



PLANNING COMMISSION MEETING STAFF REPORT

DATE OF MEETING: August 13, 2019

NAME OF PROJECT: Transmission Line Rebuild along 970 South, Stringtown Road, and Wards Lane

NAME OF APPLICANT: Rocky Mountain Power and Heber Light and Power

AGENDA ITEM: Conditional Use Permit

LOCATION OF ITEM: 970 South, Stringtown Road, and Wards Lane

ZONING DESIGNATION: R-1-15 & R-1-22

ITEM: 2

Rocky Mountain Power and Heber Light and Power are requesting a Conditional Use Permit to rebuild an existing Heber Light and Power transmission line and install a 138kV line for Rocky Mountain Power that will be located on the Heber Light and Power poles. Heber Light and Power would also have a 46 – 138 KV line on the same pole. The proposal will establish a second transmission interconnection which will strengthen service reliability and increase capacity in Midway and the surrounding area. It also creates a “loop” for RMP increasing their capacity to deliver power to a larger area. The portion in Midway is about one mile in length and will follow the existing transmission line along Wards Lane, Stringtown Road, and 970 South. The proposed tangent poles range in height from 70’-85’ above ground and the dead end poles and crossing poles range in height from 80’ – 110’ above ground.

BACKGROUND:

This request for a Conditional Use Permit (CUP) by Rocky Mountain Power and Heber Light and Power to rebuild the existing transmission line and install a 138kV line for Rocky Mountain Power that will be located on the Heber Light and Power poles. As part

of the proposal, the distribution, and potentially, the communication lines that currently are located on the transmission line poles will be buried along the route. The proposal will establish a second transmission interconnection which will strengthen service reliability and increase capacity in Midway and the surrounding area. The portion in Midway is about one mile in length and will follow the existing transmission line along Wards Lane, Stringtown Road, and 970 South. The proposed poles range in height from 65'-85' above ground.

The plan is to use many of the existing easements, which include prescriptive easements, through property in the city limits. The prescriptive easements are not wide enough for the proposed transmission lines so additional easements will need to be acquired to accommodate the wider easements necessary for the new lines. The proposed poles will be taller than the existing poles along the route in question and will carry considerably more power than what the current transmission lines carry. Heber Light and Power has stated that the main reason for this proposal is to have a second source of power into the Heber Valley. Another reason for the proposal is to increase power capacity for the Heber Valley that is needed because of development and growth. Rocky Mountain Power is an applicant for the conditional use permit because they would like a transmission to connect their areas of service in Summit County and Utah County. Rocky Mountain Power will pay 80% of the cost of the proposed line which will in turn save Heber Light and Power rate payers the cost that would have been required if Heber Light Power were to fix the aforementioned issues on its own. Heber Light and Power rate payers may see an increase in rates though based on the 20% of the transmission line cost that Heber light and Power is paying for the transmission lines.

Midway residents are concerned about how this upgraded and larger line will impact them. Staff has received comments that range from aesthetics, health concerns, property value concerns, and lack of additional options.

The City recently adopted a transmission line code on January 15, 2019 to regulate the processing and requirements regarding new transmission lines and the rebuilding of existing transmission lines. This code is Section 16.13.47 in the Midway City Municipal Code (please see attached to this report).

The applicant has submitted the following studies and reports to the City, two of which are attached to this report. All studies are all available at the Planning Office and on the City's website.

- Underground Transmission Cost/Feasibility Study
- Transmission Lines and Property Values: Review of the Research
- EMF Electric and Magnetic Fields Associated with the Use of Electric Power
- Powering Our Future: Summit Wasatch Electrical Plan Local Planning Handbook

The Planning Commission first reviewed this item and held a public hearing on May 14, 2019. The following motion was made that night:

Motion: Commissioner Streeter: I move that we continue the application for the transmission line rebuild on 970 South, Stringtown Road and

Wards Lane as per our ordinance and accept staff reports. The following conditions are that Rocky Mountain Power provide alternative route study, Rocky Mountain Power and Heber Valley Light and Power to provide cost and size of easements, easement locations, clearly marked, above and below ground with the visual aspects, more clarification as to the number of poles, heights and property line locations and talk to the two large land owners.

Seconded: Commissioner O'Toole

Chairman Kohler: Any discussion on the motion?

Commissioner

Chairman Kohler: All in favor.

Ayes: Commissioners Streeter, Payne, O'Toole, Nicholas, Bouwhuis (Alternates Whitney and McKeon-no vote needed)

Nays: None

Motion: Passed

The applicant has provided more information that is included with this staff report and has addressed the items listed in the motion which are the following:

- Alternative route study

The City code prefers that transmission lines follow routes where transmission lines are currently located. The proposal does follow the current location of transmission lines along 970 South, Stringtown Road, and Wards Lane.

- Provide cost and size of easements

The applicant has provided a series of 12 maps (please see maps included with this report) that describes the amount of easements that must be obtained for three potential scenarios. The first set is titled "Option A (short spans)" and shows the developer would need to acquire easements beyond the current prescriptive easement to a total of 13,123 sq. ft. The estimated of value of the easement is \$22,594.70 (please see included excel spreadsheet) for this option. The second set is "Option B (long spans)" and shows the developer would need to acquire more easements beyond the current prescriptive easement to a total of 14,952 sq. ft. The estimated of value of the easement is \$25,743.80 for this option. The third set is "Option C (Underground)" and shows the developer would need to acquire more easements beyond the current prescriptive easement to a total of 2,574 sq. ft. The estimated of value of the easement is \$4,431.82 for this option.

- Easement locations

The previously described series of 12 maps identifies the location of the current prescriptive easement and the proposed easements based on the potential three scenarios of short spans, long spans, or underground. As mentioned in the previous point, the amount of easements that will need to be acquired above the

current prescriptive easement is the following: short spans – 13,123 sq. ft., long spans – 14,952 sq. ft., and underground – 2,574 sq. ft.

- Visual impacts

The applicant has provided some updated photo simulations for a section of the transmission line route (please see included photos). The photos show the area along Wards Lane with poles with short spans and poles with long spans. The short span wood poles are 65' tall above grade and the long span poles are 75' above grade. The applicant has also provided series of photos titled "46 kV-138kV Rights-of-Way with Vegetation" that show different types poles and examples of vegetation that is appropriate in the transmission line easement (please see included photos). Some poles are wood, and some are metal that are painted or finished with different colors. If metal poles are approved, then the City may decide what color of poles will be used.

- Number and height of poles

Two maps have been provided that illustrate two potential scenarios. The first is titled "Typical Span Lengths Proposal" and the second is titled "Reduced Pole Height Proposal". The typical span lengths proposal includes 16 poles that range in height from 70' to 85'. There are six steel poles included and there are ten wood poles. The reduced pole height proposal includes 21 poles that range in height from 65' to 83'. There are six steel poles included and 15 wood poles.

- Property lines

The previously described series of 12 maps identifies the property lines along the route in relation to the prescriptive easement and the potential easements that will be required based on the three different scenarios.

Section 16.13.47 Transmission Line Code Requirements and Comments

Section 16.13.47 (D)(1) prefers that transmission lines follow routes where transmission lines are currently located. The proposal does follow the current location of transmission lines along 970 South, Stringtown Road, and Wards Lane.

Section 16.13.47 (D)(2) prefers the shortest poles allowed by industry standards though all options should be considered for aesthetics and for harmonizing with the vision of Midway City as described in the General Plan. Generally, taller poles will reduce the number of poles and shorter poles will increase the number poles. The proposal is to replace the existing poles that are 55' – 65' in length with new poles that are 65'-85' above ground. Wood poles are will be taller than metal poles even though the same amount of power are carried by both. Wood poles may be preferred though because currently, there are wood poles along this route and second because they don't feel as industrial as metal

poles. The height and number of poles is an item the Planning Commission and City Council can determine.

Section 16.13.47 (D)(3) limits the types of poles that are allowed and focusses on the visual impact of the poles and lines. No galvanized poles, or poles with other reflective material can be used. Pole color and material shall be focused on minimizing the visual impact of the transmission line. The City may consider wood poles or metal poles. If metal poles are used, then the City can determine the color that will minimize the visual impact on the community.

Section 16.13.47 (D)(4) allows the City to impose any reasonable restrictions on the conditional use.

Section 16.13.47 (E) allows the City to require the burial of transmission lines and distribution lines that share a transmission line pole. The applicant has stated that distribution will be buried and communication lines may be buried in conduit the power companies will install. The cost of burying the distribution lines will be paid for by the Heber Light and Power rate payers. The applicants and City will need to work with the communication line companies to have the communication lines buried. Heber Light and Power has offered to install conduit for the communication companies when the conduit for the distribution lines is installed.

The City may, after consideration of cost, require the transmission lines to be buried. Burying the transmission lines will have a positive visual impact on the community by eliminating all current lines and future transmission lines along this specific route. Financially, the difference in cost of above ground lines and buried lines would need to be paid by the City or some other funding source by private individuals. The amount required would need to be paid within 30 days of when construction begins. The limited time allowed to pay for the difference in cost creates complications that would need to be considered.

ANALYSIS:

The comments in italicized represent Planning Staff's comments pertaining to compliance or lack of compliance with the findings. The Planning Commission must make in considering this request. Section 16.26.120 requires specifically the Planning Commission to find that:

1. The proposed use is conditionally permitted within the Land Use Title, and would not impair the integrity and character of the intended purpose of the subject zoning district and complies with all of the applicable provisions of this Code; *planning staff believes that the proposal will have an impact on the properties along the route and on the entire community. There will be a visual impact that will be greater with the new proposal than the existing lines. In one way the impact will be diminished, and this is because of the removal of the distribution and communication lines. This will help the area feel less*

busy. Some of the other impacts may be on property values and depending on which study is considered, health.

2. The proposed use is consistent with the General Plan; *the proposed use will create a greater visual presence for the transmission line because of the increased height. The General Plan describes the surrounding zones as an area of relatively large lots in an agricultural setting. The proposed lines will not be in harmony with this description though lines do currently exist along this route and have for several decades.*
3. The approval of the conditional use or special exception permit for the proposed use is in compliance with the requirements of state, federal and Midway City or other local regulations; *the proposal is required to comply with all federal, state and local requirements and staff has not identified any noncompliant issues at this point.*
4. There will be no potential, significant negative effects upon the environmental quality and natural resources that could not be properly mitigated and monitored; *the City may require an environmental impact study for the proposed conditional use per Section 16.13.47 (C)(4). This is a report the City may require if deemed necessary.*
5. The design, location, size, and operating characteristics of the proposed use are compatible with the existing and future land uses with the general area in which the proposed use is to be located and will not create significant noise, traffic, or other conditions or situations that may be objectionable or detrimental to other permitted uses in the vicinity or adverse to the public interest, health, safety, convenience, or welfare to the City; *the proposed use will supply power to the Heber Valley which is important to all residents. The proposal will also provide redundancy to the power supply so if a fire or some other natural disaster disrupts one of the sources of power to the valley there will be another route for power supply. Regarding health, there are studies that argue that transmission lines have a negative impact on the health of those that live nearby and there are studies that argue that there is no negative health impact on surrounding neighbors. The City may want to consult experts regarding this issue.*
6. The subject site is physically suitable for the type and density/intensity of the proposed use; *the proposed location has had transmission lines for decades. It is debatable if increasing the transmission lines will create an intensity that is unsuitable for the subject site. The City may require additional studies, including an environmental impact study, to help answer this question.*
7. There are adequate provisions for public access, including internal and surrounding traffic flow, water, sanitation, and public utilities, and services to insure that the proposed use would not be detrimental to public health and safety; *The debate of the effects of EMF (electromagnetic field) are strong on both sides. However,*

the proposal will create more access to power and create a redundancy that will benefit the community which should have a positive impact on the community as a whole.

