

APPENDIX G-4

Agricultural Impact Mitigation Plan – Michigan



ROVER PIPELINE
An ENERGY TRANSFER Company

ROVER PIPELINE LLC

Rover Pipeline Project

AGRICULTURAL IMPACT MITIGATION PLAN

MICHIGAN

April 2015

AGRICULTURAL IMPACT MITIGATION PLAN ROVER PIPELINE PROJECT

Rover Pipeline (Rover) is proposing to implement and execute the following measures as it constructs the Rover Pipeline Project (Project) across agricultural land in Lenawee, Washtenaw, Livingston, Shiawassee, Genesee, Oakland, Lapeer, Macomb, and St. Clair counties, Michigan as described in Rover's application to the Federal Energy Regulatory Commission (FERC) under Section 7(c) of the Natural Gas Act for a Certificate of Public Convenience and Necessity (Certificate) authorizing the construction and operation of the new pipeline system. The portion of the Rover natural gas pipeline system subject to this Plan in the State of Michigan is referred to as the Market Segment, which is a 42-inch diameter natural gas pipeline.

The mitigative actions and measures outlined in this Plan will serve to minimize the negative impacts that may occur due to pipeline construction. The construction standards described below apply to construction activities proposed to occur on agriculture land in active crop production and pasture land.

Introduction

Rover will retain qualified professionals on each work phase of the Project. The qualified professionals may be engineers, soil scientists, agronomists and/or construction and environmental inspectors as appropriate during each phase of the Project. This shall include initial Plan development, construction, initial restoration, and post-construction monitoring and follow-up restoration. The qualified professionals shall act to ensure that the provisions set forth in this Plan will be adhered to in good faith by Rover and by the pipeline installation contractor(s), and that all Plans protect the resources of both the Landowner and Rover.

The qualified professionals shall assist with the collection and analyzing of site-specific agricultural information gathered for the Plan development by Rover. This information will be obtained through field review as well as direct contact with affected Landowners and farm operators, local county Conservation Districts (CDs), Agricultural Extension Agents, Farm Bureau, and others.

Rover shall also retain Inspectors that will work with the appropriate contractors throughout the construction phase and through other phases as needed. The Inspector will also maintain contact with the affected Landowners and farm Tenants in conjunction with Rover right-of-way agents, as well as local or county resource specialists concerning farm resources and management matters pertinent to the agricultural operations and the site-specific implementation of this Plan.

Rover will employ Inspectors that are at a minimum thoroughly familiar with the following:

- This Plan,
- Rover Plans and Procedures,
- Pipeline Construction Sequences and Processes,
- All aspects of soil and water conservation, and

- Michigan and/or local farming operations.

The Inspector will possess:

Good oral and written communication skills, and the ability to work closely with the Landowners, Tenants and Project sponsor.

Rover will employ a minimum of one Inspector per construction (installation) spread.

When permitted by law and contract, Rover shall encourage its pipeline contractor(s) to use, where and if available, local land improvement and drainage tile contractors to redesign, reconstruct, and/or repair any subsurface drain tile lines and U.S. Department of Agriculture (USDA), Michigan Department of Agriculture and Rural Development (MDARD), and Conservation Districts (CDs) approved and installed conservation practices that are affected by the pipeline installation. Often, the local contractors have installed the Landowner's drain tile system and can have valuable knowledge as to the location, depth of cover, appurtenances, and any other factors affecting the tile operation. The drain tile contractor(s) shall follow the attached construction specifications.

Unless the easement or other Plan between the Landowner and Rover provides to the contrary, the actions specified in the pipeline standards and construction specifications contained in this Plan will be implemented in accordance with the conditions listed below.

Conditions of the Plan

The mitigative actions specified in the construction standards and policies set forth below will be implemented in accordance with the conditions listed below:

- A. All mitigative actions are subject to modification through negotiation by Landowners and a representative of Rover, provided such changes are negotiated in advance of any construction, maintenance, or repairs.
- B. Rover may negotiate with Landowners to carry out the mitigative actions that Landowners wish to perform themselves.
- C. All mitigative actions employed by Rover, unless otherwise specified in these construction standards and policies or in an easement negotiated with an individual Landowner, will be implemented within 120 days of completion of the pipeline facilities on any affected property, weather and landowner permitting. Temporary repairs will be made by Rover during the construction process as needed to minimize the risk of additional property damage that may result from an extended construction time period. If weather delays the completion of any mitigative action beyond the 120 day period, Rover will provide the affected Landowner(s) with a written estimate of the time needed for completion of the mitigative action.
- D. All mitigative actions will extend to associated future construction, maintenance and repairs by Rover.

