

A NiSource Company

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October 28, 2010

Dennis Rocks P. E., CFM Leonard Jackson Associates 26 Firemans Memorial Drive Pomona, NY 10970

Re: Patrick Farms Project, LJA #09051

Dear Dennis:

Columbia Gas Transmission personnel have reviewed the plans you submitted for this project for impacts on our facilities. For your convenience, we listed our comments on a lot-by-lot basis. Although the report is lengthy, a number of objections can be remedied in the same way for all lots.

Project Number and Description:

The property owner (developer) proposes to sub-divide property and construct three separate projects (Patrick Farms Subdivision, Patrick Farms Volunteer Housing and Patrick Farms Condominiums). Each of the three developments has been submitted for review. Two of the proposed developments, the Patrick Farms Subdivision and the Patrick Farms Condominiums will impact Columbia Gas Transmission's (Columbia) high-pressure natural gas pipeline Line 10338.

Patrick Farms Volunteer Housing

Drawings (Project #09051, Issue 1, Dated 6/2/10 & Rev. Issue 2, Dated 8/12/10) were received and reviewed for engineering impacts.

Engineering Impacts:

No impacts to Columbia Gas Transmission's high pressure natural gas pipeline facilities are illustrated on the supplied drawings for the Patrick Farms Volunteer Housing development. All work involved with this development (Patrick Farms Volunteer Housing) lies outside of Columbia Gas Transmission's pipeline right of way.

Patrick Farms Condominiums

Drawings (Project #09051, Issue 1, Dated 6/2/10 & Rev. Issue 2, Dated 8/12/10) were received and reviewed for engineering impacts. Impacts are listed below along with concerns or objections/no objections from Columbia.

Engineering Impacts:

- WQ Basin #4 lies along the pipeline right of edge and is not objectionable to Columbia; however construction equipment is expected to be operating within the confines of Columbia's right of way. Columbia must review and approve all equipment proposed to operate within its right of way.
- The Maintenance Access Drive servicing WQ Basin #4 shown (page 3) running parallel within Columbia pipeline right of way does not comply with Columbia's Right of Way Use Specifications (OEP-152). Roads may cross the pipeline right of way at as close to a ninety degree angle as possible but may not run parallel within Columbia's right of way. The Maintenance Access Drive must be relocated outside of the pipeline right of way (see 3.5.1.C).
- Road "D" is illustrated running parallel outside of the pipeline right of way (page 5) but is noted as not being constructed as a part of this development. All comments regarding this structure will appear under the Patrick Farms Subdivision review.
- Minor grading is indicated within the right of way (page 7). Columbia is unable to comment further as little information is provided concerning changes in elevation. Columbia's Right of Way Use Specifications (OEP-152) prohibit cover over the pipeline being reduced to less than 3 or increased to greater than 5 feet (3.3.1.B). No elevation/grading changes resulting in less than 3 feet or more than 5 feet of cover will be authorized.
- The Drainage Line piping (DMH-D-5 to DMH-D-6) adjacent to WQ Basin #4 crosses Columbia's right of way. Columbia is unable to comment as no further information is provided for this utility.
- Columbia is unable to comment on the Sanitary Sewer (page 13 and 18) crossing Columbia's right of way between SMH #35 to SMH #35A as no further information (size, material, reference to existing pipeline, etc.) is provided with the supplied drawings.
 Utility installations may cross at least 2 feet underneath of the natural gas pipeline and at as close to a ninety degree angle as possible. All crossings that do not comply with Columbia's guidelines are objectionable.
- Columbia is unable to comment on the Storm Water Drain crossing Columbia's right of
 way between CB #4-25 to HW #4 as no further information (size, material, reference to
 existing pipeline, etc.) is provided with the supplied drawings. Utility installations may
 cross at least 2 feet underneath of the natural gas pipeline and at as close to a ninety degree angle as possible. All crossings that do not comply with Columbia's guidelines are
 objectionable.
- Trees are illustrated to be planted in the pipeline right of way. This does not comply with Columbia's standards and is objectionable in that no trees may be located within the pipeline right of way. In addition, it should be noted that trees planted close to the edge of the pipeline right of way whose foliage (upon maturity) may extend significantly enough to obscure the right of way from aerial patrol may be side trimmed to enable Columbia to

comply with federal Department of Transportation (DOT) requirements for pipeline inspection.