POSSIBLE FINDINGS:

- The proposal is an administrative review and approval
- The proposed use is a conditional use and the city may impose reasonable conditions to mitigate identified issues
- The proposal includes taller poles that will be visible to the residents of Midway, visitors of Midway, and the surrounding residents of Wasatch County
- The distribution and communication lines will be buried to help declutter the current transmission line situation, and reduce the weight being carried by the poles, thus reducing poles in the area
- The proposal will create a second point of power access that will benefit the residents of the valley
- The proposal will allow more power to enter the valley that will benefit the entire community by meeting community needs

ALTERNATIVE ACTIONS:

1. Recommendation for approval (conditional). This action can be taken if the Planning Commission feels the application complies with the requirements of the code and any conditions will mitigate identified issues.
 - a. Accept staff report
 - b. List accepted findings
 - c. Place condition(s)
2. Continuance. This action can be taken if the Planning Commission feels that there are unresolved issues.
 - a. Accept staff report
 - b. List accepted findings
 - c. Reasons for continuance
 - i. Unresolved issues that must be addressed
 - d. Date when the item will be heard again

3. Recommendation of denial. This action can be taken if the Planning Commission feels that the request does not meet the intent of the ordinance.
 - a. Accept staff report
 - b. List accepted findings
 - c. Reasons for denial

PROPOSED CONDITIONS:

As the review process continues, conditions will be created based on public comment, Planning Commission discussion, and City Council discussion.

Section 16.13.47 Transmission Lines

A. Transmission Lines are a conditional use in all zones.

B. The purpose of this section is to regulate all electric transmission lines that exceed 55 feet in pole height above grade. It is not the intent of this section to regulate the replacement or maintenance of existing transmission lines that exceed 55 feet in pole height. Existing transmission poles that currently exist within City boundaries, so long as they are replaced with a pole of identical height, diameter, and material, no permit nor approval shall be required. A proposal to alter the height, diameter, or material of existing transmission lines that exceed 55 feet shall require a conditional use permit under this section.

C. Prior to beginning construction on any new or proposed power transmission line that exceeds 55 feet in pole height above grade within any portion of the Midway City boundaries, a power company shall:

1. Apply for and receive approval of a conditional use permit as set forth in this title.

2. In addition to the information required in the application process as set forth in this title, the applicant shall also provide all information, design criteria, and studies deemed necessary by the City Planner, including, but not limited to:

- 1) the cost and pole height of standard transmission poles with height included for distribution lines;
- 2) the cost difference and pole height difference of burying just the distribution lines; 3) the cost difference of burying both the transmission and distribution lines; and
- 4) alternate routes for the transmission line (if not proposed within an existing and historical easement), including cost differential and studies on which route has the least impact on surrounding areas. Any requested studies shall be thorough and may include environmental impact studies, studies to determine costs of different options, and studies to determine the visual and aesthetic impact of the proposed transmission line project. At the City's sole discretion, the City may require outside third-party providers to conduct some or all of the studies, do independent studies, or to review the studies prepared by the applicant and verify the information contained therein. All reasonable costs incurred by third party studies shall be borne by the applicant.

3. Notice requirements shall comply with Section 16 of the Midway City Code and shall include notice to all property owners within 600' of the proposed route of the transmission line.

D. Preferred Conditions on any above ground transmission power lines located within the boundaries of Midway City:

1. Existing Easement Restrictions: New lines shall be preferred in corridors where existing 46kv lines are already in place.

2. Height and Span Restrictions: There shall be a preference for the shortest poles allowed by industry standards, considering the impact a shorter or longer span between poles may have on the view corridor. All options will be considered for aesthetics and for harmonizing with the vision of Midway City

as described in the General Plan.

3. Aesthetic Restrictions: No galvanized poles, or poles with other reflective materials shall be used. Pole color and material shall be focused on minimizing the visual impact of the transmission line. Wood poles will also be considered.

4. Other restrictions as reasonably imposed by the City.

E. City's option to require burial of transmission lines, or distribution lines that share the transmission line pole.

1. It is Midway City's objective to minimize the visual and aesthetic impact of above ground transmission lines within Midway City.

2. Midway City Council shall have the option of requiring transmission power lines approved under this section to be buried within the Midway City limits. Midway City Council shall also have the option of requiring just the distribution lines that commonly share the poles of transmission lines to be buried, if such a requirement would lower the overall height of the transmission poles.

3. As set forth above, to aid Midway City Council in making its determination, Applicant shall be required to submit studies that establish:

- a) the cost and pole height of standard transmission poles with height included for distribution lines;
- b) the cost difference and pole height difference of burying just the distribution lines;
- c) the cost difference of burying both the transmission and distribution lines; and
- d) alternate routes for the transmission line (if not proposed within an existing and historical easement), including cost differential and studies on which route has the least impact on surrounding areas.

4. Prior to making any decision, the City shall carefully review the different costs associated with each option.

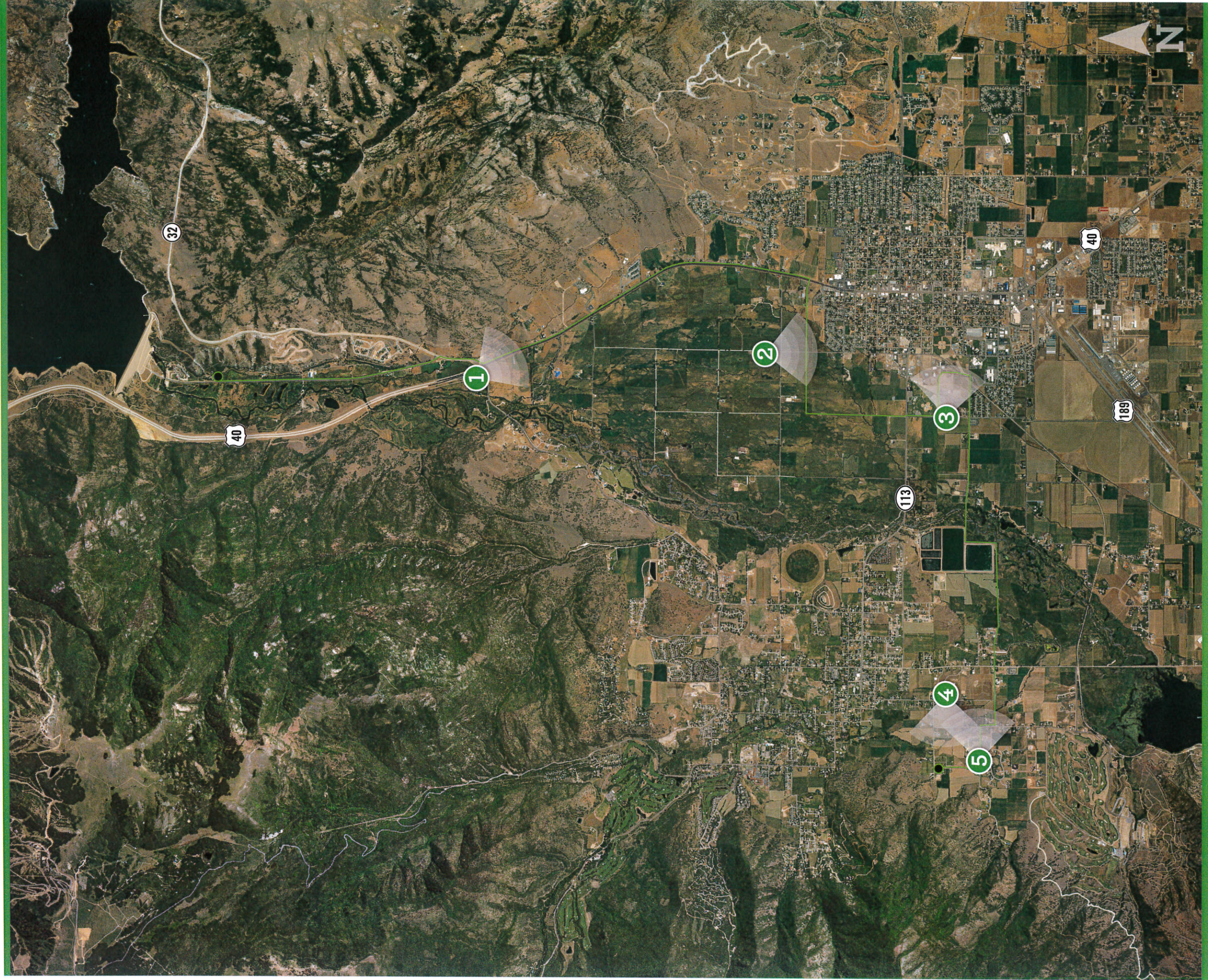
5. Any requirements imposed by the City to bury some or all of either the transmission lines or distribution lines shall be subject to then existing law that may require the City to cover some or all of the costs.

6. In making the decision to bury some or all of the transmission or distribution lines, Midway City Council shall be allowed to consider all reasonable information available to it and shall not be limited to just an analysis of cost as the determining factor.

	Short Span	Long Span	Underground
Wards Lane	0 sf	0 sf	134 sf
Stringtown Road	1401 sf	1729 sf	1298 sf
970 S. West	4676 sf	5489 sf	329 sf
970 S. East	7046 sf	7734 sf	813 sf
Total	13123	14952	2574

Fee Acre Price	\$	150,000.00	\$	150,000.00
% of Fee		0.5		0.5

Est. Easement Cost	\$	22,594.70	\$	25,743.80	\$	4,431.82
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— TRANSMISSION LINE TO BE REBUILT

