Large Filing Separator Sheet

Case Number: 94-1341-GA-BLN

File Date: AUGUST 12, 1994

Section: 2 OF 2

Number of Pages: 114

Description of Document: APPLICATION TO THE OHIO POWER CITING BOARD FOR A CERTIFICATE. CONSTRUCTION OF WESTLAKE HIGH PRESSURE BETTERMENT PROJECT

SPILL PREVENTION

Precautions shall be taken to prevent spills of any amount of petroleum product or other polluting material. This section provides guidelines which will help minimize the impact of spills, minimize fuel storage and refueling mishaps, and maximize clean up efforts.

A. Precautions

1. Containers of polluting substances (i.e. motor oil, lube oil, chemicals, etc.) shall be tightly sealed and clearly labeled.

2. A spill response kit containing absorbent material for petroleum products, two Tyvek Saranex Coveralls, two pairs of goggles, two pairs of SilverShield Gloves, disposal bags, towels and DOT labels shall be available on the construction site.

3. Do not wash construction equipment in any stream or wetland. Runoff from washing the equipment shall not enter into streams or wetlands.

4. Do not park, store, or service construction equipment, vehicles, materials, and petroleum products within 100 feet of any body of water including wetlands.

5. Check vehicles entering the construction area for leaks each day. Repair all leaks prior to the vehicle entering the construction area.

6. Take all waste material to a control site at the end of each work day.

B. Storage of Fuel and Refueling of Vehicles

1. Avoid storage of fuels and refueling of vehicles on construction site, if possible.

2. Vehicles that must be refueled at the construction site shall be filled by tanks brought to the work site. These emptied tanks shall be returned to staging area.

3. Refueling of vehicles shall not be performed within 100 feet of streams or wetlands.

C. Spill Cleanup

1. Spills that occur during construction which cause a sheen or exceed a reportable quantity, see Table 9 for a list of reportable quantities (RQ) for CDC, shall be immediately reported to Environmental Affairs in accordance with Policy and Procedure Reference No. 580-5, "Environmental Occurrence Reporting."

2. Spills that are not in the amount of a reportable quantity shall be properly cleaned up and disposal arrangements shall be made through Environmental Affairs.

Table 9

Reportable Quantities

HAZARDOUS SUBSTANCE	CASRN	CDC'S USE	RQ lbs(kg)
Hydraulic Oil		Type of oil used in construction equipment	25 gallons
Mercaptan		Odorant for natural gas	100 (45.4)
Mercury	7439976	Mercury seal regulators, thermometers, and gauges	1 (0.454)
Methanol	67561	Used to dry pipe interior after hydrostatic testing	5000 (2270)
Pipeline Liquids	68919391	Occasionally removed from pipelines	10 (4.54)
1,1,1-Trichloroethane	71556	Used to clean parts and tools	1000 (454)
Xylene	1330207	Used to clean parts and tools	1000 (454)
Petroleum Products		Gasoline and Diesel fuel	25 gal

2. If a spill occurs around bodies of water:

   a. Contain the spill by placing absorbent booms or constructing dikes.

   b. Collect the spill with absorbent materials, skim water surfaces with booms, and/or excavate the contaminated soil.

   c. Dispose of waste material according to instructions from the Environmental Affairs Department.

   d. Restore area as close as possible to original condition.

MAINTENANCE

Columbia's rights of way are maintained according to Company policy. The maintenance is performed in a manner that preserves the pre-existing state of the environment. However, the integrity of the structure must also be maintained.

A. Undeveloped Land

1. Maintain a minimum right of way width to allow repair work on the line.

2. Maintain the right of way by using a mower or, on rare occasions, herbicides, in accordance with P/P 580-2.

3. Inspect growth on the right of way two months after completion of construction to make sure perennial growth has taken place. If this has not occurred, contact Environmental Affairs for remedial action.

4. Report erosion problems to the supervisor. Erosion problems are areas where the soil and/or vegetation are carried away by runoff water. Perform corrective action measures as needed. Difficult erosion problems may require the assistance of Engineering-Civil Engineering and/or Environmental Affairs.

B. Wetlands and Streams

1. Maintain rights of way in streams and wetlands according to the governing agency's recommendations and permit requirements.

2. Contact Engineering-Civil Engineering, or Environmental Affairs for site specific maintenance plans for wetlands.

GLOSSARY OF TERMS

BACKFILLING - Earth or other material which has been used to refill a ditch or trench; also the act of refilling a ditch or trench.

BELLHOLE - A hole, excavated for the purpose of making repairs on pipelines. The size of the hole depends on the size of the pipe and/or repair to be made.

CUT SLOPES - Excavated land surface or area which deviates from the original slope of land, usually expressed in per cent or degrees.

CUT-FILL - A section of earth that has been moved by excavating part of an area and using the excavated earth and material for adjacent embankments or fill areas.

DITCH BREAKERS - Barriers placed in ditches, specifically where rights of way are sloped, to reduce water velocity and sedimentation runoff.

DITCH RELIEF CROSS-DRAINS - A channel or open ditch (open drain) constructed across temporary roads to carry off surface water.

DITCH RELIEF CULVERTS - A buried pipe (closed drain) constructed under roads or fill slopes to carry off surface water, ground water or water from underground springs.

DIVERSION DITCH - A channel or dike constructed across a slope for the purpose of intercepting surface water, reducing the velocity of flow, and diverting it to outlets where it can be disposed.

EROSION - The natural process by which the surface of the land is worn away by the action of water, wind or chemical action.

FILL SLOPE - A slope created by depositing excavated earth and material removed from another area, which may fill an original slope, channel, valley, sink or other depression.

FINAL GRADING - Includes returning the construction right of way as closely as practical to its original contour, redistributing conserved topsoil, soil compaction testing in agricultural lands, and installing final diversion ditches.

FLOAT CONSTRUCTION - Floats are attached to the pipeline and the pipe is floated and pushed into place from a push site.

INTERCEPTOR DITCH - A channel or dike of earth filled sacks or mounded earth constructed up slope of a project for the purpose of diverting surface water away from the unprotected slope.

INTERMITTENT STREAM - A stream channel which generally carries water in the spring or immediately after a rain event; designated on topographic maps with a broken line.

PERENNIAL STREAM - A stream which generally flows all year in years of normal rainfall; stream level is generally lowest in the fall, highest in the spring; designated with a solid line on topographic maps and environmental construction drawings.

PROTECTED STREAM - Declared by a governing agency.

PUSH-PULL CONSTRUCTION - Pipe sections are prefabricated on dry ground and pulled into place.

RESTORATION - Includes fertilizing, liming, disking, seeding and mulching, and crimping mulch.

RIGHT-OF-WAY - A conditional right to use land of another with the owner of the land retaining most rights and benefits of ownership. Consideration is a one-time pay.

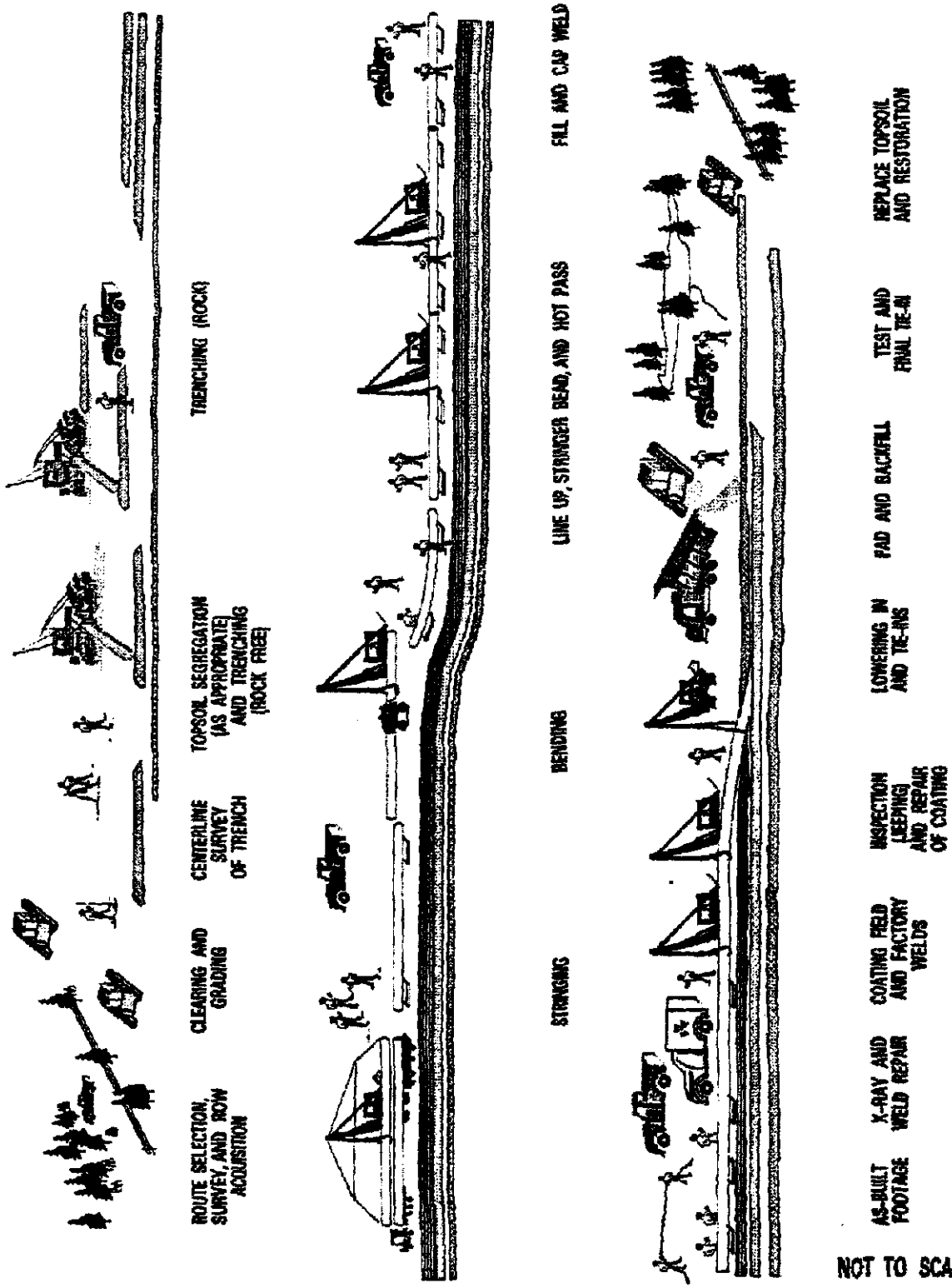
RIPRAP - Broken rock, cobbles, or boulders placed on earth surfaces, such as the face of a fill slope, for protection against the eroding action of water.
SEDIMENT - Soils or other surficial materials transported by surface water as a product of erosion.

STREAM BUFFER ZONE - A fifty foot section of land that follows the right of way starting at the waters edge and ending fifty foot away from the waters edge.

SUMP - Pit, tank, or reservoir in which water is collected for withdrawal, storage or for settlement of sediment.

UNDEVELOPED LANDS - Agricultural lands or lands in their total natural and cultural environment.

WETLAND - A area of special concern with soils prone to holding water for long periods of time; also generally characterized by distinctive plants such as ruches, sedges, cattails, or certain trees.

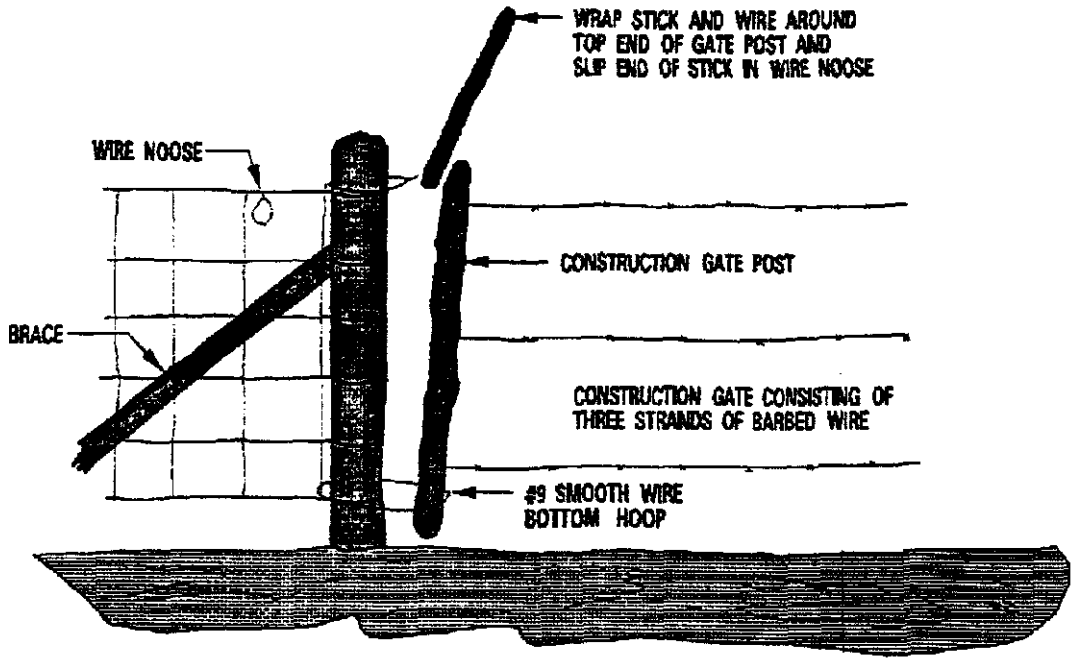


COLUMBIA GAS
Distribution Companies

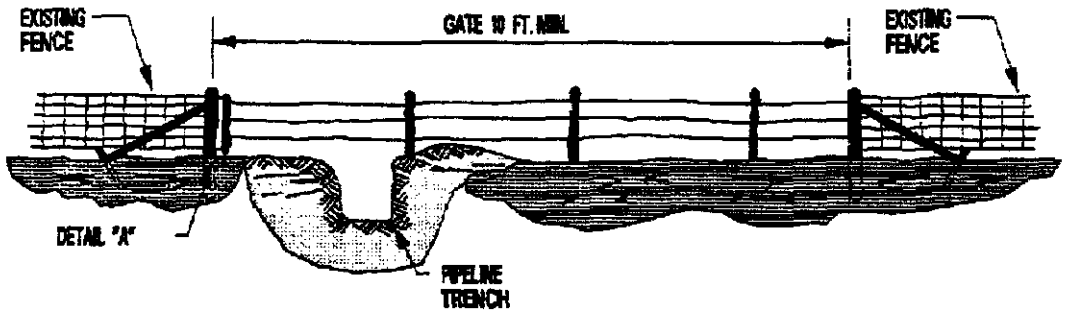
EROSION AND SEDIMENTATION CONTROL PLAN

TYPICAL UPLAND PIPELINE CONSTRUCTION SEQUENCE

Exhibit A



DETAIL "A"



NOTES:
1. IF EXISTING FENCE POSTS ARE STEEL "T" BAR TYPE, THEN REMOVE THE STEEL "T" BAR POST ON BOTH SIDES OF THE GATE OPENING AND REPLACE WITH TEMPORARY WOODEN POSTS, BRACED AS SHOWN.
2. SUITABLE SUBSTITUTES FOR THE STICK AND WIRE GATE FASTENER ARE PERMISSIBLE.

NOT TO SCALE

COLUMBIA GAS Distribution Companies ***EROSION AND SEDIMENTATION CONTROL PLAN***	TEMPORARY CONSTRUCTION GATE	***Exhibit B***

EXHIBIT C

INTERCEPTOR DIVERSION

Interceptor diversions are the most common and effective devices used for erosion control on construction Right of Way (ROW). During construction, temporary diversions are installed to control water on the graded ROW. During restoration, final diversions are installed to protect the ROW from erosion until vegetation reestablishes on the disturbed areas.

Temporary diversions are generally made by building a curb 8 to 14 inches high across the ROW. The curbs are shaped to allow passage of construction equipment and inspector vehicles. The diversion should not have a gradient of more than 2%-5%, and must drain either into the ditch or off the ROW. Where water is directed off the ROW, the outlet shall be protected by a sediment filter device or heavy vegetation. Temporary diversions may be damaged by construction equipment during the work day, but shall be repaired by the end of each day. Temporary diversions shall be spaced along the ROW in accordance with Diagram C. The spacing of temporary diversions may vary from that of final diversions because the construction ROW's artificial grade may reduce the slope.

Final diversions typically consist of a curb 16 to 20 inches high below a shallow swale. The curb is constructed of compacted earth fill with side slopes of 2:1 or flatter to allow passage of maintenance equipment. The diversions should extend across the entire ROW and drain water with no more than 2% gradient. The outlets of final diversions shall be stabilized with sediment filter devices, rock, brush, or heavy vegetation. Final diversions shall be spaced along the ROW in accordance with Diagram C (or as shown on the Environmental Construction Drawings), and will tie into existing diversions, where present. In places where final grade creates side slopes or slopes which break in more than one direction, diversion installation may need to vary to create an outslope of 2% to carry water off the ROW.

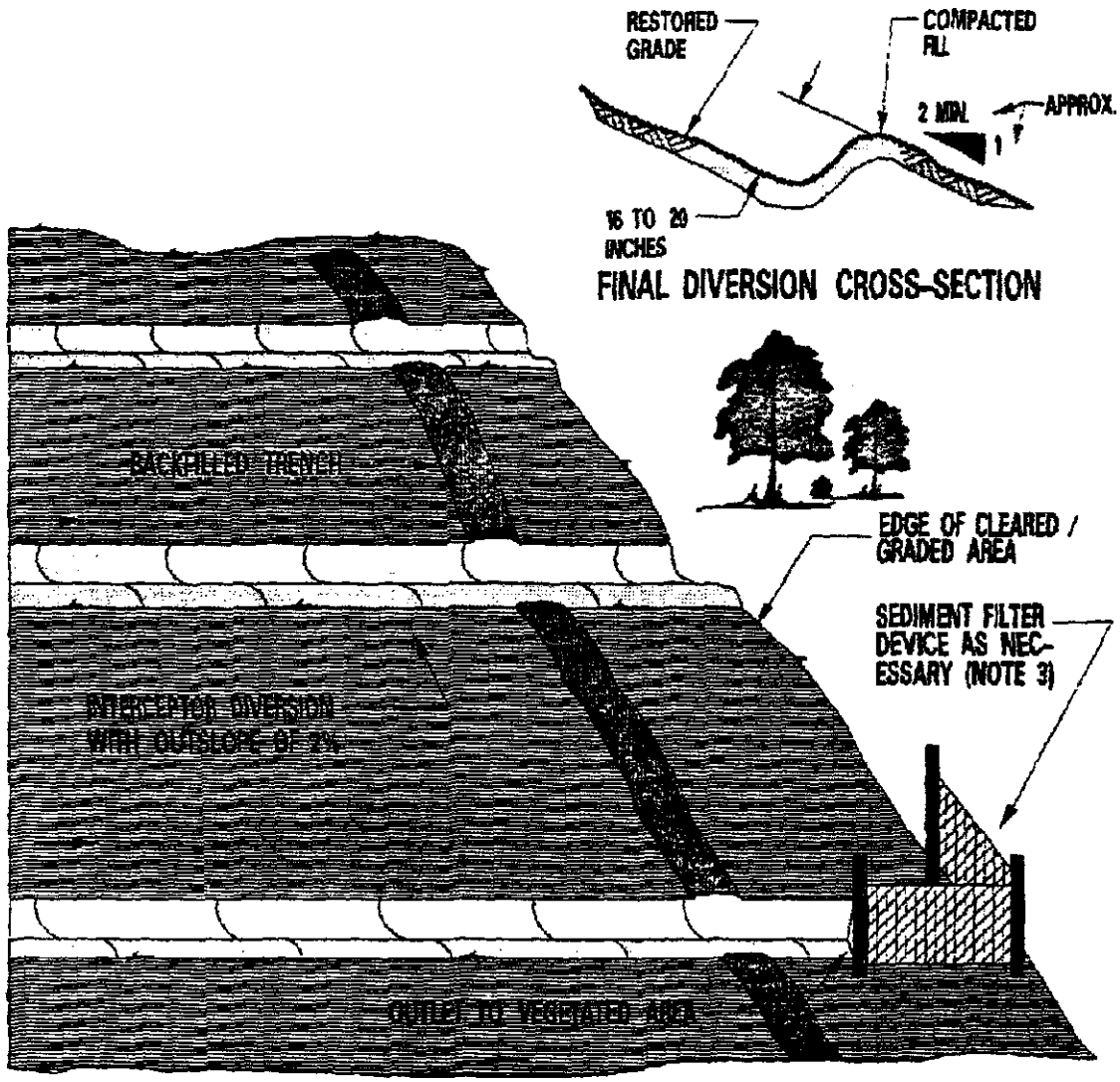
Alternative diversion construction may be used in areas where an earthen diversion is impractical. In these instances, temporary diversions may be constructed with sediment filter devices.

TABLE 2

*DIVERSION DITCH SPACING RELATED TO SOIL ERODIBILITY

RIGHT-OF-WAY		DITCH SPACING IN FEET		
% SLOPE	DEGREE	SOIL TYPE "B"	SOIL TYPE "C"	SOIL TYPE "D"
0 - 3	2°	137	120	103
3 - 8	5°	96	89	83
8 - 15	9°	84	81	78
15 - 25	14°	80	78	76
25 - 35	19°	80	79	77
35 - 45	24°	82	80	79
45 - 55	29°	84	83	82
55 - 65	33°	87	86	85
65 - 75	37°	91	90	89

* Calculations based on USDA Soil Conservation Service mathematical values for diversion terrace spacing to reduce sheet erosion.

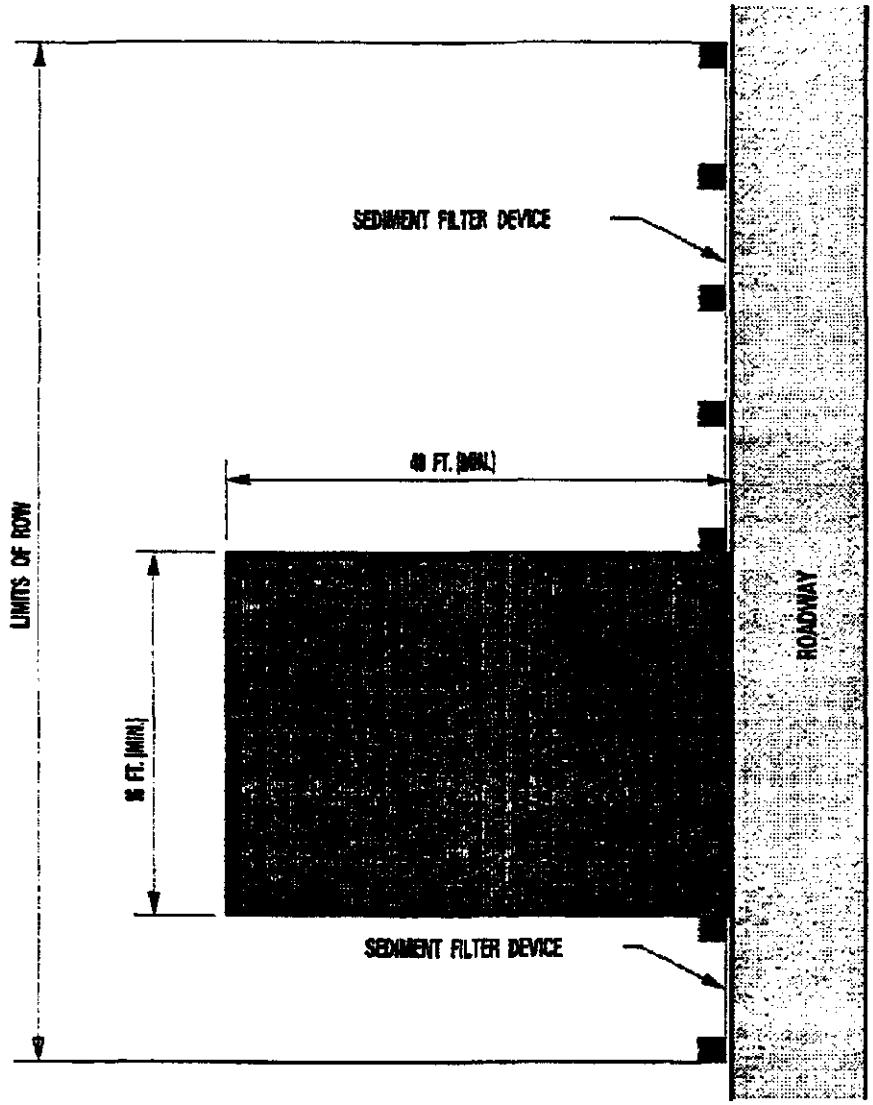


NOTES:

1. SPACING USED FOR BOTH TEMPORARY AND FINAL INTERCEPTOR DIVERSIONS.
2. TEMPORARY INTERCEPTOR DIVERSIONS WILL BE MAINTAINED DURING THE CONSTRUCTION PHASE UNTIL FINAL INTERCEPTOR DIVERSIONS ARE INSTALLED.
3. IF EXISTING GROUND COVER IS SPARSE, SECURE SEDIMENT FILTER DEVICE IN OUTLET.
4. THE DIVERSION MAY BE EXTENDED UP TO 5 FEET OFF THE ROW, IF NECESSARY, TO PROVIDE AN ADEQUATE OUTLET.
5. DIVERSION OUTLETS WILL ALTERNATE FROM SIDE TO SIDE WHENEVER POSSIBLE.

NOT TO SCALE

COLUMBIA GAS Distribution Companies ***EROSION AND SEDIMENTATION CONTROL PLAN***	INTERCEPTOR DIVERSIONS	***Exhibit C***



NOTES:
1. BOARD ROADS TO BE USED IN WETLANDS AND ROADWAY ENTRANCES FOR TEMPORARY ACCESS ROADS.
2. BOARD ROADS ARE CONSTRUCTED BY LAYERING A BASE OF THE INTERLOCKING MATS PARALLEL TO THE ROAD IN A STAGGERED MANNER. OTHER METHODS OF BOARD ROAD CONSTRUCTION CAN BE USED IF APPROVED BY THE ENVIRONMENTAL AFFAIRS, CONSTRUCTION DEPARTMENT.
3. BOARD ROADS WILL BE UNDERLAIN WITH GEOTEXTILE FABRIC.

NOT TO SCALE

COLUMBIA GAS
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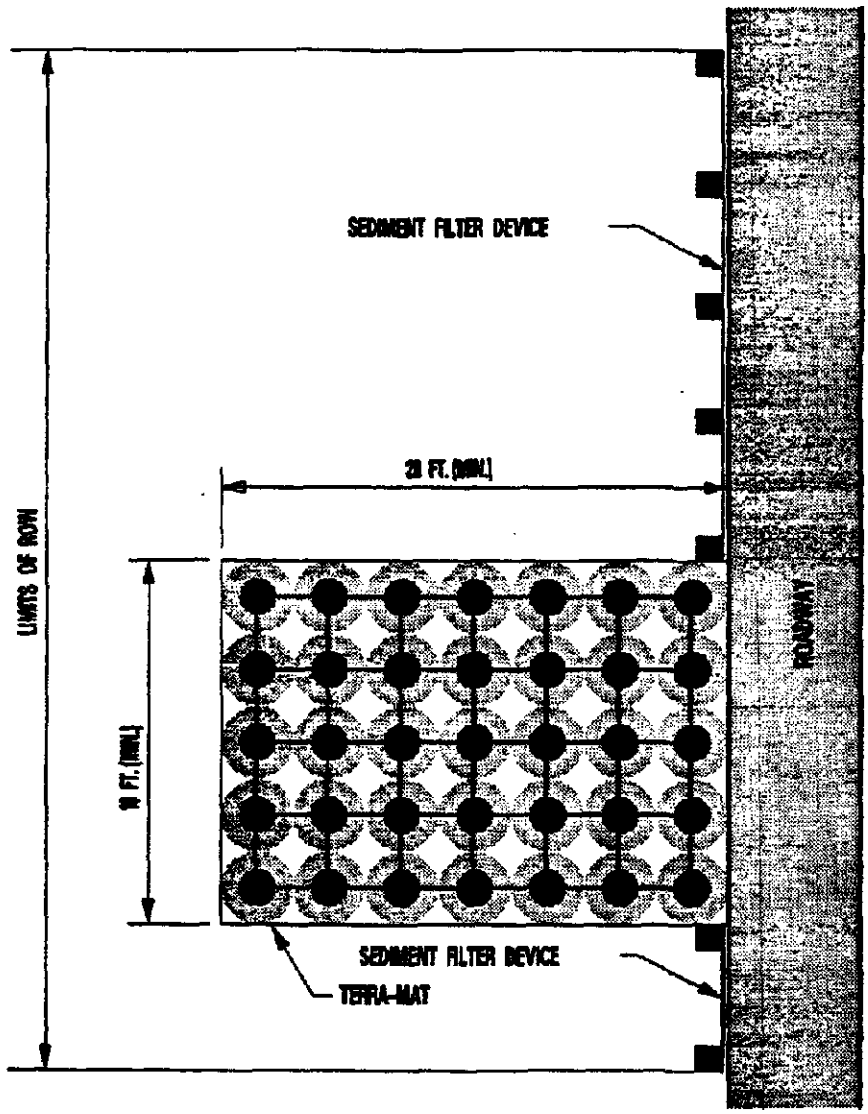
EROSION AND SEDIMENTATION CONTROL PLAN

TEMPORARY ROAD ENTRANCE BOARD ROAD

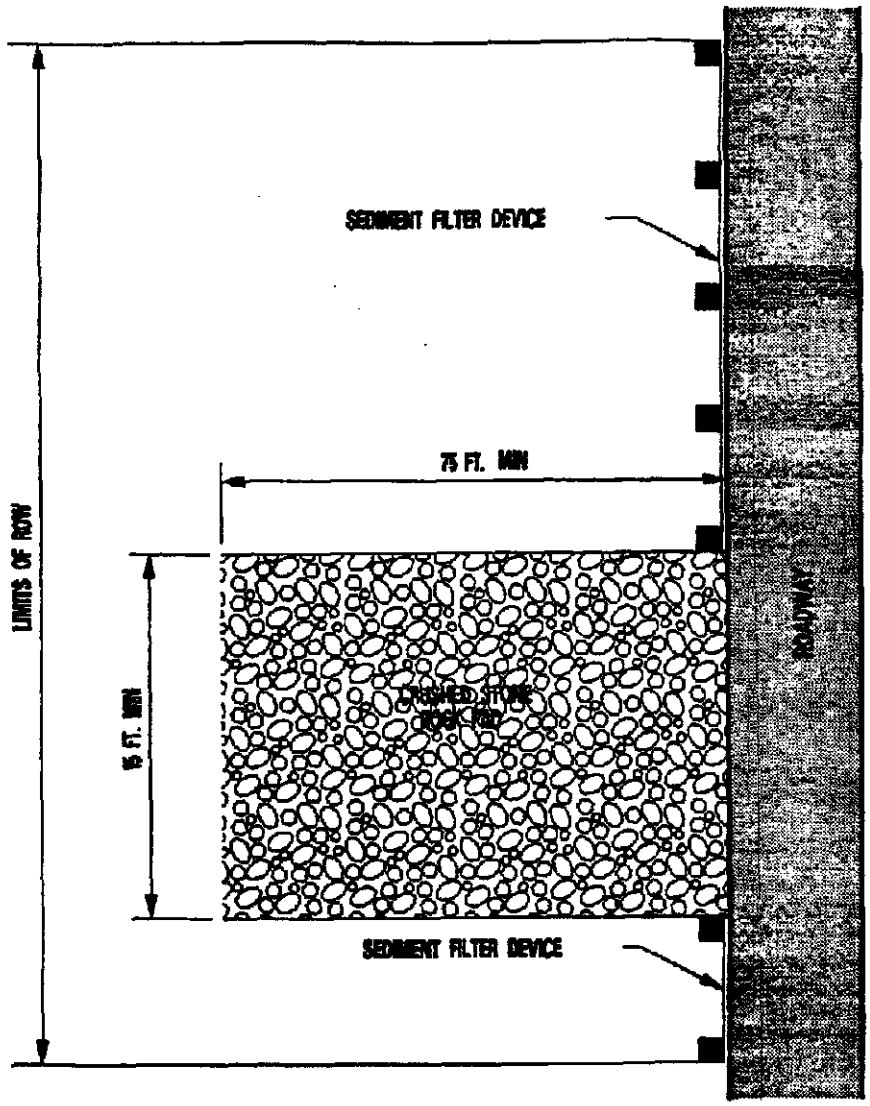
Exhibit E



NOTES: 1. TERRA-MATS ARE CONSTRUCTED BY OVERLAPPING TIRES AND INTERCONNECTED CABLE.
2. TERRA-MATS WILL BE UNDERLAIN WITH GEOTEXTILE FABRIC.