- It is noted that page 1 of the supplied drawings illustrate Building 46 as being located within the pipeline right of way. It is further noted that subsequent drawings depict this building to be fully outside of the pipeline right of way. Page 1 should be revised to reflect actual conditions.
- The sidewalk shown (page 13) along the outside edge of the pipeline right of way is not objectionable to Columbia.
- Columbia is unable to comment on equipment proposed to operate within the pipeline right of way area. Columbia reviews all equipment and proposed equipment crossings of the pipeline right of way for additional stress on the pipeline facility. The developer will need to advise the contractor for the project of this requirement. Columbia must review and approve all equipment and equipment crosses before activities within the right of way may occur.

Patrick Farms Subdivision (reviewed 10/16/10)

Drawings (Project #09051, Issue 1, Dated 6/2/10 & Rev. Issue 2, Dated 8/12/10) were received and reviewed for engineering impacts. Impacts are listed below along with concerns or objections/no objections from Columbia.

Engineering Impacts:

The Patrick Farms Subdivision will impact Columbia Gas Transmission's high pressure natural gas pipeline in the vicinity of lots 8, 9, 24, 25, 27, 28, 32, 33, 42, 43, 44, 45, 46, 47, 48, 49, 50, 52, 62, 63, 64, 65, 67 and 87. In addition, Columbia's pipeline right of way will be impacted by proposed roads, Road A, Road B, Road D, Road E and Road F as well as associated utilities for the roads and the individual lots noted above and peripheral utilities (i.e. drain lines, etc.).

- Columbia notes its pipeline is not shown as centered within the depicted right of way on the drawings. The pipeline right of way is 50 feet centered on the existing pipeline. This is a concern to Columbia as it has a serious affect on potential impacts and concerns to the pipeline and right of way. Columbia recommends the pipeline be field staked and right of way edges be marked for comparison to submitted drawings.
- Lot 8 (located along Road E)

The grading plans for Lot 8 depict elevation decreases of approximately 2 feet in the right of way area. This conflicts with Columbia's standards and is objectionable to Columbia. No cuts will be authorized within the right of way that reduces the cover over the pipeline to less than the federal DOT regulations (see OEP-152 3.3.1A & 3.3.1B).

Utility installations for this lot are shown outside of the pipeline right of way and are not objectionable to Columbia.

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

Lot 9 (located along Road E)

The supplied drawings show the edge of the future house being located at the edge of the right of way. Columbia does not object to the proximity of the house to the right of

way but will need to be advised of any excavation activities and equipment used within the right of way area.

The driveway for Lot 9 is objectionable to Columbia. Driveways may cross the right of way area from one side to the other. Pavement within the right of way area that connects to a foundation of a structure poses a safety concern and is objectionable to Columbia.

The grading plans for Lot 9 show slight increases in grade of approximately 1 foot in the right of way area. This does not conflict with Columbia's standards and is not objectionable to Columbia. No cuts will be authorized within the right of way that reduces the cover over the pipeline to less than the federal DOT regulations (see OEP-152 3.3.1A & 3.3.1B).

Utility installations for this lot are shown outside of the pipeline right of way and are not objectionable to Columbia.

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

Lot 24 (located along Road E)

The driveway entrance for Lot 42 has been reviewed for additional stress loads on the pipeline and is not objectionable to Columbia. Columbia reserves the right to review all equipment proposed for the driveway installation for additional stress loads on the pipeline.

The grading plans for Lot 24 show approximately a 2-4 foot increases in grade in the right of way area. Minor increases in grade (generally 2 foot or less) are not objectionable to Columbia; however, increases greater than 2 feet are objectionable to Columbia.

Columbia is unable to comment on the proposed utility crossings (water, telephone, electric, cable, sewer) for this lot as no further information is provided (see note under Utility Crossings – general).

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

Lot 25 (located along Road E)

No engineering impacts are noted, however, Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

Lot 27 (located along Road E)

No engineering impacts are noted, however, Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

Lot 28 (located along Road E)

The grading plans for Lot 28 show approximately a 2 foot increase in grade in the right of way area. Minor increases in grade (generally 2 foot or less) are not objectionable to Columbia; however, increases greater than 2 feet are objectionable to Columbia.