1 VIEWPOINT LOCATION

● SUBSTATION

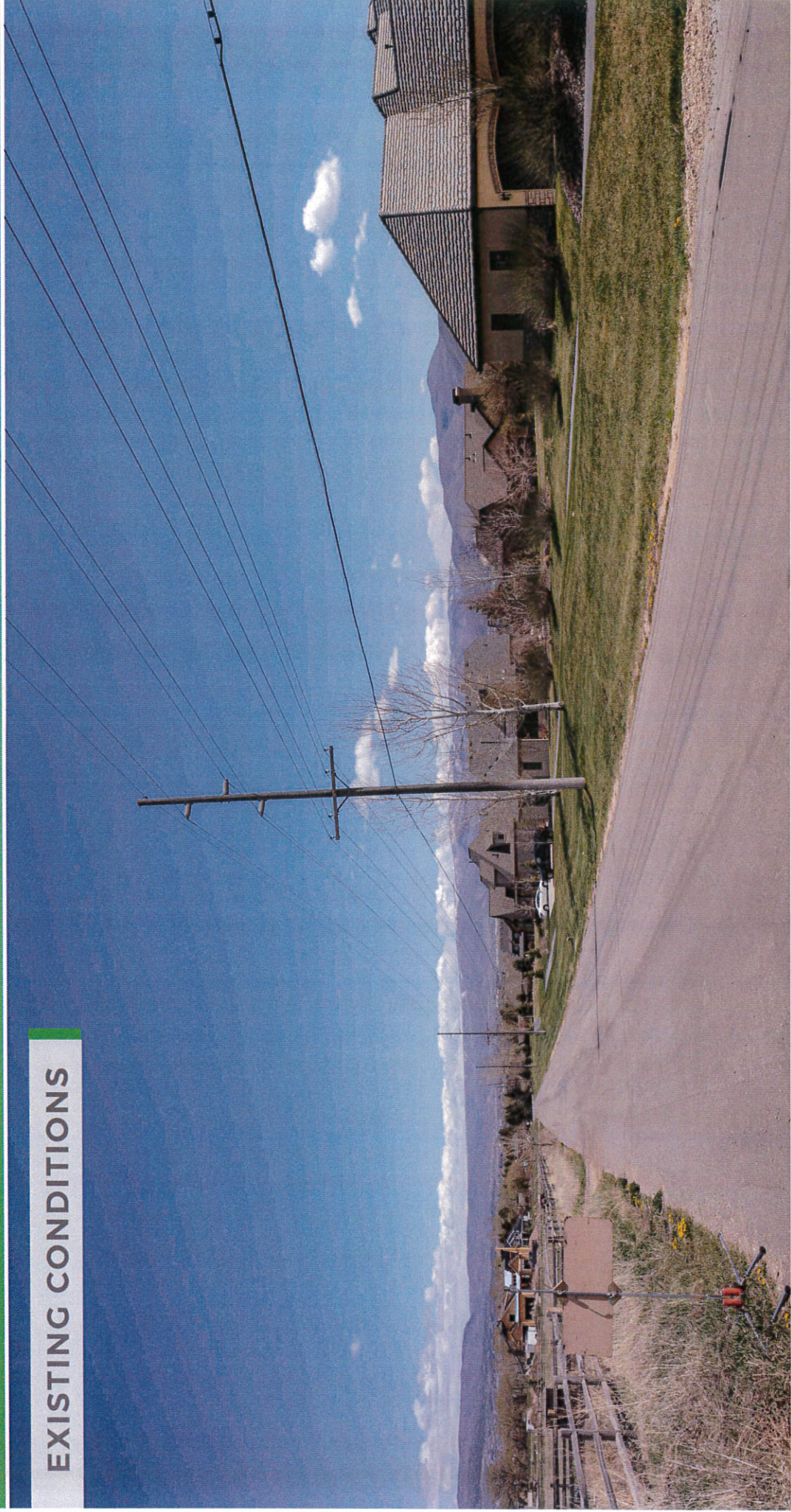
JORDANELLE TO MIDWAY

TRANSMISSION LINE UPGRADE PROJECT

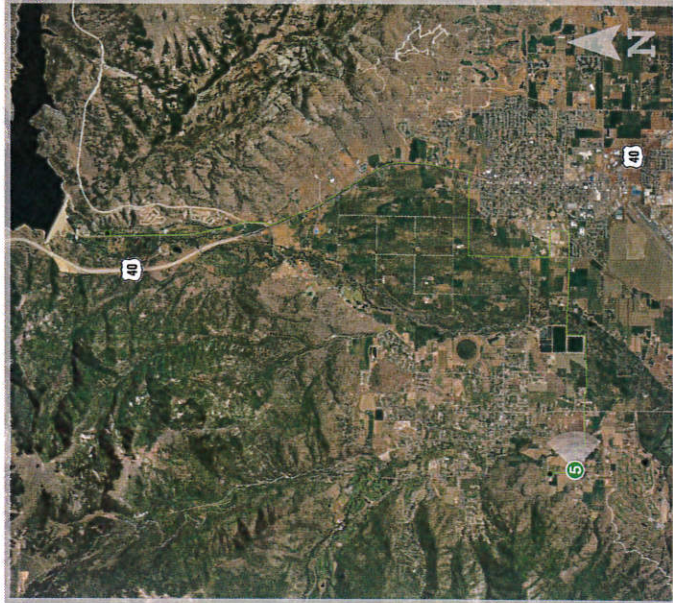
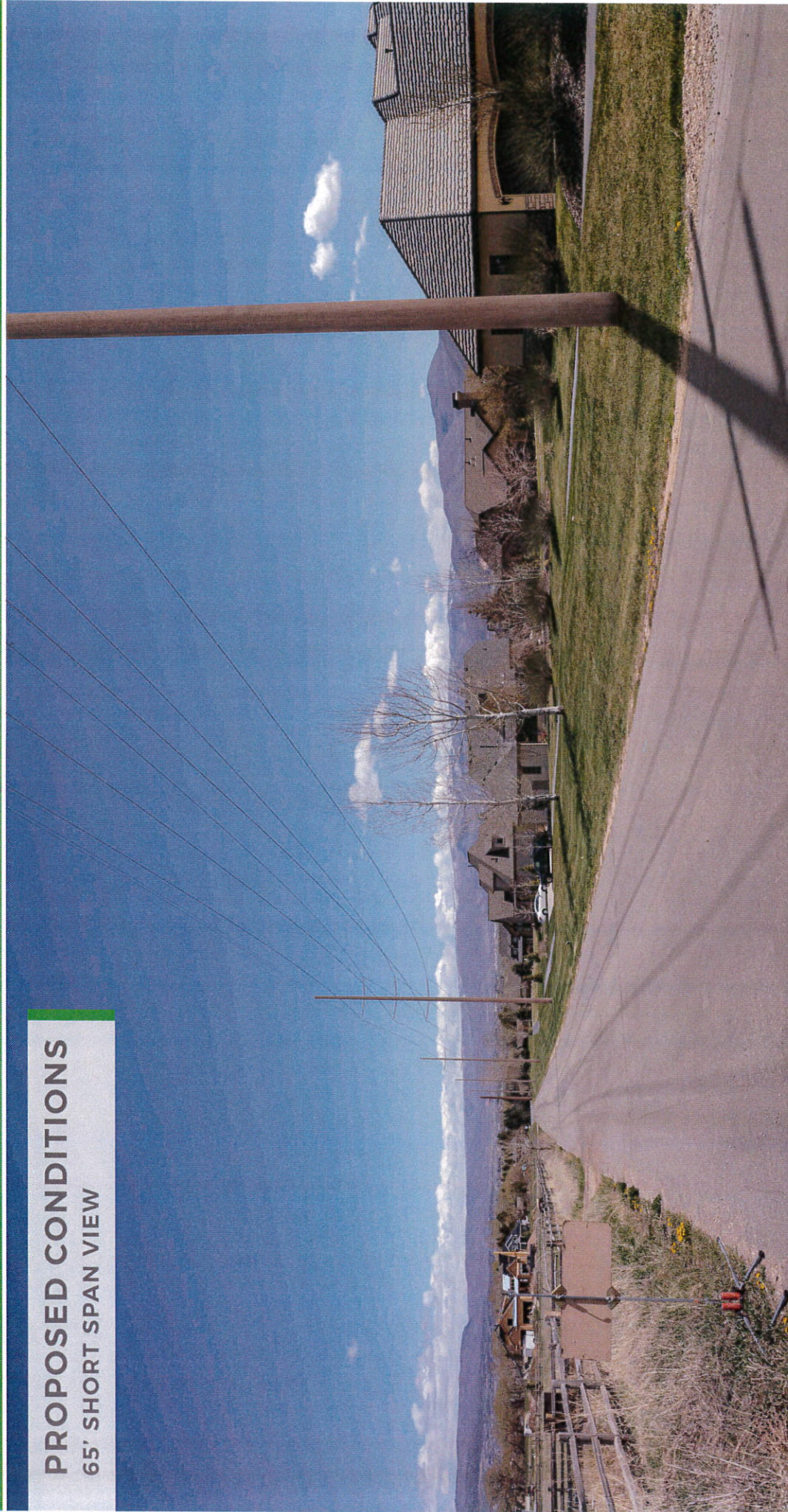


PHOTO SIMULATION BY:
POWER
ENGINEERS

EXISTING CONDITIONS



PROPOSED CONDITIONS
65' SHORT SPAN VIEW



JORDANELLE TO MIDWAY

TRANSMISSION LINE UPGRADE PROJECT

PHOTO SIM VIEWPOINT 5

- TRANSMISSION LINE TO BE REBUILT
- 5 SIMULATION VIEWPOINT LOCATION

DATE: 04/24/2018

TIME: 11:59 AM

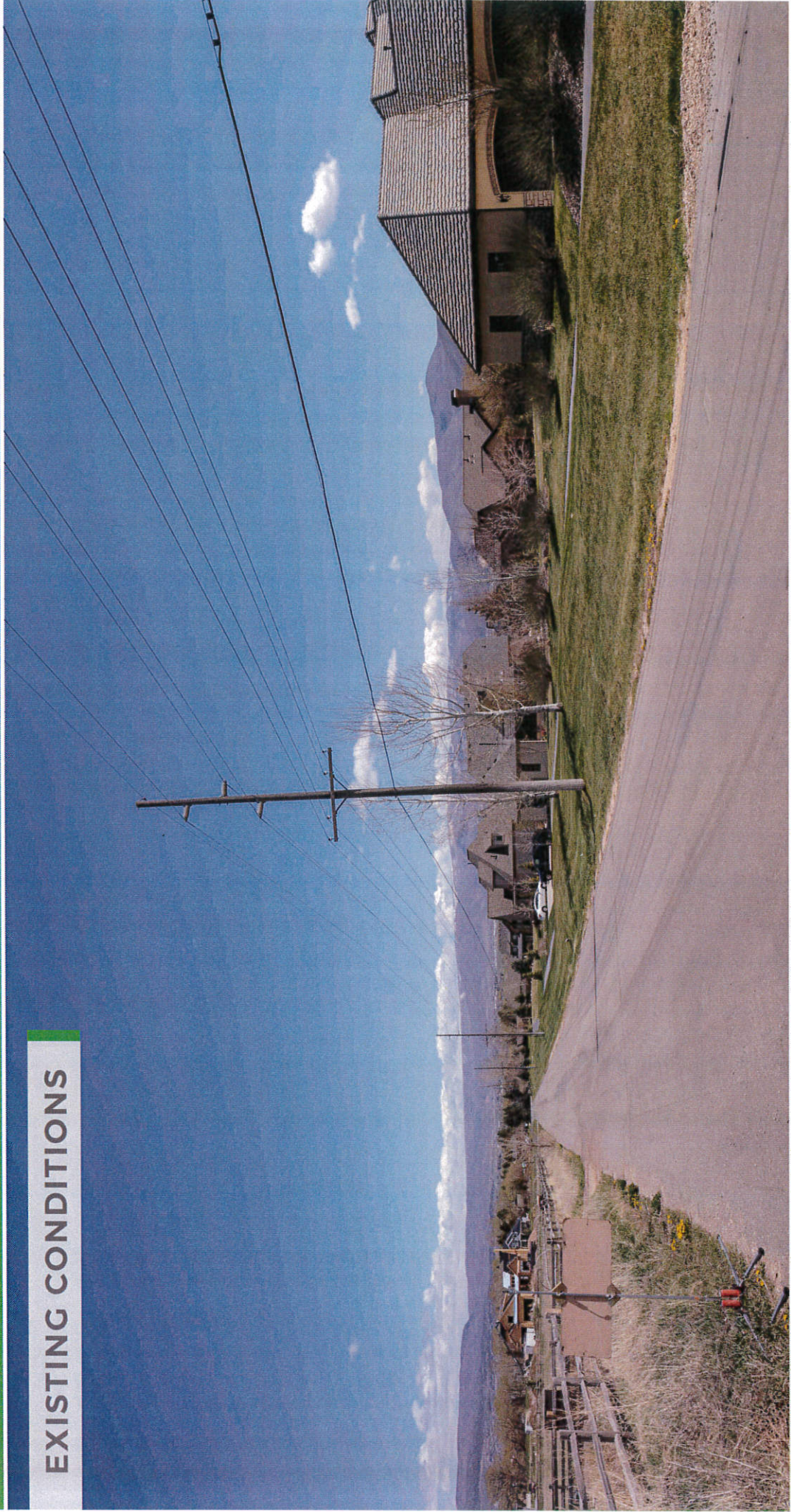
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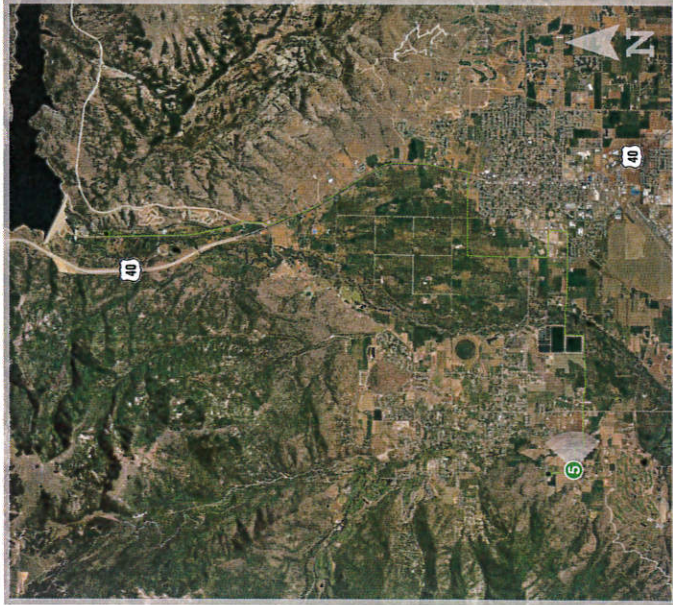
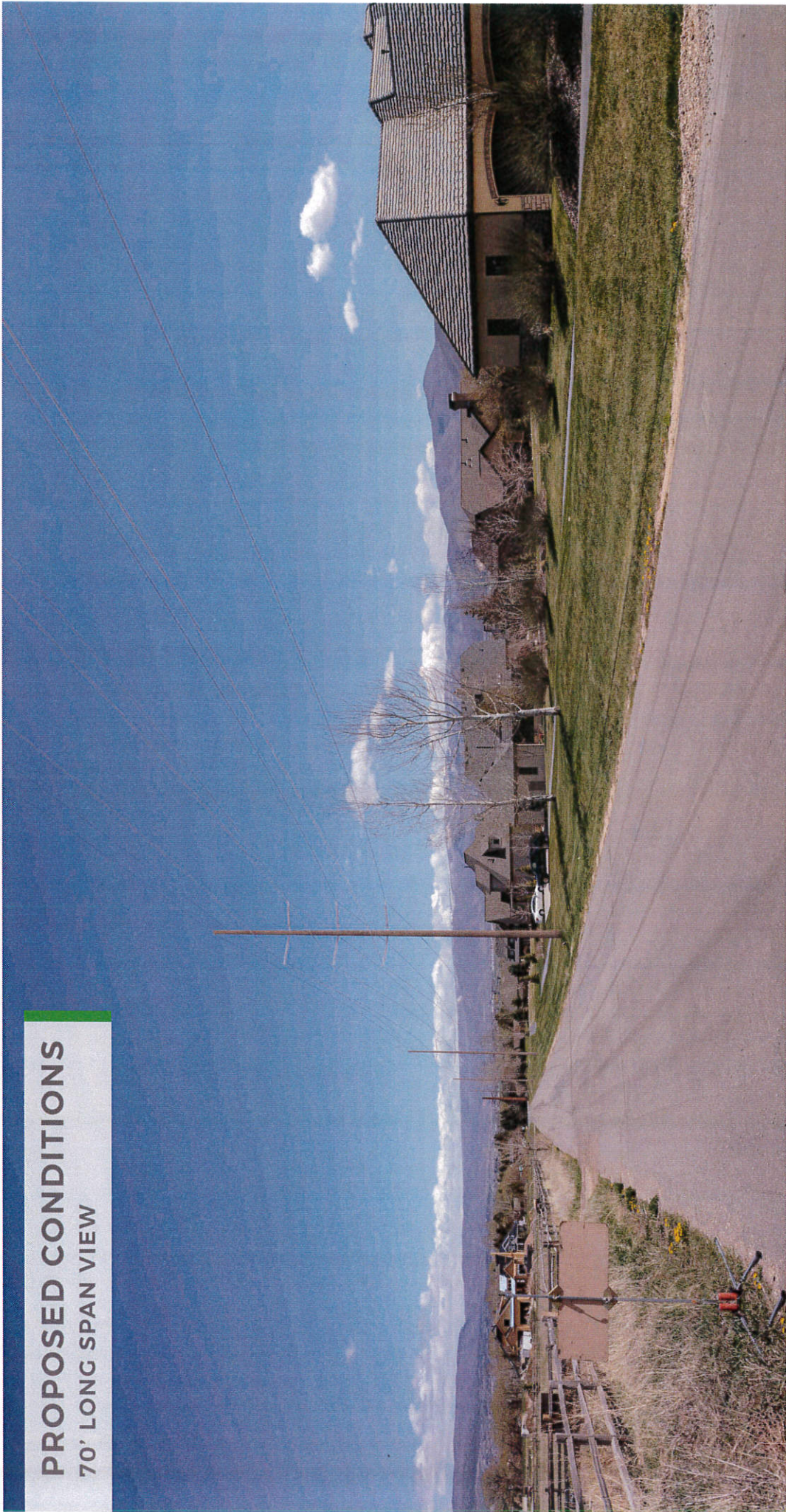
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PHOTO SIMULATION IS FOR DEMONSTRATION PURPOSES ONLY. FINAL DESIGN IS SUBJECT TO CHANGE PENDING PUBLIC, ENGINEERING, AND REGULATORY REVIEW.

