the tillage shall precede replacement of the topsoil. At least three passes with the deep tillage equipment shall be made. Tillage shall be at least 18 inches deep in land used for crop production and 12 inches deep on other lands and shall be performed under soil moisture conditions that result in a maximum standard penetration test (SPT) reading of 300 psi pursuant to ASTM D1586-11 performed by a qualified person. Decompaction shall not occur in wet conditions. Upon agreement, this tillage may be performed by the landowners or tenants using their own equipment.

b. Rutted land restoration. Rutted land shall be graded and tilled until restored as near as practical to its

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preconstruction condition. Rutting shall be remedied before any topsoil that was removed is replaced.

9.5(7) Restoration of terraces, waterways, and other erosion control structures. Existing soil conservation practices and structures damaged by the construction of a pipeline shall be restored to the elevation and grade existing prior to the time of pipeline construction. Any drain tiles or flow diversion devices impacted by pipeline construction shall be repaired or modified as needed. Soil used to repair embankments intended to retain water shall be well compacted. Disturbed vegetation shall be reestablished, including a cover crop when appropriate. Restoration of terraces shall be in accordance with Drawing No. IUB PL-2 at the end of this chapter. The county inspector shall inspect restoration of terraces, waterways, and other erosion control structures for compliance with this chapter. If proper notice is given, construction may begin regardless of the county inspector's presence on the site.

9.5(8) Revegetation of untilled land.

a. Crop production. Agricultural land not in row crop or small grain production at the time of construction, including hay ground and land in conservation or set-aside programs, shall be reseeded, including use of a cover crop when appropriate, following completion of deep tillage and replacement of the topsoil. The seed mix used shall restore the original or a comparable ground cover unless otherwise requested by the landowner. If the land is to be placed in crop production the following year, paragraph 9.5(9) "b" applies.

b. Delayed crop production. Agricultural land used for row crop or small grain production which will not be planted in that calendar year due to the pipeline construction shall be seeded with an appropriate cover crop following replacement of the topsoil and completion of deep tillage. However, cover crop seeding may be delayed if construction is completed too late in the year for a cover crop to become established and in such instances is not required if the landowner or tenant proposes to till the land the following year. The landowner may request ground cover where the construction is completed too late in the year for a cover crop to become established to prevent soil erosion.

c. Weed control. On any easement, including, but not limited to, construction easements and easements relating to valve sites, metering stations, and compression stations, the pipeline company shall provide for weed control in a manner that prevents the spread of weeds onto adjacent lands used for agricultural purposes. Spraying shall be done by a pesticide applicator that is appropriately licensed for spraying of pesticide in Iowa. If the pipeline company fails to control weeds within 45 days after receiving written notice from the landowner, the pipeline company shall be responsible for reimbursing all reasonable costs of weed control incurred by owners of adjacent land.

9.5(9) Future installation of drain tile or soil conservation practices and structures.

a. Future drain tile. The pipeline company shall consult with affected persons regarding plans for future drain tile installation. Where an affected person provides the pipeline company with written plans prepared by a qualified tile technician for future drain tile improvements before an easement is secured, the pipeline shall be installed at a depth which will allow proper clearance between the pipeline and the proposed future tile installation.

b. Future practices and structures. The pipeline company shall consult with any affected person's plans for future use or installation of soil conservation practices or structures. Where an affected person provides the pipeline company with a design for such practice or structure prepared by a qualified technician before an easement is secured, the pipeline shall be installed at a depth that will allow for future installation of the planned soil conservation practice or structure and that will retain the integrity of the pipeline.

9.5(10) Restoration of land slope and contour. Upon completion of construction, the slope, contour, grade, and drainage pattern of the disturbed area shall be restored as near as possible to its preconstruction condition. However, the trench may be crowned to allow for anticipated settlement of the backfill. Excessive or insufficient settlement of the trench area, which visibly affects land contour or undesirably alters surface drainage, shall be remediated by the pipeline company by means such as regrading and, if necessary, import of appropriate fill material. Disturbed areas in which erosion causes formation of rills or channels, or areas of heavy sediment deposition, shall be regraded as needed. On steep slopes, methods such as sediment barriers, slope breakers, or mulching shall be used as necessary to control erosion until vegetation can be reestablished. The county inspector shall inspect restoration of land slope and contour for compliance with this chapter.

9.5(11) Restoration of areas used for field entrances or temporary roads. Upon completion of construction and land restoration, field entrances or temporary roads built as part of the construction project shall be removed

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and the land made suitable for return to its previous use. Areas affected shall be regraded as required by subrule 9.5(10) and deep tilled as required by subrule 9.5(6). If by agreement, or at landowner request, and subject to any necessary approval by local public road authorities, a field entrance or road is to be left in place, it shall be left in a graded and serviceable condition. The county inspector shall inspect restoration of areas used for field entrances or temporary roads for compliance with this chapter.