Columbia is unable to comment on the proposed utility crossings (water, telephone, electric, cable, sewer) for this lot as no further information is provided (see note under Util ity Crossings – general).

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

Lot 32 (located along Road A)

The grading plans for Lot 32 show approximately a 2 foot decrease in grade in the right of way area. Grade reductions across the pipeline right of way area are objectionable to Columbia. No cuts will be authorized within the right of way that reduces the cover over the pipeline to less than the federal DOT regulations (see OEP-152 3.3.1A & 3.3.1B).

Columbia is unable to comment on the proposed sanitary utility crossing of the pipeline right of way for this lot as no further information is provided (see note under Utility Crossings – general).

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

Lot 33 (located along Road A)

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

Lot 42 (located along Road D)

The driveway entrance for Lot 42 has been reviewed for additional stress loads on the pipeline and is not objectionable to Columbia. Columbia reserves the right to review all equipment proposed for the driveway installation for additional stress loads on the pipeline.

The grading plans for Lot 42 show approximately a 1-2 foot increase in grade in the right of way area. Minor increases in grade (generally 2 foot or less) are not objectionable to Columbia; however, increases greater than 2 feet are objectionable to Columbia.

Columbia is unable to comment on the proposed utility crossings (water, telephone, electric, cable, sewer) for this lot as no further information is provided (see note under Utility Crossings – general).

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

Lot 43 (located along Road D)

The driveway entrance for Lot 43 has been reviewed for additional stress loads on the pipeline and is not objectionable to Columbia. Columbia reserves the right to review all equipment proposed for the driveway installation for additional stress loads on the pipeline.

The grading plans for Lot 42 show approximately a 1-2 foot increase in grade in the right of way area. Minor increases in grade (generally 2 foot or less) are not objectionable to Columbia; however, increases greater than 2 feet is objectionable to Columbia.

Columbia is unable to comment on the proposed utility crossings (water, telephone, electric, cable, sewer) for this lot as no further information is provided (see note under Utility Crossings – general).

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

Lot 44 (located along Road D)

The driveway entrance for Lot 44 has been reviewed for additional stress loads on the pipeline and is not objectionable to Columbia. Columbia reserves the right to review all equipment proposed for the driveway installation for additional stress loads on the pipeline

The grading plans for Lot 42 show approximately 1-2 foot increases and minor decreases in grade in the right of way area. Minor increases in grade (generally 2 foot or less) are not objectionable to Columbia; however, decreases in grade are objectionable to Columbia.

Columbia is unable to comment on the proposed utility crossings (water, telephone, electric, cable, sewer) for this lot as no further information is provided (see note under Utility Crossings – general).

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

Lot 45 (located along Road D)

The driveway entrance for Lot 45 has been reviewed for additional stress loads on the pipeline and is not objectionable to Columbia. Columbia reserves the right to review all equipment proposed for the driveway installation for additional stress loads on the pipeline.

The grading plans for Lot 45 show decreases in grade in the right of way area. This conflicts with Columbia's standards and is objectionable to Columbia. No cuts will be authorized within the right of way that reduces the cover over the pipeline to less than the federal DOT regulations (see OEP-152 3.3.1A & 3.3.1B).

Columbia is unable to comment on the proposed utility crossings (water, telephone, electric, cable, sewer) for this lot as no further information is provided (see note under Utility Crossings – general).

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

Lot 46 (located along Road D)

The driveway entrance for Lot 46 has been reviewed for additional stress loads on the pipeline and is not objectionable to Columbia. Columbia reserves the right to review all equipment proposed for the driveway installation for additional stress loads on the pipeline.

The grading plans for Lot 46 show decreases in grade in the right of way area. This conflicts with Columbia's standards and is objectionable to Columbia. No cuts will be

authorized within the right of way that reduces the cover over the pipeline to less than the federal DOT regulations (see OEP-152 3.3.1A & 3.3.1B).

Columbia is unable to comment on the proposed utility crossings (water, telephone, electric, cable, sewer) for this lot as no further information is provided (see note under Utility Crossings – general).