NOT TO SCALE

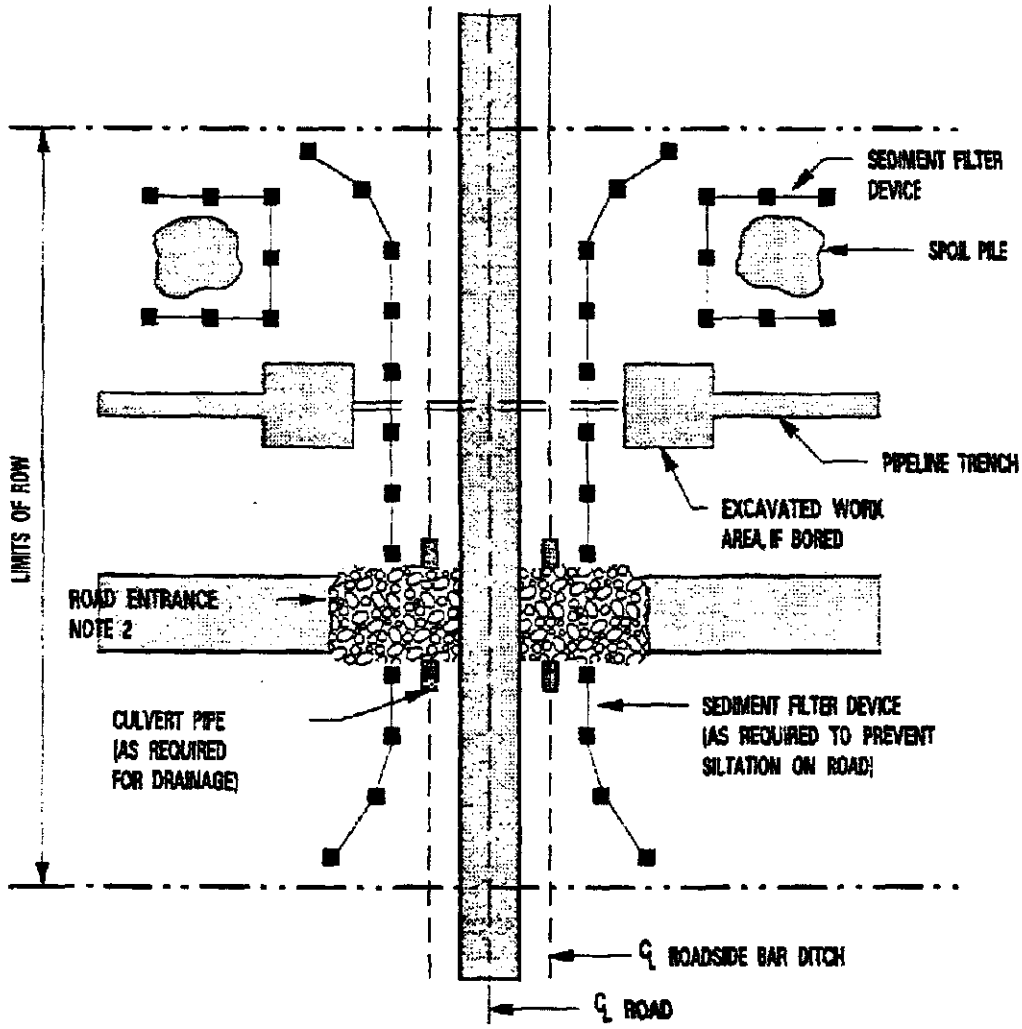
COLUMBIA GAS Distribution Companies *EROSION AND SEDIMENTATION CONTROL PLAN*	TEMPORARY ROAD ENTRANCE TERRA-MATS	*Exhibit E*



NOTES:
1. CRUSHED STONE SIZE WILL BE AASHTO NUMBER 1 COARSE AGGREGATE OR EQUIV. (4 INCH DIAMETER MINIMUM.)
2. ROCK PAD WILL BE AT LEAST 6 INCHES THICK.
3. THE ROAD ENTRANCE WILL HAVE A GEOTEXTILE FABRIC BENEATH THE ROCK PAD.
4. IF ROCK PAD BECOMES COVERED WITH MUD SO AS TO BECOME INEFFECTIVE, ADDITIONAL STONE WILL BE ADDED.
5. ALL STONE AND FABRIC MUST BE REMOVED DURING ROW RESTORATION.
6. THE ROCK PAD MAY BE ENLARGED TO INCLUDE A TURNING RADIUS.

NOT TO SCALE

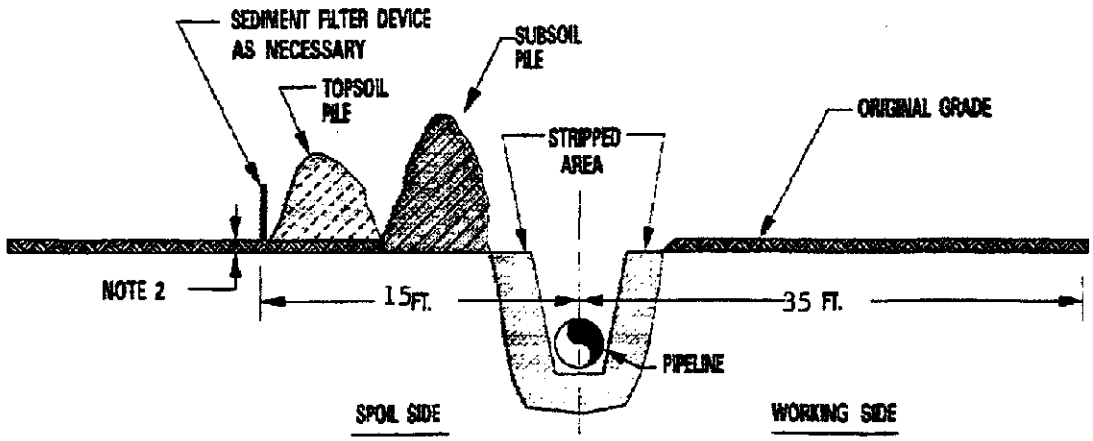
COLUMBIA GAS Distribution Companies *EROSION AND SEDIMENTATION CONTROL PLAN*	TEMPORARY ROAD ENTRANCE ROCK PADS	*Exhibit* F



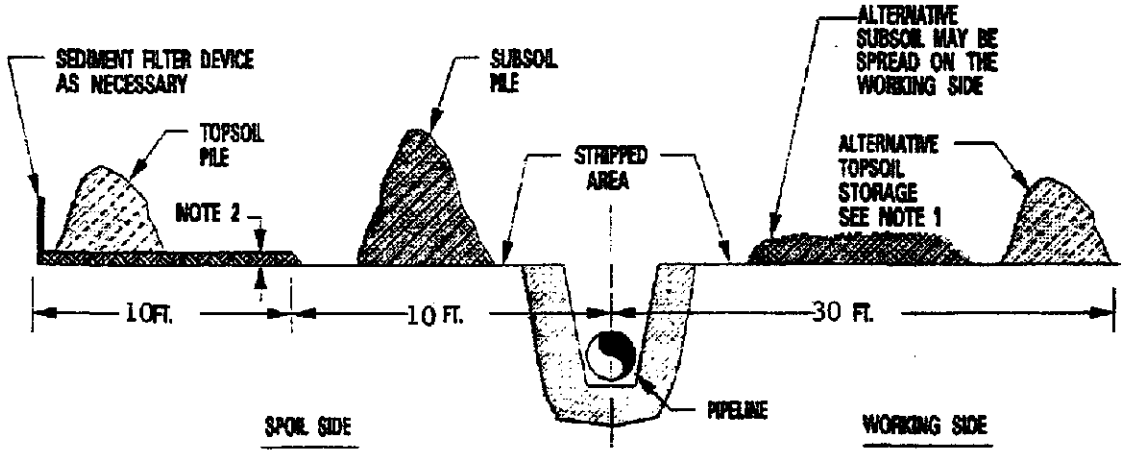
NOTES: 1. SIMILAR PROCEDURES WILL BE USED AT RAILROAD CROSSINGS.
2. REFER TO FIGURES 9, 10, AND 11 FOR TYPES OF ROAD ENTRANCES.

NOT TO SCALE

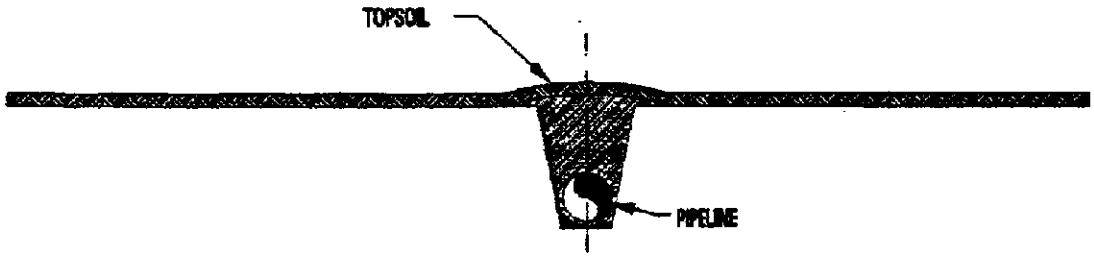
COLUMBIA GAS Distribution Companies ***EROSION AND SEDIMENTATION CONTROL PLAN***	TYPICAL EROSION CONTROL MEASURES AT ROAD CROSSINGS	*Exhibit* 6



A. TRENCHLINE AND SPOIL SIDE METHOD



B. ENTIRE CONSTRUCTION ROW METHOD

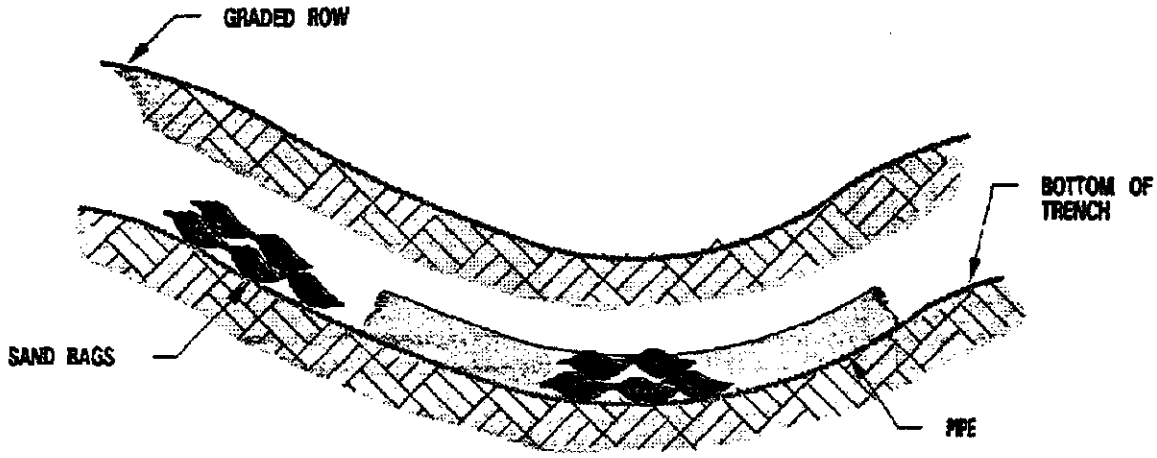


C. REPLACED

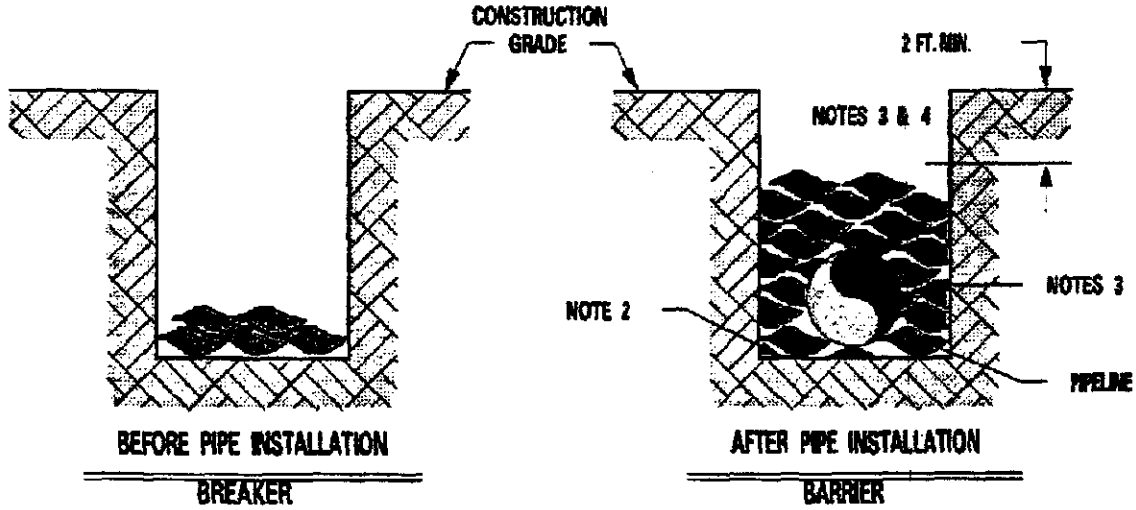
NOTES:
1. OTHER CONFIGURATIONS OF TOPSOIL AND SUBSOIL ARE ACCEPTABLE PROVIDED THEY ARE KEPT SEPARATE.
2. UP TO 12 INCHES OF TOPSOIL REMOVED.
3. TOPSOIL AND SUBSOIL PILES WILL BE ADEQUATELY PROTECTED FROM EROSION AND SEDIMENTATION BY USE OF SEDIMENT FILTER DEVICES OR MULCH.

NOT TO SCALE

COLUMBIA GAS Distribution Companies ***EROSION AND SEDIMENTATION CONTROL PLAN***	TOPSOIL CONSERVATION	***Exhibit H***



A. SIDE VIEW

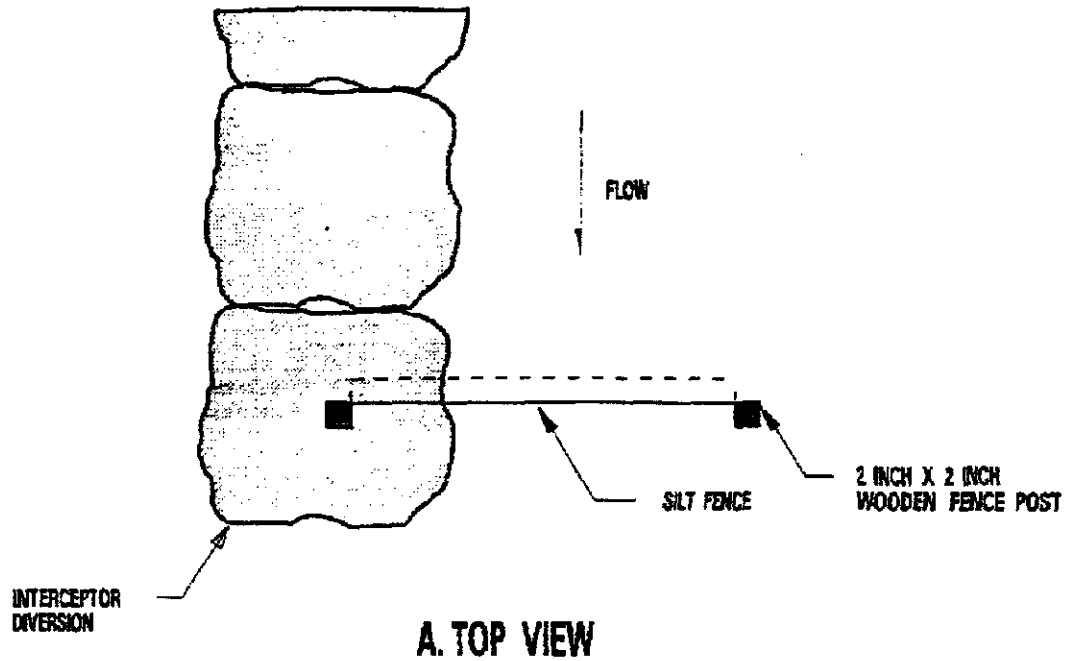


B. FRONT VIEW

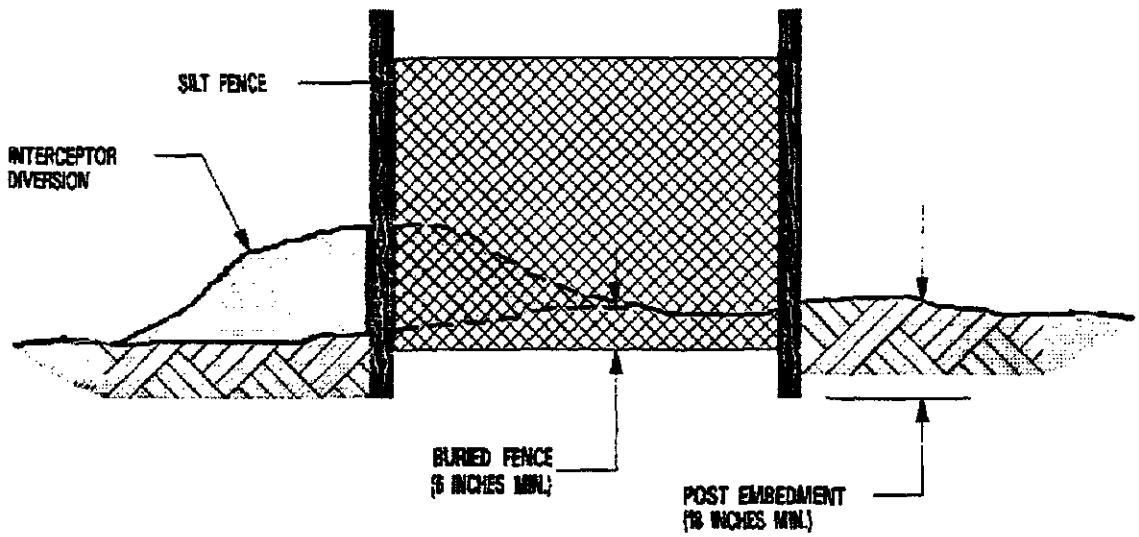
NOTES:
1. INSTALL AT EVERY SECOND INTERCEPTOR DIVERSION PROMPTLY AS TRENCH IS COMPLETED.
2. PRIOR TO LOWERING IN, REMOVE ALL DECOMPOSED MATERIAL AND ROCKS.
3. INSTALL SACKS TO TOP OF TRENCH ON STEEP GRADES THAT ARE NOT USED FOR FARMING.
4. TOP OF TRENCHLINE BARRIER WILL BE BELOW PLOW DEPTH IN AGRICULTURAL LAND.

NOT TO SCALE

COLUMBIA GAS Distribution Companies ***EROSION AND SEDIMENTATION CONTROL PLAN***	TRENCHLINE BARRIERS AND BREAKERS	***Exhibit I***



A. TOP VIEW

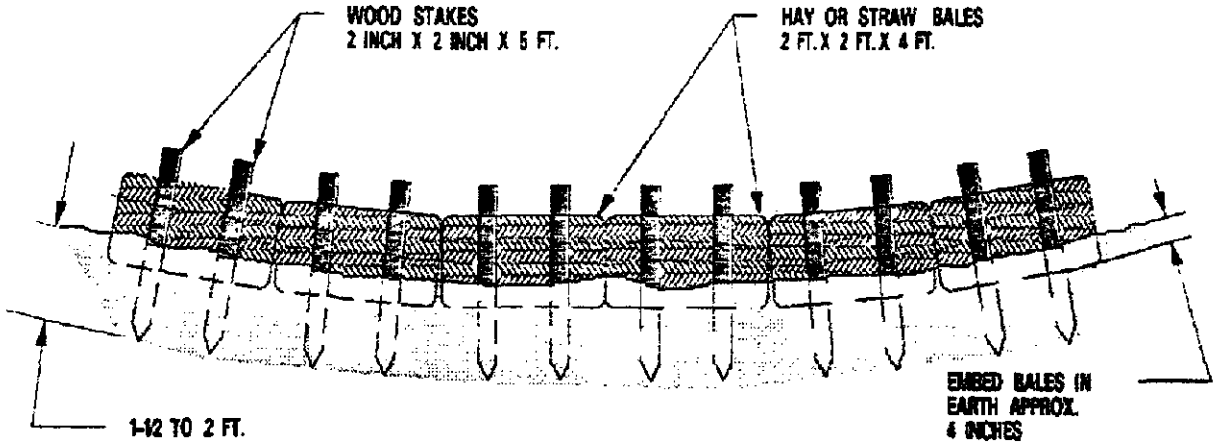


B. SIDE VIEW

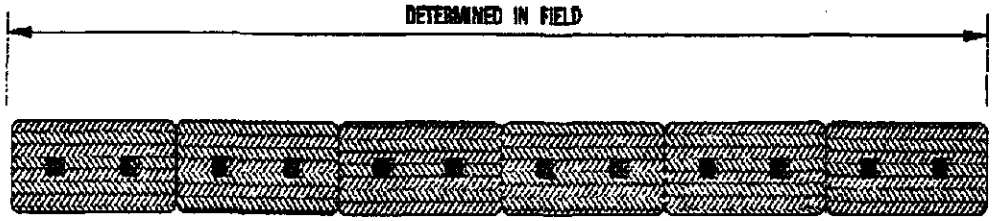
NOTES: 1. SILT FENCE CAN ALSO BE INSTALLED (USING THE SAME SPECIFICATIONS AS PRESENTED ABOVE) IN OTHER SITUATIONS FOR EROSION AND SEDIMENTATION CONTROL.

NOT TO SCALE

COLUMBIA GAS Distribution Companies ***EROSION AND SEDIMENTATION CONTROL PLAN***	SEDIMENT FILTER DEVICE SILT FENCING	***Exhibit J***



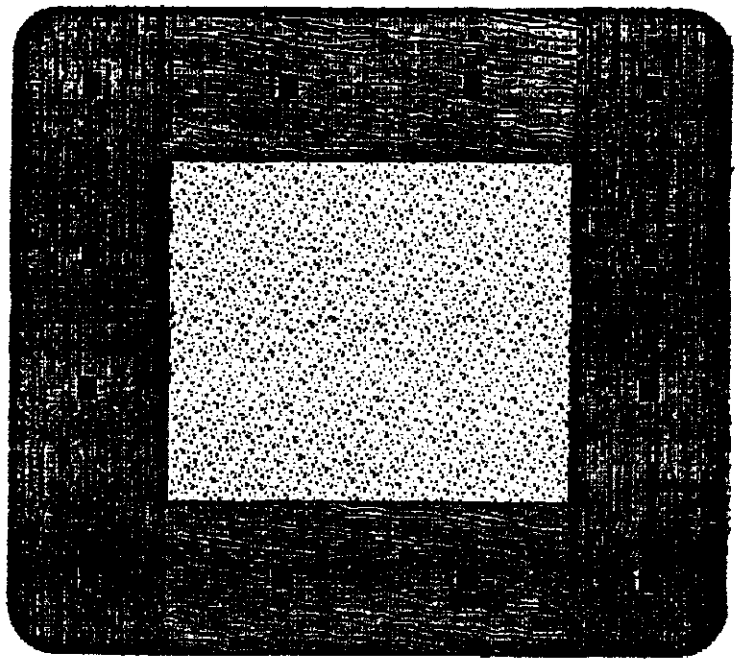
A. SIDE VIEW



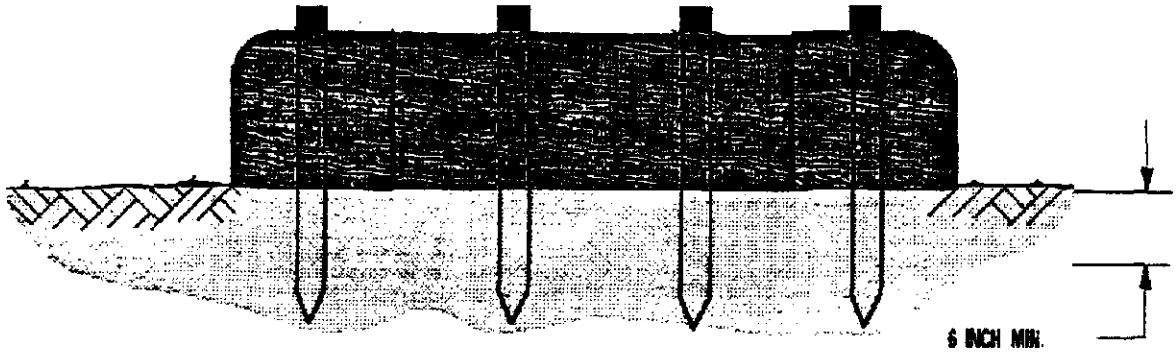
B. TOP VIEW

NOT TO SCALE

COLUMBIA GAS Distribution Companies ***EROSION AND SEDIMENTATION CONTROL PLAN***	SEDIMENT FILTER DEVICE STAKED BALES	***Exhibit K***



A. PLAN VIEW

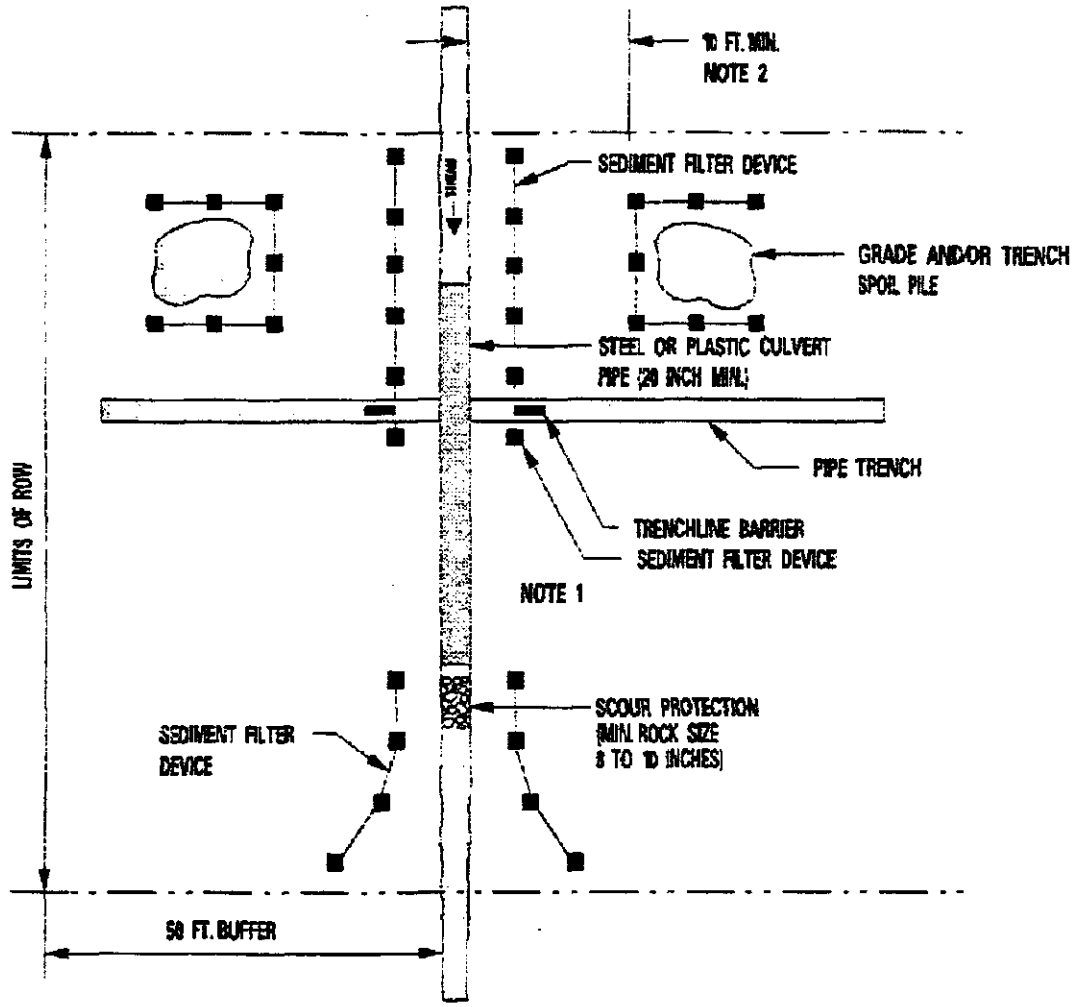


B. SIDE VIEW

NOTES:
1. INSTALL BALES AS SHOWN. IF ADDITIONAL STORAGE VOLUME IS NECESSARY, SECURE ADDITIONAL BALES ON TOP OF INITIAL BOTTOM LAYER AND/OR BY INCREASING THE NUMBER BALES IN BOTTOM LAYER.
2. SECURE EACH BALE & EACH LAYER OF BALES USING EITHER TWO REBARS OR TWO WOODEN STAKES PER BALE.
3. PLACE A 5 TO 6 INCH DEEP LAYER OF 3/4 TO 1.0 INCH CLEAN STONE ON GROUND COVER INSIDE BALES.
4. THE SEDIMENT TRAP WILL NOT BE GREATER THAN TWO BALES IN HEIGHT FOR SIX-BALE BOTTOM CONSTRUCTION WITHOUT ADDITIONAL REINFORCEMENT OF TRAP WALLS.