- E. Every effort will be made by Rover to determine all affected Tenants along the route of the pipeline. Rover will endeavor to keep the Tenants informed of the Project's status, meetings and other factors that may have an impact upon their farming operations.

Rover recognizes the time and potential years of investment tenants have in enhancing and maintaining the productive capacity of the land they rent. Their input, advice and cooperation concerning repair and remediation carries due consideration along with input gathered from the property's absentee landowner.

- F. Prior to the construction of the pipeline, Rover shall provide each Landowner or Landowner's Designate and Tenant with a telephone number and address which can be used to contact Rover, both during and following the completion of construction, regarding the work that was performed on their property or any other construction-related matter. Rover shall respond promptly to Landowner's or Landowner's Designate and Tenant's telephone calls and correspondence.

- G. Rover agrees to include this Plan as part of its submissions to the FERC.

- H. Rover agrees to include a statement for its adherence to the construction standards and policies in any environmental assessment and/or environmental impact statement that may be prepared on the Project.

- I. Rover will implement all mitigative actions contained in this Plan to the extent that they do not conflict with the requirements of applicable federal, state and local rules and regulations and other permits and approvals that are obtained by Rover for the Project.

- J. Each mitigative action contained in this Plan will be implemented to the extent that such mitigative action is not determined to be unenforceable by reason of the mitigative actions approved by, or other requirements of, the FERC Certificate issued for the Project.

Definitions

Agricultural land - Land used for cropland, hayland, pasture land, managed woodlands, truck gardens, farmsteads, commercial ag-related facilities, feedlots, livestock confinement systems, land on which farm buildings are located, and land in government set-aside programs.

Best Management Practice (BMP) - Any structural, vegetative or managerial practice used to prevent, minimize or treat soil erosion.

Rover - Rover and any contractor or sub-contractor in the employ of Rover for the purpose of completing construction of the pipeline or any mitigative actions covered by this Plan.

Conservation Practice - Any installation or measure used to protect or improve natural resources and environmental quality, for which standards and specifications for installation, operation, or maintenance have been developed.



- Cropland - Land used for growing row crops, small grains, hay, muck crops, vegetables, fruits, vineyards, orchards, nuts, nursery stock, and Christmas trees; includes land which was formerly used as cropland, but is currently in a government set-aside program and pastureland comprised of prime farmland.
- Drainage Tile - Artificial subsurface drainage system including, but not limited to, clay and concrete tile, vitrified sewer tile, corrugated plastic tubing, and stone drains.
- Landowner - Person(s) holding legal title to property on the pipeline route from whom Rover is seeking, or has obtained, a temporary or permanent easement, or any person(s) legally authorized by a landowner to make decisions regarding the mitigation or restoration of agricultural impacts to such landowner's property.
- Landowner's Designate - Any person(s) legally authorized by a Landowner to make decisions regarding the mitigation or restoration of agricultural impacts to such Landowner's property.
- Pipeline - The natural gas pipelines and related appurtenances located in Lenawee, Washtenaw, Livingston, Shiawassee, Genesee, Oakland, Lapeer, Macomb, and St. Clair counties, Michigan, as described in Rover's application to the Federal Energy Regulatory Commission (FERC) under Section 7(c) of the Natural Gas Act for a Certificate of Public Convenience and Necessity authorizing the construction and operation of the new pipeline system.
- Prime farmland - Agricultural land comprised of soils that are defined by the USDA Natural Resources Conservation Service as being "prime" soils (generally considered the most productive soils with the least input of nutrients and management).
- Right-of-way - The permanent and temporary easements that Rover acquires for the purpose of constructing and operating the pipeline.
- Surface Drains - Any surface drainage system such as shallow surface field drains, grassed waterways, open ditches, or any conservation practice installed as part of a USDA, MDARD, or CD soil and water conservation plan..
- Tenant - Any person lawfully residing on or leasing/renting of the land.
- Topsoil - The uppermost layer of the soil that has the darkest color or the highest content of organic matter, more specifically defined as the "A" horizon. The surface layer of the soil that has the darkest color or the highest content of organic matter (as defined in the USDA County Soil Survey and verified with samples as stipulated under 2.A below).