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

Lot 47 (located along Road D)

The driveway entrance for Lot 47 has been reviewed for additional stress loads on the pipeline and is not objectionable to Columbia. Columbia reserves the right to review all equipment proposed for the driveway installation for additional stress loads on the pipeline.

Columbia is unable to comment on the proposed utility crossings (water, telephone, electric, cable, sewer) for this lot as no further information is provided (see note under Utility Crossings – general).

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

Lot 48 (located along Road D)

The driveway entrance for Lot 48 has been reviewed for additional stress loads on the pipeline and is not objectionable to Columbia. Columbia reserves the right to review all equipment proposed for the driveway installation for additional stress loads on the pipeline.

The grading plans for Lot 48 show slight decreases in grade in the right of way area. This conflicts with Columbia's standards and is objectionable to Columbia. No cuts will be authorized within the right of way that reduces the cover over the pipeline to less than the federal DOT regulations (see OEP-152 3.3.1A & 3.3.1B).

Columbia is unable to comment on the proposed utility crossings (water, telephone, electric, cable, sewer) for this lot as no further information is provided (see note under Utility Crossings – general).

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

Lot 49 (located along Road D)

The driveway entrance for Lot 49 has been reviewed for additional stress loads on the pipeline and is not objectionable to Columbia. Columbia reserves the right to review all equipment proposed for the driveway installation for additional stress loads on the pipeline.

The grading plans for Lot 49 show very slight grading changes and will not objectionable to Columbia.

Columbia is unable to comment on the proposed utility crossings (water, telephone, electric, cable, sewer) for this lot as no further information is provided (see note under Utility Crossings – general).

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

Lot 50 (located along Road D)

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

Lot 52 (located along Road F)

The driveway entrance for Lot 52 is objectionable to Columbia as illustrated. Driveways may cross the right of way area from one side to the other at as close to a 90-degree angle as possible.

The grading plans for Lot 52 depict elevation decreases of approximately 2 feet in the right of way area. This conflicts with Columbia's standards and is objectionable to Columbia. No cuts will be authorized within the right of way that reduces the cover over the pipeline to less than the federal DOT regulations (see OEP-152 3.3.1A & 3.3.1B).

Columbia is unable to comment on the proposed utility crossings (water, telephone, electric, cable, sewer) for this lot as no further information is provided (see note under Utility Crossings – general).

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

Lot 62 (located along Road D)

No engineering impacts are noted, however, Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

Lot 63 (located along Road D)

No engineering impacts are noted, however, Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

Lot 64 (located along Road D)

No engineering impacts are noted, however, Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

Lot 65 (located along Road D)

No engineering impacts are noted, however, Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

Lot 67 (located along Route 306)

The grading plans for Lot 67 show decreases in grade in the right of way area. This conflicts with Columbia's standards and is objectionable to Columbia. No cuts will be autho-

rized within the right of way that reduces the cover over the pipeline to less than the federal DOT regulations (see OEP-152 3.3.1A & 3.3.1B).

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

Lot 87 (located along Road D)

No engineering impacts are noted, however, Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

Road "E" Crossing

The Road "E" crossing (between 17+00- 19+00) has been reviewed for compliance with Columbia's standards for such facilities, including evaluation of additional stress loads on the pipeline, angle crossing, cover over the pipeline, etc. The supplied drawings do not provide information concerning Columbia's pipeline depth in the area of the proposed road. Minor fills and cuts are illustrated on the profile drawings. Be advised, minor fills, generally less than 2 feet will be approved, however, no reductions in cover over the pipeline will be authorized. In addition, Columbia may require the pipeline be exposed in the area of the road crossing to physically inspect the pipeline and pipeline coating prior to the installation of the road. This process is fully reimbursable to Columbia and must follow all of Columbia's standards for excavation, backfill and cathodic protection.

Columbia may restrict vibratory rollers being used within its right of way and must be apprised of all equipment proposed to be used within the right of way for the installation of the road in order to determine additional stress loads on the pipeline.

Columbia is unable to comment on the associated utilities to be installed with the road as no further information has been provided in regards to sizes, materials, depths in relationship to the existing pipeline (see note under Utilities).