EXISTING CONDITIONS



PROPOSED CONDITIONS
70' LONG SPAN VIEW



JORDANELLE TO MIDWAY

TRANSMISSION LINE UPGRADE PROJECT

PHOTO SIM VIEWPOINT 5

- TRANSMISSION LINE TO BE REBUILT
- 5 SIMULATION VIEWPOINT LOCATION

DATE: 04/24/2018

TIME: 11:59 AM

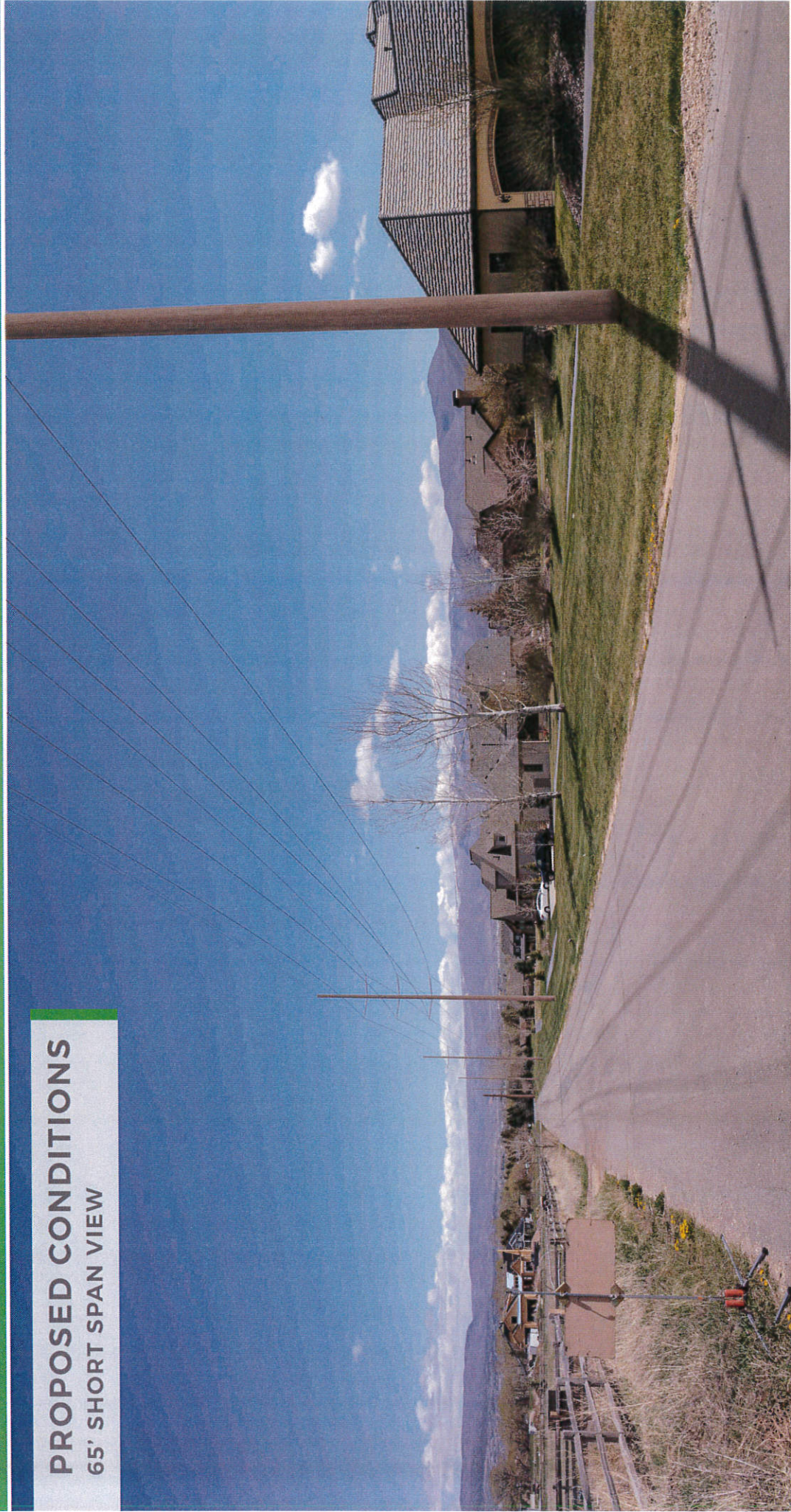
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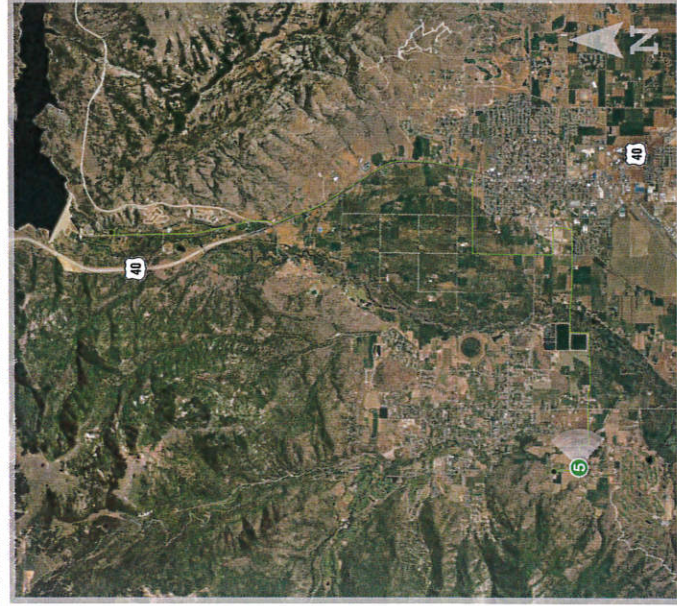
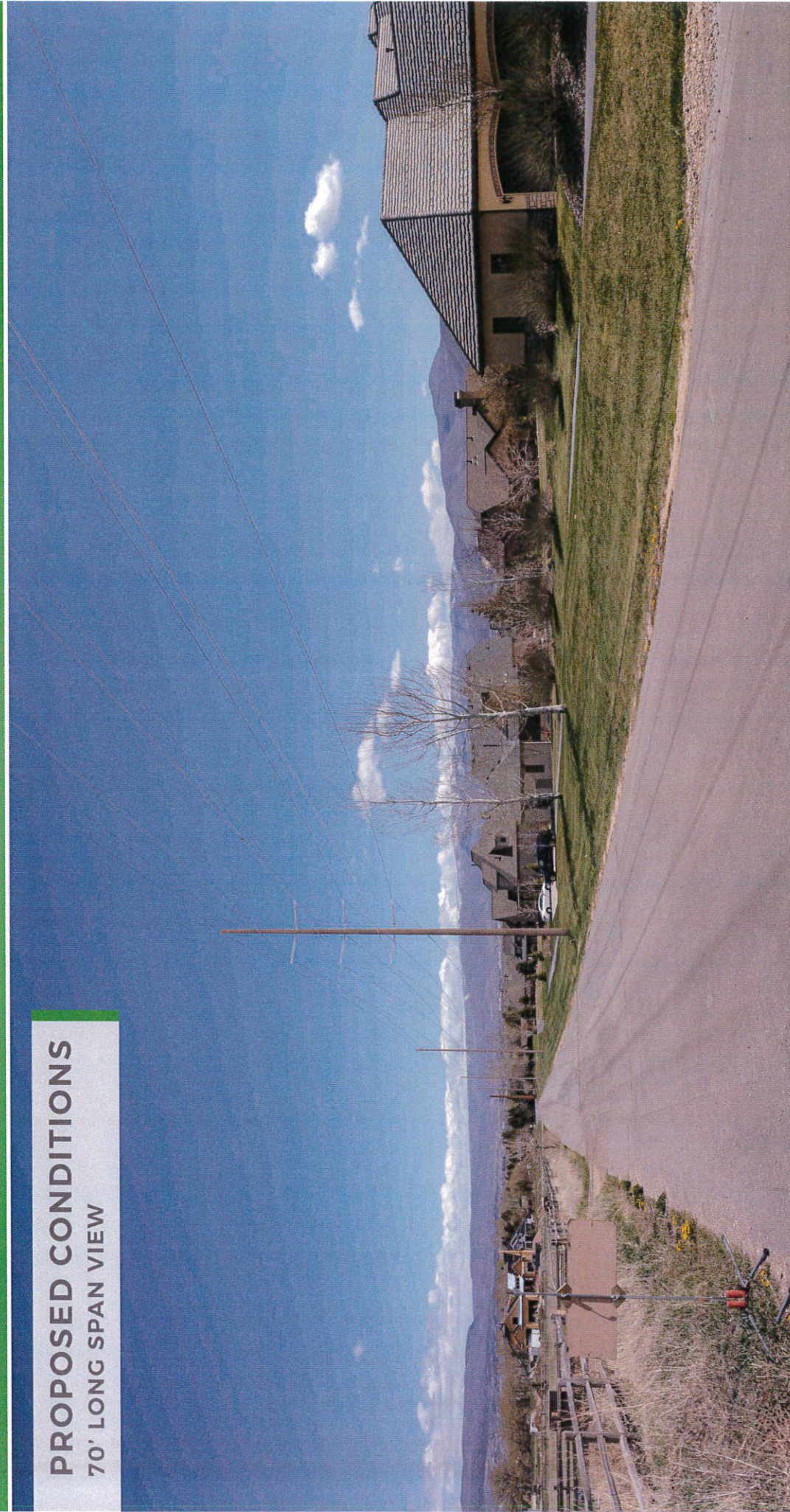
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PROPOSED CONDITIONS
65' SHORT SPAN VIEW