Construction Standards and Policies

1. Pipeline Depth

- A. Except for aboveground piping facilities, such as mainline block valves, tap valves, meter stations, etc., the pipeline will be buried with:
 - 1. a minimum of 4 feet of top cover where it crosses agricultural land.
 - 2. a minimum of 4 feet of top cover where it crosses pasture land.
 - 3. a minimum of 3 feet of top cover where it crosses wooded/brushy land.
 - 4. a minimum of 5 feet of cover where it crosses surface drains, diversions, grassed waterways, open ditches and streams.
- B. Notwithstanding the foregoing, in those areas where (i) rock in its natural formation and/or (ii) a continuous strata of gravel exceeding 200 feet in length is encountered, the minimum top cover will be 30 inches.
- C. When the pipeline requires weights to keep it from floating, the pipeline and weight will be buried deep enough to maintain the depth of top cover as specified in 1.A. above.

2. Topsoil Replacement

- A. In agricultural land, the topsoil depth shall be determined by a properly qualified soil scientist or soil technician who will set stakes or flags every 200 feet along the right-of-way identifying the depth of topsoil to be removed. As an alternative, Rover may depict topsoil depths on alignment sheets or table based on published county-level soil survey information.
- B. The actual depth of the topsoil, no less than 12 inches or in accordance with site-specific agreements with the landowner, or in instances where there is less than 12-inch of topsoil, the full depth of topsoil will first be stripped from the area to be excavated above the pipeline and from the adjacent subsoil storage area. The topsoil will be stored in a windrow parallel to the pipeline trench in such a manner that it will not become intermixed with subsoil materials. Topsoil may be stored at either edge of the right-of-way, but not intermixed with subsoil materials.
- C. Where topsoil cannot be stripped off a parallel pipeline easement an organic physical barrier (such as straw) or an approved geotextile material will be placed on the surface of the undisturbed topsoil prior to placement of the subsoil.
- D. In certain circumstances, topsoil may be stripped from the full width of the construction easement (including the working side or travel lane) to prevent equipment traffic from mixing topsoil with the subsoil. An additional 25 feet of construction easement may be required for the additional topsoil storage.



- E. Subsoil material that is removed from the trench will be placed in a windrow parallel to the pipeline trench that is separate from the topsoil windrow(s).
- F. In circumstances where the subsoil has significant productivity characteristics when compared to the underlying parent material, a triple-lift method will be used to segregate and stockpile these layers to maintain productivity.
- G. In backfilling the trench, the stockpiled subsoil material will be placed back into the trench before replacing the topsoil.
- H. Refer to Items No. 5.A. and 5.B. for procedures pertaining to rock removal from the subsoil and topsoil.
- I. Refer to Items No. 7.A. through 7.C. for procedures pertaining to the alleviation of compaction of the topsoil.
- J. The topsoil must be replaced so that after settling occurs, the topsoil's original depth and contour will be restored. The same shall apply where excavations are made for road, stream, drainage ditch, or other crossings. In no instance will the topsoil materials be used for any other purpose.

3. Tile Lines

- A. Rover will endeavor to locate all tile lines within the right-of-way prior to the pipeline's installation so repairs can be made if necessary. Rover will contact affected Landowners/Tenants for their knowledge of tile line locations prior to the pipeline's installation. If the location of tile lines is known precisely, those tile lines will be staked or flagged prior to construction to alert construction crews to the possible need for tile line repairs. If previously unidentified, tile lines that are encountered and cut during grading or trenching activities will be flagged at that time.
- B. If underground drainage tile is damaged by the pipeline's construction, it will be repaired in a manner that assures the tile line's proper operation at the point of repair.
- C. Tile lines that are damaged, cut, or removed shall be staked or flagged with the stakes or flags placed in such a manner they will remain visible until the permanent repairs are completed. In addition, the location of damaged tile lines will be recorded using Global Positioning Systems technology.
- D. The tile line will be immediately and temporarily repaired until such a time that permanent repairs can be made. The exposed tile lines will be screened or otherwise protected to prevent the entry of vegetation, sediment, small animals and/or other foreign materials into the tile line."
- E. Where tile lines are severed by the pipeline trench, repairs shall be made using the attached Rover Pipeline Typical Drain Tile Header System drawings.