9.5(12) *Construction in wet conditions.* The county inspector, in consultation with the pipeline company and the landowner or person in possession of the land pursuant to a lease, if present, shall determine when construction should not proceed in a given area due to wet conditions. The county inspector shall have the sole authority to determine whether construction should be halted due to wet conditions. Construction in wet soil conditions shall not commence or continue at times when or locations where the passage of heavy construction equipment may cause rutting to the extent that the topsoil and subsoil are mixed or underground drainage structures may be damaged. To facilitate construction in wet soils, the pipeline company may elect to remove and stockpile the topsoil from the traveled way, install mats or padding, or use other methods acceptable to the county inspector. Topsoil removal, storage, and replacement shall comply with subrule 9.5(2).

9.5(13) *Access to land.* Nothing in this rule shall prohibit a landowner or person in possession of the land pursuant to a lease from having access to the property. A landowner or person in possession of the land pursuant to a lease shall not disrupt ongoing construction and shall not compromise the safety considerations of the construction. A landowner or person in possession of the land pursuant to a lease shall abide by any and all safety instructions established by the pipeline company during construction.

199—9.6(479,479B) Designation of a pipeline company point of contact for landowner inquiries or claims.

9.6(1) For each pipeline construction project subject to this chapter, the pipeline company shall designate a point of contact for inquiries or claims from affected persons. The designation shall include the name of an individual to contact and a toll-free telephone number, an email address, and an address through which that person can be reached. The pipeline company shall also provide the name of and contact information for the county inspector. This information shall be provided to all affected persons prior to commencement of construction. Any change in the point of contact shall be promptly communicated in writing to affected persons. A designated point of contact shall remain available for all affected persons for at least one year following project completion and for affected persons with unresolved damage claims until such time as those claims are settled.

9.6(2) If requested by an affected person, any notice required to be given to the county inspector shall also be given to the affected person.

199—9.7(479,479B) Separate agreements. This chapter does not preclude the application of provisions for protecting or restoring property that are different from those contained in this chapter, or in a land restoration plan, which are contained in easements or other agreements independently executed by the pipeline company and the landowner. The alternative provision shall not be inconsistent with state law or these rules. The agreement shall be in writing, and the pipeline company shall provide a copy to the county inspector and the board.

199—9.8(479,479B) Notice of violation and halting construction.

9.8(1) *Notice of violation.* If the county inspector identifies a violation of the standards adopted in this chapter, Iowa Code section 479.29 or 479B.20, or a separate agreement between the pipeline company and the landowner, the county inspector shall give verbal notice, followed by written notice, to the pipeline company and the pipeline company's contractor and require the pipeline company to take corrective action.

9.8(2) *Halting construction.* A county inspector may temporarily halt construction at the location of the dispute if construction is not in compliance with the standards adopted in this chapter, the land restoration plan, or the terms of an independent agreement between the pipeline company and landowner regarding land restoration or line location until the county inspector consults with a supervisor of the pipeline company or contractor. If, after consultation with a supervisor of the pipeline company or contractor, agreement on corrective action to address the violation cannot be reached, the county inspector may submit a request to the county board of supervisors for resolution of the issue. Construction may ~~not~~ resume at the disputed location after either (1) ~~until~~ the county inspector and supervisor of the pipeline company reach an agreement on a resolution or (2)

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where the board of supervisors has been contacted, after the board of supervisors has responded or after one business day after contact by the county inspector. If a resolution is not reached, construction may continue; however, the pipeline company will be responsible for any damages or for correcting any violation.

199—9.9(479,479B) Enforcement. A pipeline company shall fully cooperate with county inspectors in the performance of their duties under Iowa Code sections 479.29 and 479B.20, including giving proper notice before staking, clearing, boring, topsoil removal and stockpiling, trenching, tile marking, silt screening, tile repair or backfilling, decompaction, cleanup, restoration, or testing of any easement. The pipeline company shall pay the reasonable costs for any work provided during the pipeline construction by the county inspector. If the pipeline company or its contractor does not comply with the requirements of Iowa Code section 479.29 or 479B.20, with the land restoration plan, or with an independent agreement on land restoration or line location, the county board of supervisors may petition the utilities board for an order requiring corrective action to be taken. The county board of supervisors may also file a complaint with the board seeking imposition of civil penalties.

199—9.10(479,479B) Project completion. The county inspector for each county affected by the pipeline project shall recommend to the county board of supervisors that the pipeline project be considered complete upon completion of restoration of all affected agricultural lands and 70 percent growth is established in locations requiring seeding after receiving written notification by the pipeline company to the same effect. The county board of supervisors shall determine whether the project is completed.