PROPOSED CONDITIONS
70' LONG SPAN VIEW



JORDANELLE TO MIDWAY

TRANSMISSION LINE UPGRADE PROJECT

PHOTO SIM VIEWPOINT 5

- TRANSMISSION LINE TO BE REBUILT
- 5 SIMULATION VIEWPOINT LOCATION

DATE: 04/24/2018

TIME: 11:59 AM

DIRECTION: EAST



PHOTO SIMULATION BY: **POWER** ENGINEERS

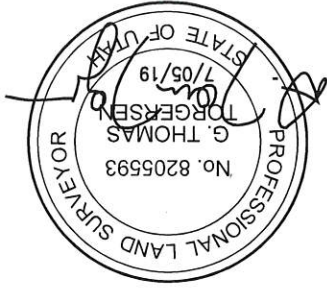
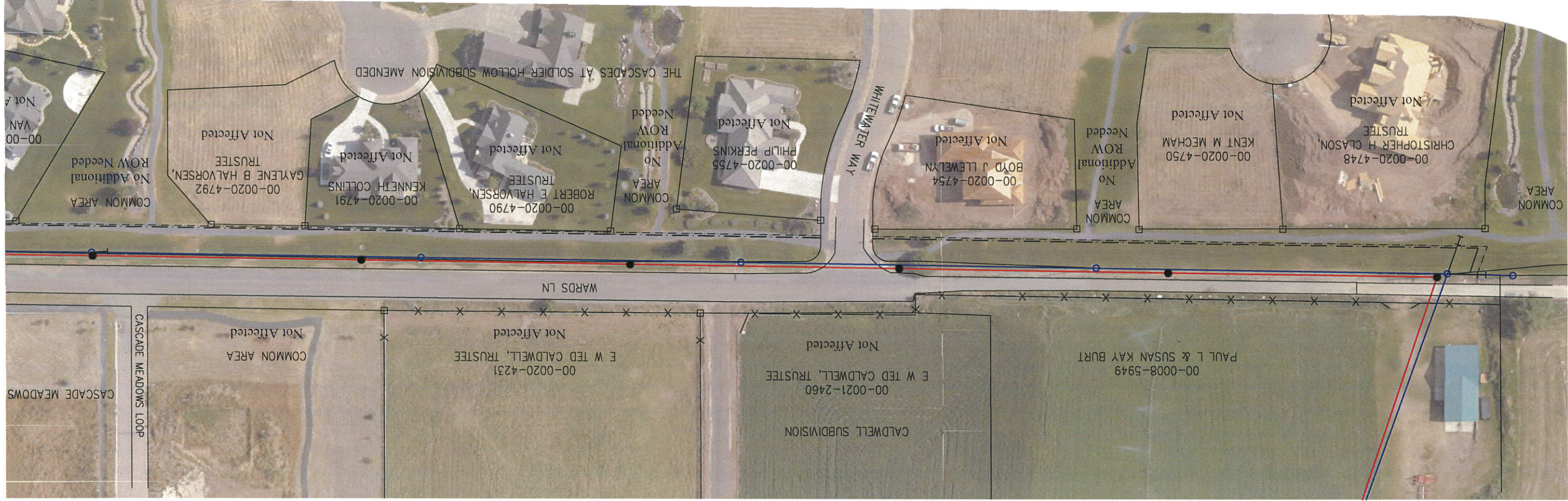
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JORDANELLE-MIDWAY TRANSMISSION LINE
MIDWAY RIGHT-OF-WAY MAP
Section 3, Township 4 South, Range 4 East, S1B&M
Wasatch County, Utah

Option A (short spans)
Existing 46kV ROW: 27' from centerline
138kV ROW: 28.5' from centerline

- LEGEND:
- PROPERTY LINE
 - ROAD RIGHT-OF-WAY LINE
 - PAVED ROAD
 - UNPAVED ROAD
 - FENCE
 - EXISTING POWER LINE
 - EXISTING POLE
 - EXISTING GUY/ANCHOR
 - PROPERTY CORNER MARKER
 - PROPOSED POWER LINE
 - PROPOSED POLE
 - EXISTING RIGHT-OF-WAY LINE
 - PROPOSED RIGHT-OF-WAY LINE



I, G. THOMAS TORGENSEN, DO HEREBY CERTIFY THAT I AM A LICENSED LAND SURVEYOR, CERTIFICATE NO. 8205593, AS PRESCRIBED UNDER THE LAWS OF THE STATE OF UTAH. I FURTHER CERTIFY THAT, BY AUTHORITY OF THE CLIENT, I HAVE DIRECTED A SURVEY OF THE PROPOSED EASEMENTS AND AFFECTED LAND BOUNDARIES SHOWN ON THIS PLAT.

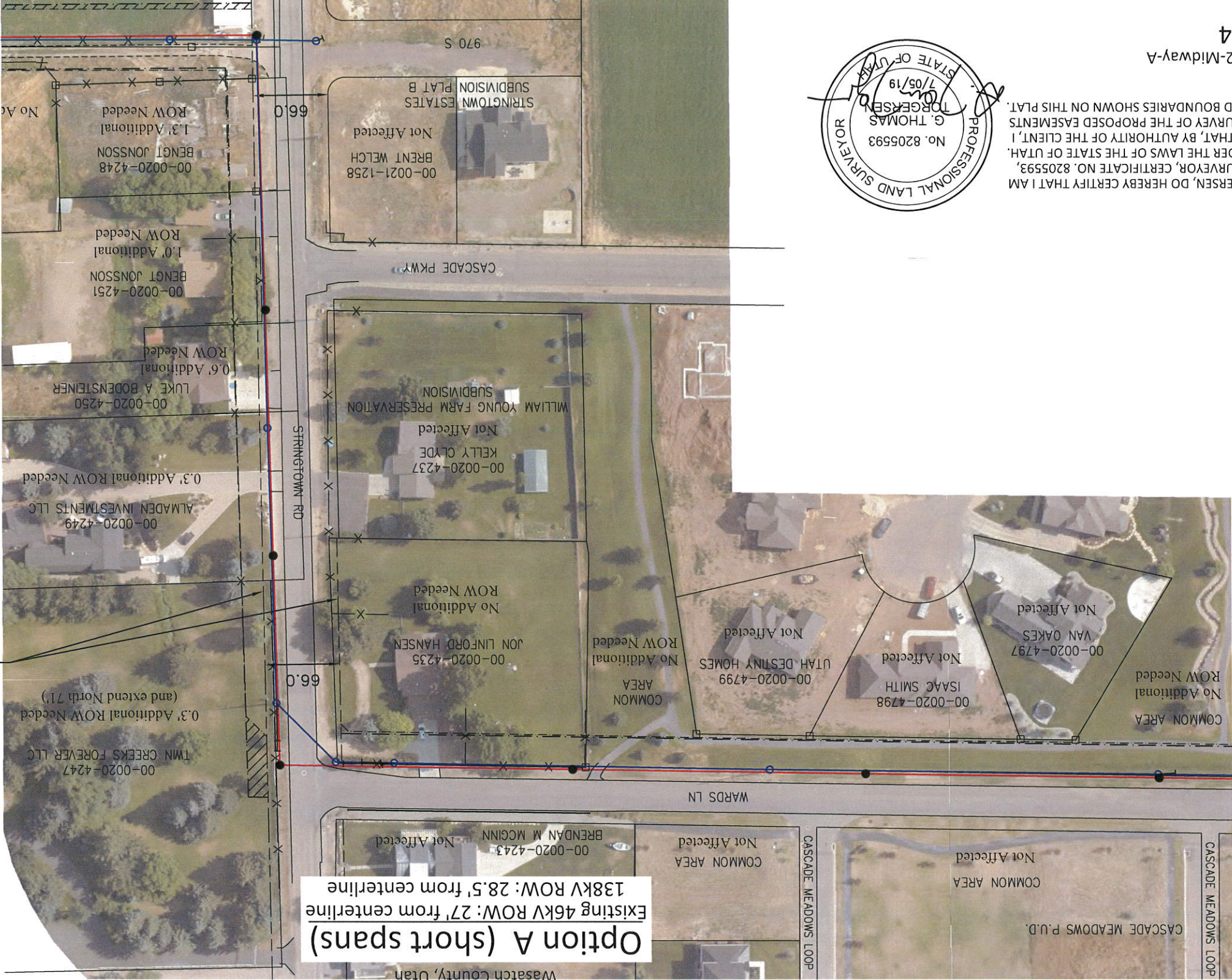
Drawing # 17412-Midway-A
Sheet 1 of 4
7/05/2019



JORDANELLE-MIDWAY TRANSMISSION LINE MIDWAY RIGHT-OF-WAY MAP

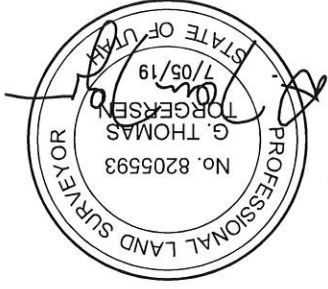
Section 3, Township 4 South, Range 4 East, S18&M
Wasatch County, Utah

Option A (short spans)
Existing 46kV ROW: 27' from centerline
138kV ROW: 28.5' from centerline



Stringtown Road right-of-way lines based
on 33' half-width from centerline (Typ.)