NOT TO SCALE

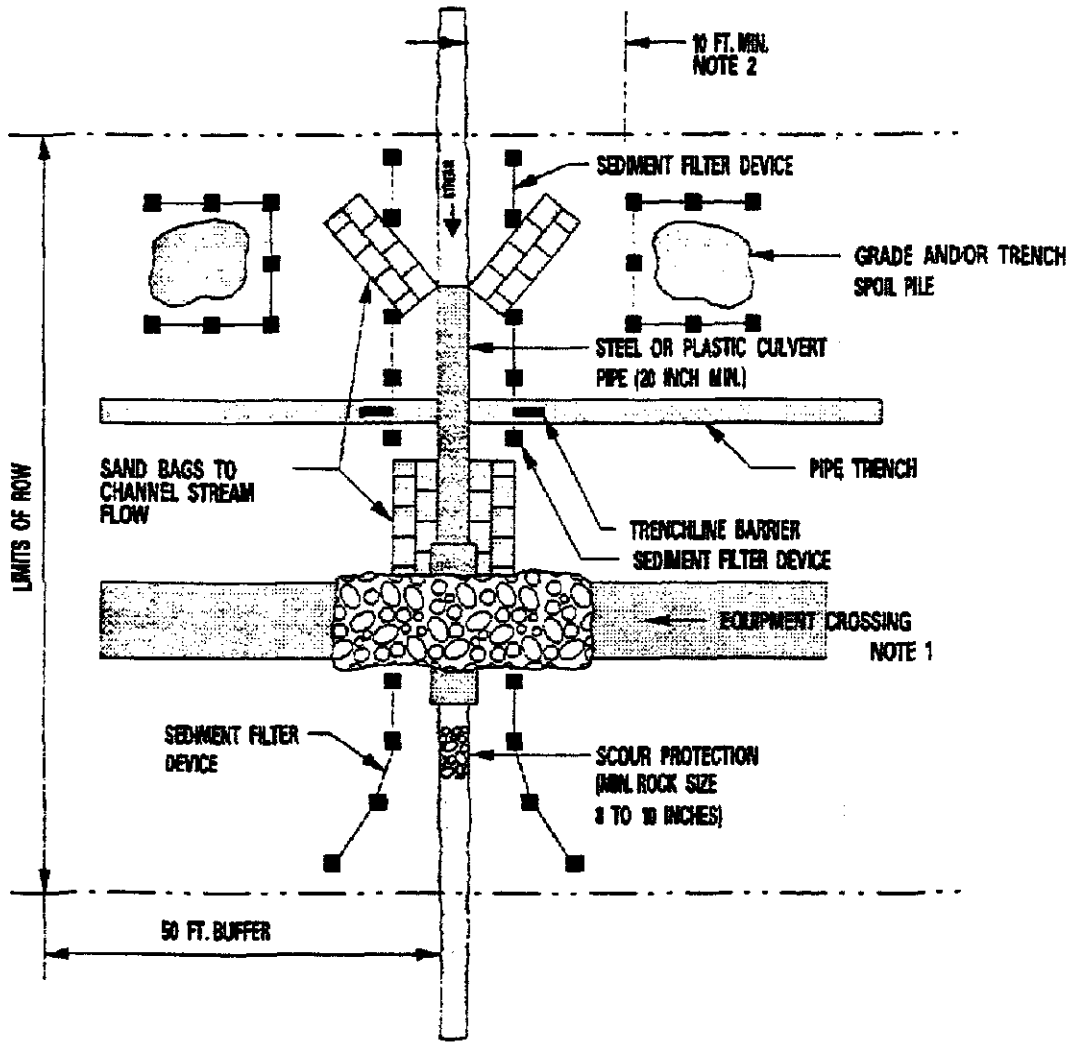
COLUMBIA GAS Distribution Companies ***EROSION AND SEDIMENTATION CONTROL PLAN***	SEDIMENT TRAP	***Exhibit L***



NOTES:
1. EQUIPMENT CROSSINGS ARE TO BE PREPARED AS ILLUSTRATED IN FIGURES 21, 22, OR 23 IF NEEDED.
2. GRADE AND TRENCH SPOIL WILL BE STOCKPILED AT LEAST 10 FEET FROM THE WATER'S EDGE, TOPOGRAPHY PERMITTING.

NOT TO SCALE

COLUMBIA GAS Distribution Companies ***EROSION AND SEDIMENTATION CONTROL PLAN***	TYPICAL STREAM CROSSING INTERMITTENT STREAMS	***Exhibit N***



NOTES:
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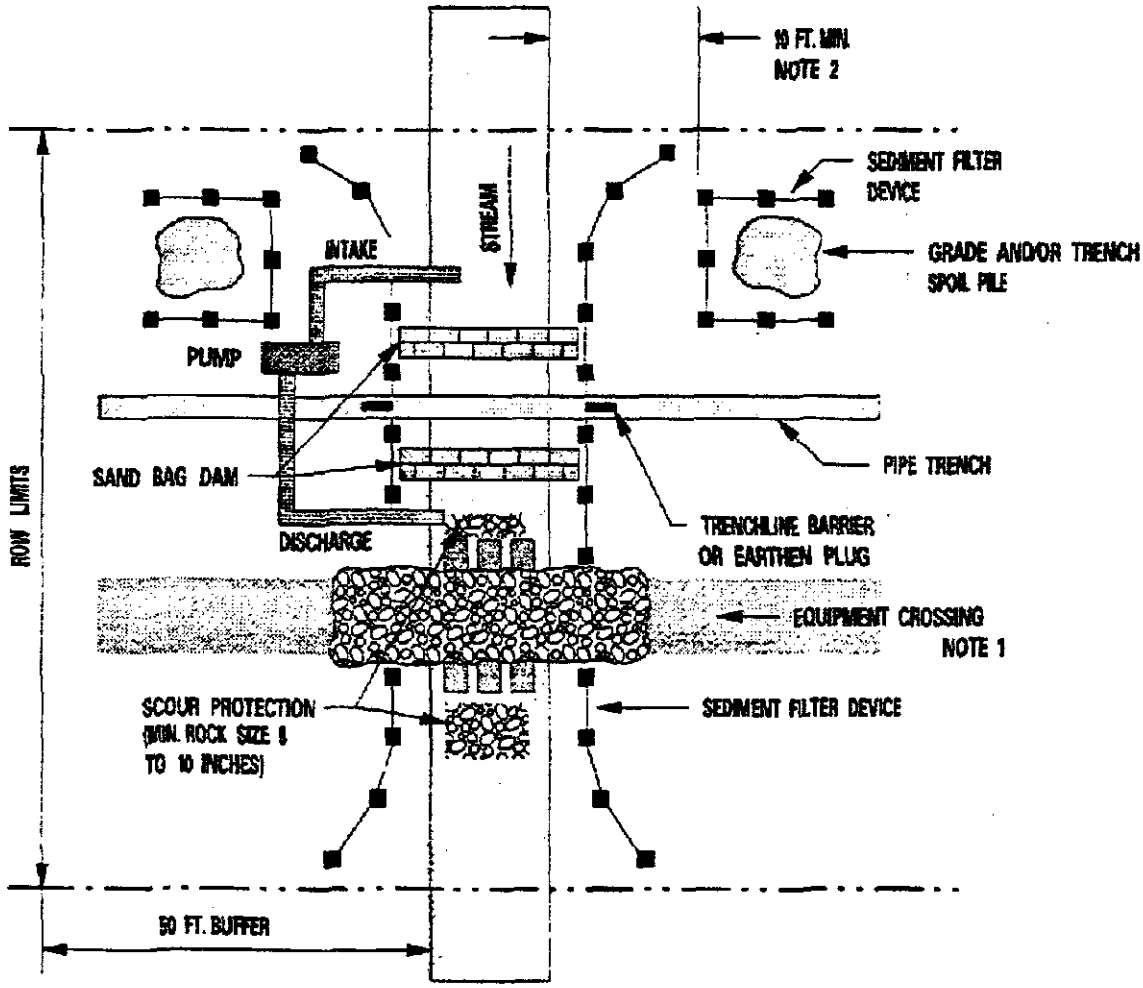
NOT TO SCALE

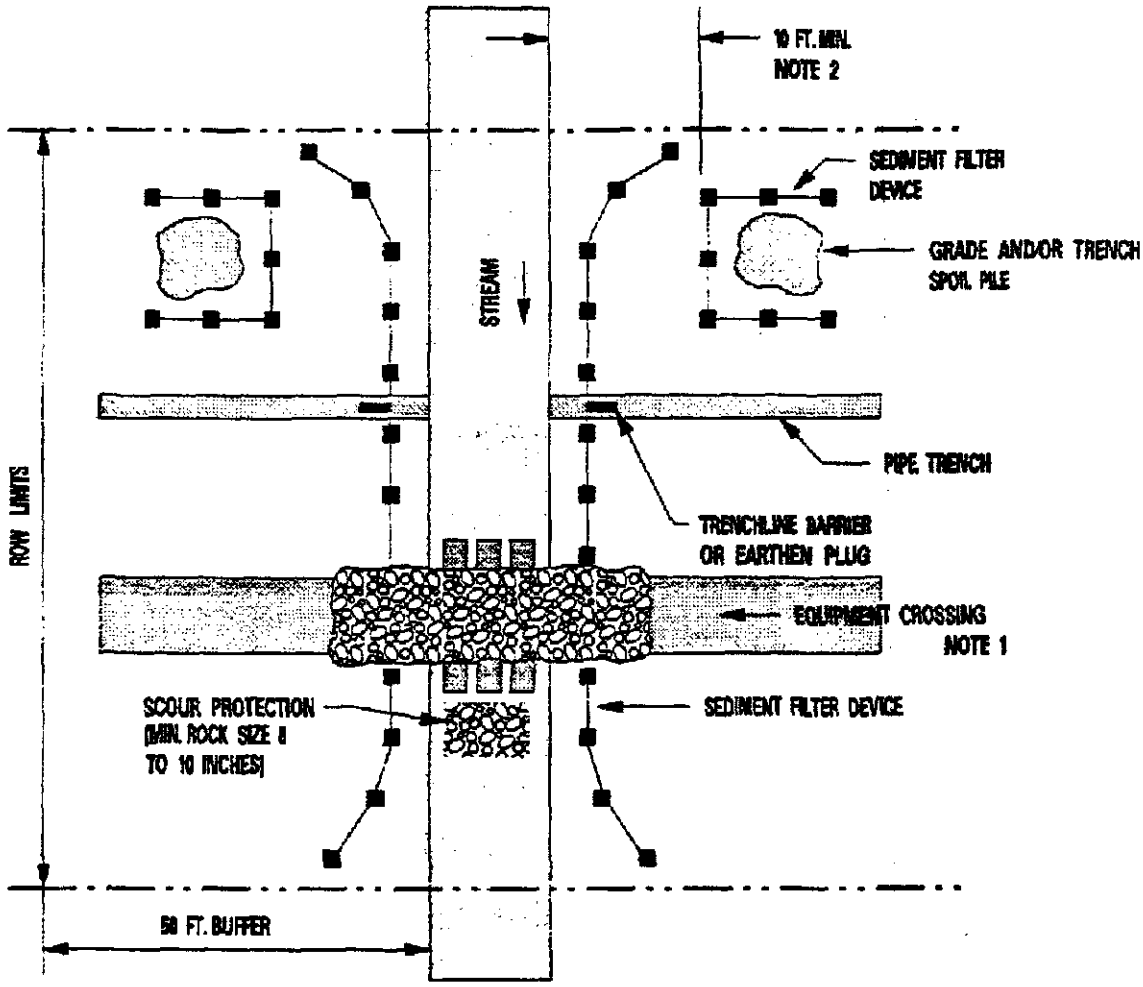
COLUMBIA GAS Distribution Companies ***EROSION AND SEDIMENTATION CONTROL PLAN***	TYPICAL STREAM CROSSING DRY-DITCH	*Exhibit O*



NOTES:
1. EQUIPMENT CROSSINGS ARE TO BE INSTALLED AS ILLUSTRATED IN FIGURES 21, 22, OR 23.
2. GRADE AND TRENCH SPOIL WILL BE STOCKPILED AT LEAST 10 FEET FROM THE WATERS' EDGE, TOPOGRAPHY PERMITTING.
3. PUMP INTAKES WILL BE SCREENED.
4. SUFFICIENT PUMP CAPACITY WILL BE USED TO MAINTAIN STREAM FLOW AT ALL TIMES UNTIL BACKFILL AND REMOVAL OF SANDBAG DAM.

NOT TO SCALE

COLUMBIA GAS Distribution Companies *EROSION AND SEDIMENTATION CONTROL PLAN*	TYPICAL STREAM CROSSING PUMP-AROUND	*Exhibit P*



NOTES:
1. EQUIPMENT CROSSINGS ARE TO BE PREPARED AS ILLUSTRATED IN FIGURES 21, 22, OR 23.
2. GRADE AND TRENCH SPOIL WILL BE STOCKPILED AT LEAST 10 FEET FROM THE WATERS' EDGE, TOPOGRAPHY PERMITTING.

NOT TO SCALE

COLUMBIA GAS Distribution Companies ***EROSION AND SEDIMENTATION CONTROL PLAN***	TYPICAL STREAM CROSSING WET-DITCH	***Exhibit Q***

COLUMBIA GAS
of Ohio

September 8, 1994

The Hon. Craig A. Glazer, Chairman
Ohio Power Siting Board
180 East Broad Street
Columbus, Ohio 43266-0573

Re: Columbia Gas of Ohio, Inc.
Westlake High-Pressure Betterment Project
Case No. 94-1341-GA-BTX

Dear Chairman Glazer:

Enclosed for filing are an original and twenty copies of the responses of Columbia Gas of Ohio, Inc. to the Staff's Requests for Production of Documents and Interrogatories in the above-referenced proceeding.

Very truly yours,

Kenneth W. Christman

Kenneth W. Christman
Assistant General Counsel

cc: All Parties of Record

PRODUCTION OF DOCUMENTS AND INTERROGATORIES

1. **What is the depth of directional drilling/boring proposed for each segment of pipeline identified on pages 11-6 and 11-7 of the application?**

   Response:

   The anticipated depth of the directional drilled/bored pipeline will vary nominally from 4 feet to 8 feet deep.

2. **What is the depth of cover above the pipeline for each of those segments of pipeline identified on pages 11-6 and 11-7 of the application that will be installed by directional drilling/boring?**

Response:

The anticipated cover of the directional drilled/bored pipeline will vary nominally from 3 feet to 7 feet of cover.

3. **Provide a detailed description of the types of vegetative cover above the pipeline for those segments identified on pages 11-6 and 11-7 of the application that will be installed by directional drilling/boring.**

Response:

For a detailed description of the wetlands involved in this project, refer to Appendix A, the Application to the Ohio Power Siting Board. Of approximately 9500 feet of pipeline, about 5680 feet is through forested and scrub-shrub wetlands. However, by using directional drilling/boring techniques, the proposed pipeline construction should not disturb any of the forested wetlands and only about 210 feet of the scrub-shrub wetlands will be temporarily disturbed between I-90 and Chester Road.

4. **What specific problems are anticipated with leak detection and corrosion monitoring of the pipeline during operation with respect to the depth of the pipeline and the types of vegetative cover in the right of way for those segments identified on pages 11-6 and 11-7 of the application that will be installed by directional drilling/boring?**

Response:

The use of directional drilling/boring through the wetlands areas should have no effect on Columbia's leakage detection and corrosion monitoring of the pipeline. Due to the relatively minimal depth of the planned directional drilling/boring (4 feet to 8 feet in depth), Columbia's standard leakage and corrosion control programs will be adequate.

5. **Which segments of the pipeline, as described on pages 11-6 and 11-7 of the application, will be installed with casings?**

Response:

Use of pipeline casings are not anticipated for this project.

6. **In detail describe, what types of soils, subsurface conditions such as cobbles/boulders, and underlying strata including depth to bedrock are found in the proposed preferred and alternative rights of way from the surface to depth of drilling/boring?**

Response:

As indicated in Appendix A; page 2, of the application to the Ohio Power Siting Board, there are two major soil types within the proposed construction area: Allis silty clay loam and Miner silty clay loam. The wetland components of the pipeline alignment are dominated by the Allis soil and are hydric. According to the Appendix A report,"..[T]he bedrock is at 36 inches and is shale" (page 2). There are no anticipated problems associated with directional drilling through this substrate.

7. **What are the potential impacts resulting from the disturbance of the root zone of the vegetation in the wetlands during directional drilling/boring?**

Response:

Since trees in wetland areas are generally shallow-rooted, no impacts are expected to the vegetation. Soils which are saturated for long periods during the growing season generally develop anaerobic conditions in the deeper zones. Species with deep root systems cannot survive in such situations. Those tree species which have adapted to these soils are shallow-rooted (<3 feet deep) to take advantage of the higher oxygen concentrations in the near-surface soil areas. Therefore, the proposed 3-7 feet of cover will put the pipeline well below the root zone of the forested and scrub/shrub wetlands.

8. **What are the potential impacts resulting from the disturbance of the surface and subsurface hydrology in the wetlands during and after directional drilling/boring?**

a. **Include dewatering and other changes in the hydrology of the wetlands.**

Response:

No negative impacts are expected to the surface and subsurface hydrology as a result of directional drilling in this project for the following reasons:

1. There is very little change in elevation in the work area.
2. The borehole containing the pipeline will be packed with residual bentonite drilling mud, which is relatively impermeable, acting much like the existing clay soils in the wetland area.

9. **What are the potential impacts resulting from the disturbance of the surface and subsurface hydrology in the wetlands during and after trenching?**

a. **Include dewatering and other changes in the hydrology of the wetlands.**

Response:

No negative impacts are expected to the surface and subsurface hydrology in the wetlands from any trenching procedures for the following reasons:

1. There is very little elevation change in the proposed work area, eliminating concern for establishment of a gradient to drain higher wetland areas.
2. Trenching in wetlands is anticipated to be extremely limited, i.e. about 210 feet in the scrub-shrub wetland just north of I-90.
3. Should field conditions indicate the potential for dewatering from a wetland area to a ditch area, "trench breakers" or soil-filled sacks will be packed around the pipeline within the trench to establish segmented areas to impede water flow along the trench line.

10. Which of the segments of the pipeline, as described on pages 11-6 and 11-7 of the application, will be installed with trench plugs?

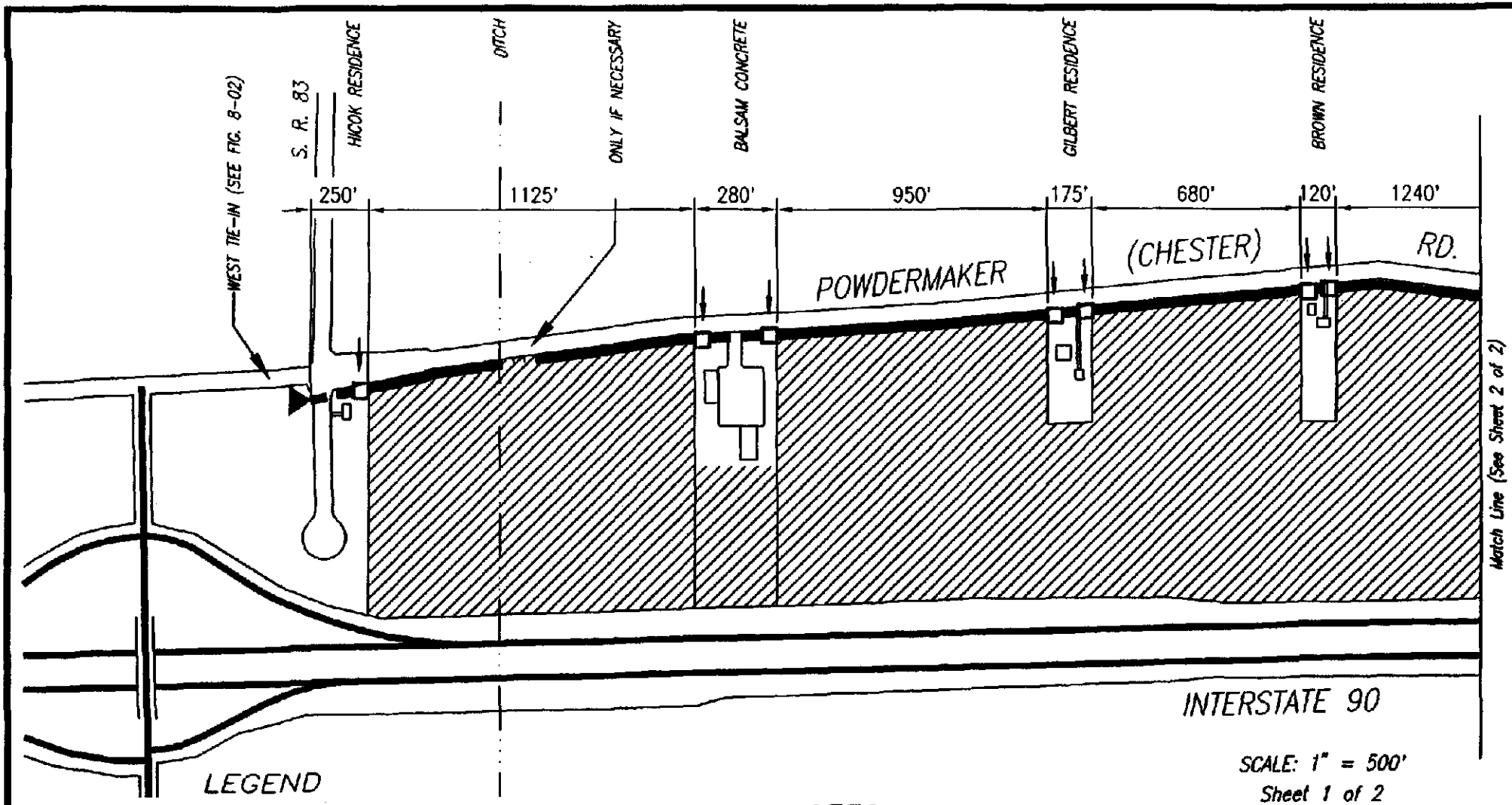
Response:

Trench plugs are normally installed within the trench to keep water from migrating from upland areas to streams or other drainage or from stream channels to low areas during high flows. Since no perennial streams exist along either pipeline alignment, trench plugs are not anticipated for this project.

11. **Depict, on Map 11-01 of the application, the specific locations of and access points to the drilling pads to be used during directional drilling/boring.**

Response:

The attached Map 11-01A indicates the six (6) proposed directional drilling/boring segments of the proposed pipeline. The location of the directional bore staging areas are shown as marked. Final field evaluation will determine the direction of drilling/boring for each segment and consequently which staging areas will be used for drilling sites and exit hole sites. The anticipated access locations for each directional drilling/boring staging area are shown on Map 11-01A.



SCALE: 1" = 500'
Sheet 1 of 2

LEGEND

- FORESTED WETLAND AREAS
- SHRUB/SCRUB WETLAND AREAS
- DIRECTIONAL BORE AREAS
- TRENCHING IN WETLAND AREAS
- CONVENTIONAL TRENCHING AREAS
- TIE-IN
- DIRECTIONAL BORE STAGING AREAS
- ANTICIPATED ACCESS LOCATIONS

NOTES

A) AS INDICATED LESS THAN 750 FEET OF COMBINED FORESTED WETLANDS AND SHRUB/SCRUB WETLANDS WILL BE IMPACTED BY THIS PROJECT.

B) FROM THE EAST TIE-IN AT LEAR NAGLE RD. TO THE WEST BOUNDARY OF THE GOOD TIMES FUN PARK, COLUMBIA WILL UTILIZE A 25' EASEMENT ADJACENT TO THE EXISTING ROAD RIGHT OF WAY.

C) FROM THE WEST BOUNDARY OF THE GOOD TIMES FUN PARK TO THE WEST TIE-IN AT STATE ROUTE 83, COLUMBIA WILL UTILIZE A 15' EASEMENT ADJACENT TO THE EXISTING ROAD RIGHT OF WAY.

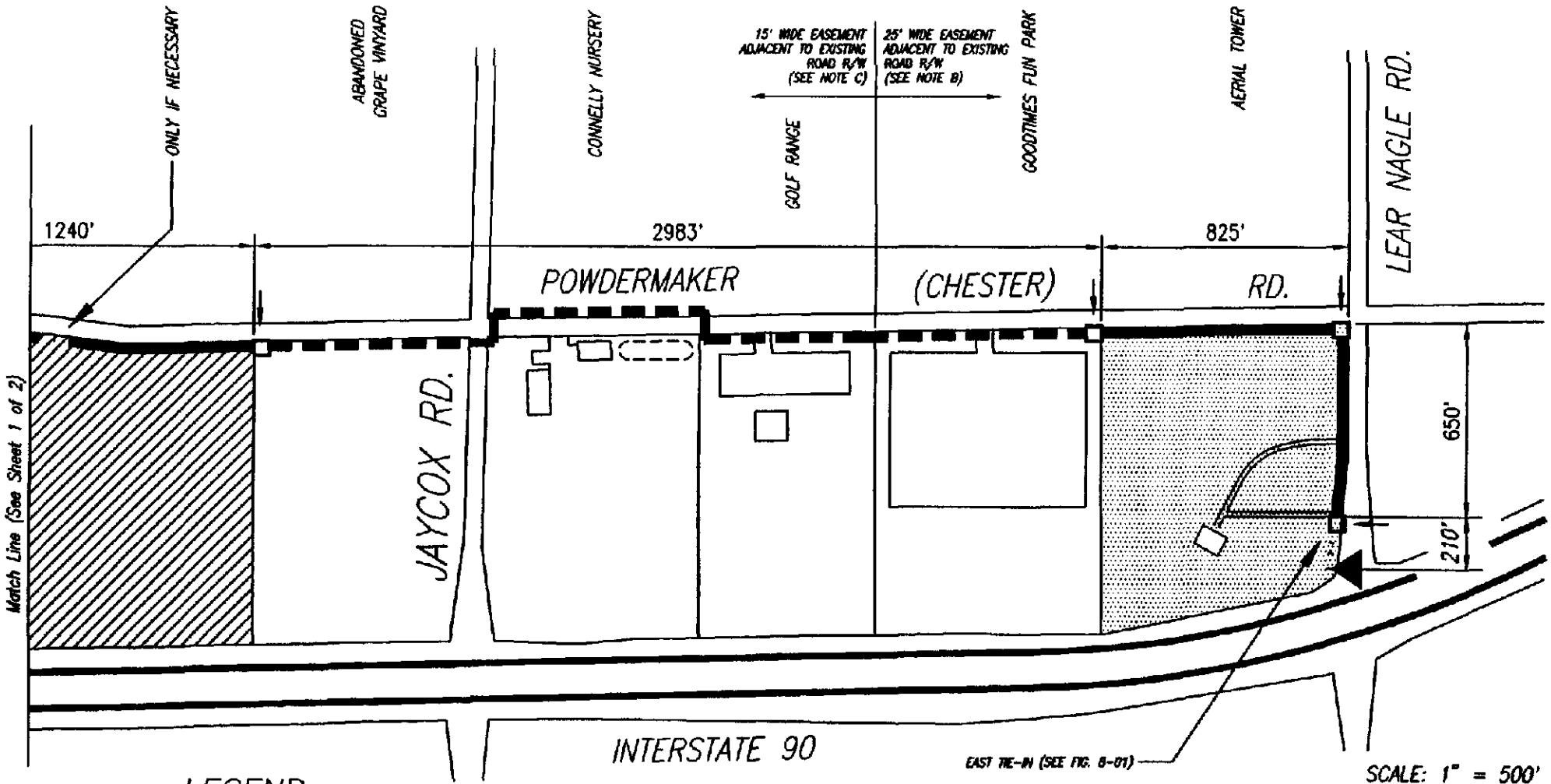
MAP 11-01A

COLUMBIA GAS
of Ohio

WESTLAKE HP BETTERMENT
CHESTER RD. 12 INCH LOOP

ARMY CORP. OF ENGINEERS
APPLICATION NO. 94-502-32

08-05-94 C R EMERSON



SCALE: 1" = 500'
Sheet 2 of 2

LEGEND

- FORESTED WETLAND AREAS
- SHRUB/SCRUB WETLAND AREAS
- DIRECTIONAL BORE AREAS
- TRENCHING IN WETLAND AREAS
- CONVENTIONAL TRENCHING AREAS
- TIE-IN
- DIRECTIONAL BORE STAGING AREAS
- ANTICIPATED ACCESS LOCATIONS

NOTES

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MAP 11-01A

COLUMBIA GAS
of Ohio

WESTLAKE HP BETTERMENT
CHESTER RD. 12 INCH LOOP

ARMY CORP. OF ENGINEERS
APPLICATION NO. 94-502-32

08-05-94 C R EMERSON

12. **Provide a detailed schematic of each drilling pad to be used during directional drilling/boring. Include information on approximate dimensions for each pad.**

Response:

The attached sketch, Exhibit A, shows an approximate layout of a typical drilling/boring site planned for this project. Space limitation at each staging area will dictate the actual equipment layout.