- F. Rover will do its best to maintain a minimum of two feet of separation between the tile line and the pipeline whether the pipeline passes over or under the tile line. In cases where the two-feet of separation cannot be maintained, Rover will inform the Landowner. In all instances, Rover will attempt to place the pipeline below the tile drain and will only place the pipeline above the tile with specific land owner permission.
- G. Rover will install with landowner consent parallel tile drains along the proposed right-of-way in advance of pipeline construction to maintain the drainage of the field tile drain system. After construction, the parallel tile drains will be connected across the pipeline right-of-way to facilitate a re-united overall tile drain system in the agricultural field.
- H. Before completing permanent tile repairs, all tile lines will be probed or examined by other suitable means on both sides of the trench for their entire length within any work areas to check for tile that might have been damaged by vehicular traffic or construction equipment. If tile lines are found to be damaged, they must be repaired so they operate as well after construction as before the construction began.
- I. Permanent tile line repairs will be made within 45 days of the pipeline being laid in the trench on the Landowner's property, weather and soil conditions permitting.
- J. Following completion of the pipeline, Rover will be responsible for correcting all tile line repairs that fail due to pipeline construction, provided those repairs were made by Rover. Rover will not be responsible for tile line repairs that Rover pays the Landowner to perform.

4. Installation of Additional Tile Lines

- A. Rover shall be responsible for returning the property to reflect pre-construction conditions. Rover shall be responsible for installing such additional drainage tile and other drainage measures as are necessary to properly drain wet areas on the permanent and temporary easements to the extent caused by the construction and/or existence of the pipeline.
- B. Where the pipeline's route parallels an existing pipeline within a 200-foot perpendicular offset, Rover shall be responsible for installing tile and/or other drainage measures, as necessary, to properly drain the area between the two pipelines to the extent the wet areas between the pipelines are caused by the construction and/or existence of the pipeline.
- C. It is presumed that any wet areas located in permanent and temporary easements and/or between the two parallel pipelines are caused by the construction and/or existence of the new pipeline unless Rover can prove that the construction and/or existence of the new pipeline is not the cause of the wet areas.

5. Rock Removal

The following rock removal procedures only pertain to rocks found in the uppermost 36 inches of soil, the common freeze zone in Michigan.

- A. Before replacing any topsoil, all rocks greater than 4 inches in any dimension will be removed from the surface of all exposed subsoil and from all subsoil that is replaced back in the trench, to the extent that the rock content of the topsoil after the replacement will be substantially similar to that of the topsoil in the area immediately adjacent to the right-of-way.
- B. After the topsoil is replaced, all rocks greater than 4 inches in any dimension will be removed from the topsoil until similar conditions on the right-of-way as compared to the adjacent off right-of-way are achieved.
- C. If trenching, blasting, or boring operations are required through rocky terrain, suitable precautions will be taken to minimize the potential for oversized rocks to become interspersed with adjacent soil material.
- D. Rocks and soil containing rocks removed from the subsoil areas, topsoil, or from any excavations, will be hauled off the landowner's premises or disposed of on the Landowner's premises at a location that is mutually acceptable to the Landowner and Rover.

6. Removal of Construction Debris

All construction-related debris and material that are not an integral part of the pipeline will be removed from the landowner's property. Such material to be removed would include litter generated by the construction crews. Litter generated by construction crews shall be removed daily.

7. Compaction, Rutting, Fertilization, Liming

- A. Before the topsoil has been replaced, all areas that were traversed by vehicles and construction equipment will be ripped at least 18 inches deep in agricultural land and all pasture and woodland will be ripped at least 12 inches deep unless the presence of stumps and large quantities of roots within 12 inches precludes ripping, if approved by the Landowner. Ripping will occur through the topsoil at a deeper depth if field conditions necessitate topsoil restoration prior to ripping the subsoil. The existence of tile lines or underground utilities may necessitate less depth.
- B. Three passes will be made across any agricultural land that is ripped.
- C. All ripping and chiseling will be done at a time when the soil is dry enough for normal tillage operations to occur on undisturbed farmland adjacent to the areas to be ripped.



- D. Rover will restore rutted land within the easement to reflect its original condition.
- E. The cost of fertilizer, manure, and/or lime will be included in the damages paid to the landowner, thereby allowing the landowner to apply the appropriate type and amounts of fertilizer, manure, and/or lime as needed depending on the crops contemplated and the construction schedule.

8. Land Leveling

- A. Following the completion of the pipeline, Rover will restore any right-of-way to its original pre-construction elevation and contour should uneven settling occur or surface drainage problems develop as a result of pipeline construction.
- B. Rover will provide the Landowners with a telephone number and address that may be used to alert Rover of the need to perform additional land leveling services.
- C. If, in the future, uneven settling occurs or surface drainage problems develop as a result of the pipeline construction, Rover will provide such land leveling services within 120 days of a Landowner's written notice, weather and soil conditions permitting or at a time agreed upon by the landowner and Rover.
- D. If there is any dispute between the landowner and Rover as to what areas need additional land leveling beyond that which is done at the time of construction, it shall be Rover's responsibility to disprove the Landowner's claim that additional land leveling is warranted.