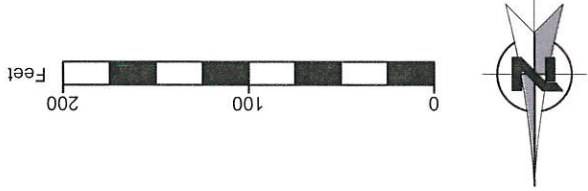
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 - PROPOSED POLE
 - EXISTING RIGHT-OF-WAY LINE
 - PROPOSED RIGHT-OF-WAY LINE



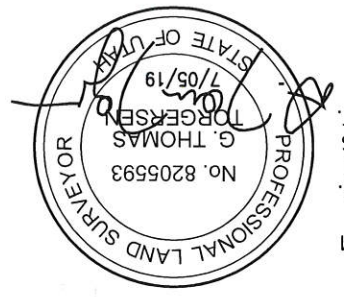
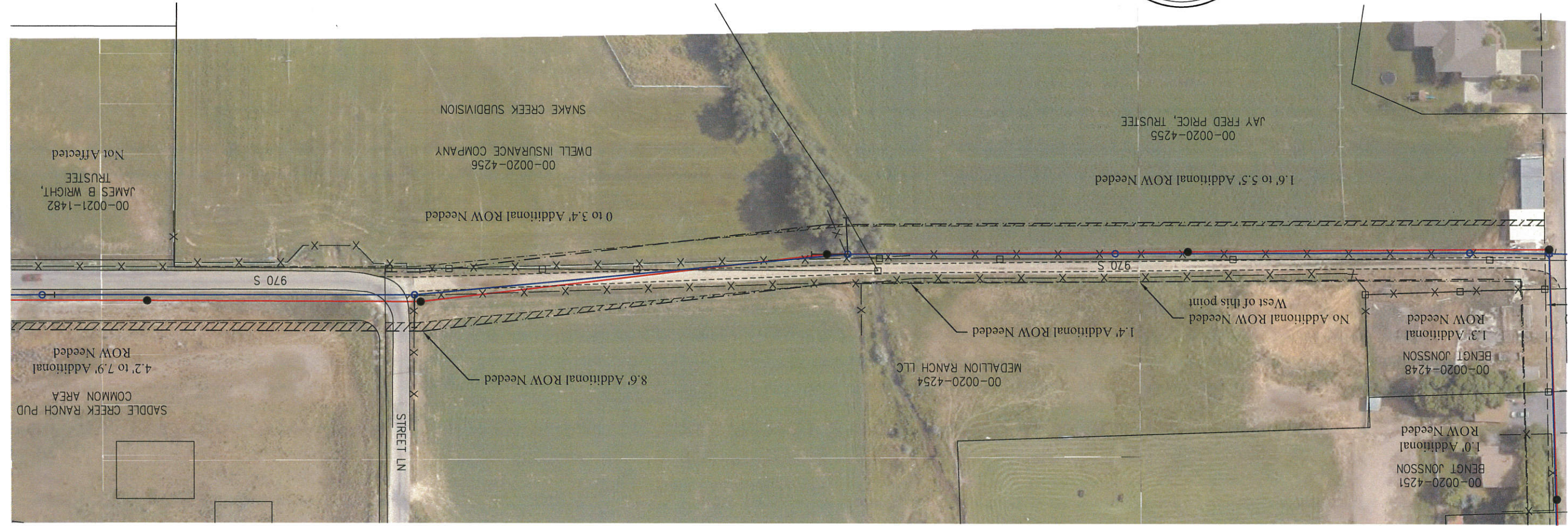
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I FURTHER CERTIFY THAT, BY AUTHORITY OF THE CLIENT, I
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AND AFFECTED LAND BOUNDARIES SHOWN ON THIS PLAT.

Drawing # 17412-Midway-A
Sheet 2 of 4
7/05/2019

JORDANELLE-MIDWAY TRANSMISSION LINE MIDWAY RIGHT-OF-WAY MAP Section 3, Township 4 South, Range 4 East, SLB&M Wasatch County, Utah **Option A (short spans)** Existing 46kV ROW: 27' from centerline 138kV ROW: 28.5' from centerline



- LEGEND:
- PROPERTY LINE
 - ROAD RIGHT-OF-WAY LINE
 - PAVED ROAD
 - UNPAVED ROAD
 - FENCE
 - EXISTING POWER LINE
 - EXISTING POLE
 - EXISTING GUY/ANCHOR
 - PROPERTY CORNER MARKER
 - PROPOSED POWER LINE
 - PROPOSED POLE
 - EXISTING RIGHT-OF-WAY LINE
 - PROPOSED RIGHT-OF-WAY LINE



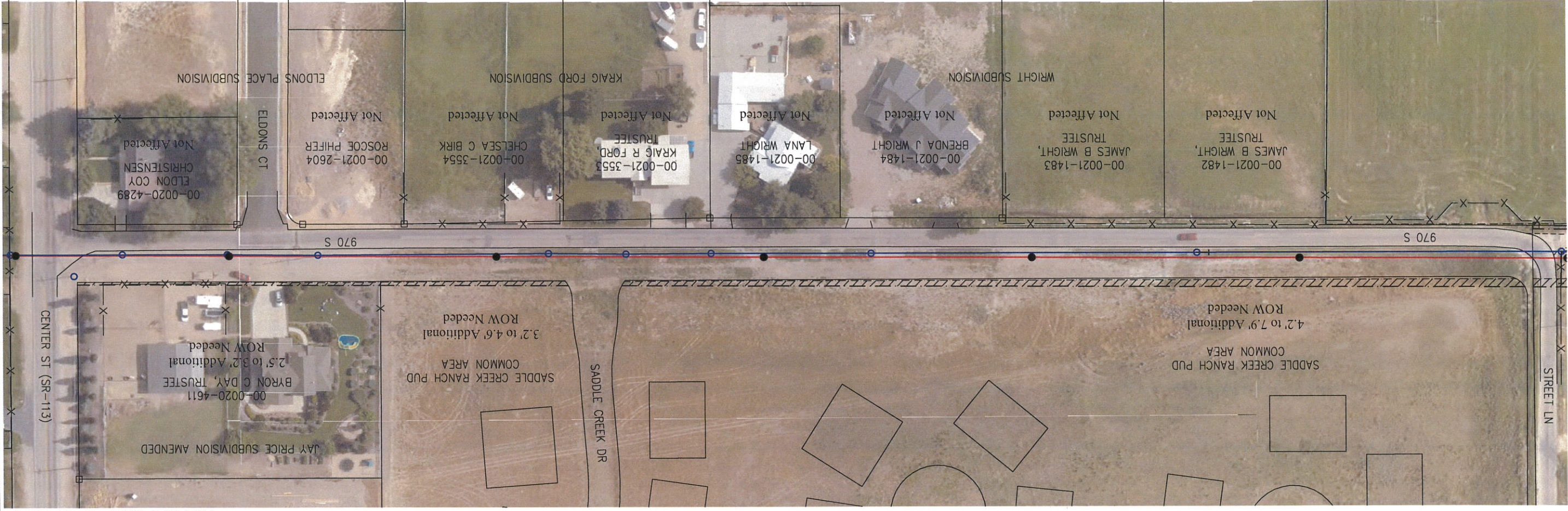
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**JORDANELLE-MIDWAY TRANSMISSION LINE
MIDWAY RIGHT-OF-WAY MAP**
Section 3, Township 4 South, Range 4 East, S1B&M
Wasatch County, Utah

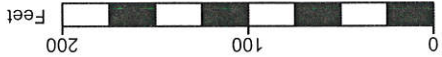
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- LEGEND:
- PROPERTY LINE
 - ROAD RIGHT-OF-WAY LINE
 - PAVED ROAD
 - UNPAVED ROAD
 - FENCE
 - EXISTING POWER LINE
 - EXISTING POLE
 - EXISTING GUY/ANCHOR
 - PROPERTY CORNER MARKER
 - PROPOSED POWER LINE
 - PROPOSED POLE
 - EXISTING RIGHT-OF-WAY LINE
 - PROPOSED RIGHT-OF-WAY LINE



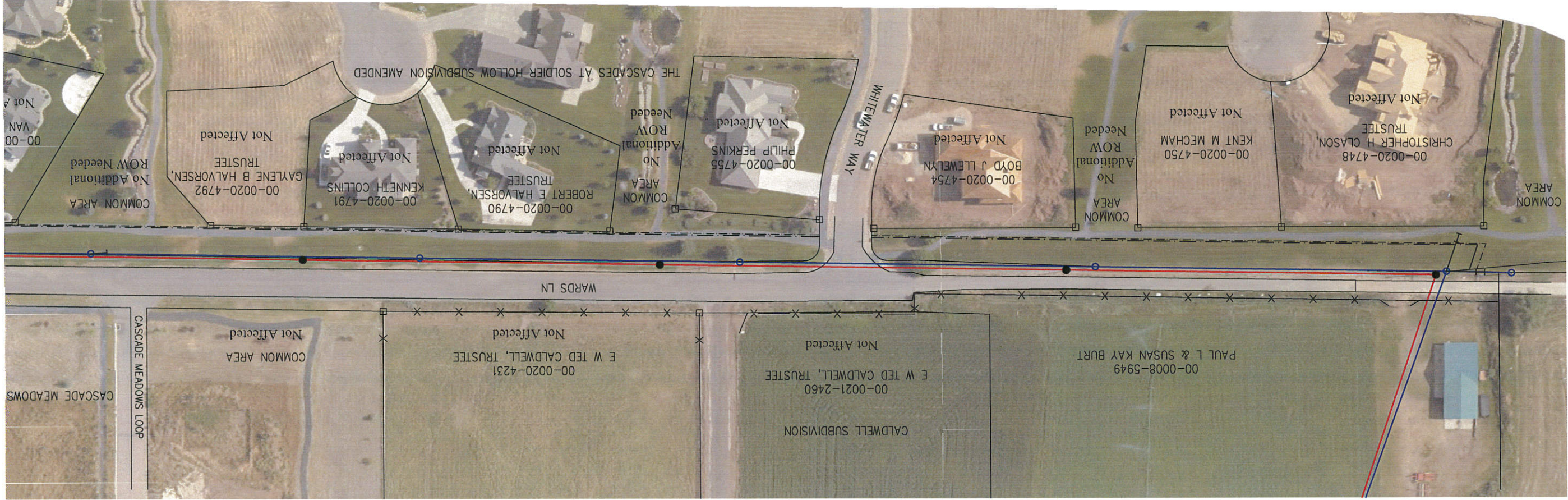
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Drawing # 17412-Midway-A
Sheet 4 of 4
7/05/2019

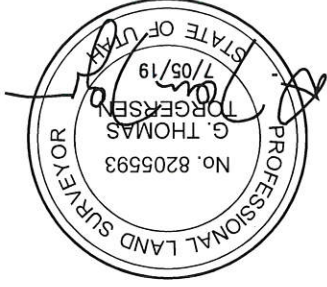


JORDANELLE-MIDWAY TRANSMISSION LINE
Section 3, Township 4 South, Range 4 East, S18&M
Wasatch County, Utah
Option B (long spans)
Existing 46kV ROW: 27' from centerline
138kV ROW: 29' from centerline