TYPICAL STAGING AREA FOR DIRECTIONAL DRILLING/BORING SITE

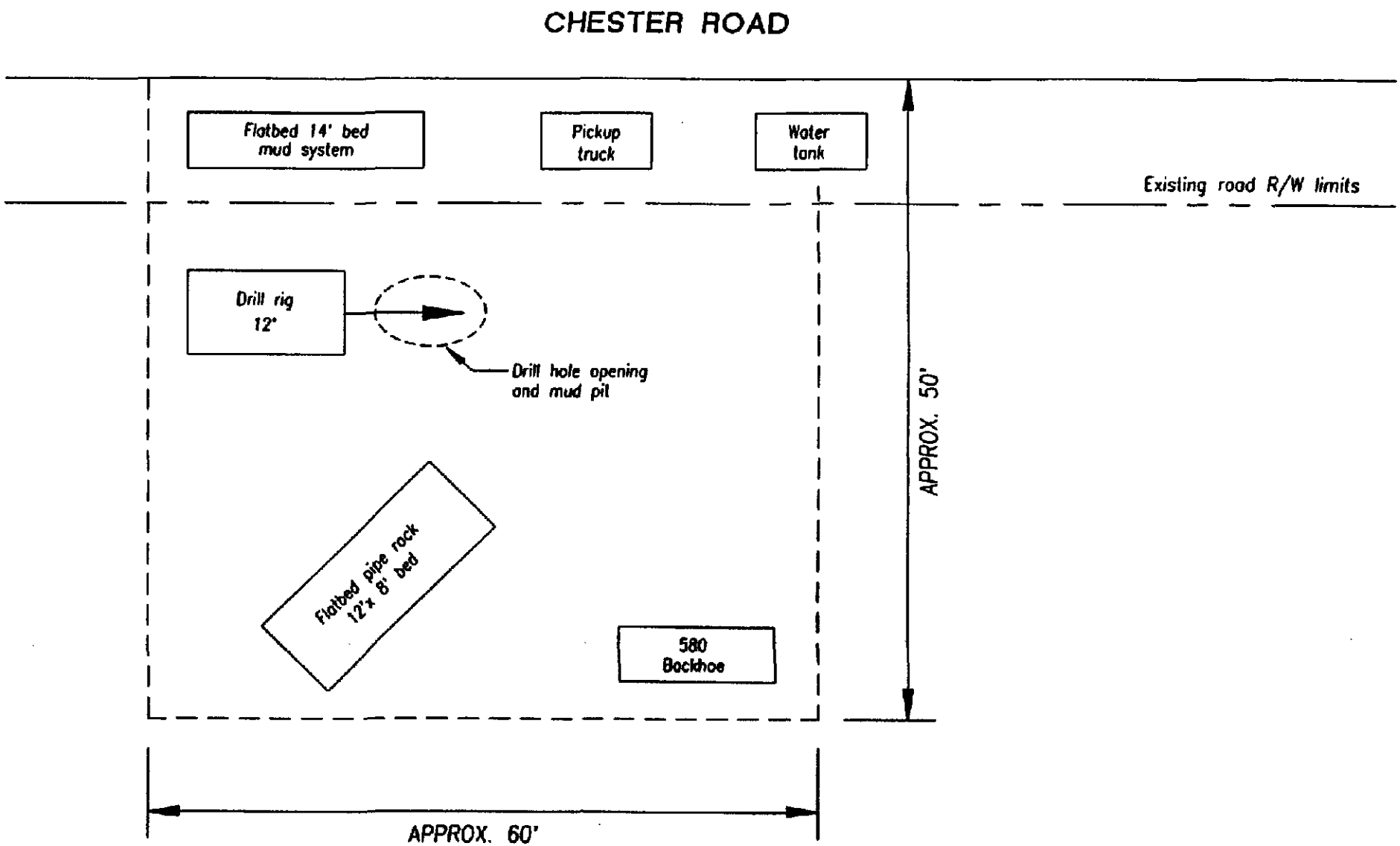


Exhibit 'A'

NOT TO SCALE

13. **What types of equipment and structures will be used at each drilling pad?**

a. **Describe the above in detail.**

b. **Include information on drilling fluids pits/tanks.**

Response:

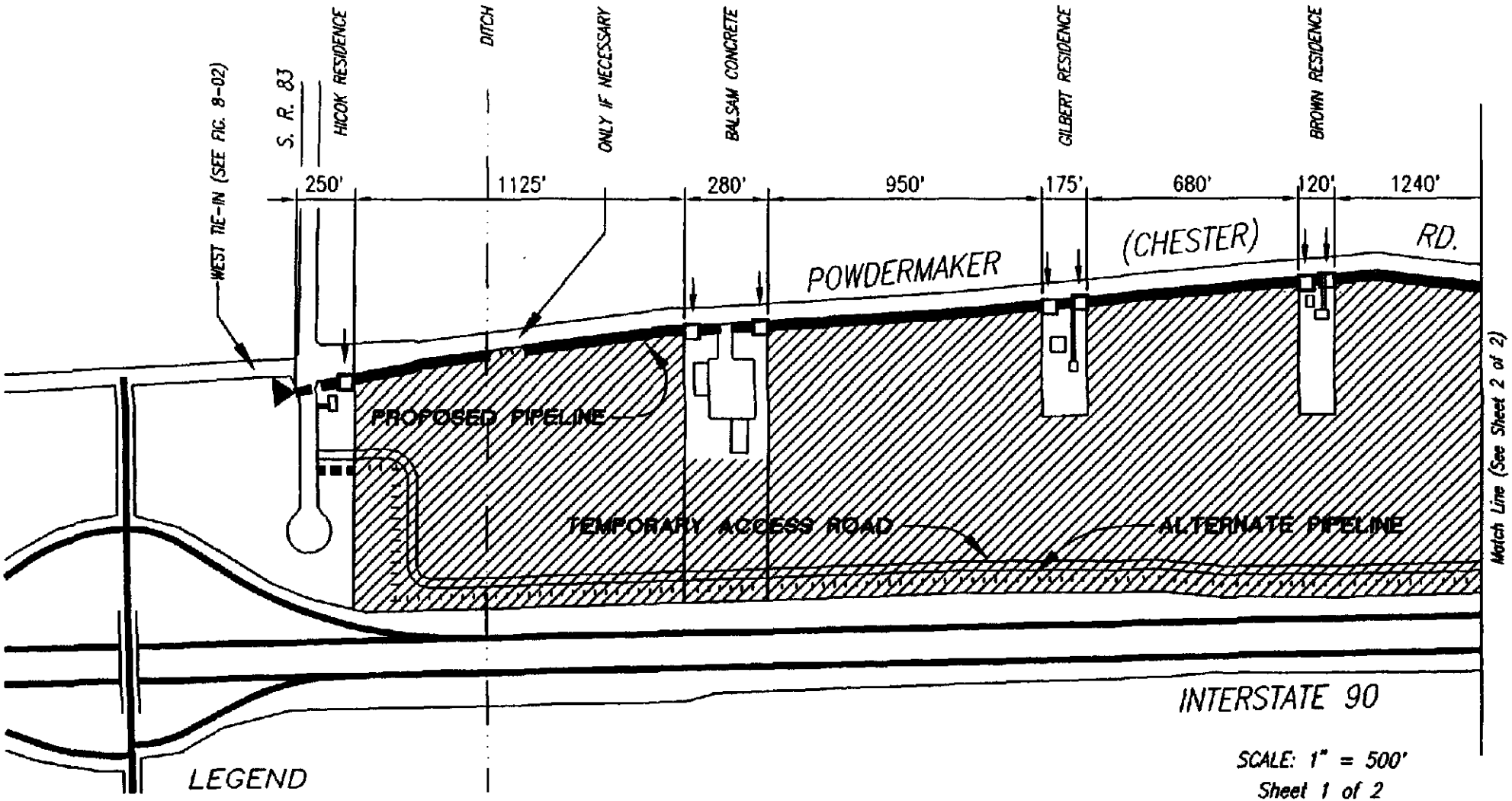
As shown on the attached sketch, Exhibit A, the typical drilling site staging area will consist of the following equipment.

- Drilling Rig; maximum capacity of 70,000 lb. of thrust/pullback.
- Flatbed truck with a 14 foot bed; mounted on this truck is the drilling fluid system consisting of filtration, pumps, and drilling fluid mud storage tanks. This truck will likely be parked along the road right-of-way.
- Pick-up truck; most likely parked along the road right-of-way.
- Water Tank; located adjacent to road right-of-way.
- Flatbed truck with 12 foot bed; drill pipe will be loaded on this truck.
- 580 backhoe.

14. **Depict to scale, on Map 11-01 of the application, the specific locations of all temporary and permanent access roads and points, equipment laydown areas, and any other staging areas and associated facilities that will be used during construction, operation, and maintenance of the proposed facility along both alignments.**

Response:

The attached Map 11-01B shows the six (6) proposed directional drilling/boring segments along the preferred pipeline route and the pipeline alignment for the alternate route. The location of the directional bore staging areas are shown as marked. Final field evaluation will determine the direction of drilling/boring for each segment and consequently which staging areas will be used for drilling sites and exit hole sites. The pipe layout area will be at the exit hole location. The anticipated access locations for both the preferred and alternate pipeline alignments are shown on Map 11-01B.



SCALE: 1" = 500'
Sheet 1 of 2

LEGEND

- FORESTED WETLAND AREAS
- SHRUB/SCRUB WETLAND AREAS
- DIRECTIONAL BORE AREAS
- TRENCHING IN WETLAND AREAS
- CONVENTIONAL TRENCHING AREAS
- TIE-IN
- DIRECTIONAL BORE STAGING AREAS
- ANTICIPATED ACCESS LOCATIONS

NOTES

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B) FROM THE EAST TIE-IN AT LEAR NAGLE RD. TO THE WEST BOUNDARY OF THE GOOD TIMES FUN PARK, COLUMBIA WILL UTILIZE A 25' EASEMENT ADJACENT TO THE EXISTING ROAD RIGHT OF WAY.

C) FROM THE WEST BOUNDARY OF THE GOOD TIMES FUN PARK TO THE WEST TIE-IN AT STATE ROUTE 83, COLUMBIA WILL UTILIZE A 15' EASEMENT ADJACENT TO THE EXISTING ROAD RIGHT OF WAY.

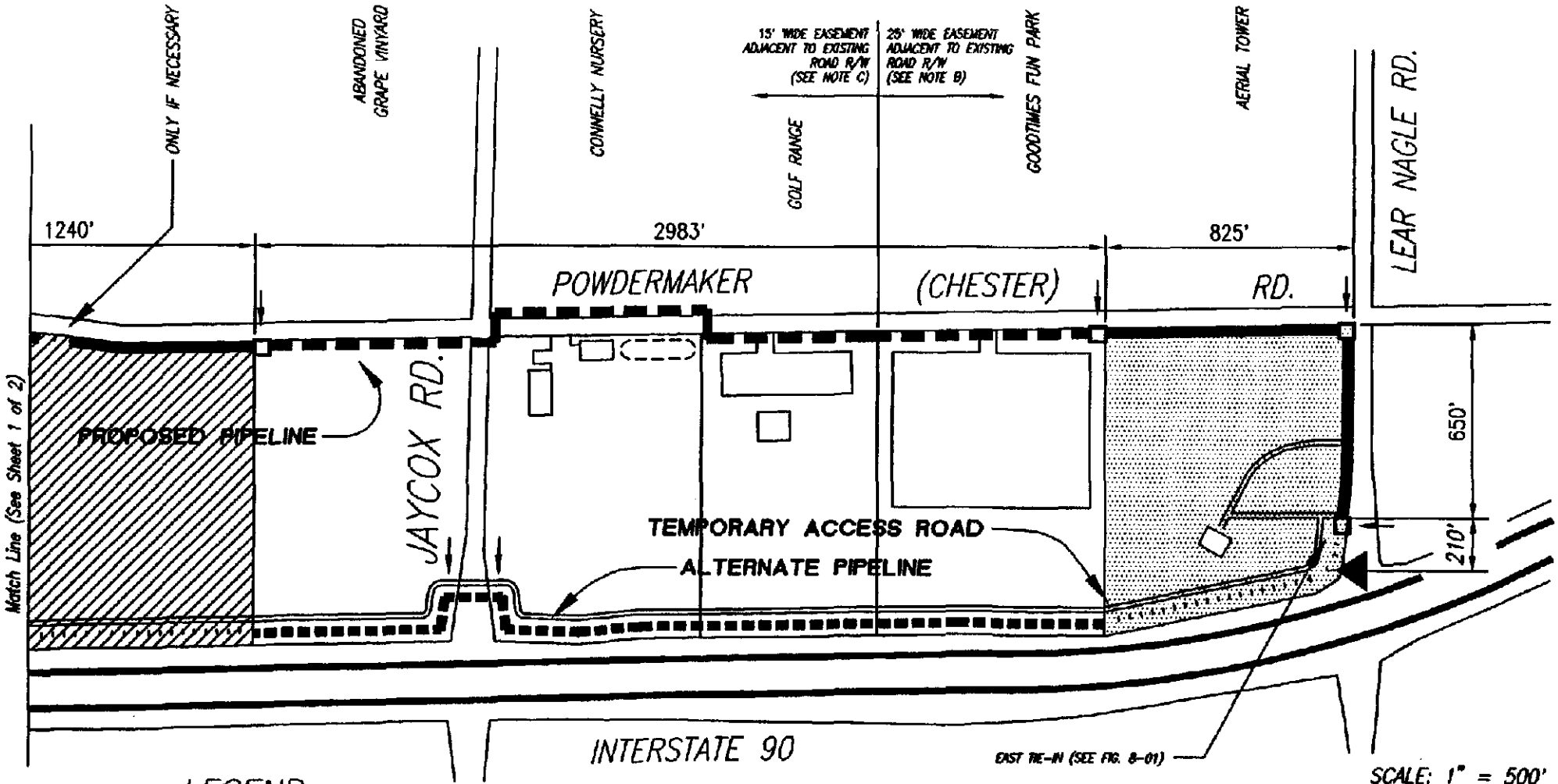
MAP 11-01B

COLUMBIA GAS
of Ohio

WESTLAKE HP BETTERMENT
CHESTER RD. 12 INCH LOOP

ARMY CORP. OF ENGINEERS
APPLICATION NO. 94-502-32

08-05-94 C R EMERSON



SCALE: 1" = 500'
Sheet 2 of 2

LEGEND

- FORESTED WETLAND AREAS
- SHRUB/SCRUB WETLAND AREAS
- DIRECTIONAL BORE AREAS
- TRENCHING IN WETLAND AREAS
- CONVENTIONAL TRENCHING AREAS
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- DIRECTIONAL BORE STAGING AREAS
- ANTICIPATED ACCESS LOCATIONS

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C) FROM THE WEST BOUNDARY OF THE GOOD TIMES FUN PARK TO THE WEST TIE-IN AT STATE ROUTE 83, COLUMBIA WILL UTILIZE A 15' EASEMENT ADJACENT TO THE EXISTING ROAD RIGHT OF WAY.

MAP 11-01B

COLUMBIA GAS
of Ohio

WESTLAKE HP BETTERMENT
CHESTER RD. 12 INCH LOOP

ARMY CORP. OF ENGINEERS
APPLICATION NO. 94-502-32

08-05-94 C R EMERSON

15. **Describe, in detail, all temporary and permanent access roads and points, equipment laydown areas, other staging areas, and any other associated facilities as depicted on Map 11-01 in No. 14 above.**

Response:

The location of the directional bore staging areas for the preferred pipeline alignment are shown as marked on map 11-01B. Final field evaluation will determine the direction of drilling/boring for each segment and consequently which staging areas will be used for drilling sites and exit hole sites. The pipe layout area will consist of double and triple random length pipe stacked in the pipeline right-of-way in a non wetlands area at the exit hole location for each directional drilling/boring segment. Proposed access to each site will be either directly from road right-of-way through non-wetland areas onto the adjacent construction site or from the various residential and commercial driveways (non wetlands) along the preferred pipeline alignment. Access to the scrub/shrub wetland area just north of I-90 along Lear Nagle Rd. will be from an existing gravel driveway which services a radio tower. No permanent access roads or staging areas will be required for future operation and maintenance of the preferred pipeline route.

For the alternate pipeline route adjacent to the north side of I-90, additional right-of-way width (proposed 50 feet) will be required due to the inability to utilize I-90 for ingress and egress during pipeline construction. Also, a temporary access road will be needed within the proposed right-of-way for the entire pipeline length between Lear nagle Rd. and SR 83. The approach to the temporary access road from Lear Nagle Rd. will be from the existing gravel driveway which services a radio tower. The approach from Jaycox Rd. and S.R. 83 will be along the pipeline alignment except at Jaycox Rd. where additional access easement may be required.

The cross country pipeline alignment of the alternate route will require a permanent future

access easement to the pipeline for operation and maintenance purposes.

Significantly greater environmental and wetland impact will be associated with access to the alternate pipeline route.

16. **What is the estimated volume of drilling fluid to be used at each drilling pad location identified in No. 11 above?**

Response:

During the directional drilling operation, drilling fluid (mud) is used to flush out the bore hole cuttings, keep the hole open and lubricate the pipe as it is pulled through. The drilling fluid pumping rate will be approximately 6 to 8 gallons per foot of drill hole. Drilling fluid flushed from the drill hole will be filtered and recirculated by the mud tank truck at the drilling pad stage area. The type of soil will determine the amount of drilling fluid needed at each drilling pad location.

17. What is the estimated volume of drilling fluid, with cuttings, that will require disposal from each drilling pad location identified in No. 11 above following construction?

Response:

Excess drilling fluid flushed from the drill hole will be filtered and recirculated by the mud tank truck at the drilling pad stage area. Any excess drilling fluid with cuttings will be disposed of offsite either at a local landfill or spread on an agricultural field, with the landowners permission. It is anticipated that little if any disposal of excess fluid will be required.

18. **Provide a detailed description of the type of drilling fluids that will be used at each drilling pad location identified in No. 11 above during construction.**

a. **Include any and all hazardous and non-hazardous chemical additives.**

Response:

See attached Exhibit B, MSDS sheet for the proposed Bentonite to be used for this project.

No chemical additives, other than water, will be mixed with the bentonite.

Bentonite is a naturally occurring clay mineral and is chemically and biologically inert.

Baroid Drilling Fluids, Inc.
Environmental, Safety and Transportation Data Sheet

QUIK-GEL®

HEALTH HAZARD 1 FLAMABILITY 0 REACTIVITY 0
Ratings based on NFPA
'Standard system for the Identification of the Fire Hazards of Materials'

I. PRODUCT IDENTIFICATION

Supplier
BAROID DRILLING FLUIDS, INC.
Address
P.O. BOX 1675 HOUSTON, TEXAS 77251
Trade Name
QUIK-GEL
Generic Description
HIGH YIELD BENTONITE; SODIUM MONTMORILLONITE 1302-78-9

Regular Telephone No. 713/987-5900
Emergency Telephone No. 713/987-4000

II. HAZARDOUS INGREDIENTS

Material or Component	%	Hazard Data
SILICA 14808-60-7	2-6%	LOW CONCENTRATIONS OF CRYSTALLINE SILICA (SiO_2) IN THE FORM OF QUARTZ, CRISTOBALITE, AND TRIDYMITE MAY BE PRESENT (SEE SECTION V)

III. PHYSICAL DATA

Boiling Point (Deg F): NA
Melting Point: NA
Freezing Point: NA
Specific Gravity (Water = 1): 2.5
Vapor Pressure (mm Hg): NA
Vapor Density (Air = 1): NA
Solubility in water, % by wt.: NA
Volatiles, % by Volume: NA
Evaporation Rate (Butyl Acetate = 1): NA
Appearance and Odor: GREY, TAN POWDER, NO ODOR
Density @ 20 Deg C: 47.6 LB/CU
pH: NA

NA = Not Applicable ND = Not Determined

All information recommendations and suggestions herein concerning our product are based upon tests and data believed to be reliable, however, it is the user's responsibility to determine the safety, toxicity, and suitability for his own use of the product described herein. Since the actual use by others is beyond our control, no guarantee, expressed or implied, is made by Baroid Drilling Fluids, Inc. as to the effects of such use, the results to be obtained, or the safety and toxicity of the product nor does Baroid Drilling Fluids, Inc. assume any liability arising out of use, by others, of the product referred to herein. Nor is the information herein to be construed as absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations.

(R) QUIK-GEL® is a Registered Trademark of Baroid Technology, Inc.

IV. FIRE AND EXPLOSION DATA

NOT FLAMMABLE OR EXPLOSIVE DOES NOT SUPPORT COMBUSTION.

EXTINGUISHING MEDIA: USE MEDIA APPLICABLE TO SURROUNDING FIRE.

SPECIAL FIRE FIGHTING PROCEDURES: NONE ANTICIPATED

V. HEALTH HAZARD INFORMATION

Carcinogenicity -SEE ROUTES OF EXPOSURE AND EFFECTS (BELOW)

Acute Oral (LD50)	Acute Dermal (LD50)	Aquatic Toxicity (LC50)
ND	ND	ND

Routes of exposure and effects
THIS PRODUCT CONTAINS FREE CRYSTALLINE SILICA WHICH ACCORDING TO THE IARC HAS EXHIBITED LIMITED EVIDENCE OF CARCINOGENICITY IN HUMANS. PROLONGED INHALATION OF THE POWDER MAY RESULT IN SILICOSIS, A NONCANCEORUS LUNG DISEASE. OSHA FINAL LIMITS TABLE 2-3 MINERAL DUSTS.

CRYSTALLINE SILICA
QUARTZ (RESPIRABLE) $\frac{10 \text{ mg/m3}}{\%SiO2 + 2}$

QUARTZ (TOTAL DUST) $\frac{30 \text{ mg/m3}}{\%SiO2 + 2}$

IF CRISTOBALITE OR TRIDYMITE IS DETECTED, USE ONE HALF THE VALUE CALCULTAED FROM FORMULA FOR QUARTZ.

EYES: IRRITANT
SKIN: POTENTIAL IRRITANT
INHALATION: IRRITATION TO LUNGS, NOSE, AND THROAT; PROLONGED INHALATION MAY CAUSE LUNGFINDURMIORPOSSEABES

NORMAL PERSONAL HYGIENE.

VI. REACTIVITY DATA

Conditions contributing to instability
STABLE

Incompatibility
NONE

Hazardous Decomposition Products
NONE

Conditions Contributing to Hazardous Polymerization
NONE

VII. SPILL OR LEAK PROCEDURES

Steps to be taken if material is released or spilled
NORMAL HOUSEKEEPING; CAUSES SLIPPERY SURFACES WHEN WET.

Neutralizing Chemicals
NA

Waste Disposal Method
DISPOSE OF IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS

VIII. INDUSTRIAL HYGIENE CONTROL MEASURES

Ventilation Requirements
MECHANICAL, GENERAL ROOM VENTILATION.
USE LOCAL VENTILATION TO MAINTAIN TLV (SEE SECTION V)

Specific Personal Protective Equipment
Respiratory
DUST MASK
Eye
SAFETY GLASSES, GOGGLES
Gloves
WORK GLOVES
Other Clothing and Equipment
APRON, EYEWASH

IX. SPECIAL PRECAUTIONS

Precautionary Statements

RECOMMENDED LABELING:

FRONT PANEL: CAUTION! SEE BACK PANEL FOR CAUTION BEFORE USE.
BACK PANEL: CAUTION THIS PRODUCT CONTAINS FREE CRYSTALLINE SILICA WHICH ACCORDING TO THE IARC HAS EXHIBITED LIMITED EVIDENCE OF CARCINOGENICITY IN HUMANS. PROLONGED INHALATION OF THE POWDER MAY RESULT IN SILICOSIS. A NONCANCEROUS LUNG DISEASE. AVOID CREATING DUSTY CONDITIONS AND USE A NIOSH APPROVED DUST RESPIRATOR.

Other Handling and Storage Requirements

STORE IN SHELTERED AREA OR COVER TO PROTECT FROM MOISTURE

X. DEPARTMENT OF TRANSPORTATION INFORMATION

Proper Shipping Name:
NOT REGULATED AS HAZARDOUS

Hazard Class:
NOT HAZARDOUS
Hazardous Substance:
NONE
Label:
NONE REQUIRED

Placards:
NONE
Reportable quantity:
NONE
ID Number:
NONE

XI. REGULATORY INFORMATION

STATUS ON SUBSTANCE LISTS

Comprehensive Environmental Response, Compensation and Liability Act of 1980, (CERCLA) requires notification of the National Response Center of release of quantities of Hazardous Substances equal to or greater than the reportable quantities (RQs) in 40 CFR 302.4.

Components present in this product which may require notification are:

Chemical	CAS #

NONE

Superfund Amendments and Reauthorization Act of 1986 Title III requires emergency planning based on Threshold Planning Quantities (TPQs) and release reporting based on RQs.

Components present in this product at a level which could require reporting under the statute are:

NONE

SARA requires the submission of annual reports of toxic chemicals that appear in 40 CFR 372 (for SARA 313). This information must be included in all MSDS that are copied and distributed for this material.

Components present in this product at a level which could require reporting under the statute are:

NONE

Toxic Substances Control Act (TSCA)

The ingredients of this product are on the TSCA inventory.

XII. STATE RIGHT-TO-KNOW

QUARTZ IS ON CANADIAN WHMIS (WORKPLACE HAZARDOUS MATERIAL INFORMATION SYSTEM) INGREDIENT DISCLOSURE LIST, MASSACHUSETTS SUBSTANCE LIST, NEW JERSEY RIGHT TO KNOW HAZARDOUS SUBSTANCE LIST AND PENNSYLVANIA HAZARDOUS SUBSTANCE LIST.

19. **What, in detail, are the site-specific plans to contain any and all blowouts of drilling fluids/cuttings during directional boring in wetlands?**

Response:

Careful control of borehole pressure is used to preclude blowouts or leaks to the surface. In the unlikely event of a significant blowout or fissure leak, the bentonite will be removed from the affected area with a vacuum truck system (which will be on call) and disposed of at an appropriate site or returned to the drilling mud tanks for reuse. If a smaller leak occurs, the bentonite will be removed either by hand bucket or by vacuum truck (whichever is appropriate) and disposed of at an appropriate site or returned to the drilling mud tanks for reuse.

20. What, in detail, are the site-specific methods of handling, storing, treating, and disposing of used and unused drilling fluids?

a. Identify a specific disposal method and facility, as applicable, for final disposition of the drilling fluids.

Response:

The contractor plans to reuse the drilling mud which will be contained in the drilling mud tanks at the drilling pad stage area. If it is necessary to dispose of some of the material offsite, the material will be disposed of at a local landfill or spread on an agricultural field with the landowners permission.

21. **What, in detail, are the site-specific construction methodologies and practices that will be used during trenching in wetlands and non-wetlands along both proposed alignments?**

a. **Include soil segregation methods, grading specifications, and use of mats.**

Response:

The construction methodologies for the preferred and alternate pipeline routes are similar, however, *significantly greater environmental* impact will be associated with the alternate route as discussed in the Application.

Special wetland trenching construction practices will be utilized in the wetlands to minimize any sedimentation effects from the construction procedure. During trench excavation, the top 12-inch of topsoil will be segregated from the subsoil. These spoil piles will be secured with silt fences to prevent the fill from moving off the right of way. Only vehicles with rubber tires will be permitted in the forested wetlands. The trench will be backfilled with the spoil material to a grade no higher than the previous ground elevation. No additional fill material will be utilized during trenching in wetlands. The use of mats is not anticipated during this project but will be made available if working conditions warrant.

Pipeline trench construction in the non-wetland area will consist of removing the spoil to one side of the trench line, laying the pipe and returning the spoil. Once the pipe is installed, the trench will be backfilled with the spoil material to preconstruction grade.

22. **What, in detail, are the site-specific restoration plans for both proposed alignments following construction including the plantings in forested and scrub-shrub wetlands referenced on page 11-8 of the application?**

Response:

Wetland trenching construction will be required for approximately 210 feet in the scrub-shrub wetland at the eastern end of the project. This wetland is dominated by arrowwood along with patches of nannyberry and red osier dogwood. During the dormant season following construction in February or March 1995, cuttings will be taken from the adjacent vegetative community. Herbaceous species such as Juncus spp and sensitive fern (Onoclea sensibilis) will probably readily reestablish from rootstocks and seed in the soil bank.

Since there is no anticipated cutting/trenching within the forested areas, no restoration plan is needed. Should limited trenching be required to monitor progress of the directional drill string or pipeline, it is expected that a rubber-tired backhoe could reach the ROW without cutting trees for access. In the event that trees do require cutting, they will be cut at ground level with stumps left in place for resprouting, which is common in wetland tree species.