Road "F" Crossing

The Road "F" crossing (between 9+00-11+00) has been reviewed for compliance with Columbia's standards for such facilities, including evaluation of additional stress loads on the pipeline, angle crossing, cover over the pipeline, etc. The supplied drawings do not provide information concerning Columbia's pipeline depth in the area of the proposed road. Minor fills and cuts are illustrated on the profile drawings. Be advised, minor fills, generally less than 2 feet will be approved, however, no reductions in cover over the pipeline will be authorized. In addition, Columbia may require the pipeline be exposed in the area of the road crossing to physically inspect the pipeline and pipeline coating prior to the installation of the road. This process is fully reimbursable to Columbia and must follow all of Columbia's standards for excavation, backfill and cathodic protection.

Columbia may restrict vibratory rollers being used within its right of way and must be apprised of all equipment proposed to be used within the right of way for the installation of the road in order to determine additional stress loads on the pipeline.

Columbia is unable to comment on the associated utilities to be installed with the road as no further information has been provided in regards to sizes, materials, depths in relationship to the existing pipeline (see note under Utilities).

Road "A" Crossing

The Road "A" crossing (between 5+00- 7+00) has been reviewed for compliance with Columbia's standards for such facilities, including evaluation of additional stress loads on the pipeline, angle crossing, cover over the pipeline, etc. The supplied drawings do not provide information concerning Columbia's pipeline depth in the area of the proposed road. Minor fills and cuts are illustrated on the profile drawings. Be advised, minor fills, generally less than 2 feet will be approved, however, no reductions in cover over the pipeline will be authorized. In addition, Columbia may require the pipeline be exposed in the area of the road crossing to physically inspect the pipeline and pipeline coating prior to the installation of the road. This process is <u>fully reimbursable</u> to Columbia and must follow all of Columbia's standards for excavation, backfill and cathodic protection.

Columbia may restrict vibratory rollers being used within its right of way and must be apprised of all equipment proposed to be used within the right of way for the installation of the road in order to determine additional stress loads on the pipeline.

Columbia is unable to comment on the associated utilities to be installed with the road as no further information has been provided in regards to sizes, materials, depths in relationship to the existing pipeline (see note under Utilities).

Road "B" Crossing

The Road "B" crossing (between 15+00- 16+00) has been reviewed for compliance with Columbia's standards for such facilities, including evaluation of additional stress loads on the pipeline, angle crossing, cover over the pipeline, etc. The supplied drawings do not provide information concerning Columbia's pipeline depth in the area of the proposed road. Minor fills and cuts are illustrated on the profile drawings. Be advised, minor fills, generally less than 2 feet will be approved, however, no reductions in cover over the pipeline will be authorized. In addition, Columbia may require the pipeline be exposed in the area of the road crossing to physically inspect the pipeline and pipeline coating prior to the installation of the road. This process is <u>fully reimbursable</u> to Columbia and must follow all of Columbia's standards for excavation, backfill and cathodic protection.

Columbia may restrict vibratory rollers being used within its right of way and must be apprised of all equipment proposed to be used within the right of way for the installation of the road in order to determine additional stress loads on the pipeline.

Columbia is unable to comment on the associated utilities to be installed with the road as no further information has been provided in regards to sizes, materials, depths in relationship to the existing pipeline (see note under Utilities).

Road "D" Installation

Road "D" is shown running parallel (3+00-13+00) outside of Columbia's pipeline right of way and is not objectionable to Columbia, however, Columbia is to be advised and must approve all equipment that is proposed to operate in or across its right of way. In addition, the dedicated public road right of way may not extend over Columbia's private pipeline right of way.

Landscaping

The drawings denote a five foot (5') wide tree easement to be located within Columbia pipeline right of way. This easement along with all intended trees is objectionable to Columbia. No trees may be planted in the pipeline right of way. Please note previous side trimming comment regarding trees whose limbs may extend over the right of way area.

Bushes, shrubs less than 5 feet may be planted within the right of way area but not directly over the pipeline (see guidelines or OEP-152 3.4.2 A-D).

WQ Basin #4

WQ Basin #4 is proposed to be installed at the edge of Columbia's right of way. It is noted as not being constructed as part of this development. All comments regarding this structure will appear under the Patrick Farms Condominium review.