9. Backfill Profile and Trench Crowning

- A. In all agricultural land areas, trench crowning shall not occur unless specifically approved by the landowner.
- B. Surface drainage should not be permanently blocked or hindered in any way. If excess spoil is encountered, it will be removed offsite to prevent ridging. Adding additional spoil to a prep-approved crown over the trench in excess of that required for settlement will not be permitted. In areas where minor trench settling occurs after topsoil spreading, land leveling or imported topsoil shall be used to fill each depression. In areas where major trench settling occurs after topsoil spreading, and land leveling cannot be utilized; imported topsoil shall be used to fill each depression of significant depth. Topsoil from the adjacent agricultural land outside of the right-of-way shall not be used to fill the depressions.
- C. In agricultural areas where the materials excavated during trenching are insufficient in quantity to meet backfill requirements, the soil of any agricultural land adjacent to the trench and construction zone shall not be used as either backfill or surface cover material. Under no circumstances shall any topsoil materials be used for pipe padding material or trench backfill. In situations where imported soil materials are employed for backfill on agricultural lands, such material shall be of similar texture and quality to the existing soils on site.

Imported soils should be free from noxious weeds and other pests to the extent possible.

10. Prevention of Soil Erosion

Rover will work with Landowners to prevent excessive erosion on right-of-way that has been disturbed by construction. Reasonable methods will be implemented to control erosion. Rover may elect to plant a temporary cover crop on active cropland, if approved by the landowner.

11. Repair of Damaged Soil Conservation Practices

All soil conservation practices (such as terraces, grassed waterways, etc.), which are damaged by the pipeline's construction, will be restored to their pre-construction condition.

12. Construction During Wet Weather

The Chief Inspector, Environmental Inspector and Agricultural Inspector will determine, as a group, when construction should not proceed in a given area due to wet weather conditions. The following are the factors to be considered in determining whether construction will be allowed to continue due to wet weather conditions:

- A. Work will not be allowed in areas where rutting is mixing subsoil with topsoil. The depth of the allowable rutting is dependent on the depth of topsoil in a given location.
- B. In areas where rutting will result in topsoil/subsoil mixing, alternatives such as utilizing mats, low ground weight equipment, and/or flat bottom sleds pulled by low ground weight equipment, disking the right-of-way to increase evaporation and dewatering the area with portable pumps may also be acceptable.
- C. Wet weather restrictions only apply to those areas necessary and may not require cessation of work in areas not affected by wet weather.

13. Damages to Private Property

- A. Rover will compensate Landowners for construction-related damages caused by Rover that occur on or off of the established pipeline right-of-way.
- B. Compensation for damages to private property caused by Rover shall extend beyond the initial construction of the pipeline, to include those damages caused by Rover during future construction, operation, maintenance, and repairs relating to the pipeline.

14. Clearing of Trees and Brush from the Easement

- A. If trees are to be removed from the right-of-way, Rover will consult with the Landowner to determine if there are trees of commercial or other value to the landowner.
- B. If there are trees of commercial or other value to the landowner, Rover will allow the Landowner the right to retain ownership of the trees with the disposition of the trees to be negotiated prior to the commencement of land clearing.
- C. Rover will identify “black cherry trees” located on the right-of-way near active livestock use areas during the construction plan development phase. Black cherry tree vegetation is toxic to livestock when wilted, and shall not be stockpiled in areas accessible to livestock during the clearing phase, and will be disposed of in a manner that prevents contact with livestock.

15. Interference with Irrigation Systems

- A. If the pipeline and/or temporary work areas intersect an operational (or soon to be operational) spray and/or subsurface irrigation system, Rover will establish with the landowner an acceptable amount of time the irrigation system may be out of service.
- B. If, as a result of pipeline construction activities, an irrigation system interruption results in crop damages, either on the pipeline right-of-way or off the right-of-way, the Landowner will be compensated for such crop damages that are attributed to the system interruption.
- C. If it is feasible and mutually acceptable to Rover and the Landowner, temporary measures will be implemented to allow an irrigation system to continue to operate across land on which the pipeline is also being constructed.

16. Ingress and Egress Routes

Prior to the pipeline's installation, Rover and the Landowner will reach a mutually acceptable agreement on the route that will be utilized for entering and leaving the pipeline right-of-way should access to the right-of-way not be practical or feasible from adjacent segments of the pipeline right-of-way or from public highway or (if available to Rover) railroad right-of-way.