The site-specific restoration plans for the preferred and alternate pipeline routes are similar, however, the alternate pipeline alignment if constructed will require an additional forested wetland restoration plan which is not needed for the preferred pipeline route because no forested wetlands will be disturbed.

23. **What, in detail, is the site-specific monitoring plan for all wetlands within the proposed, preferred, and alternate rights of way to be implemented after construction to provide an assessment of the following, at a minimum:**

a. **any and all changes in hydrology including dewatering;**

b. **changes in the composition of native wetland plant species;**

c. **revegetation by native wetland plant species; and**

d. **invasion by exotic wetland plant species.**

Response:

The site-specific monitoring plan for the preferred and alternate pipeline alignments will be similar, however, the alternate alignment will require an additional forested wetland monitoring plan which is not required for the preferred alignment because no forested wetlands are planned to be impacted.

a. There is no monitoring plan scheduled for hydrology since it is highly unlikely that any change in hydrology will result from either directional drilling or trenching procedures associated with this pipeline construction.

b. Vegetation within the impacted ROW areas (scrub-shrub areas) affected by trenching will be monitored over two years to determine survival of cuttings placed within the ROW and similarity of vegetation composition with off-ROW segments. ROW and off-ROW representative areas will be photographed before and after construction for comparison purposes. This report will be available to OPSB, ODNR and OEPA.

c. As noted above, vegetation composition will be monitored. Native vegetation will be encouraged by the deliberate planting of cuttings from adjacent native wetland woody

vegetation.

d. Monitoring over the two-year post-construction period will include physical removal of exotic wetland species such as multiflora rose, purple loosestrife and phragmites, which have been observed in the area.

24. **Provide information on the occurrence of State-designated endangered species, threatened species, rare species, and species of special interest within both project corridors based on an analysis of seasonal range, the presence of suitable habitat, known records, field surveys, and agency contacts.**

Response:

Telephone contacts regarding this project relative to state-designated endangered species, threatened species, rare species, and species of special interest include the following Ohio Department of Natural Resources personnel: Denis Case, Dave Ross, John Marshall and Pat Jones. A Natural Heritage Inventory was undertaken by Pat Jones as suggested by John Marshall. Analysis of the Natural Heritage Inventory data indicated no species of concern or habitat of concern associated with the proposed construction area.

Contacts at Ohio Department of Natural Resources:

Denis Case	(614) 265-6338
Dave Ross	(614) 265-6422
John Marshall	(614) 265-6306
Pat Jones	(614) 265-6472

25. **Provide copies of any and all correspondences, documents, telephone conversations, etc., with Federal and State entities regarding this project.**

Response:

Exhibit C contains documents sent to and received from Federal and State entities regarding this project. Several telephone conversations have taken place regarding above mentioned documents. Additional verbal contact has been made with The City of Avon and Ohio Department of Transportation.

COLUMBIA GAS
of Ohio

EXHIBIT C

file

April 12, 1994

Mr. David Snyder
Ohio Historical Preservation Office
Ohio Historical Center
1982 Velma Avenue
Columbus, OH 43211-2497

Re: Line Replacement Along Interstate 90 in Avon, Ohio

Dear Mr. Snyder:

Enclosed are two copies of a Topographic map outlining the above mentioned project. The replacement will be approximately 8300 feet in length and located in private right-of-way a few feet off of road right-of-way. The second topographic map details our alternative route which will be 8700 feet in length. The pipe diameter will be 12 inches.

According to the Ohio Power Siting Board's Reporting Matrix, Columbia is required to file a letter of notification with the Board. Columbia is requesting the Ohio Historical Preservation Office to relinquish the requirement of an Archaeological survey of this area due to its current commercialization.

Columbia would appreciate clearance from the Ohio Historic Preservation Office. Please send a letter stating the requirements Columbia must meet in order to achieve this clearance by May 12, 1994.

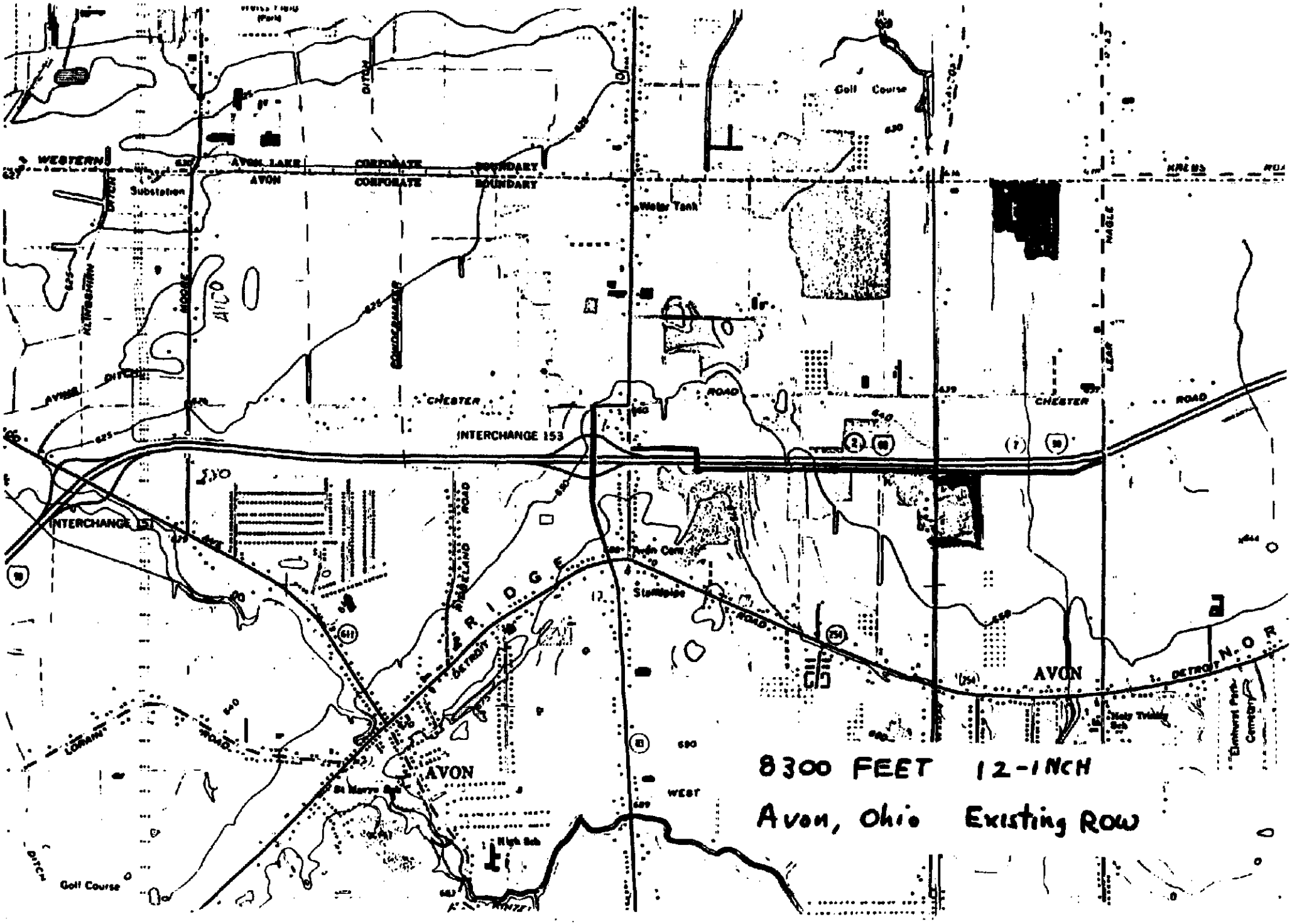
If you have any questions on this project, please feel free to contact me at (614) 460-6314.

Sincerely,

Kristin K. Luginbuhl
Environmental Engineer

Attachment

cc: C. J. Rees
R. A. Johnson


8300 FEET 12-INCH
Avon, Ohio Existing ROW
WESTERN
AVON LAKE
AVON
CORPORATE
CORPORATE
BOUNDARY
BOUNDARY
Substation
Golf Course
Water Tank
CHESTER
ROAD
INTERCHANGE 153
INTERCHANGE 151
AVON
AVON
DETROIT
WEST
Golf Course

COLUMBIA GAS
of Ohio

file

April 12, 1994

Mr. Kent Kroonemeyer, Field Supervisor
U. S. Department of the Interior Fish and Wildlife Service
6950 Americana Parkway
Reynoldsburg, OH 43068-4115

Dear Mr. Kroonemeyer:

Please find enclosed, two topographic maps detailing a line replacement Columbia would like to complete. The line will replace an existing line or be put in service along with the existing line. The first topographic map details the replacement in the existing right of way. The second topographic map depicts the line in new private right of way. The first line will be approximately 8,300 feet in length and have a diameter of 12 inches. The second line is 8,700 feet in length and is 12 inches in diameter.

According to the Ohio Power Siting Board's Reporting Matrix, Columbia is required to file a letter of notification with the Board. Columbia is requesting information on any endangered species which may be effected this proposed project. Please send a letter indicating whether or not endangered species will be affected by this project. Columbia requests a response prior to May 12, 1994.

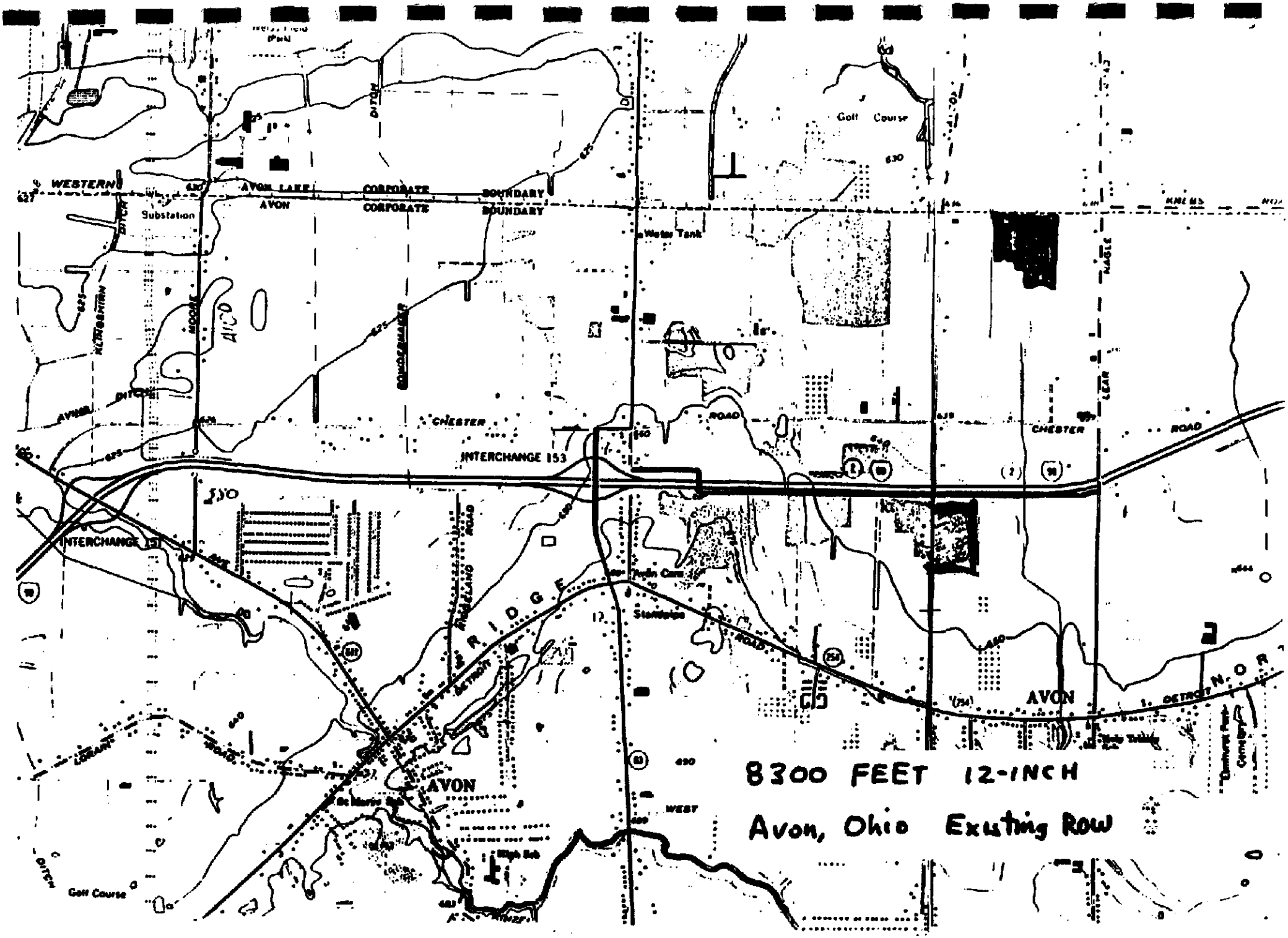
Please send your letter to my attention at the address shown below. If you have any questions about this project, please contact me at (614) 460-6314.

Sincerely,

Kristin K. Luginbuhl
Environmental Engineer

Attachment

cc: C. J. Rees
R. A. Johnson


8300 FEET 12-INCH
Avon, Ohio Existing ROW
WESTERN
AVON LAKE
CORPORATE
BOUNDARY
Substation
Golf Course
Water Tank
CHESTER
ROAD
INTERCHANGE 153
INTERCHANGE 151
AVON
DETROIT
N.O.R.
WEST
Golf Course

Ohio Historic Preservation Office

Ohio Historical Center
1982 Velma Avenue
Columbus, Ohio 43211-2497
614/297-2470
Fax: 297-2546

OHIO HISTORICAL SOCIETY
SINCE 1885

May 13, 1994

Kristin K. Luginbuhl
Columbia Gas of Ohio, Inc.
200 Civic Drive
P.O. Box 117
Columbus, Ohio 43216-0117

Dear Ms. Luginbuhl:

Re: Line Replacement Along Interstate 90, Avon, Ohio

This is in response to your letter dated April 12, 1994 concerning the proposed project. Our comments are submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966.

The project involves the relocation of a portion of pipeline. The proposed pipeline will be routed along a secondary road, Chester Road. Will it be located in the right-of-way? What is the current land use of the property? Photographs of the area would be appreciated, if available.

If you have any questions please contact Julie Quinlan at the above number. Her hours are from 5:00 a.m. to 1:00 p.m. Thank you for your cooperation.

Sincerely,

Martha J. Raymond

Martha J. Raymond, Department Head
Technical and Review Services

MJR/JAQ:jq

COLUMBIA GAS
of Ohio

May 18, 1994

Ms. Julie Quinlan
Program Coordinator
Ohio Historical Center
1982 Velma Avenue
Columbus, Ohio 43211-2497

RE: Line Replacement Along Interstate 90, Avon Lake, Ohio

Dear Ms. Quinlan:

Please find attached the report we discussed on the telephone on May 18, 1994. As I mentioned, this is one of three of our original reports and we would like to have it returned upon the completion of your review. If this information is not sufficient, Columbia is in the process of videotaping the route. We expect to have the video tape in at the beginning of next week. If you find that viewing the tape would be helpful for your response, please let me know and we will make arrangements for you to view it.

If you have any further questions on this project, please give me a call at 460-6314.

Sincerely,

Kristin K. Luginbuhl
Environmental Engineer

Attachment

cc: C. J. Rees (w/o attach.)
R. A. Johnson (w/o attach.)

COLUMBIA GAS
Distribution Companies

FACSIMILE TRANSMISSION

DATE: June 3, 1994

TO: Julie Quinlan
COMPANY/LOCATION Ohio Historical Society
Fax NO. 297-2546

FROM: Kristin Luginbuhl
COMPANY/LOCATION Columbia Gas
TEL.NO. 460-6314
FAX NO. 460-6938

Total Number of Pages 9 (including this cover sheet)

FOR MESSAGE CENTER USE ONLY:	MESSAGE NUMBER:	TIME SENT:	AM PM	DATE:

WRITE OR TYPE MESSAGE BELOW

Julie,

Please find attached a copy of the report from 3D/Environmental on Chester Road in Avon Lake, Ohio. I hope this information is sufficient for your work. However, if it is not, please let me know as soon as possible and Columbia will provide the information you require.

Thank you for assistance on this project. If you have any questions, please feel free to call me at 460-6314.

Sincerely,

Kristin

Form C 2979 CPS (11-92)

SUMMARY OF FINDINGS

To respond to Ohio Power Sighting Board's Item (C)(15) of 4906-15-12, 3D/E reviewed background data including USGS topographic maps, National Wetland Inventory maps (NWI), Soil Conservation Service Soil Survey maps, and road atlases. In addition, a field survey was conducted on May 5, 1994. 3D/E determined that no national and state forests and parks, floodplains, designated or proposed wilderness areas, national and state wild and scenic rivers, wildlife refuges, wildlife management areas, and wildlife sanctuaries are located within the area to be disturbed by the project if construction and operation of the pipeline are limited to the preferred route along Chester Road.

3D/E also determined that no areas of ecological concern were present, including national and state forests and parks, floodplains, designated or proposed wilderness areas, national and state wild and scenic rivers, wildlife refuges, wildlife management areas, and wildlife sanctuaries located within the area to be disturbed by the project if construction and operation of the pipeline are limited to the alternate route along the north side of Interstate 90.

Wetlands are a concern along both of the proposed preferred and alternate pipeline routes. Wetlands are not present within the existing road ROW's along either Chester Road or I-90. However, construction outside of the existing ROW's for either the preferred or the alternate route will result in wetland impacts.

1.0 PURPOSE OF STUDY

3D/Environmental (3D/E) was retained by Columbia of Gas Ohio, Inc. to conduct a survey for the proposed installation of a 12-inch natural gas pipeline located in Lorain County, Ohio (Figure 1). A field investigation was conducted on May 5, 1994. The purpose of this survey was to prepare a description of the applicant's investigation concerning the presence or absence of areas of ecological concern including national and state forests and parks, floodplains, wetlands, designated or proposed wilderness areas, national and state wild and scenic rivers, wildlife refuges, wildlife management areas, and wildlife sanctuaries that may be located within the area likely to be disturbed by the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.

2.0 OVERVIEW OF PROJECT AREA

2.1 Location of Project Area

The preferred pipeline route is located north of I-90 and runs along Chester Road (Figure 2) near the junction of I-90 and State Route 83, in Lorain County, Ohio. The alternate route is located parallel to the preferred route, but it is located immediately to the north of the highway. The area investigated for the preferred route and the alternate route rights-of-way were 100 feet in width, however for both lines, an area of 1000 feet in width was surveyed. The preferred pipeline route is approximately 8700 feet in length and the alternate pipeline route is approximately 8300 feet in length.

2.2 Physiography and Geomorphology

The study area is located in the Great Lakes section of the Central Lowlands. This is an area that was completely covered by the Wisconsin Ice sheet in the last pulse of Pleistocene glaciation. As a direct result of the last glaciation, all natural soil was stripped from the land and glacial till was deposited in it's place (Braun, 1950). Another result of the Wisconsin glacier was Lake Erie, which borders Lorain County to the north. Lorain County has two physiographic units. The northern third of the County is lake plain, and the southern two-thirds of the County is till plain. The lake plain is characterized by level or nearly level expanses of land broken by sand ridges and underlain by sandstone or shale bedrock. The till plain areas of the County consist of large and level areas underlain by sandstone or shale bedrock (USDA, 1976).

2.3 Soils

There are two main types of soil that occur within the study area, Allis silty clay loam and Miner silty clay loam (Figure 4) . Occurring within these two major soil types are areas of Dekalb very channery loam, Luray silty clay loam, Mermill loam, and Mitiwanga silt loam (USDA, 1976). The Dekalb, Mermill, and Mitiwanga soils are almost all located at the west end of the study area and the Luray soils are located in the southwest corner of the study area. Dekalb, Luray, Mermill, and Mitiwanga soils are not hydric soils (LSWCD, 1992).

Allis silty clay loam is located in large areas throughout the study area. Allis soils consist of somewhat poorly drained, nearly level soils on lake plains in the northern part of Lorain County. In a representative profile of Allis soil, the surface layer is an 8-inch thick, dark grayish-brown silty clay loam. The subsurface layer is 2 inches thick and is a gray silty clay loam. The subsoil extends to 36 inched deep a nd is mottled gray silty clay. The bedrock is at 36 inches and is shale. Allis silty clay loam is a hydric soil.

Miner silty clay loam is the second most abundant soil type within the study area. Miner soils are very poorly drained soils and are characterized by a surface layer of very dark grey silty clay loam about 9 inches thick. The subsoil is approximately 32 inches deep and is mottled, gray and dark-gray silty clay. The substratum is gray silty clay loam glacial till that extends to a depth of 60 inches. Miner silty clay loam is a hydric soil.

2.4 Plant Communities

The proposed pipeline is within the Beech-Maple Forest association. This forest association exists solely within the area covered by the Wisconsin glacier. The Mixed Mesophytic Forest region, which covers portions of Ohio, Kentucky, West Virginia, and Pennsylvania is contiguous with the Beech-Maple association throughout most of the range (Braun, 1950; Vankat, 1979). The dominant vegetation within this forest association consists of American beech (*Fagus grandifolia*) and sugar maple (*Acer saccharum*).

3.0 STUDY METHODS

To begin the study, topographic maps, soils maps, and other data were reviewed to determine the likelihood of occurrence, probable location of, and the presence and/or absence of areas of ecological concern including national and state forests and parks, floodplains, wetlands, designated or proposed wilderness areas, national and state wild and scenic rivers, wildlife refuges, wildlife management areas, wildlife sanctuaries, and endangered species and their habitats that may be located within the area of the project.

3.1 Wetlands and Floodplains

Following the background review, a field visit was conducted on May 5, 1994 to: (1) characterize the vegetation, (2) examine the soils, (3) inspect surface and groundwater hydrology, (4) based on this information, determine if wetlands or other Waters of the United States were present in the project area. The field visit was conducted by a wetland scientist who was responsible for identifying the presence of wetlands within the project area.

3.1.1 Wetland Classification and Definition

Wetland Classification

Wetland habitats within the study area were classified according to "Classification of Wetlands and Deepwater Habitats of the United States" (Cowardin et. al. 1979). In this classification system, wetland habitats are divided into five major systems: (1) Marine, (2) Estuarine, (3) Lacustrine, (4) Palustrine, and (5) Riverine. Each of these systems is further divided into subsystems, classes, and subclasses, with the level of discrimination including modifiers of dominant vegetation, water regime, water chemistry, and soils.

Wetland Definition

Wetlands habitats for the purpose of this study were defined as per the publication entitled "Corps of Engineers Wetlands Delineation Manual," (1987). The definition of wetlands in this manual reads as follows:

> Wetlands are those areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

This definition identifies three essential characteristics possessed by wetlands: 1) hydrophytic vegetation, 2) hydric soils, and 3) wetland hydrology, which is the driving force creating all wetlands.

3.1.2 Waters of the United States

The term "Waters of the United States" has broad meaning and incorporates both deepwater aquatic habitats and special aquatic sites, including wetlands (Federal Register, 1980), as follows:

a. The territorial seas with respect to the discharge of fill material.

b. Coastal and inland waters, lakes, rivers, and streams that are navigable Waters of the United States, including their adjacent wetlands.

c. Tributaries to navigable Waters of the United States, including adjacent wetlands.

d. Interstate waters and their tributaries, including adjacent wetlands.

e. All other Waters of the United States not identified above, such as isolated wetlands and lakes, intermittent streams, prairie potholes, and other waters that are not a part of a tributary system to interstate waters or navigable Waters of the United States, the degradation or destruction of which could affect interstate commerce.

For the purpose of this report "Waters of the United States" refers to all waters that do not meet the wetland criteria (hydrophytic vegetation, hydric soils, and hydrology), as defined in the 1987 Manual. Permanent and intermittent streams are the most common habitats included in this category.

Major vegetative communities were investigated to determine the dominant plant species in each of three vegetative layers: trees, sapling/shrubs, and herbs. To determine if wetland vegetation was present, the wetland indicator status for each of the dominant species was identified using the manual "Wetland plants of the State of Ohio" (USFWS, 1988).

Once vegetative communities were defined, the presence of wetland soils and hydrology was determined for each community by inspecting soil samples for saturated soil indicators and by looking for other indicators of surface or subsurface inundation. The Soil Survey of Lorain County, Ohio (USDA, 1976) was consulted to provide an overview of soils within the study area.

3.2 Other Areas of Ecological Concern

To identify the location of areas of concern that will be effected by the project, a background investigation was conducted prior to the field survey. USGS topographic maps were consulted to determine the presence and/or absence of national and state parks and forests, wildlife sanctuaries, and other areas of concern. Following the background investigation, a field survey was conducted to investigate the project area.

3.3 Endangered Species

Although 3D/E did not conduct a survey for endangered or threatened species as part of this project, the presence of birds, mammals, reptiles, and amphibians using the corridor were recorded. In addition, 3D/E was prepared to record the presence

of habitats likely to support endangered, threatened, or special concern species. Detailed studies concerning individual species were not completed as part of this effort.

4.0 RESULTS/EXISTING CONDITIONS

4.1 Upland Vegetation Along the Proposed Right-of-Way

The preferred route parallels Chester Road and the alternate route parallels I-90. Both routes are within or adjacent to existing roadway ROW's in an area that contains residential and commercial properties. Plants common to residential areas and roadways along the proposed corridors are meadow fescue, magnolia, multiflora rose, Amur honeysuckle, and other horticultural trees, shrubs and herbs.

4.2 Wetlands and Floodplains

Most of the project area is forested wetland, with the exception of land previously developed into commercial/residential property, and land within the existing ROW's of I-90 and Chester Road. For the purpose of reporting, wetland habitats have been separated into three distinct wetlands. These wetlands were contiguous at one time, but have since been separated by development. The wetland boundary begins approximately 20-30 feet from the edge of the pavement of Chester Road and approximately is 150 feet from the centerline of the west-bound side of I-90 (Figure 3). Wetlands identified during the field study are described below, and the wetland data sheets are included in Appendix C.

Wetland 1

Wetland 1 is a palustrine forested broad-leaved deciduous seasonally-flooded wetland (PFO1C). The dominant plant species within the wetland are pin oak, white ash, black ash, silver maple, and American elm. The soils chroma, hue and value are 10YR 5/1, respectively, and mottles (10YR 5/6) are present. Evidence of wetland hydrology included water-stained leaves and water in the soil probe hole within 1 inch of the surface.

Wetland 2

Wetland 2 is a palustrine forested broad-leaved deciduous seasonally-flooded wetland (PFO1C) that is very similar to Wetland 1. It appears that the Wetland 1 and 2 were connected at one time, but development has separated them. The dominant species present in Wetland 2 are; pin oak, white ash, black ash, silver maple, and American elm. The soils are characterized by a chroma, hue, and value of 10YR 5/1, respectively, and mottles (10YR 5/6) are present. Evidence of wetland hydrology included water-stained leaves and water in the soil probe hole within 1 inch of the surface.

Wetland 3

Wetland 3 is a palustrine scrub-shrub broad-leaved deciduous seasonally-flooded wetland (PSS1C). The shrub layer of the wetland is dominated by arrowwood. The herbaceous layer is dominated by soft rush, agrimony, sensitive fern and grasses. The soils are characterized by a chroma, hue, and value of 10YR 5/1, respectively, and mottles (10YR 5/6) are present. Evidence of wetland hydrology included the presence of surface water, water-stained leaves, and water in the soil probe hole within 1-inch of the surface.

Stream 1

A small stream is crossed by both proposed corridors approximately 500 feet east of Route 83. The stream banks are approximately 5 feet wide, and the water is 1-2 feet wide and 4-6 inches deep. No floodplain is associated with the stream, and the stream is culverted to flow under both roads.

4.3 Other Areas of Ecological Concern

Following the literature review and the pedestrian field survey, it was determined that no other areas of ecological concern including national and state forests and parks, designated or proposed wilderness areas, national and state wild and scenic rivers, wildlife refuges, wildlife management areas, and wildlife sanctuaries are located within the area to be disturbed by the project.

4.4 Endangered Species

Eleven species of birds were observed during the field visit. The species observed were: northern cardinal (*Cardinalis cardinalis*), European starling (*Sturnus vulgaris*), mourning dove (*Zenaida macroura*), American robin (*Turdus migratorius*), common grackle (*Quiscalus quiscula*), house sparrow (*Passer domesticus*), song sparrow (*Melospiza melodia*), red-tail hawk (*Buteo jamaicensis*), turkey vulture (*Cathartes aura*), and red-winged blackbird (*Agelaius phoeniceus*). No federal or state threatened or endangered species of birds were observed during the survey.

Five species of mammals were observed or identified by sign: white-tailed deer (*Odocoileus virginianus*), opossum (*Didelphis virginiana*), raccoon (*Procyon lotor*), red fox (*Vulpes vulpes*), and woodchuck (*Marmota monax*). None of these species is threatened or endangered.

No amphibians or reptiles were observed during the survey.

COLUMBIA GAS
of Ohio

file

June 13, 1994

Mr. Mick Micacchion
Ohio EPA
Division of Water Quality Planning and Assessment
1880 WaterMark Drive
P. O. Box 1049
Columbus, Ohio 43266-0149

Re: Water Quality Certification Submitted June 10, 1994 by Columbia Gas of Ohio

Dear Mr. Micacchion:

This letter is in response to your request for alternatives analysis on the above mentioned project during our meeting on June 10, 1994. Columbia chose the route along Chester Road primarily because of the future expansion expected along this moderately traveled connector road which is zoned as Industrial/Commercial. As an alternate Columbia investigated pipeline routes on both the north and south sides of Interstate 90, but determined that these locations would cause more destruction to the wetlands than the route along Chester Road. The I-90 routes would effect primarily virgin wetlands with older growth. The Chester Road route includes parcels of land with previously removed or effected wetland vegetation and additional properties which will be developed in the future.