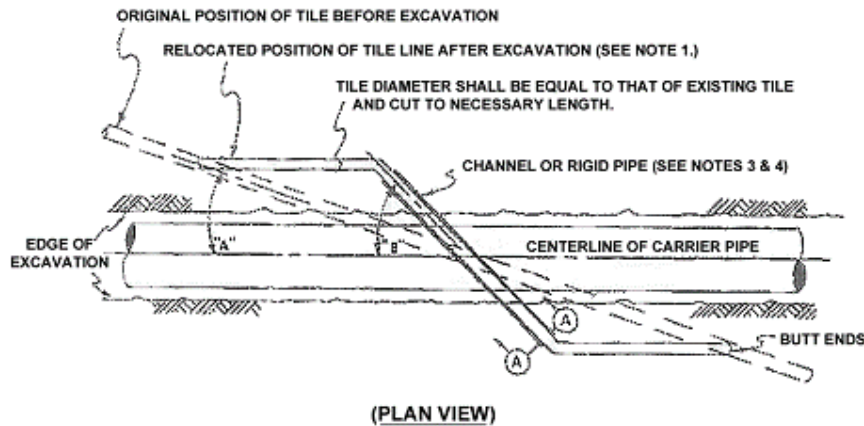
199—9.11(479,479B) Document submittal. Once a project is completed, project documents shall be submitted as follows:

9.11(1) Document turnover. The county inspector shall submit to the county board of supervisors and the pipeline company copies of inspection reports; tile reports and maps; punch lists; notice of violation documents; decompaction agreements; separate agreements, including those that excuse the pipeline company from certain construction responsibilities; and landowner agreements. The documents shall also be available for inspection by the board or an affected person upon request.

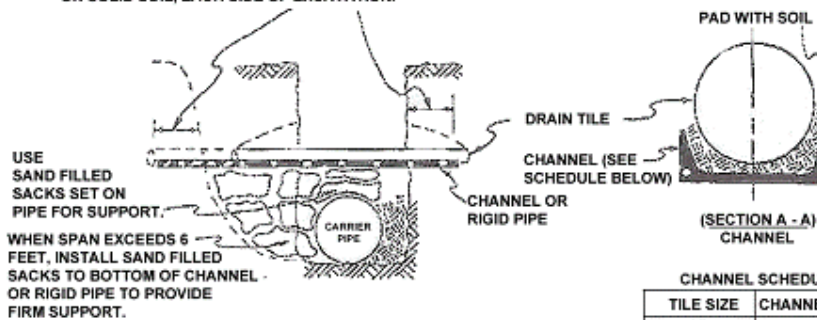
9.11(2) As-built drawings. The pipeline company shall provide the county inspector and affected landowners with copies of pipe alignment as-built drawings and underground drain tile as-built drawings, including the Global Positioning System location of drain tile.

Drawing No.IUB PL-1

RESTORATION OF DRAIN TILE



20" MINIMUM LENGTH OF CHANNEL OR RIGID PIPE SUPPORT ON SOLID SOIL, EACH SIDE OF EXCAVATION.



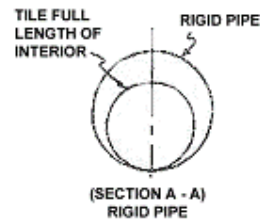
(METHOD OF SUPPORT -- ELEVATION)

CHANNEL SCHEDULE

TILE SIZE	CHANNEL SIZE
3"	4" AT 5.4#
4" - 5"	5" AT 6.7#
6" - 9"	7" AT 9.8#
10" & LARGER	10" AT 15.3#

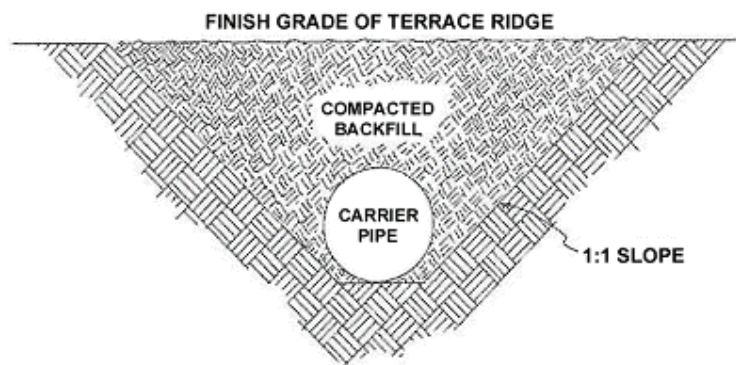
NOTES:

1. TILE SHALL BE RELOCATED AS SHOWN WHEN ANGLE "A" BETWEEN PIPELINE AND ORIGINAL TILE IS LESS THAN 20° UNLESS OTHERWISE AGREED TO BY LANDOWNER AND COMPANY.
2. ANGLE "B" SHALL BE 45° FOR USUAL WIDTHS OF TRENCH. FOR EXTRA WIDTHS, IT MAY BE GREATER.
3. DIAMETER OF RIGID PIPE SHALL BE OF ADEQUATE SIZE TO ALLOW FOR THE INSTALLATION OF THE TILE FOR THE FULL LENGTH OF THE RIGID PIPE.
4. OTHER METHODS OF SUPPORTING DRAIN TILE MAY BE USED IF THE ALTERNATE PROPOSED IS EQUIVALENT IN STRENGTH TO THE CHANNEL SECTIONS SHOWN AND IF APPROVED BY THE LANDOWNER.



Drawing No.IUB PL-2

RESTORATION OF TERRACE



NOTE:

COMPACTION OF BACKFILL TO BE EQUAL TO THAT OF THE UNDISTURBED ADJACENT SOIL.

IUB PL-2