- LEGEND:
- PROPERTY LINE
 - ROAD RIGHT-OF-WAY LINE
 - PAVED ROAD
 - UNPAVED ROAD
 - FENCE
 - EXISTING POWER LINE
 - EXISTING POLE
 - EXISTING GUY/ANCHOR
 - PROPERTY CORNER MARKER
 - PROPOSED POWER LINE
 - PROPOSED POLE
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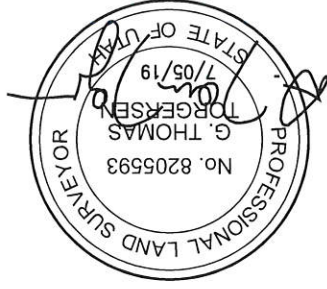
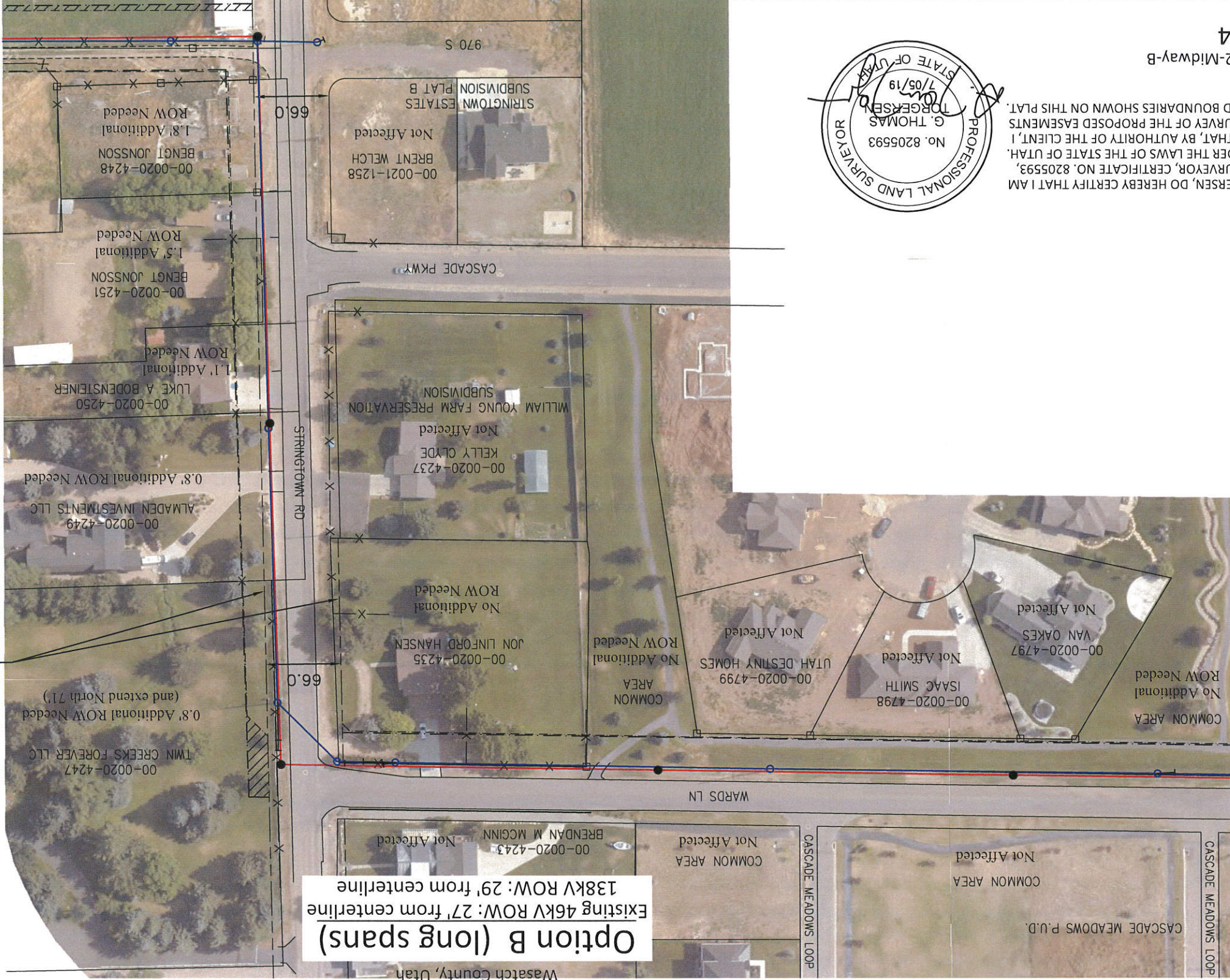




JORDANELLE-MIDWAY TRANSMISSION LINE MIDWAY RIGHT-OF-WAY MAP

Section 3, Township 4 South, Range 4 East, S18&M
Wasatch County, Utah

Option B (long spans)
Existing 46kV ROW: 27' from centerline
138kV ROW: 29' from centerline



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- LEGEND:
- PROPERTY LINE
 - ROAD RIGHT-OF-WAY LINE
 - PAVED ROAD
 - UNPAVED ROAD
 - FENCE
 - EXISTING POWER LINE
 - EXISTING POLE
 - EXISTING GUY/ANCHOR
 - PROPERTY CORNER MARKER
 - PROPOSED POWER LINE
 - PROPOSED POLE
 - EXISTING RIGHT-OF-WAY LINE
 - PROPOSED RIGHT-OF-WAY LINE

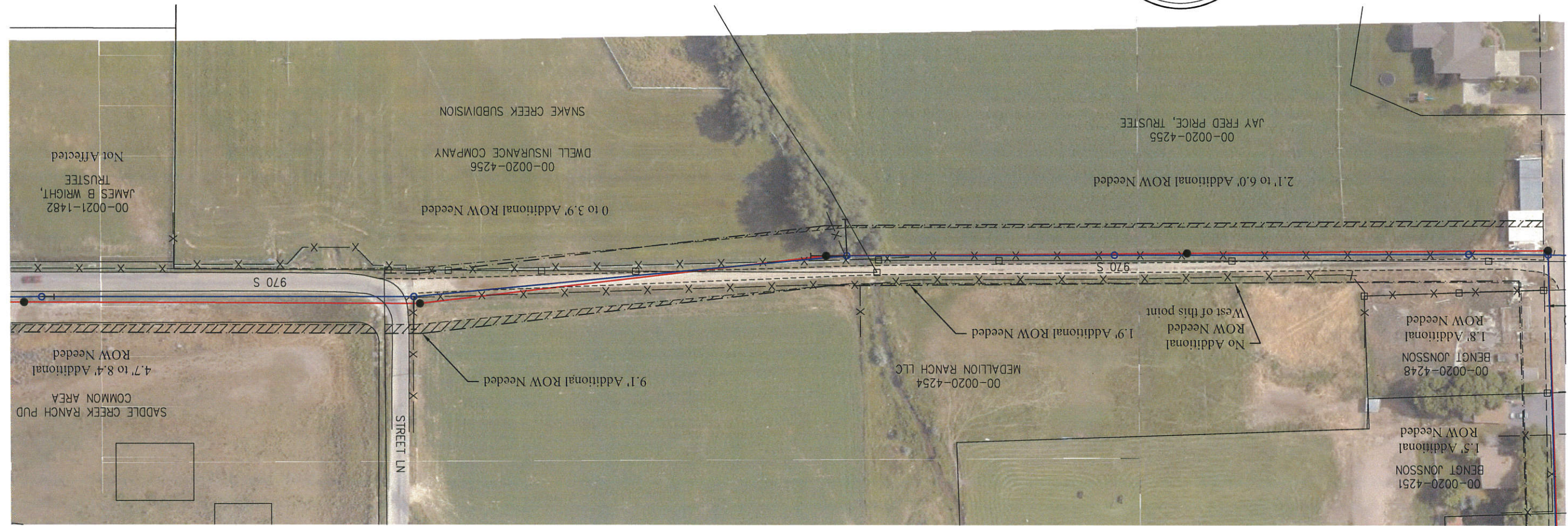
Stringtown Road right-of-way lines based on 33' half-width from centerline (Typ.)



JORDANELLE-MIDWAY TRANSMISSION LINE
MIDWAY RIGHT-OF-WAY MAP
Section 3, Township 4 South, Range 4 East, SLB&M
Wasatch County, Utah

Option B (long spans)
Existing 46kV ROW: 27' from centerline
138kV ROW: 29' from centerline

- LEGEND:
- PROPERTY LINE
 - ROAD RIGHT-OF-WAY LINE
 - PAVED ROAD
 - UNPAVED ROAD
 - FENCE
 - EXISTING POWER LINE
 - EXISTING POLE
 - EXISTING GUY/ANCHOR
 - PROPERTY CORNER MARKER
 - PROPOSED POWER LINE
 - PROPOSED POLE
 - EXISTING RIGHT-OF-WAY LINE
 - PROPOSED RIGHT-OF-WAY LINE

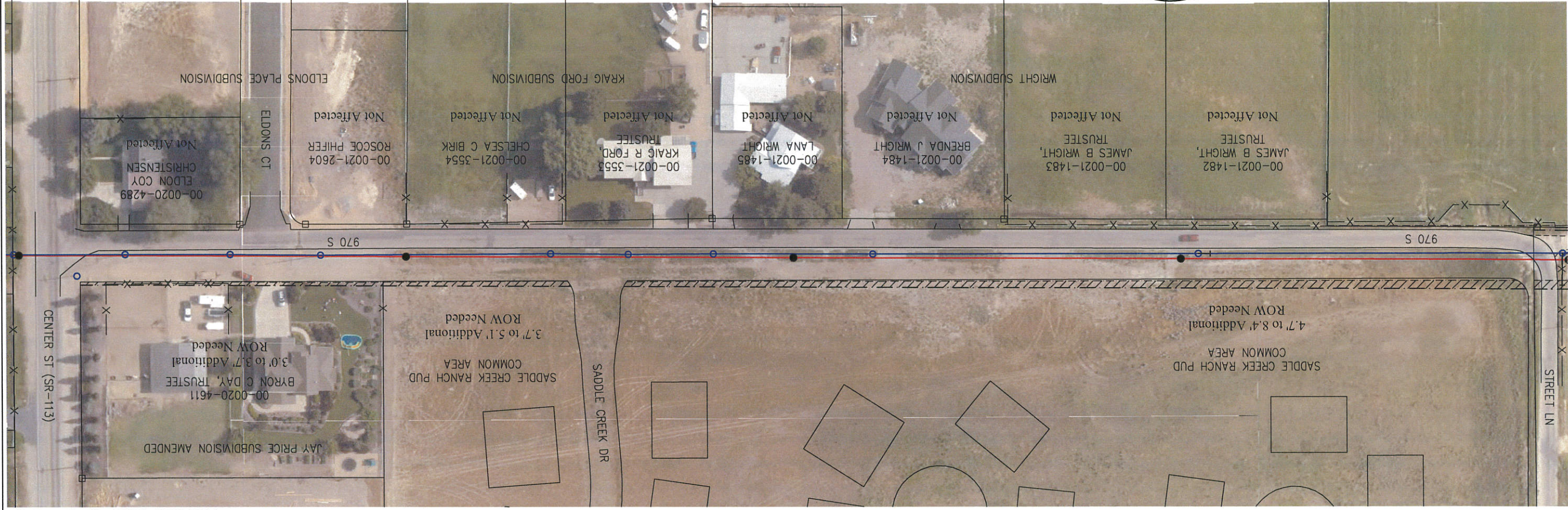


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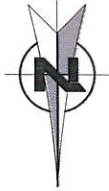
JORDANELLE-MIDWAY TRANSMISSION LINE
Section 3, Township 4 South, Range 4 East, SL&M
Wasatch County, Utah
Option B (long spans)
Existing 46kV ROW: 27' from centerline
138kV ROW: 29' from centerline

- LEGEND:
- | | |
|-------|----------------------------|
| — | PROPERTY LINE |
| --- | ROAD RIGHT-OF-WAY LINE |
| --- | PAVED ROAD |
| --- | UNPAVED ROAD |
| -X-X- | FENCE |
| — | EXISTING POWER LINE |
| ○ | EXISTING POLE |
| └ | EXISTING GUY/ANCHOR |
| □ | PROPERTY CORNER MARKER |
| — | PROPOSED POWER LINE |
| ● | PROPOSED POLE |
| --- | EXISTING RIGHT-OF-WAY LINE |
| --- | PROPOSED RIGHT-OF-WAY LINE |



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Drawing # 17412-Midway-B
Sheet 4 of 4
7/05/2019