Please keep in mind that once Columbia's construction is complete, the wetlands will be allowed to return to their natural state. Columbia does not mow its rights of way or use pesticides or herbicides on them. Columbia will make all attempts not to disturb larger trees. However, where necessary in order to construct the pipeline, trees will be cut off at ground level in the proximity of the pipeline trench.

Detailed drawings of this project have not been submitted because Columbia has not yet drawn them nor do we need them. If this is a vital part of the Ohio EPA's permitting process, please let me know and we will have them sent to your office.

Enclosed please find the five additional copies of the application which were not submitted initially. Hopefully with the submission of this letter, Columbia will have provided Ohio EPA with all the necessary information.

Columbia would like to assist Ohio EPA in this permitting process as much as applicable. Columbia is looking forward to meeting with you in the field to review the proposed route. Columbia would also like to stress the importance of this line being put in service before the winter heating months. Columbia had some problems supplying gas to customers in this area and we need to have this line in place in order to avoid the same situation this winter. If you have any questions please don't hesitate to contact me at 460-6314 or Randy Johnson at 460-6339.

Sincerely,

Kristin K. Luginbuhl
Environmental Engineer

Attachments

cc: R. F. James
R. A. Johnson
M. E. Thomas
R. T. Burrows
C. J. Rees
R. L. Frank
R. L. Babbitt
R. J. Kuhner

APPLICATION FOR OHIO EPA SECTION 401 WATER QUALITY CERTIFICATION

This application must be completed whenever a proposed activity requires an individual Section 401 Water Quality Certification from Ohio EPA, and application is made directly to Ohio EPA. To determine whether you need to submit this application to Ohio EPA, contact the U.S. Corps of Engineers District Office with jurisdiction over your project, or the Ohio EPA Section 401 Coordinator at (614) 644-2856.

The Ohio EPA Water Quality Certification Program is authorized by Section 401 of the Clean Water Act (33 USC 1251). Ohio Administrative Code (OAC) Rule 3745-32 outlines the application process and criteria for decision of the Director. OAC Rule 3745-1 is the Water Quality Standards by which applications are evaluated. All projects must comply with Ohio's Water Quality Standards to receive a Section 401 Water Quality Certification.

Information provided will be used to evaluate the project for certification. Information on this application is made a matter of public record through the issuance of a public notice. Disclosure of the information requested is voluntary; however, the data requested are necessary to evaluate the certification application. If the Director determines that the application lacks information necessary or desirable to determine whether the applicant has demonstrated the criteria set forth in OAC Rule 3745-32-05(A), Ohio EPA will inform the applicant in writing of the additional information that must be submitted.

Six (6) sets of the completed application; original plan drawings and sections (or good reproducible copies); location of the project (preferably on a USGS quadrangle); and a detailed description of the proposed project on 8 1/2"x11" paper must be submitted to:

Ohio Environmental Protection Agency, Section 401 Coordinator
Division of Water Quality Planning and Assessment
1800 WaterMark Drive, P.O. Box 1049
Columbus, Ohio 43266-0149

1. THE U.S. ARMY CORPS OF ENGINEERS HAS DETERMINED THIS PROJECT MAY BE AUTHORIZED BY NWP # 12 PROVIDED A SECTION 401 CERTIFICATION IS ISSUED.

2. APPLICATION NUMBER (to be assigned by Ohio EPA)

3. NAME AND ADDRESS OF APPLICANT

Kristin Luginbuhl
Columbia Gas of Ohio
200 Civic Center Dr.
Columbus, OH 43215

Telephone number during business hours

( ) _____ (Residence)

(614) 460-6314 (Office)

4. NAME, ADDRESS, AND TITLE OF AUTHORIZED AGENT

Telephone number during business hours

( ) _____ (Residence)

( ) _____ (Office)

Statement of Authorization: I hereby designate and authorize _____ to act in my behalf as my agent in the processing of this permit application and to furnish, upon request, supplemental information in support of the application.

SIGNATURE OF APPLICANT

DATE

5. DETAILED DESCRIPTION OF THE ACTIVITY

5a. ACTIVITY: DESCRIBE THE OVERALL ACTIVITY.

This project involves the installation of approximately 9700 feet of 12-inch steel, high pressure (125 psig MAOP) natural gas distribution main along Chester (Powdermaker Road, in the city of Avon, Lorain County (maps attached). The area where this pipeline is to be installed is zoned commercial/light industrial.

5b. PURPOSE: DESCRIBE THE PURPOSE, NEED, AND INTENDED USE OF THE ACTIVITY.

There are significant concerns regarding the ability of the Westlake High Pressure System to provide continuing reliable service. These concerns arise as a result of 1) the extensive load additions over the last few years, and 2) the expected increase from loads due to planned new customers additions to the system. Pressure problems were experienced on this system on peak days during 1993-94 winter.

COLUMBIA GAS
of Ohio

RECEIVED
JUN 16 1994
DOCKETING DIVISION
PUBLIC UTILITIES COMMISSION OF OHIO

June 15, 1994

The Hon. Craig A. Glazer, Chairman
Ohio Power Siting Board
180 East Broad Street
Columbus, Ohio 43266-0573

Re: Columbia Gas of Ohio
Westlake High-Pressure Betterment Project
Case No. 94-1026-GA-BLN

Dear Chairman Glazer:

Enclosed for filing in the above-referenced docket is a letter from the Ohio Historical Society indicating that its records disclose no historic properties on either the preferred or alternate routes.

The letter recommends that if the preferred route is selected, a reconnaissance level (Phase I and II) archaeological survey be conducted. Columbia is in the process of retaining a consultant to conduct such a study.

Please contact me at (614) 460-4655 if you have any questions.

Very truly yours,

Kenneth W. Christman

Kenneth W. Christman
Assistant General Counsel

Enclosure

Ohio Historic Preservation Office

Ohio Historical Center
1982 Velma Avenue
Columbus, Ohio 43211-2497
614/297-2470
Fax: 297-2546

OHIO HISTORICAL SOCIETY
SINCE 1885

June 8, 1994

Kristen K. Luginbuhl
Columbia Gas of Ohio, Inc.
200 Civic Drive
P.O. Box 117
Columbus, Ohio 43216-0117

Dear Ms. Luginbuhl:

Re: Line Replacement Along Interstate 90, Avon, Ohio
SAI No. : X842-20.106

This is in response to your fax of June 3, 1994 concerning the proposed project. Our comments are submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act, as amended (36 CFR 800) and Ohio Power Siting Board regulations.

My staff has checked our records, which include the Ohio Archaeological Inventory, the Ohio Historic Inventory and the National Register of Historic Places. There is no record of any historic properties in either the preferred route or the alternative. Previous disturbance makes it unlikely that any archaeological sites remain undisturbed along Interstate 90. It is our opinion that if the alternative route is selected no properties listed or eligible for the National Register of Historic Places will be affected. However, the preferred route, following Chester Road, is less developed with areas of forested wetland. It is our recommendation that if the preferred route is selected, a reconnaissance level archaeological survey should be completed in order to identify any sites in the project area.

If you have any questions please contact Julie Quinlan at 297-2483. Her hours are from 5:00 a.m-1:00 p.m. Thank you for your cooperation.

Sincerely,

Martha J. Raymond

Martha J. Raymond, Department Head
Technical and Review Services

MJR/JAQ:jq

file

COLUMBIA GAS
of Ohio

June 29, 1994

Ms. Kathy Griffin
Army Corps of Engineers
Buffalo District
1776 Niagara Street
Buffalo, NY 14207

Re: Chester Road Betterment Project

Dear Ms. Griffin:

Please find enclosed an Application for Department of the Army Permit for the above mentioned project. Columbia Gas of Ohio, Inc. (Columbia) submitted an Application for Ohio EPA Section 401 Water Quality Certification to Ohio EPA on June 10, 1994. As I discussed with you on the telephone, this is a project that must be completed prior to this winter because of pressure problems with our existing system.

Columbia normally does not prepare detailed design drawings for this type of pipeline construction. Therefore, drawings are not included with this application. If the ACOE requires detailed drawings, please notify Columbia as soon as possible. Columbia intends to lay in private right of way approximately 15 feet south of the edge of pavement of Chester Road. However, there may be areas where we will need to be in road right of way. On the east side of the Chester Road - Jaycox Road intersection, Columbia will need to move to the north side of the road due to a structure that is located next to the road. Just past the intersection Columbia will return to the south of Chester Road.

Also enclosed is a typical drawing of Columbia's wetland construction technique. The drawing depicts topsoil segregation and the use of rubber tired vehicles. The right of way width on this project will be 15 feet, not the 50 feet depicted in the drawing. Also enclosed a copy of an Avon Topographic map with our route highlighted.

If you have any questions or find this application to be incomplete, please contact me as soon as practical at (614) 460-6314 or Randy Johnson at (614) 460-6339.

Sincerely,

Kristin K. Luginbuhl
Environmental Engineer

Enclosures

cc: R. F. James
C. J. Rees
R. A. Johnson
R. T. Burrows
M. G. Groomes
R. L. Frank
R. L. Babbitt
R. J. Kuhner
M. E. Thomas

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT

(33 CFR 325)

OMB APPROVAL NO. 0710-0003
Expires 30 September 1992

Public reporting burden for this collection of information is estimated to average 5 hours per response for the majority of cases, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Applications for larger or more complex projects, or those in ecologically sensitive areas, could take up to 500 hours. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Service, Directorate for Information Operations and Projects, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302; and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003), Washington, DC 20503. Please DO NOT RETURN your completed form to either of these addresses. Completed application must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

The Department of the Army permit program is authorized by Section 10 of the Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act and Section 103 of the Marine, Protection, Research and Sanctuaries Act. These laws require permits authorizing activities in or affecting navigable waters of the United States, the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters. Information provided on this form will be used in evaluating the application for a permit. Information in this application is made a matter of public record through issuance of a public notice. Disclosure of the information requested is voluntary; however, the data requested are necessary in order to communicate with the applicant and to evaluate the permit application. If necessary information is not provided, the permit application cannot be processed nor can a permit be issued.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

1. APPLICATION NUMBER (To be assigned by Corps)

2. NAME AND ADDRESS OF APPLICANT

Kristin Luginbuhl
Columbia Gas of Ohio, Inc.
200 Civic Center Dr.
Columbus, OH 43215

Telephone no. during business hours

A/C ( ) _____ (Residence)
A/C (614) 460-6314 (Office)

3. NAME, ADDRESS, AND TITLE OF AUTHORIZED AGENT

Telephone no. during business hours

A/C ( ) _____ (Residence)
A/C ( ) _____ (Office)

Statement of Authorization: I hereby designate and authorize _____ to act in my behalf as my agent in the processing of this permit application and to furnish, upon request, supplemental information in support of the application.

SIGNATURE OF APPLICANT

DATE

4. DETAILED DESCRIPTION OF PROPOSED ACTIVITY

4a. ACTIVITY

This project involves the installation of approximately 9700 feet of 12-inch steel, high pressure (125 psig MAOP) natural gas distribution main along Chester (Powdermaker Rd.), in the city of Avon, Lorain County (maps attached). The area where this pipeline is to be installed is zoned commercial/light industrial.

4b. PURPOSE

There are significant concerns regarding the ability of the Westlake High Pressure System to provide continuing reliable service. These concerns arise as a result of 1) the extensive load additions over the last few years, and 2) the expected increase from loads due to planned new customers additions to the system. Pressure problems were experienced on this system on peak days during 1993-94 winter.

4c. DISCHARGE OF DREDGED OR FILL MATERIAL

Columbia plans to clear approximately 15 feet of right-of-way where necessary to dig a trench 9700 feet long by 2 feet wide by 4 feet deep. The excavated soil will be approximately 2880 cubic yards. The topsoil will be segregated during excavation. Approximately 2590 cubic yards will be placed back in the trench with the topsoil in the top 12". The 290 cubic yards of soil displaced by the pipeline will be disposed of properly.

Parcel No.	
1	Hicok, Mary Ellen 1515 Chester Rd. Avon, OH. 44011
2	Smith, Evelyn A., et al. c/o Smith Associates Devel Co. 35748 Detroit Rd. Avon, OH. 44011
3	Price, Frank T, et ux. c/o Triton Transport Service, Inc. 2701 Lakeside Ave. Cleveland, OH. 44114
4	Balsam Corp. c/o Westview Concrete P.O. Box 38159 Olmsted Falls, OH. 44138
5,7&9	Brown, Donald A., Trustee c/o Investment Management Co. P.O. Box 541 Vermillion, OH. 44089
6	Gilbert, Lester F. & Josephine L. 35525 Chester Rd. Avon, OH. 44011

8 Schober, Edward J., et al.
34402 Chester Rd.
Avon, OH. 44011

11 Connelly, Edwin C. & Deanna L.
34925 Chester Rd.
Avon, OH. 44011

13 Marlin Manufacturing Corp.
12404 Triskett Rd.
Cleveland, OH. ~~44011~~ 44111

14 R & W Management Co.
c/o Retek Inc.
34550 Chester Rd.
Avon, OH. 44011

16 Cut Shot, Inc.
c/o West Pines Golf Range
34455 Chester Rd.
Avon, OH. 44011

17 Chuckles Limited Partnership
c/o Goodtimes
5996 Wilderness Ln.
Cleveland, OH. 44130

18 Mihalega, William, et al.
6591 Lewis Rd.
Olmsted Falls, OH. 44138

19 Lemke, Carl F.
698 Center Rd.
P.O. Box 409
Hinckley, OH. 44233

20 American Towers, Inc.
c/o Ram Broadcasting
10 Woodbridge Center Dr.
Woodbridge, N. J. 07095

FORM C (EPL) 3 265 C50 (REV. 12-7-)

34-183-2000-WP7223-02

COLUMBIA GAS DISTRIBUTION COMPANIES

RIGHT OF WAY LIST

Sheet 1 of 1

COMPANY: COH

AREA:

WORK ORDER NUMBER: GEN. LEO | AUX. | SUB. | OTHER

LINE NO.:

SIZE:

DISTRICT-BORO-TOWNSHIP(S): Avon (Avon Township)

COUNTY(IES): Lorain

STATE(S): Ohio

FROM: Wooster Avon Lake Rd. (S.R. 83)

TO: Lear Nagle Rd.

DRAWING NO.:

DATE COMPLETED:

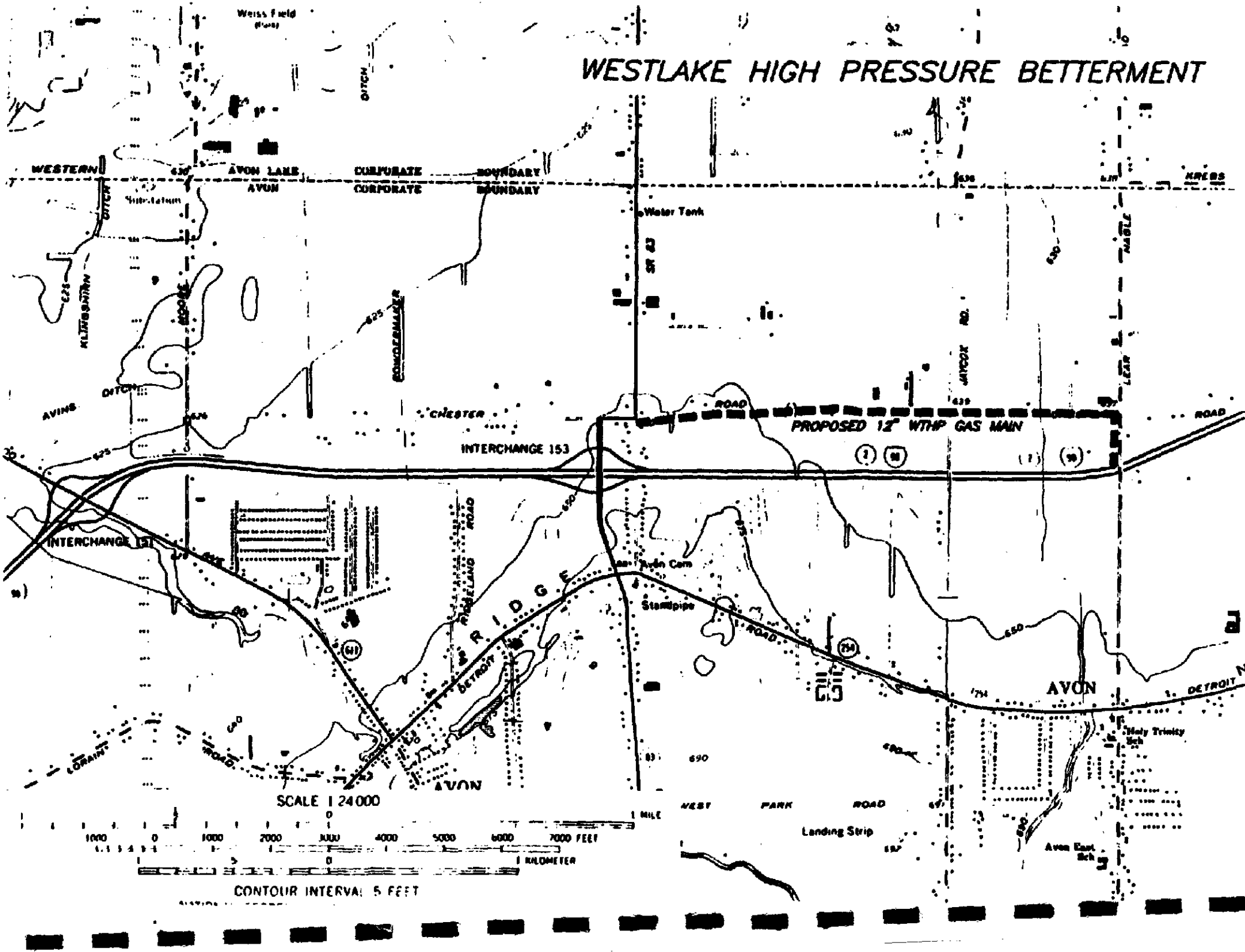
ENGINEER OR LAND AGENT:

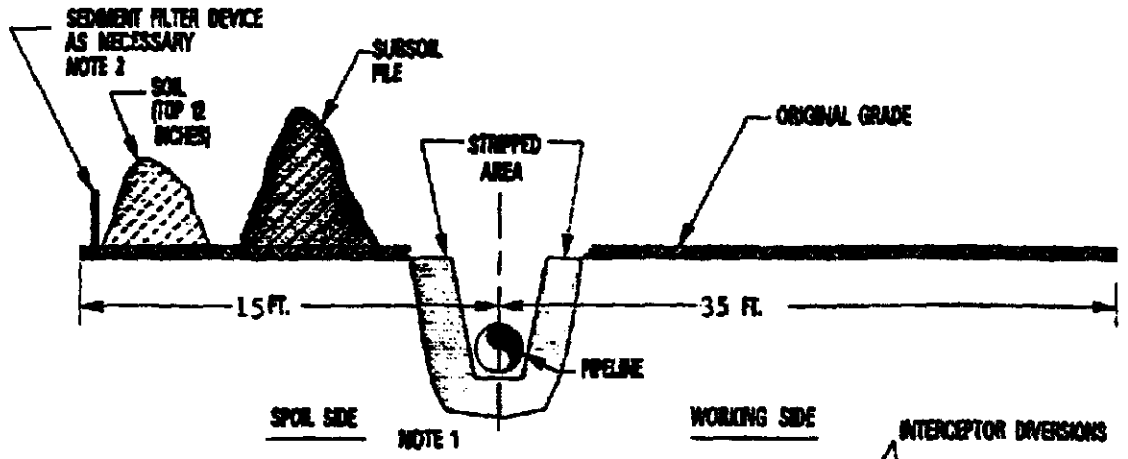
BK. PG.

DATE LIST FURNISHED LAND SERVICES:

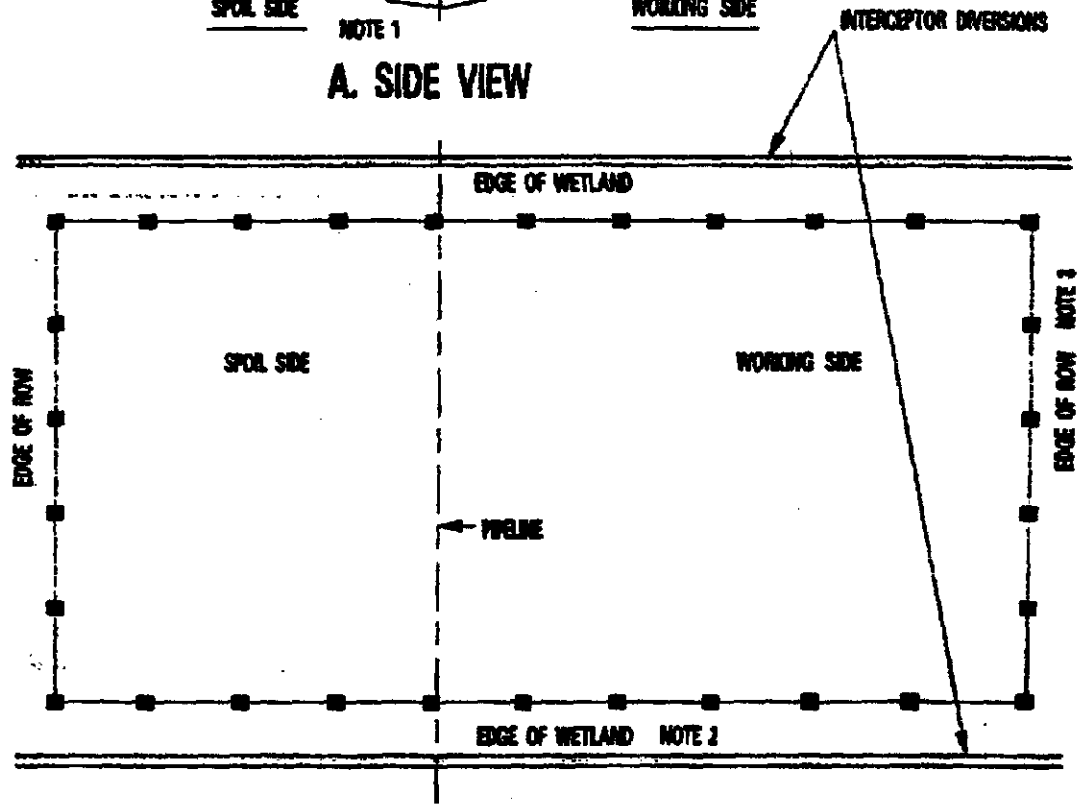
DESCRIPTION			SURVEY STATION	LINE			REMARKS			CHECK
PARCEL NO.	RIGHT OF WAY NUMBER	NAME		LINE SIZE	FEET	RODS	RIGHT OF WAY SECURED	RIGHT OF WAY PAID	DAMAGE SETTLED	SPECIAL COND.
1	47-02-84	Hicok, Mary Ellen			176				Existing R/W	
2	84	Smith, Evelyn A, et al.			1,500.				Existing R/W	
3	84	Price, Frank T., et ux			100				Existing R/W	
4		Balsam Corp			282					
5		Brown, Donald A., Trustee			924					
6	352	Gilbert, Lester F. and Josephine L.			150		Yes	$150.	Yes	Yes
7		Brown, Donald A. Trustee			1,484					
8	351	Schober, Edward J., et al			588		Yes	$588.	Yes	Yes
9	116	Brown, Donald A., Trustee			837				Existing R/W	
10	—	Cross Jaycox Road								
11		Connelly, Edwin C. & Dianne L.			765					
16	353	Cut Shot, Inc.			825		Yes	$825.	Yes	Yes
17		Chuckles Limited Partnership			500					
18	109	Mihalega, William, et al.			851		Yes	$851.	Existing R/W Owner Paid.	
19	109	Lemke, Carl F.			298				Existing R/W	
20	109	American Towers Inc.			320				Existing R/W	
12	—	Cross Chester Road								
13	354	Marlin Manufactor Corp.			702'		Yes	$702	Yes	Yes
14	355	R & W Management Co.			300'		Yes	$1,200.00	Yes	Yes
15	—	Cross Chester Road								

WESTLAKE HIGH PRESSURE BETTERMENT





A. SIDE VIEW



B. PLAN VIEW

NOTES:
1. IN WETLAND AREAS WHICH CONTAIN NO STANDING WATER OR SATURATED SOILS, SOIL (TOP 12 INCHES) AND SUBSOIL WILL BE STOCKPILED SEPARATELY WITHIN THE WETLAND CONSTRUCTION ROW.
2. A SEDIMENT FILTER DEVICE WILL BE PLACED ACROSS THE ROW AT THE WETLAND'S EDGE.
3. A SEDIMENT FILTER DEVICE WILL BE PLACED AT THE EDGE OF THE ROW AND AROUND SOIL AND SUBSOIL PILES AS NECESSARY.

NOT TO SCALE

COLUMBIA GAS Distribution Companies *EROSION AND SEDIMENTATION CONTROL PLAN*	TYPICAL WETLAND CROSSING	*Exhibit M*

COLUMBIA GAS
of Ohio

file

July 1, 1994

Ms. Kathy Griffin
Army Corps of Engineers
Buffalo District
1776 Niagara Street
Buffalo, NY 14207

Re: Chester Road Betterment Project

Dear Ms. Griffin:

Please find enclosed a Wetland Delineation of the above mentioned project. This document was not available when I sent in the application and I did not want to hold up the application until this document was received.

If you have any questions or find Columbia's application to be incomplete, please contact me as soon as practical at (614) 460-6314 or Randy Johnson at (614) 460-6339.

Sincerely,

Kristin K. Luginbuhl
Environmental Engineer

Enclosures

cc: R. F. James (w/o enclo.)
C. J. Rees (w/o enclo.)
R. A. Johnson (w/o enclo.)
R. T. Burrows (w/o enclo.)
M. G. Groomes (w/o enclo.)
R. L. Frank (w/o enclo.)
R. L. Babbitt (w/o enclo.)
R. J. Kuhner (w/o enclo.)
M. E. Thomas (w/o enclo.)

COLUMBIA GAS
of Ohio

August 8, 1994

Ms. Kathy Griffin
Army Corps of Engineers
1776 Niagara Street
Buffalo, NY 14207

Re: Columbia Gas of Ohio, Inc. 94-502-32

Dear Ms Griffin:

As discussed during the meeting between Army Corps of Engineers and Columbia Gas of Ohio, Inc. (Columbia) on Wednesday August 3, Columbia is submitting two maps (see attached). Map 8-01 depicts Columbia's Chester Rd. betterment project on a 8-1/2 x 11 topographic base map and map 11-01 is a plan view of the project area with the location of the proposed pipeline through the shrub/scrub and forested wetlands. Also shown on the plan view map are the limits of the right of way easements which will be utilized for this pipeline project. **As indicated, Columbia will temporarily disturb less than 750 linear feet of combined shrub/scrub and forested wetlands.**

Please verify that in accordance with Columbia's mitigation plan, which is a combination of directional bore and conventional trench pipeline construction, this project will temporarily effect less than 750 linear feet of combined shrub/scrub and forested wetlands and therefore falls within the approval level of the "Nationwide Permit" program.

Upon verification of this project falling within the "Nationwide Permit", please send Columbia a formal written letter indicating approval to proceed.

If further information is required, please contact either myself at (614) 460-6339 or Kristin Luginbuhl at (614) 460-6314.

Very truly yours,

Randy A. Johnson

Randy A. Johnson, P.E.
Project Engineer

cc: R. T. Burrows
C. J. Rees
K. L. Luginbuhl
B. L. Babbitt
R. L. Frank
M. E. Thomas
D. K. Gartman
R. J. Kuhner

Columbia Gas of Ohio, Inc., 200 Civic Center Drive, P.O. Box 117, Columbus, OH 43216-0117

DEPARTMENT OF THE ARMY
BUFFALO DISTRICT, CORPS OF ENGINEERS
1776 NIAGARA STREET
BUFFALO, NEW YORK 14207-3199

August 16, 1994

REPLY TO ATTENTION OF

Regulatory Branch

SUBJECT: Application No. 94-502-32, Nationwide Permit 33 CFR 330, Appendix A, Section B, No. (12)

Kristin Luginbuhl
Columbia Gas of Ohio, Incorporated
200 Civic Center Drive
Columbus, Ohio 43215

Dear Ms. Luginbuhl:

This pertains to your proposed installation of 9700 linear feet of 12-inch steel high pressure natural gas pipeline, located on Chester Road, in the City of Avon, Lorain County, Ohio. The proposed project will impact a maximum of 750 linear feet of scrub/shrub and forested wetlands.

I have reviewed your application, and have determined that the impacts associated with your 9700 linear feet of 12-inch steel high pressure natural gas pipeline are authorized by the enclosed Nationwide Permit provided that the attached conditions are satisfied. Please note that our verification of the applicability of this Nationwide Permit is valid for two years from the date of this letter unless the Nationwide is modified, suspended, or revoked. This verification will remain valid if during this two year period the Nationwide Permit is reissued without modification. Please note that if you commence or are under contract to commence this activity in reliance of your Permit prior to the date this Permit expires, is suspended or revoked, or is modified such that your activity no longer complies with the terms and conditions, you have 12 months from the date of Permit modification, expiration, or revocation to complete the activity under the present terms and conditions of the Permit, unless this Permit has been subject to the provisions of discretionary authority.

It is your responsibility to remain informed of changes to the Nationwide Permit program. A public notice announcing any changes will be issued when they occur. Finally, note that if your activity is not undertaken within the two year period or the project specifications have changed, you must immediately notify this office to determine the need for further approval or reverification.

Regulatory Branch
SUBJECT: Application No. 94-502-32, Nationwide Permit 33 CFR 330, Appendix A, Section B, No. (12)

You are encouraged to contact the appropriate state and local governmental officials to insure that the proposed work complies with their requirements.

Lastly, I would like to point out that our verification of the Federal wetland boundary, as shown on the attached drawings, is valid for a period of five (5) years from the date of this correspondence. At the end of this period, a new wetland delineation will be required if the above described work is not completed.