17. Temporary Roads

- A. The location of temporary roads to be used for construction purposes will be negotiated with the Landowner.
- B. The temporary roads will be designed to not impede surface drainage and will be built to minimize soil erosion on or near the temporary roads.

- C. Upon abandonment, temporary roads may be left intact through mutual agreement of the Landowner and Rover unless otherwise restricted by federal, state, or local regulations.
- D. If the temporary roads are to be removed, the rights-of-way upon which the temporary roads are constructed will be returned to their previous use(s) and restored to equivalent condition(s) as existed prior to their construction. All temporary access roads that are removed shall be ripped to a depth of 18 inches. All ripping will be done consistent with Items 7 above.

18. Weed Control

- A. On any right-of-way over which Rover has jurisdiction as to its surface use, (i.e., valve sites, metering stations, compression stations, etc.), Rover will provide for weed control in a manner that prevents the spread of weeds onto adjacent lands used for agricultural purposes. Spraying will be done by a pesticide applicator that is appropriately licensed for doing such work in the state of Michigan.
- B. Should Rover fail to control weeds after being given written notice and a 45-day opportunity to respond, Rover will be responsible for reimbursing all reasonable costs for weed control incurred by owners of land adjacent to surface facilities when the land accommodating the pipeline surface facility is determined to be the weed source.

19. Pumping of Water from Open Trenches

- A. In the event it becomes necessary to pump water from open trenches, Rover will pump the water in a manner that will avoid damaging adjacent agricultural land, crops, and/or pasture. Such damages include, but are not limited to, inundation of crops for more than 24 hours, deposition of sediment in ditches and other water courses, and the deposition of subsoil sediment and gravel in fields and pastures.
- B. If it is impossible to avoid water-related damages as described in Item 19.A. above, Rover will compensate the Landowners for the damages or will correct the damages so as to restore the land, crops, pasture, water courses, etc. to their pre-construction condition.
- C. All pumping of water shall comply with existing drainage laws, local ordinances relating to such activities, and provisions of the Clean Water Act.

20. Aboveground Facilities

Locations for aboveground facilities shall be selected in a manner so as to be as unobtrusive as reasonably possible to ongoing agricultural activities occurring on the land adjacent to the facilities. First priority shall be made to locating aboveground facilities on right-of-way that is not used as cropland. If this is not feasible, such facilities shall be located so as to incur the least hindrance to the adjacent cropping operations

(i.e., located in field corners or areas where at least one side is not used for cropping purposes).

21. Advance Notice of Access to Private Property

Except in the event of an emergency, Rover will provide the Landowner or Tenant with reasonable prior notice before accessing his/her property for the purpose of constructing the pipeline.