Drain Line Crossing DMH #9-15 to DMH #9-16

Columbia is unable to comment on this proposed utility crossing terminating at WQ Basin #9 as no further information is provided (see note under Utility Crossings – general).

Drain Line Crossing DMH #10-16 to CB #10-6

Columbia is unable to comment on this proposed utility crossing terminating at WQ Basin #10 as no further information is provided (see note under Utility Crossings – general).

Sanitary Line Crossing SMH #35 to SMH #35A

Columbia is unable to comment on this proposed utility crossing in the vicinity of WQ Basin #4 as no further information is provided (see note under Utility Crossings – general).

Drain Line Crossing CB #4-25 to HW #4

Columbia is unable to comment on this proposed utility crossing terminating at WQ Basin #4 as no further information is provided (see note under Utility Crossings – general).

Sanitary Sewer Easements

The proposed drainage easements to benefit the Town of Ramapo that cross Columbia's private pipeline right of way are not objectionable to Columbia however, it should be clearly understood that the public drainage easements would be subservient to Columbia's pre-existing private right of way agreement.

Equipment Crossings

No Equipment Crossings of Columbia's pipeline right of way are identified on the drawings. Equipment crossings must be identified by the developer/contractor and all equipment must be reviewed and approved by Columbia before it may cross the pipeline. All equipment crossings must be clearly marked and maintained (after installation) after approval has been received. The right of way may not be used in areas outside of the pre-determined and approved crossings points.

General Notes:

Utility Crossings (general)

The drawings identify numerous utility crossings. However, no information is provided regarding sizes, material, depth, relationship to existing pipeline (clearances), etc. The following information is provided for design purposes.

Utilities installations must cross at least 2-feet underneath the pipeline unless the pipeline is abnormally deep and at as close to a 90-degree angle as possible. All permitted cable/wire utilities crossing below Columbia pipelines including, but not limited to, fiber optic, electric, telephone and television (excluding single telephone and single television drops), shall be encased with a minimum of 2 inch Schedule 40 PVC pipe, or equivalent, for the complete width of the ROW.

For safety reasons, electric and fiber optic lines shall also be surrounded with a minimum of six inches of red colored concrete or 4-inch minimum diameter, .237 inch wall thickness, coated steel pipe across the full width of the Columbia right-of-way.

Metallic Utility Crossings shall have bonds, test leads or other corrosion protection materials installed by Columbia at the expense of the Developer where necessary, at Columbia's sole determination. Metallic Utilities shall be coated with a non-conductive coating for the entire width of the NGTS right-of-way. The Developer shall be responsible for the protection of facilities against Columbia's Cathodic Protection system.

Non-Metallic Utilities shall be wrapped with tracer wire for the full width of Columbia's right-of-way unless otherwise permitted by Columbia. At locations where tracer wire is installed, tracer wire shall be raised to the ground surface and connected to a test station for monitoring.

Natural gas (or other industrial gas) pipelines crossing below Columbia's pipelines shall either be encased in a 6-inch envelope of yellow 2,000 psi concrete or encased in 4-inch minimum diameter, standard inch wall thickness, coated steel pipe across the full width of the NGTS right-of-way. Utilities permitted by NGTS to cross above the pipelines, shall be encased in 4-inch minimum diameter, standard inch wall thickness, coated steel pipe across the full width of the NGTS right-of-way.

In addition to the specific items detailed above, we have a number of universal concerns: grading, blasting, landscaping, pavement, utility and equipment crossings. Because very little information was provided regarding Columbia's pipeline relationship to the proposed utility, driveway and road crossings, we cannot yet address those issues. Please bear in mind that until all objections have been resolved, Columbia will authorize no work within our right of way.

Your contractors may use copies of the enclosed *Equipment Crossing Data* and *Blasting Data* sheets. Please provide them well in advanced of proposed use. Our operations people will assist in establishing equipment crossings and blasting precautions. Columbia inspectors must be present whenever work takes place near our facilities. Two or three days' notice should suffice to ensure that personnel are available.

Thank you for providing this latest set of plans. We look forward to working with you as you bring this project to fruition.

Sincerely,