Your initiation of work as authorized by the enclosed Nationwide Permit acknowledges your acceptance of the general and special conditions contained therein.

Questions pertaining to this matter should be directed to Ms. Kathy Griffin, who may be contacted by calling 716-879-4315, or by writing to the above address.

Sincerely,

Kathy M. Griffin

for Walter C. Neitzke
Colonel, U.S. Army
Commanding

Enclosures

ACTIVITIES AUTHORIZED UNDER 33 CFR 330, APPENDIX A:

(12) Utility Line Backfill and Bedding. Discharges of material for backfill or bedding for utility lines, including outfall and intake structures, provided there is no change in preconstruction contours. A "utility line" is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquefiable, or slurry substance, for any purpose, and any cable, line or wire for the transmission for any purpose of electrical energy, telephone and telegraph messages, and radio and television communication. The term "utility line" does not include activities which drain a water of the United States, such as drainage tile, however, it does apply to pipes conveying drainage from another area. Material resulting from trench excavation may be temporarily sidecast (up to three months) into waters of the United States provided that the material is not placed in such a manner that it is dispersed by currents or other forces. The DE may extend the period of temporary side-casting up to 180 days, where appropriate. The area of waters of the United States that is disturbed must be limited to the minimum necessary to construct the utility line. In wetlands, the top 6" to 12" of the trench should generally be backfilled with topsoil from the trench. Excess material must be removed to upland areas immediately upon completion of construction. Any exposed slopes and streambanks must be stabilized immediately upon completion of the utility line. The utility line itself will require a Section 10 permit if in navigable waters of the United States. (See 33 CFR Part 322) (Section 404)

NATIONWIDE PERMIT GENERAL CONDITIONS

General Conditions: The following general conditions must be followed in order for any authorization by a nationwide permit to be valid:

1. Navigation. No activity may cause more than a minimal adverse effect on navigation.

2. Proper Maintenance. Any structure or fill authorized shall be properly maintained, including maintenance to ensure public safety.

3. Erosion and Siltation Controls. Appropriate erosion and siltation controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills must be permanently stabilized at the earliest practicable date.

4. Aquatic Life Movements. No activity may substantially disrupt the movement of those species of aquatic life indigenous to the waterbody, including those species which normally migrate through the area, unless the activity's primary purpose is to impound water.

5. Equipment. Heavy equipment working in wetlands must be placed on mats or other measures must be taken to minimize soil disturbance.

6. Regional and Case-by-Case Conditions. The activity must comply with any regional conditions which may have been added by the division engineer (see 33 CFR 330.4[e]) and any case specific conditions added by the Corps.

7. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System; or in a river officially designated by Congress as a "study river" for possible inclusion in the system, while the river is in an official study status. Information on Wild and Scenic Rivers may be obtained from the National Park Service and the U.S. Forest Service.

8. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

9. Water Quality Certification. In certain states, an individual state water quality certification must be obtained or waived (see 33 CFR 330.4[c]).

10. Coastal Zone Management. In certain states, an individual state coastal zone management consistency concurrence must be obtained or waived. (See 33 CFR 330.4[d]).

11. Endangered Species. No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act, or which is likely to destroy or adversely modify the critical habitat of such species. Non-federal permittees shall notify the district engineer if any listed species or critical habitat might be affected or is in the vicinity of the project and shall not begin work on the activity until notified by the district engineer that the requirements of the Endangered Species Act have been satisfied and that the activity is authorized. Information on the location of threatened and endangered species and their critical habitat can be obtained from the U.S. Fish and Wildlife Service and National Marine Fisheries Service. (See 33 CFR 330.4[f]).

12. Historic Properties. No activity which may affect Historic properties listed, or eligible for listing, in the National Register of Historic Places is authorized, until the DE has complied with the provisions of 33 CFR 325, appendix C. The prospective permittee must notify the district engineer if the authorized activity may affect any historic properties listed, determined to be eligible, or which the prospective permittee has reason to believe may be eligible for listing on the National Register of Historic Places, and shall not begin the activity until notified by the District Engineer that the requirements of the National Historic Preservation Act have been satisfied and that the activity is authorized. Information on the location and existence of historic resources can be obtained from the State Historic Preservation Office and the National Register of Historic Places. (See 33 CFR 330.4[g]).

13. Notification: (a) Where required by the terms of the NWP, the prospective permittee must notify the District Engineer as early as possible and shall not begin the activity: (1) Until notified by the District Engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) If notified by the District or Division engineer that an individual permit is required; or

(3) Unless 30 days have passed from the District Engineer's receipt of the notification and the prospective permittee has not received notice from the District or Division Engineer. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5[d][2].

(b) The notification must be in writing and include the following information and any required fees:

(1) Name, address and telephone number of the prospective permittee;

(2) Location of the proposed project;

(3) Brief description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), regional general permit(s) or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity;

(4) Where required by the terms of the NWP, a delineation of affected special aquatic sites, including wetlands; and

(5) A statement that the prospective permittee has contacted: (i) The USFWS/NMFS regarding the presence of any Federally listed (or proposed for listing) endangered or threatened species or critical habitat in the permit area that may be affected by the proposed project; and any available information provided by those agencies. (The prospective permittee may contact Corps District Offices for USFWS/NMFS agency contacts and lists of critical habitat).

(ii) The SHPO regarding the presence of any historic properties in the permit area that may be affected by the proposed project; and the available information, if any, provided by that agency.

(c) The standard individual permit application form (Form ENG 4345) may be used as the notification but must clearly indicate that it is a PDN and must include all of the information required in (b)(1)-(5) of General Condition 13.

(d) In reviewing an activity under the notification procedure, the District Engineer will first determine whether the activity will result in more than minimal individual or cumulative adverse environmental effects or will be contrary to the public interest. The prospective permittee may, at his option, submit a proposed mitigation plan with the predischarge notification to expedite the process and the District Engineer will consider any optional mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed work are minimal. The District Engineer will consider any comments from Federal and State agencies concerning the proposed activity's compliance with the terms and conditions of the nationwide permits and the need for mitigation to reduce the project's adverse environmental effects to a minimal level. The district engineer will upon receipt of a notification provide immediately (e.g. facsimile transmission, overnight mail or other expeditious manner) a copy to the appropriate offices of the Fish and Wildlife Service, State natural resource or water quality agency, EPA, and, if appropriate, the National Marine Fisheries Service. With the exception of NWP 37, these agencies will then have 5 calendar days from the date the material is transmitted to telephone the District Engineer if they intend to provide substantive, site-specific comments. If so contacted by an agency, the District Engineer will wait an additional 10 calendar days before making a decision on the notification. The District Engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency. The District Engineer will indicate in the administrative record associated with each notification that the resource agencies' concerns were considered. Applicants are encouraged to provide the Corps multiple copies of notifications to expedite agency notification. If the District Engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects are minimal, he will notify the permittee and include any conditions he deems necessary. If the District Engineer determines that the adverse effects of the proposed work are more than minimal, then he will notify the applicant either:

(1) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; or

(2) That the project is authorized under the nationwide permit subject to the applicant's submitting a mitigation proposal that would reduce the adverse affects to the minimal level. This mitigation proposal must be approved by the District Engineer prior to commencing work. If the prospective permittee elects to submit a mitigation plan, the DE will expeditiously review the proposed mitigation plan, but will not commence a second 30-day notification procedure. If the net adverse effects of the project (with the mitigation proposal) are determined by the District Engineer to be minimal, the District Engineer will provide a timely written response to the applicant informing him that the project can proceed under the terms and conditions of the nationwide permit.

(e) Wetlands Delineations: Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic site. There may be some delay if the Corps does the delineation. Furthermore, the 30-day period will not start until the wetland delineation has been completed.

(f) Mitigation: Factors that the District Engineer will consider when determining the acceptability of appropriate and practicable mitigation include, but are not limited to:

(1) To be practicable the mitigation must be available and capable of being done considering costs, existing technology, and logistics in light of overall project purposes;

(2) To the extent appropriate, permittees should consider mitigation banking and other forms of mitigation including contributions to wetland trust funds, which contribute to the restoration, creation, replacement, enhancement, or preservation of wetlands.

Furthermore, examples of mitigation that may be appropriate and practicable include but are not limited to: reducing the size of the project; establishing buffer zones to protect aquatic resource values; and replacing the loss of aquatic resource values by creating, restoring, and enhancing similar functions and values. In addition, mitigation must address impacts and cannot be used to offset the acreage of wetland losses that would occur in order to meet the acreage limits of some of the nationwide permits (e.g. 5 acres of wetlands cannot be created to change a 6 acre loss of wetlands to a 1 acre loss; however, the 5 created acres can be used to reduce the impacts of the 6 acre loss).

Section 404 Only Conditions

In addition to the General Conditions, the following conditions apply only to activities that involve the discharge of dredged or fill material and must be followed in order for authorization by the nationwide permits to be valid:

1. Water Supply Intakes. No discharge of dredged or fill material may occur in the proximity of a public water supply intake except where the discharge is for repair of the public water supply intake structure and adjacent bank stabilization.

2. Shellfish Production. No discharge of dredged or fill material may occur in areas of concentrated shellfish production, unless the discharge is directly related to a shellfish harvesting activity authorized by nationwide permit 4.

3. Suitable Material. No discharge of dredged or fill material may consist of unsuitable material (e.g., trash, debris, car bodies, etc.) and material discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

4. Mitigation. Discharges of dredged or fill material into waters of the United States must be minimized or avoided to the maximum extent practicable at the project site (i.e. on-site), unless the DE has approved a compensation mitigation plan for the specific regulated activity.

5. Spawning Areas. Discharges in spawning areas during spawning seasons must be avoided to the maximum extent practicable.

6. Obstruction of High Flows. To the maximum extent practicable, discharges must not permanently restrict or impede the passage of normal or expected high flows or cause the relocation of the water (unless the primary purpose of the fill is to impound waters).

7. Adverse Impacts From Impoundments. If the discharge creates an impoundment of water, adverse impacts on the aquatic system caused by the accelerated passage of water and/or the restriction of its flow shall be minimized to the maximum extent practicable.

8. Waterfowl Breeding Areas. Discharges into breeding areas for migratory waterfowl must be avoided to the maximum extent practicable.

9. Removal of Temporary Fills. Any temporary fills must be removed in their entirety and the affected areas returned to their preexisting elevation.

OHIO

NATIONWIDE PERMIT PROGRAM - FURTHER INFORMATION

The following general conditions, in accordance with the Ohio Environmental Protection Agency Water Quality Certification, have been attached to your Nationwide Permit:

a. Steps shall be taken, upon completion of the project, to ensure bank stability. This may include, but is not limited to, the placement of rip-rap or bank seeding.

b. Any damage to the immediate environment of the project by equipment needed for construction or hauling will be repaired immediately.

c. Care must be employed throughout the course of this project to avoid the creation of unnecessary turbidity which may degrade water quality or adversely affect aquatic life outside the project area.

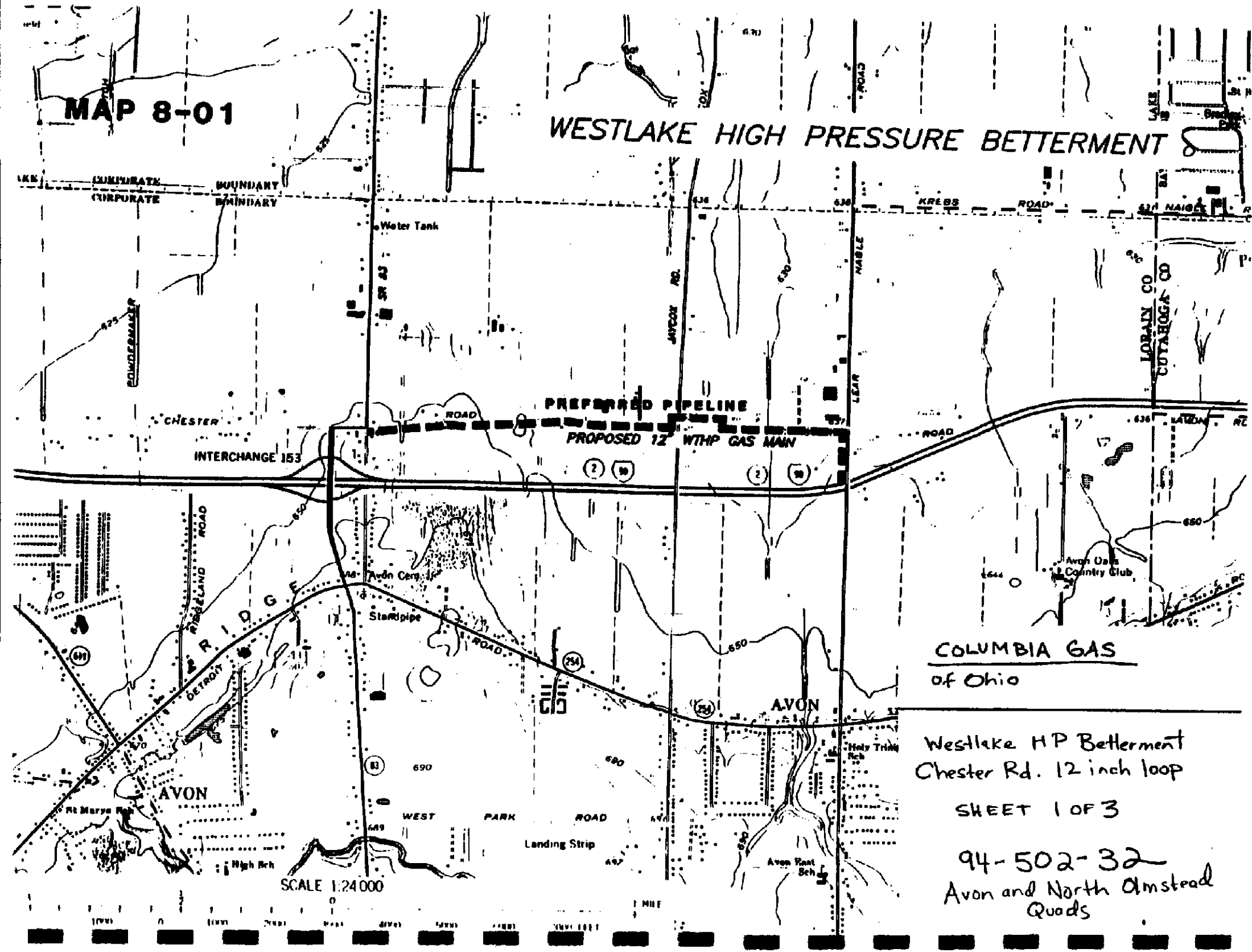
d. The length of utility line crossings in streams and/or rivers shall not exceed twice the width of the waterbody at that location.

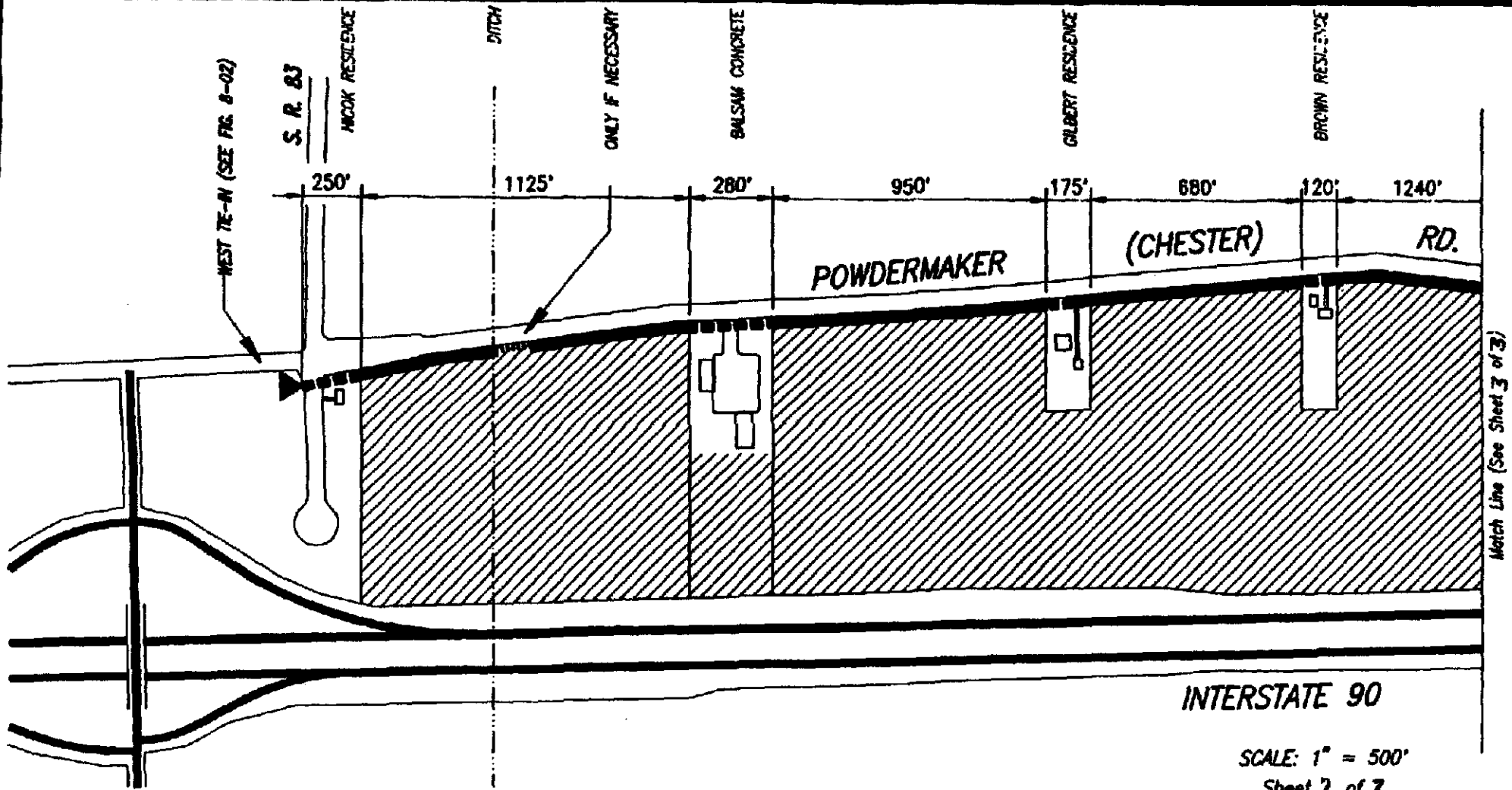
e. This Nationwide Permit shall authorize sidecasting or stockpiling of dredged material for a maximum of 3 months.

f. In wetlands, at least the top six inches of backfill over a utility line shall consist of the topsoil material removed from the trench.

g. The Ohio Administrative Code Rule 3745-01 requires that notice must be given to the director of Ohio EPA before chemicals are applied for the control of aquatic plants or animals in Waters of the United States (including wetlands). Applicants who intend to use chemicals in Waters of the United States shall contact the Ohio EPA, Division of Water Quality Planning and Assessment, P.O. Box 1049, Columbus, Ohio 43266-0149 prior to the application of any chemicals.

h. This Nationwide Permit shall not authorize utility line installations greater than 1000 feet in length in forested wetlands.


MAP 8-01
WESTLAKE HIGH PRESSURE BETTERMENT
CORPORATE BOUNDARY
Water Tank
KREBS ROAD
NAGEL RD.
JAYCOX RD.
NABLE
LEAR
LORAIN CO
CUYAHOGA CO
POWDERMAKER
CHESTER ROAD
PREFERRED PIPELINE
PROPOSED 12" WTHP GAS MAIN
INTERCHANGE 153
RIDGELAND ROAD
DETROIT RIDGE
Avon Cem
Standpipe
Avon Oaks Country Club
AVON
WEST PARK ROAD
Landing Strip
Holy Trinity Sch
Avon Rent Sch
St Marys Sch
High Sch
SCALE 1:24 000
COLUMBIA GAS
of Ohio
Westlake HP Betterment
Chester Rd. 12 inch loop
SHEET 1 OF 3
94-502-32
Avon and North Olmstead
Quads



SCALE: 1" = 500'
Sheet 2 of 3

LEGEND

- FORESTED WETLAND AREAS
- SHRUB/SCRUB WETLAND AREAS
- DIRECTIONAL BORE AREAS
- TRENCHING IN WETLAND AREAS
- CONVENTIONAL TRENCHING AREAS
- TIE-IN

NOTES

A) AS INDICATED LESS THAN 750 FEET OF COMBINED FORESTED WETLANDS AND SHRUB/SCRUB WETLANDS WILL BE IMPACTED BY THIS PROJECT.

B) FROM THE EAST TIE-IN AT LEAR NAGLE RD. TO THE WEST BOUNDARY OF THE GOOD TIMES FUN PARK, COLUMBIA WILL UTILIZE A 25' EASEMENT ADJACENT TO THE EXISTING ROAD RIGHT OF WAY.

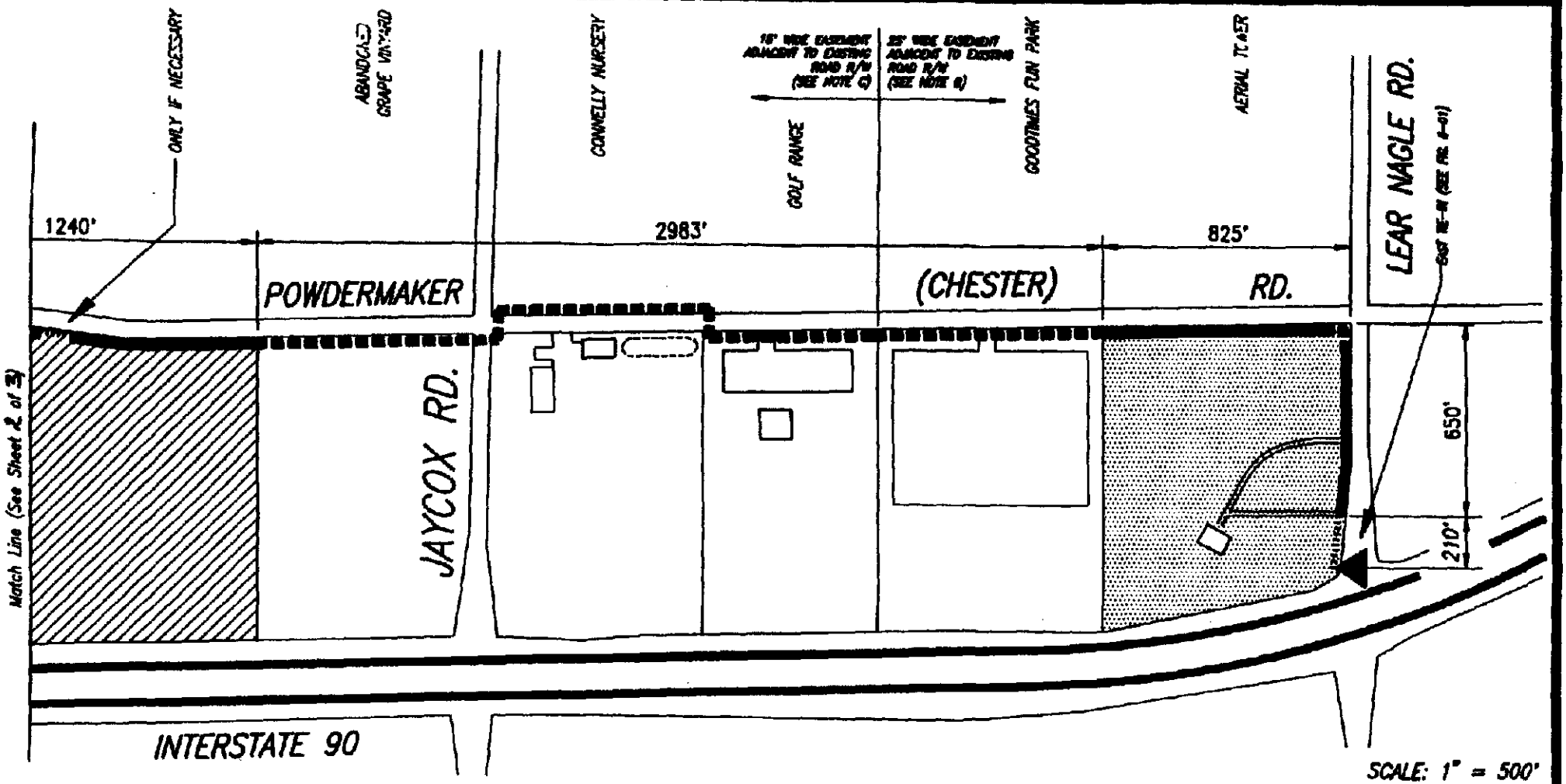
C) FROM THE WEST BOUNDARY OF THE GOOD TIMES FUN PARK TO THE WEST TIE-IN AT STATE ROUTE 83, COLUMBIA WILL UTILIZE A 15' EASEMENT ADJACENT TO THE EXISTING ROAD RIGHT OF WAY.

MAP 11-01

COLUMBIA GAS
of Ohio

WESTLAKE HP BETTERMENT
CHESTER RD. 12 INCH LOOP
SHEET 2 OF 3
ARMY CORP. OF ENGINEERS
APPLICATION NO. 94-502-32

08-05-94 C R EMERSON



SCALE: 1" = 500'
Sheet 3 of 3

LEGEND

- FORESTED WETLAND AREAS
- SHRUB/SCRUB WETLAND AREAS
- DIRECTIONAL BORE AREAS
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MAP 11-01

COLUMBIA GAS
of Ohio

WESTLAKE HP BETTERMENT
CHESTER RD. 12 INCH LOOP
SHEET 3 OF 3
ARMY CORP. OF ENGINEERS
APPLICATION NO. 94-502-32
08-05-94 C R EMERSON

IN REPLY REFER TO:

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Reynoldsburg Ohio Field Office
6950-H Americana Parkway
Reynoldsburg, Ohio 43068-4115

(614) 469-6923/FAX (614) 469-6919

April 18, 1994

Ms. Kristin K. Luginbuhl
Columbia Gas Transmission Corp.
200 Civic Center Drive
Post Office Box 117
Columbus, Ohio 43216-0177

RE: Proposed Replacement of a 12-inch Pipeline Near Avon, Columbiana County, Ohio

Dear Ms. Luginbuhl:

This responds to your April 12, 1994 letter requesting our comments on your proposal to replace an existing pipeline or put a new line in service along with the existing line. The length of lines involved are 8,300 and 8,700 and will have a 12-inch diameter.

These comments are provided under the authority of the Endangered Species Act of 1973, as amended.

ENDANGERED SPECIES COMMENTS: The proposed project lies within the range of the Indiana bat, a Federally listed endangered species. Summer habitat requirements for the species are not well defined but the following are thought to be of importance:

1. Dead trees and snags along riparian corridors especially those with exfoliating bark or cavities in the trunk or branches which may be used as maternity roost areas.

2. Live trees (such as shagbark hickory) which have exfoliating bark.

3. Stream corridors, riparian areas, and nearby woodlots which provide forage sites.

Considering the above items, we recommend that if trees with exfoliating bark (which could be potential roost trees) are encountered in the project area, they and surrounding trees should be saved wherever possible. If they must be cut, they should not be cut between April 15 and September 15.

If desirable trees are present, or if the above time restriction is unacceptable, mist net or other surveys should be conducted to determine if bats are present. The survey should be designed and conducted in coordination with the endangered species coordinator for this office, Mr. Buddy Fazio. The survey should be conducted in June or July since the bats would only be expected in the project area from approximately May 1 to August 31.

Sincerely,

Kent E. Kroonemeyer
Supervisor

cc: DOW, Wildlife Environmental Section, Columbus, OH
ODNR, Office of Realty and Land Management, Columbus, OH
Ohio EPA, Water Quality Monitoring, Attn: G.Hesse, Columbus, OH
US EPA, Office of Environmental Review, Chicago, IL

OHIO Department of Natural Resources

George V. Voinovich • *Governor*
Frances S. Buchholzer • *Director*

August 31, 1994

Donald K. Gartman
Columbia Gas System Service Corporation
20 Montchanin Road
Wilmington, DE 19807

Dear Mr. Gartman:

After reviewing our Natural Heritage maps and files, I find the Division of Natural Areas and Preserves has no records of rare species in the Chester Road Pipeline project area in Avon, Lorain County, Ohio (Avon and North Olmsted Quads).

There are no existing or proposed state nature preserves or scenic rivers at the project site. We are also unaware of any unique ecological sites, geologic features, breeding or non-breeding animal concentrations, champion trees, or state parks, forests or wildlife areas in the project vicinity.

Our inventory program has not completely surveyed Ohio and relies on information supplied by many individuals and organizations. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that site. Please note that we inventory only high-quality plant communities and do not maintain an inventory of all Ohio wetlands.

Please contact me at 614-265-6818 if I can be of further assistance.

Sincerely,

Debbie Woischke

Debbie Woischke, Ecological Analyst
Division of Natural Areas & Preserves

SEP 2 1994

Ohio Historic Preservation Office

Ohio Historical Center
1982 Velma Avenue
Columbus, Ohio 43211-2497
614/297-2470
Fax: 297-2546

OHIO HISTORICAL SOCIETY
SINCE 1885

September 2, 1994

Kristen K. Luginbuhl
Columbia Gas of Ohio, Inc.
200 Civic Drive
P.O. Box 117
Columbus, OH 43216-0117

Dear Ms. Luginbuhl:

Re: Line Replacement, Avon, Ohio

This is in response to the receipt of the report "Phase I and II Cultural Resources Report on Columbia Gas of Ohio Incorporated's Proposed Approximate 1.84 Mile Natural Gas Pipeline in Lorain County, Ohio by Gary Perkins and Dr. John F. Doershuk. My staff has reviewed this information. Based on their recommendations, I have the following comments, submitted in accordance with the provisions of Section 106 of the National Preservation Act of 1966 (36 CFR 800).