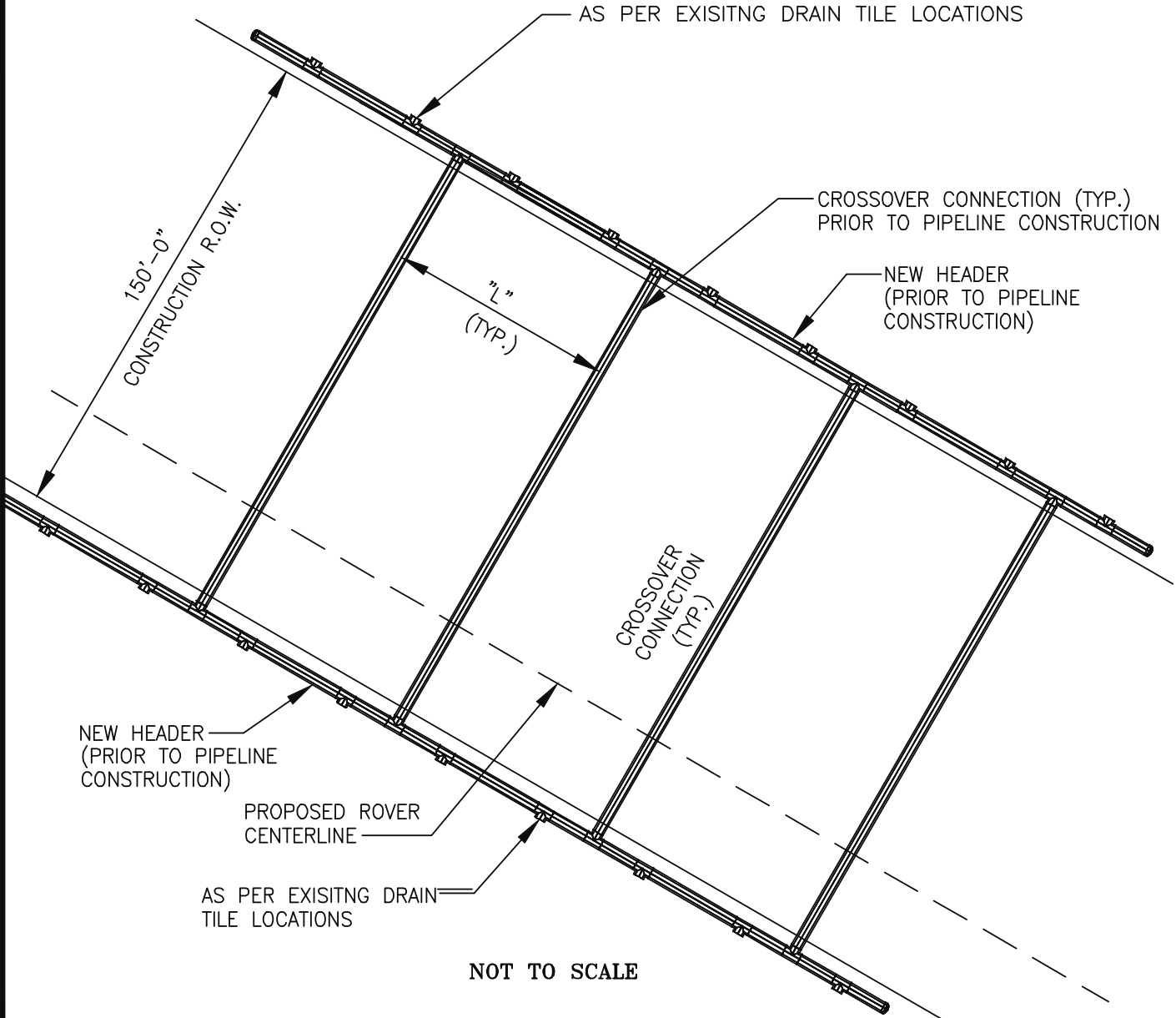
22. Reporting of Inferior Agricultural Impact Mitigation Work

No later than 45 days prior to the commencement of the pipeline construction across a Landowner's property, Rover will provide the Landowner with a toll-free number the Landowner can call to alert Rover should the Landowners observe inferior agricultural impact mitigation work which is being done or has been carried out on his/her property.

23. General Monitoring and Remediation

The Plan establishes construction and restoration guidelines to limit adverse effects to agricultural resources and to return the affected lands to productive agricultural use with a level of production consistent with that of the lands immediately adjacent to the Right-of-Way. Post construction and restoration situations may occur as a result of the pipeline construction which requires further restoration or corrective activities. These areas potentially requiring further restoration or corrective activities will be brought to Rover's attention through Landowner or Tenant contacts with Rover right-of-way staff or as a result of Rover's monitoring of the pipeline right-of-way.


DRAIN TILE	HEADER SIZE	SPACING "L"
4"	TBD	TBD
6"	TBD	TBD
8"	TBD	TBD
10"	TBD	TBD



- NOTES:
1. HEADERS MAY BE CONNECTED TO EXISTING DRAIN TILE PRE-CONSTRUCTION.
 2. CROSSOVER PIPING MAY BE INSTALLED POST PIPELINE INSTALLATION.

P.L./STA.		
ACCT. NO.		
WORK NO.		
REV.	BY	DATE
B	SRS	8/4/14
C	KMA	5/8/15
D	KMA	6/23/16

ROVER PIPELINE					
TYPICAL DRAIN TILE					
HEADER SYSTEM					
DRAWN	DATE	SCALE	APPR. BY	CONST.YR.	
SRS	8/4/14	N.T.S			



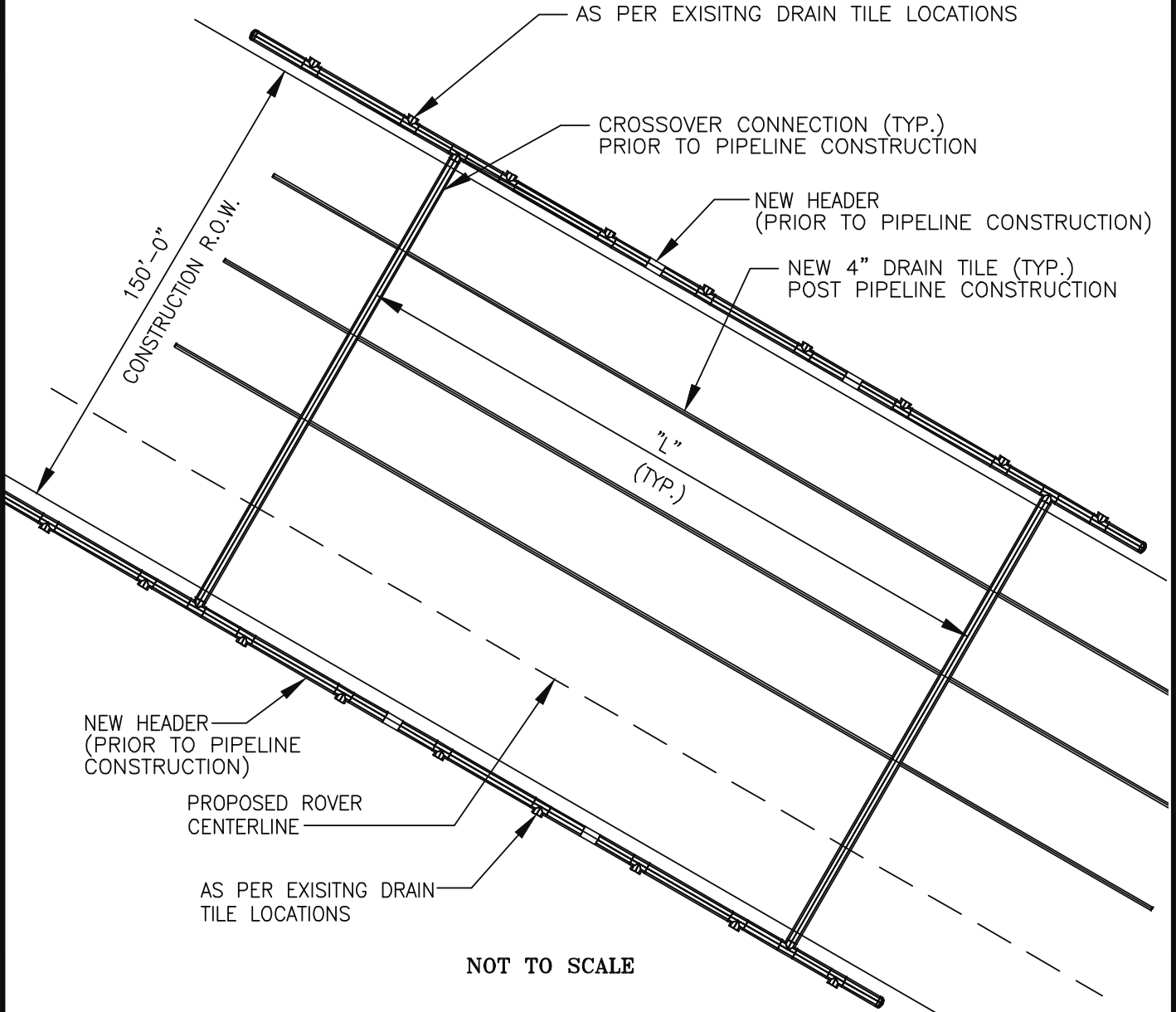
ENERGY TRANSFER

PREVIOUS DWG. NO.

DRAWING NO. **DRAIN TILE 1**

P:\energy transfer\14138\working\permit\drain tile 1_new.dwg
 06-23-16 13:01 14138 5 KMA


DRAIN TILE	HEADER SIZE	SPACING "L"
4"	TBD	TBD
6"	TBD	TBD
8"	TBD	TBD
10"	TBD	TBD



- NOTES:
1. HEADERS MAY BE CONNECTED TO EXISTING DRAIN TILE PRE-CONSTRUCTION.
 2. CROSSOVER PIPING MAY BE INSTALLED POST PIPELINE INSTALLATION.

P.L./STA. ACCT. NO.		
WORK NO.		
REV.	BY	DATE
B	KMA	8/5/14
C	KMA	8/8/15
D	KMA	6/23/16

ROVER PIPELINE TYPICAL DRAIN TILE HEADER SYSTEM				
DRAWN SRS	DATE 8/5/14	SCALE N.T.S	APPR. BY	CONST.YR.



ENERGY TRANSFER

PREVIOUS DWG. NO.

DRAWING NO. **DRAIN TILE 2**