Field survey of the proposed natural gas pipeline corridor consisted of pedestrian survey and subsurface testing. Although much of the project area is currently comprised of wetlands and was not tested. No prehistoric or historic remains were encountered in investigated areas. It is our understanding that the pipeline relacement will be constructed by directional drilling under the wetlands. Based on the negative results of the survey and the methods of construction, it is my opinion that the project will have no effect on any properties are listed or eligible for the National Register of Historic Places. No further coordination for this project is needed unless the scope of the project should change.

If you have any questions, please contact Julie Quinlan, Progam Coordinator, at (614) 297-2483. Her hours are 5:00 a.m.-1:00 p.m. Thank you for your cooperation.

Sincerely,

Martha Raymond, Department Head
Technical and Review Services

MJR/JAQ:jq

xc: Ohio Power Siting Board

26. **Provide a copy of the USCOE permit/authorization received for the proposed project.**

Response:

The attached Exhibit D is a copy of the USCOE letter indicating that the proposed project is authorized under the Nationwide Permit Program.

Exhibit D

DEPARTMENT OF THE ARMY
BUFFALO DISTRICT, CORPS OF ENGINEERS
1776 NIAGARA STREET
BUFFALO, NEW YORK 14207-3199

August 16, 1994

REPLY TO ATTENTION OF

Regulatory Branch

SUBJECT: Application No. 94-502-32, Nationwide Permit 33 CFR 330, Appendix A, Section B, No. (12)

Kristin Luginbuhl
Columbia Gas of Ohio, Incorporated
200 Civic Center Drive
Columbus, Ohio 43215

Dear Ms. Luginbuhl:

This pertains to your proposed installation of 9700 linear feet of 12-inch steel high pressure natural gas pipeline, located on Chester Road, in the City of Avon, Lorain County, Ohio. The proposed project will impact a maximum of 750 linear feet of scrub/shrub and forested wetlands.

I have reviewed your application, and have determined that the impacts associated with your 9700 linear feet of 12-inch steel high pressure natural gas pipeline are authorized by the enclosed Nationwide Permit provided that the attached conditions are satisfied. Please note that our verification of the applicability of this Nationwide Permit is valid for two years from the date of this letter unless the Nationwide is modified, suspended, or revoked. This verification will remain valid if during this two year period the Nationwide Permit is reissued without modification. Please note that if you commence or are under contract to commence this activity in reliance of your Permit prior to the date this Permit expires, is suspended or revoked, or is modified such that your activity no longer complies with the terms and conditions, you have 12 months from the date of Permit modification, expiration, or revocation to complete the activity under the present terms and conditions of the Permit, unless this Permit has been subject to the provisions of discretionary authority.

It is your responsibility to remain informed of changes to the Nationwide Permit program. A public notice announcing any changes will be issued when they occur. Finally, note that if your activity is not undertaken within the two year period or the project specifications have changed, you must immediately notify this office to determine the need for further approval or reverification.

Regulatory Branch
SUBJECT: Application No. 94-502-32, Nationwide Permit 33 CFR 330, Appendix A, Section B, No. (12)

You are encouraged to contact the appropriate state and local governmental officials to insure that the proposed work complies with their requirements.

Lastly, I would like to point out that our verification of the Federal wetland boundary, as shown on the attached drawings, is valid for a period of five (5) years from the date of this correspondence. At the end of this period, a new wetland delineation will be required if the above described work is not completed.

Your initiation of work as authorized by the enclosed Nationwide Permit acknowledges your acceptance of the general and special conditions contained therein.

Questions pertaining to this matter should be directed to Ms. Kathy Griffin, who may be contacted by calling 716-879-4315, or by writing to the above address.

Sincerely,

Kathy M. Griffin

for Walter C. Neitzke
Colonel, U.S. Army
Commanding

Enclosures

ACTIVITIES AUTHORIZED UNDER 33 CFR 330, APPENDIX A:

(12) **Utility Line Backfill and Bedding.** Discharges of material for backfill or bedding for utility lines, including outfall and intake structures, provided there is no change in preconstruction contours. A "utility line" is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquefiable, or slurry substance, for any purpose, and any cable, line or wire for the transmission for any purpose of electrical energy, telephone and telegraph messages, and radio and television communication. The term "utility line" does not include activities which drain a water of the United States, such as drainage tile, however, it does apply to pipes conveying drainage from another area. Material resulting from trench excavation may be temporarily sidecast (up to three months) into waters of the United States provided that the material is not placed in such a manner that it is dispersed by currents or other forces. The DE may extend the period of temporary side-casting up to 180 days, where appropriate. The area of waters of the United States that is disturbed must be limited to the minimum necessary to construct the utility line. In wetlands, the top 6" to 12" of the trench should generally be backfilled with topsoil from the trench. Excess material must be removed to upland areas immediately upon completion of construction. Any exposed slopes and streambanks must be stabilized immediately upon completion of the utility line. The utility line itself will require a Section 10 permit if in navigable waters of the United States. (See 33 CFR Part 322) (Section 404)

NATIONWIDE PERMIT GENERAL CONDITIONS

General Conditions: The following general conditions must be llowed in order for any authorization by a nationwide permit to be valid:

1. Navigation. No activity may cause more than a minimal adverse 'ect on navigation.

2. Proper Maintenance. Any structure or fill authorized shall be properly maintained, including maintenance to ensure public safety.

3. Erosion and Siltation Controls. Appropriate erosion and siltation controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills must be permanently stabilized at the earliest practicable date.

4. Aquatic Life Movements. No activity may substantially disrupt the movement of those species of aquatic life indigenous to the waterbody, including those species which normally migrate through the area, unless the activity's primary purpose is to impound water.

5. Equipment. Heavy equipment working in wetlands must be placed on mats or other measures must be taken to minimize soil disturbance.

6. Regional and Case-by-Case Conditions. The activity must comply with any regional conditions which may have been added by the division engineer (see 33 CFR 330.4[e]) and any case specific conditions added by the Corps.

7. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System; or in a river officially designated by Congress as a "study river" for possible inclusion in the system, while the river is in an official study status. Information on Wild and Scenic Rivers may be obtained from the National Park Service and the U.S. Forest Service.

8. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

9. Water Quality Certification. In certain states, an individual state water quality certification must be obtained or waived (see 33 CFR 330.4[c]).

10. Coastal Zone Management. In certain states, an individual state coastal zone management consistency concurrence must be obtained or 'aived. (See 33 CFR 330.4[d]).

11. Endangered Species. No activity is authorized under any NWP ich is likely to jeopardize the continued existence of a threatened or angered species or a species proposed for such designation, as identified ider the Federal Endangered Species Act, or which is likely to destroy or adversely modify the critical habitat of such species. Non-federal permittees shall notify the district engineer if any listed species or critical habitat might be affected or is in the vicinity of the project and shall not begin work on the activity until notified by the district engineer that the requirements of the Endangered Species Act have been satisfied and that the activity is authorized. Information on the location of threatened and endangered species and their critical habitat can be obtained from the U.S. Fish and Wildlife Service and National Marine Fisheries Service. (See 33 CFR 330.4[f]).

12. Historic Properties. No activity which may affect Historic properties listed, or eligible for listing, in the National Register of Historic Places is authorized, until the DE has complied with the provisions of 33 CFR 325, appendix C. The prospective permittee must notify the district engineer if the authorized activity may affect any historic properties listed, determined to be eligible, or which the prospective permittee has reason to believe may be eligible for listing on the National Register of Historic Places, and shall not begin the activity until notified by the District Engineer that the requirements of the National Historic Preservation Act have been satisfied and that the activity is authorized. Information on the location and existence of historic resources can be obtained from the State Historic Preservation Office and the National Register of Historic Places. (See 33 CFR 330.4[g]).

13. Notification: (a) Where required by the terms of the NWP, the prospective permittee must notify the District Engineer as early as possible and shall not begin the activity: (1) Until notified by the District Engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) If notified by the District or Division engineer that an individual permit is required; or

(3) Unless 30 days have passed from the District Engineer's receipt of notification and the prospective permittee has not received notice from the istrict or Division Engineer. Subsequently, the permittee's right to proceed der the NWP may be modified, suspended, or revoked only in accordance ith the procedure set forth in 33 CFR 330.5[d][2].

(b) The notification must be in writing and include the following information and any required fees:

(1) Name, address and telephone number of the prospective permittee;

(2) Location of the proposed project;

(3) Brief description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), regional general permit(s) or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity;

(4) Where required by the terms of the NWP, a delineation of affected special aquatic sites, including wetlands; and

(5) A statement that the prospective permittee has contacted: (i) The USFWS/NMFS regarding the presence of any Federally listed (or proposed for listing) endangered or threatened species or critical habitat in the permit area that may be affected by the proposed project; and any available information provided by those agencies. (The prospective permittee may contact Corps District Offices for USFWS/NMFS agency contacts and lists of critical habitat).

(ii) The SHPO regarding the presence of any historic properties in the permit area that may be affected by the proposed project; and the available information, if any, provided by that agency.

(c) The standard individual permit application form (Form ENG 4345) may be used as the notification but must clearly indicate that it is a PDN and must include all of the information required in (b)(1)-(5) of General Condition 13.

(d) In reviewing an activity under the notification procedure, the District Engineer will first determine whether the activity will result in more than minimal individual or cumulative adverse environmental effects or will be contrary to the public interest. The prospective permittee may, at his option, submit a proposed mitigation plan with the predischarge notification to expedite the process and the District Engineer will consider any optional mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed work are minimal. The District Engineer will consider any comments from Federal and State agencies concerning the proposed activity's compliance with the terms and conditions of the nationwide permits and the need for mitigation to reduce the project's adverse environmental effects to a minimal level. The district engineer will upon receipt of a notification provide immediately (e.g. facsimile transmission, overnight mail or other expeditious manner) a copy to the appropriate offices of the Fish and Wildlife Service, State natural resource or water quality agency, EPA, and, if appropriate, the National Marine Fisheries Service. With the exception of NWP 37, these agencies will then have 5 calendar days from the date the material is transmitted to telephone the District Engineer if they intend to provide substantive, site-specific comments. If so contacted by an agency, the District Engineer will wait an additional 10 calendar days before making a decision on the notification. The District Engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency. The District Engineer will indicate in the administrative record associated with each notification that the resource agencies' concerns were considered. Applicants are encouraged to provide the Corps multiple copies of notifications to expedite agency notification. If the District Engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects are minimal, he will notify the permittee and include any conditions he deems necessary. If the District Engineer determines that the adverse effects of the proposed work are more than minimal, then he will notify the applicant either:

(1) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; or

(2) That the project is authorized under the nationwide permit subject to the applicant's submitting a mitigation proposal that would reduce the adverse affects to the minimal level. This mitigation proposal must be approved by the District Engineer prior to commencing work. If the prospective permittee elects to submit a mitigation plan, the DE will expeditiously review the proposed mitigation plan, but will not commence a second 30-day notification procedure. If the net adverse effects of the project (with the mitigation proposal) are determined by the District Engineer to be minimal, the District Engineer will provide a timely written response to the applicant informing him that the project can proceed under the terms and conditions of the nationwide permit.

(e) Wetlands Delineations: Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic site. There may be some delay if the Corps does the delineation. Furthermore, the 30-day period will not start until the wetland delineation has been completed.

(f) Mitigation: Factors that the District Engineer will consider when determining the acceptability of appropriate and practicable mitigation include, but are not limited to:

(1) To be practicable the mitigation must be available and capable of being done considering costs, existing technology, and logistics in light of overall project purposes;

(2) To the extent appropriate, permittees should consider mitigation inking and other forms of mitigation including contributions to wetland trust inds, which contribute to the restoration, creation, replacement, hancement, or preservation of wetlands.

Furthermore, examples of mitigation that may be appropriate and practicable include but are not limited to: reducing the size of the project; establishing buffer zones to protect aquatic resource values; and replacing the loss of aquatic resource values by creating, restoring, and enhancing similar functions and values. In addition, mitigation must address impacts and cannot be used to offset the acreage of wetland losses that would occur in order to meet the acreage limits of some of the nationwide permits (e.g. 5 acres of wetlands cannot be created to change a 6 acre loss of wetlands to a 1 acre loss; however, the 5 created acres can be used to reduce the impacts of the 6 acre loss).

Section 404 Only Conditions

In addition to the General Conditions, the following conditions apply only to activities that involve the discharge of dredged or fill material and must be followed in order for authorization by the nationwide permits to be valid:

1. **Water Supply Intakes.** No discharge of dredged or fill material may occur in the proximity of a public water supply intake except where the discharge is for repair of the public water supply intake structure and adjacent bank stabilization.

2. **Shellfish Production.** No discharge of dredged or fill material may occur in areas of concentrated shellfish production, unless the discharge is directly related to a shellfish harvesting activity authorized by nationwide permit 4.

3. **Suitable Material.** No discharge of dredged or fill material may consist of unsuitable material (e.g., trash, debris, car bodies, etc.) and material discharged must be free from toxic pollutants in toxic amounts (see ction 307 of the Clean Water Act).

4. **Mitigation.** Discharges of dredged or fill material into waters of the nited States must be minimized or avoided to the maximum extent racticable at the project site (i.e. on-site), unless the DE has approved a compensation mitigation plan for the specific regulated activity.

5. **Spawning Areas.** Discharges in spawning areas during spawning seasons must be avoided to the maximum extent practicable.

6. **Obstruction of High Flows.** To the maximum extent practicable, discharges must not permanently restrict or impede the passage of normal or expected high flows or cause the relocation of the water (unless the primary purpose of the fill is to impound waters).

7. **Adverse Impacts From Impoundments.** If the discharge creates an impoundment of water, adverse impacts on the aquatic system caused by the accelerated passage of water and/or the restriction of its flow shall be minimized to the maximum extent practicable.

8. **Waterfowl Breeding Areas.** Discharges into breeding areas for migratory waterfowl must be avoided to the maximum extent practicable.

9. **Removal of Temporary Fills.** Any temporary fills must be removed in their entirety and the affected areas returned to their preexisting elevation.

OHIO

NATIONWIDE PERMIT PROGRAM - FURTHER INFORMATION

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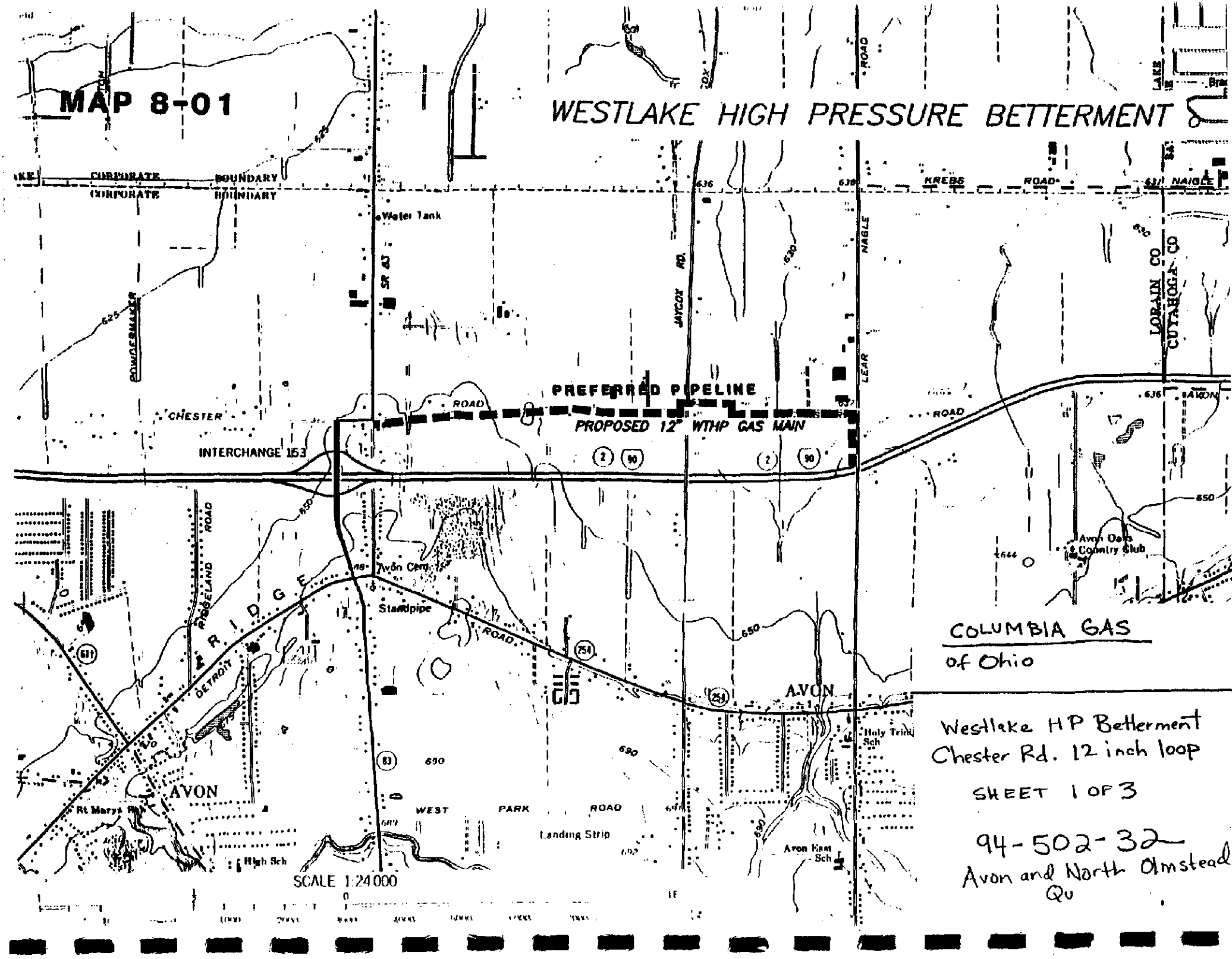
d. The length of utility line crossings in streams and/or rivers shall not exceed twice the width of the waterbody at that location.

e. This Nationwide Permit shall authorize sidecasting or stockpiling of dredged material for a maximum of 3 months.

f. In wetlands, at least the top six inches of backfill over a utility line shall consist of the topsoil material removed from the trench.

g. The Ohio Administrative Code Rule 3745-01 requires that notice must be given to the director of Ohio EPA before chemicals are applied for the control of aquatic plants or animals in Waters of the United States (including wetlands). Applicants who intend to use chemicals in Waters of the United States shall contact the Ohio EPA, Division of Water Quality Planning and Assessment, P.O. Box 1049, Columbus, Ohio 43266-0149 prior to the application of any chemicals.

h. This Nationwide Permit shall not authorize utility line installations greater than 1000 feet in length in forested wetlands.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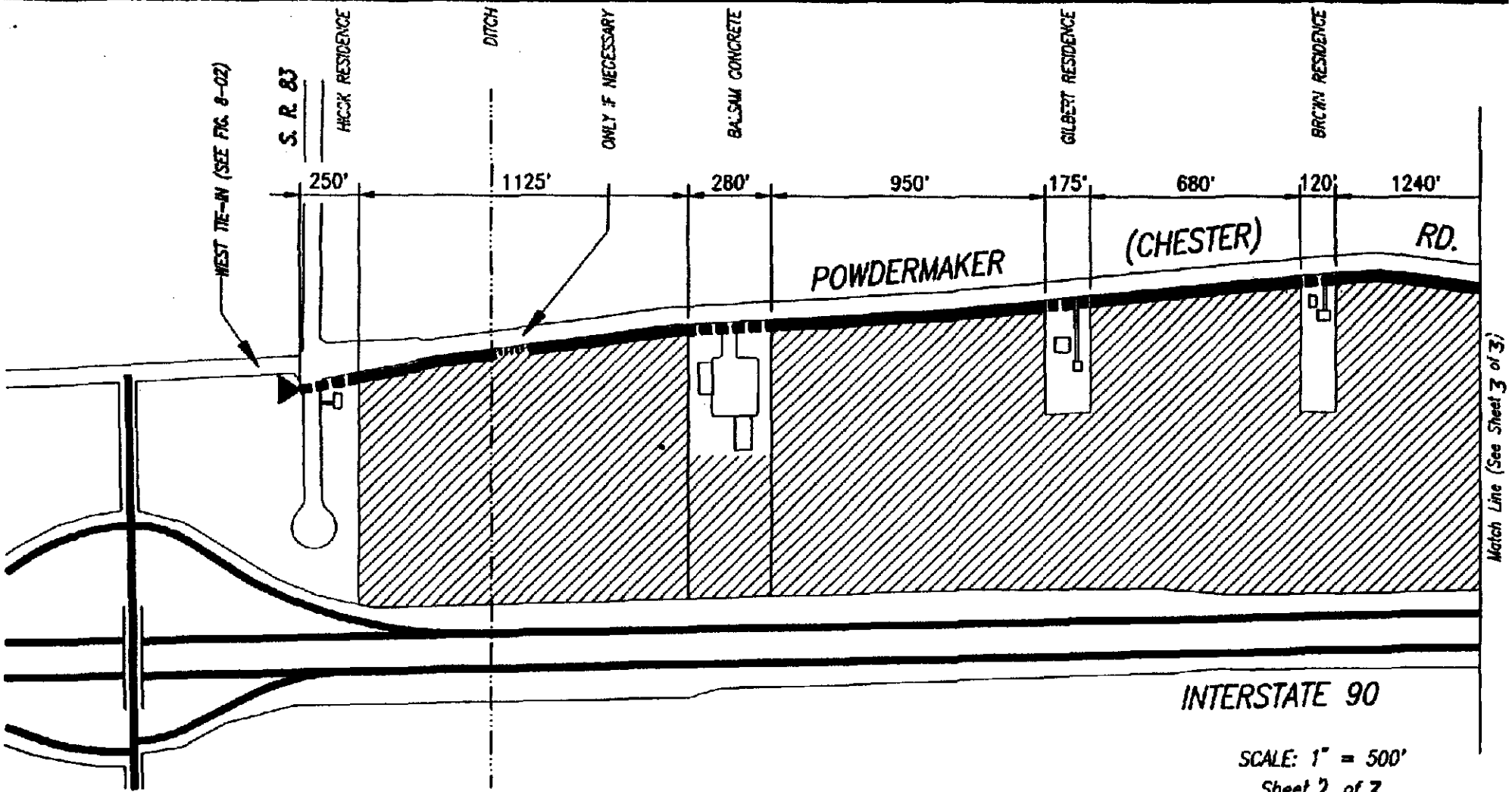
Avon and North Olmstead
Qu



SCALE: 1" = 500'

Sheet 2 of 3

LEGEND

- FORESTED WETLAND AREAS
- SHRUB/SCRUB WETLAND AREAS
- DIRECTIONAL BORE AREAS
- TRENCHING IN WETLAND AREAS
- CONVENTIONAL TRENCHING AREAS
- TIE-IN

NOTES

A) AS INDICATED LESS THAN 750 FEET OF COMBINED FORESTED WETLANDS AND SHRUB/SCRUB WETLANDS WILL BE IMPACTED BY THIS PROJECT.

B) FROM THE EAST TIE-IN AT LEAR NAGLE RD. TO THE WEST BOUNDARY OF THE GOOD TIMES FUN PARK, COLUMBIA WILL UTILIZE A 25' EASEMENT ADJACENT TO THE EXISTING ROAD RIGHT OF WAY.

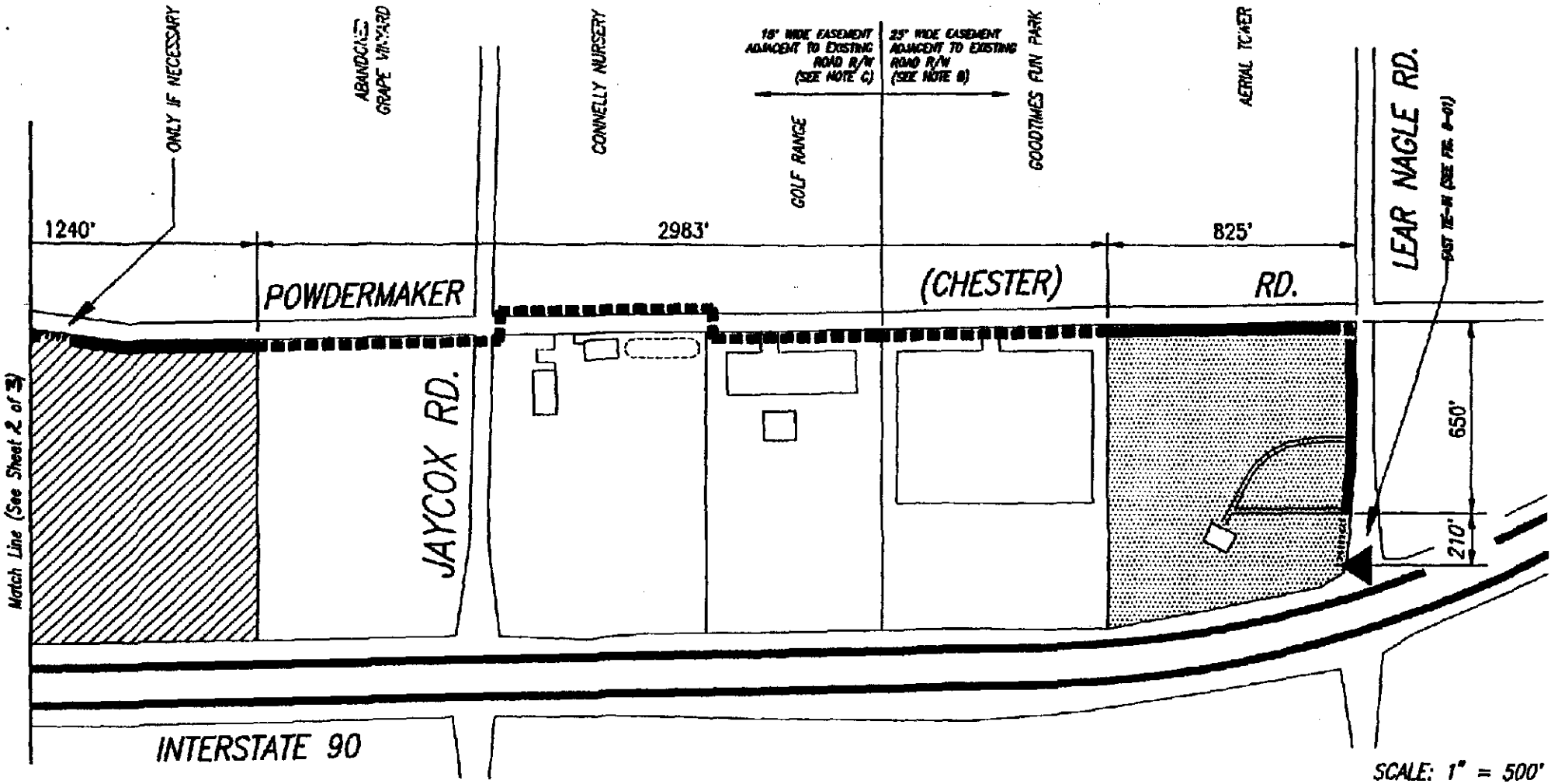
C) FROM THE WEST BOUNDARY OF THE GOOD TIMES FUN PARK TO THE WEST TIE-IN AT STATE ROUTE 83, COLUMBIA WILL UTILIZE A 15' EASEMENT ADJACENT TO THE EXISTING ROAD RIGHT OF WAY.

11-01

COLUMBIA GAS
of Ohio

WESTLAKE HP BETTERMENT
CHESTER RD. 12 INCH LOOP
SHEET 2 OF 3
ARMY CORP. OF ENGINEERS
APPLICATION NO. 94 502-32

08-05-94 C JN



SCALE: 1" = 500'

Sheet 3 of 3

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COLUMBIA GAS
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WESTLAKE HP BETTERMENT
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SHEET 3 OF 3
ARMY CORP. OF ENGINEERS
APPLICATION NO. [illegible]02-32
08-05-94 C[illegible]N

27. What are the environmental effects of the installation of natural gas pipelines in forested wetlands by directional boring based on a review of previous projects?

a. Please summarize.

Response:

For the past decade, the pipeline industry has been using horizontal directionally drilled crossings to greatly reduce and/or eliminate impacts to environmentally sensitive areas, congested areas, high-security areas with limited access, and protected habitats such as beaches, estuaries and forests. Since there is normally no surface disturbance required, there are no detectable environmental effects to landscapes such as forested wetlands which are crossed using this technique. The only observed impacts which may occur are when off-center cores are required to test the target depths for geological conditions (bedrock, gravel, cobble) which may require adjustments in the drilling procedure. Also, if a fissure develops between the borehole and the surface there may be a leak or discharge of drilling mud (bentonite) to the forested wetland surface. The bentonite mud is chemically and biologically inert and has no negative effect other than the covering of near-ground vegetation which may be in the area. In such situations, the bentonite is usually removed using a vacuum tank truck and disposed of at a landfill or returned to the tank system for recycling.

28. What has been the applicant's previous experience with the installation of natural gas pipelines in forested wetlands by directional boring?

a. Please summarize.

Response:

Columbia Gas of Ohio, Inc. has not been specifically involved with directional boring in forested wetlands; however, Dr. Donald K. Gartman of the Columbia Gas Service Corporation, Environmental Affairs Department, located in Wilmington, Delaware has participated in several Columbia System projects which have used directional boring techniques to cross forested wetlands in New Jersey. In this regard, Raccoon Creek and its wetland in Gloucester County, New Jersey were crossed for approximately 1,300 feet, and Mantua Creek was crossed for 1,200 feet. Both crossings were completed in 1990 to protect the forest and herbaceous wetlands associated with these streams. At the Mantua crossing there was a minor leakage of drilling mud at the upland/wetland interface where the pipeline was approaching the target emergence site. Vacuum trucks were used to pick up the residual bentonite which was subsequently incorporated into a nearby agricultural field with the permission of the landowner. Subsequent visits to the site indicated there were no negative effects to the wetland vegetation as a result of the leak.