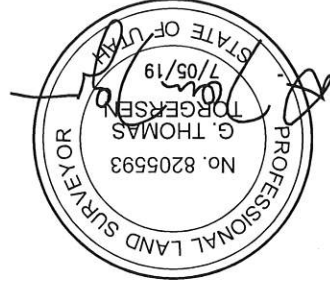
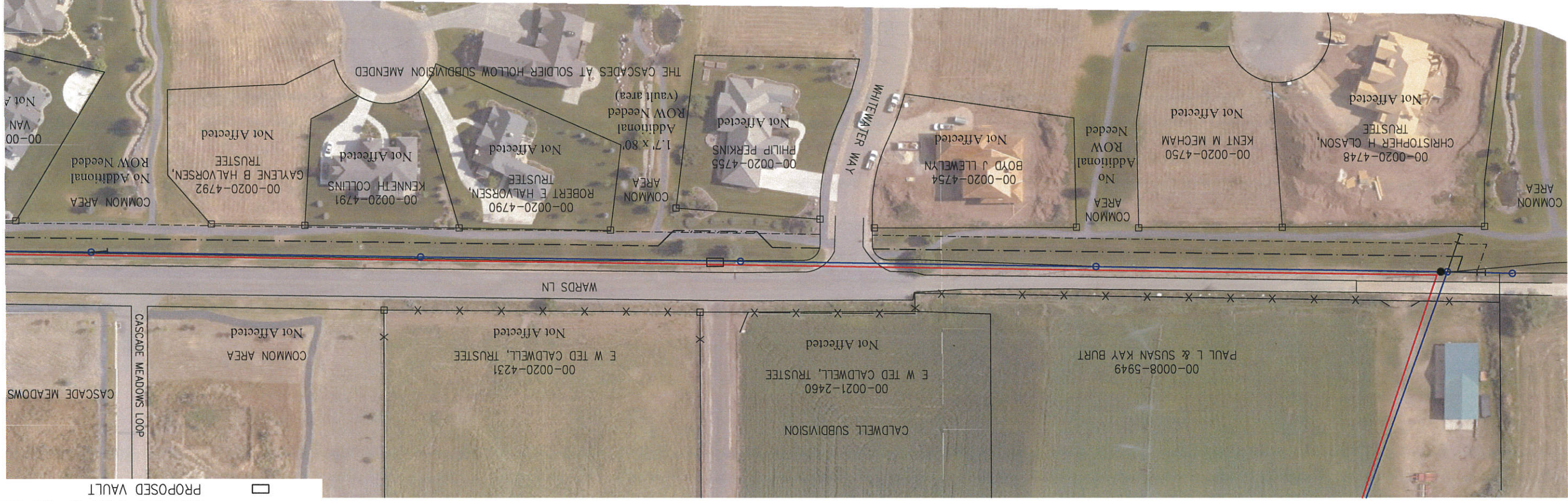
JORDANELLE-MIDWAY TRANSMISSION LINE
MIDWAY RIGHT-OF-WAY MAP

Section 3, Township 4 South, Range 4 East, S1B&M
Wasatch County, Utah

Option C (Underground)

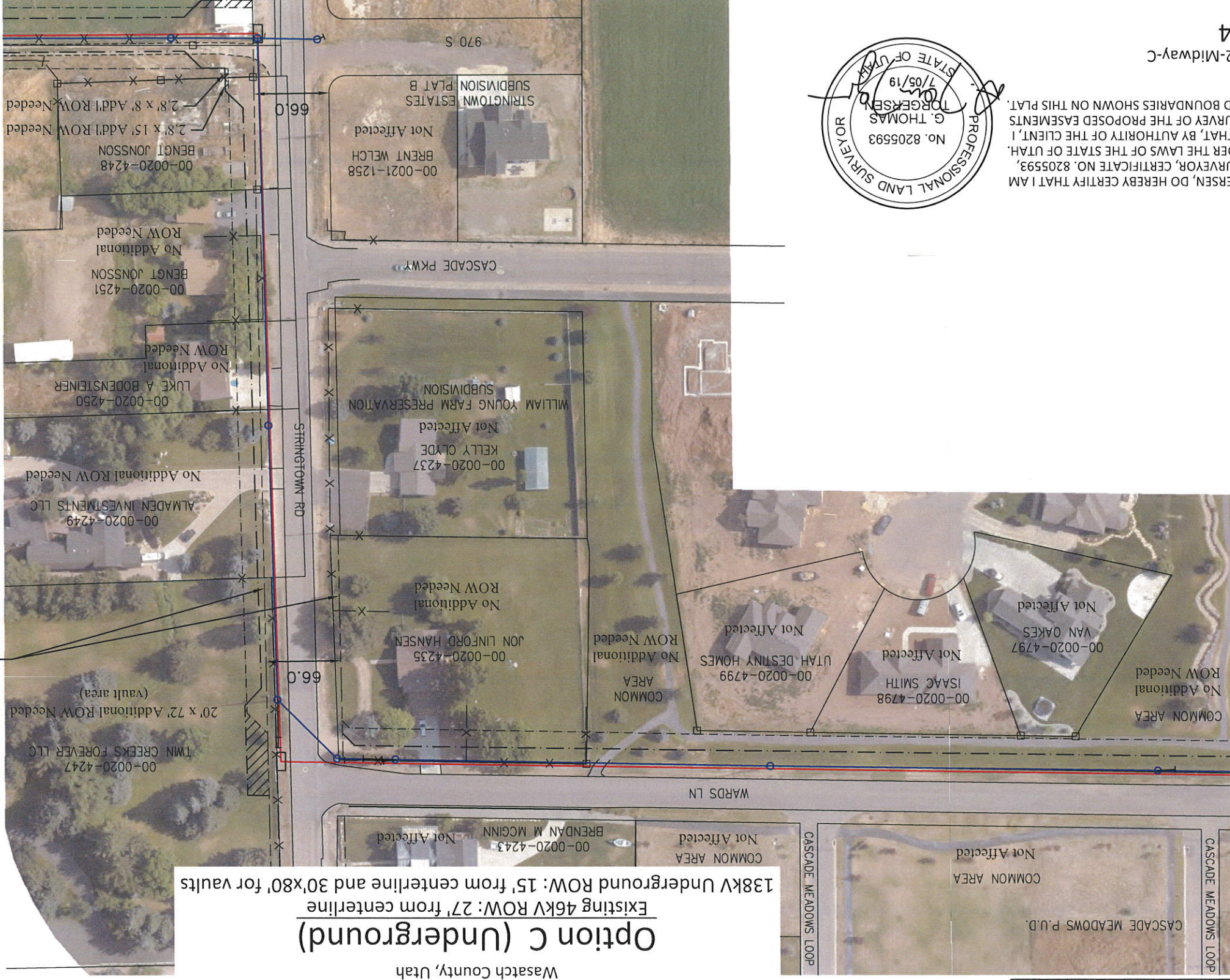
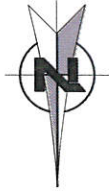
Existing 46kV ROW: 27' from centerline
138kV Underground ROW: 15' from centerline and 30'x80' for vaults

LEGEND:	
PROPERTY LINE	—
ROAD RIGHT-OF-WAY LINE	---
PAVED ROAD	=====
UNPAVED ROAD	-----
FENCE	-x-x-
EXISTING POWER LINE	—o—
EXISTING POLE	o
EXISTING GUY/ANCHOR	T
PROPERTY CORNER MARKER	□
PROPOSED POWER LINE	—●—
PROPOSED POLE	●
EXISTING RIGHT-OF-WAY LINE	---
PROPOSED RIGHT-OF-WAY LINE	---
PROPOSED VAULT	□



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Drawing # 17412-Midway-C
Sheet 1 of 4
7/05/2019



JORDANELLE-MIDWAY TRANSMISSION LINE
Section 3, Township 4 South, Range 4 East, S1B&M
Wasatch County, Utah

MIDWAY RIGHT-OF-WAY MAP

Option C (Underground)
Existing 46kV ROW: 27' from centerline
138kV Underground ROW: 15' from centerline and 30'x80' for vaults

- LEGEND:
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 - PAVED ROAD
 - UNPAVED ROAD
 - FENCE
 - EXISTING POWER LINE
 - EXISTING POLE
 - EXISTING GUY/ANCHOR
 - PROPERTY CORNER MARKER
 - PROPOSED POWER LINE
 - PROPOSED POLE
 - EXISTING RIGHT-OF-WAY LINE
 - PROPOSED RIGHT-OF-WAY LINE
 - PROPOSED VAULT

Stringtown Road right-of-way lines based on 33' half-width from centerline (Typ.)

00-0020-4247 TWIN CREEKS FOREVER LLC
20' x 72' Additional ROW Needed (vault area)
00-0020-4249 ALMADEN INVESTMENTS LLC
No Additional ROW Needed
00-0020-4250 LUKE A BODENSTEINER
No Additional ROW Needed
00-0020-4251 BENGT JONSSON
No Additional ROW Needed
00-0020-4248 BENGT JONSSON
2.8' x 15' Add'l ROW Needed
2.8' x 8' Add'l ROW Needed

00-0021-1258 BRENT WELCH
Not Affected
STRINGTOWN ESTATES SUBDIVISION PLAT B

00-0020-4237 KELLY CLYDE
Not Affected
WILLIAM YOUNG FARM PRESERVATION SUBDIVISION

00-0020-4235 JON LINFORD HANSEN
ROW Needed
No Additional ROW Needed

COMMON AREA
ROW Needed
No Additional ROW Needed

00-0020-4799 UTAH DESTINY HOMES
Not Affected

00-0020-4798 ISAAC SMITH
Not Affected

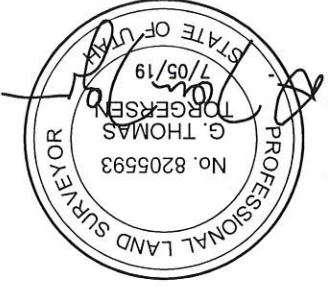
00-0020-4797 VAN OAKES
Not Affected

COMMON AREA
ROW Needed
No Additional ROW Needed

COMMON AREA
Not Affected

COMMON AREA
Not Affected

00-0020-4243 BRENDAN M MCGINN
Not Affected



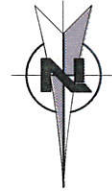
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JORDANELLE-MIDWAY TRANSMISSION LINE
MIDWAY RIGHT-OF-WAY MAP

Section 3, Township 4 South, Range 4 East, SLB&M
Wasatch County, Utah

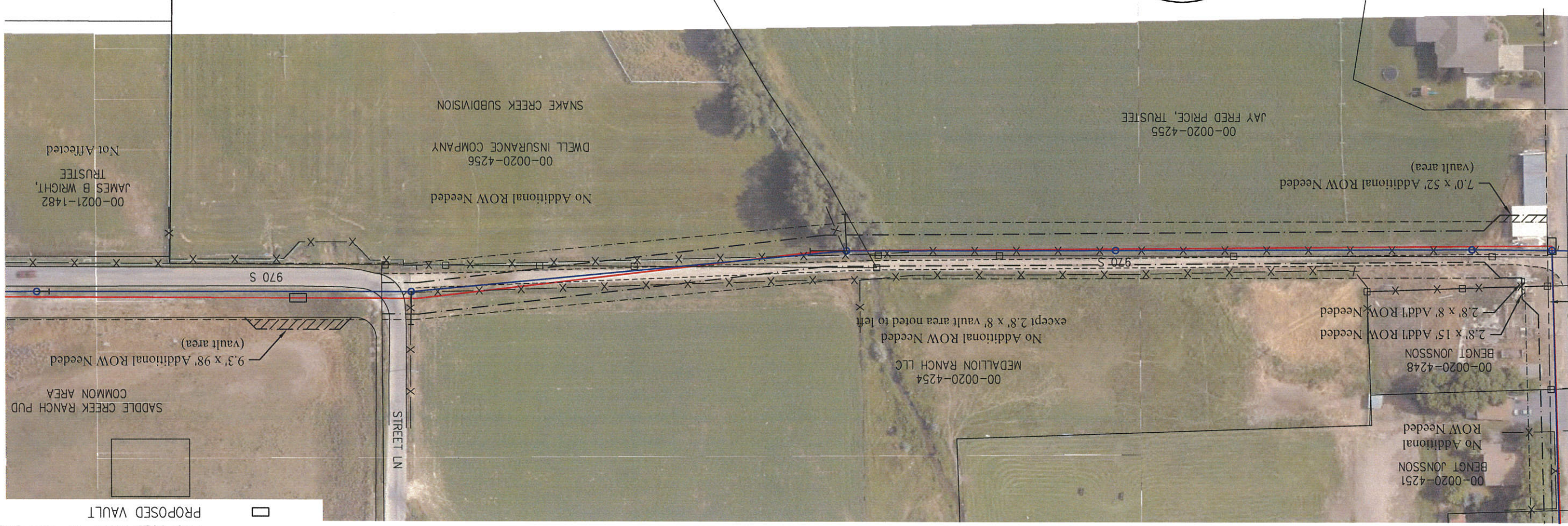
Option C (Underground)

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LEGEND:

PROPERTY LINE	---
ROAD RIGHT-OF-WAY LINE	---
PAVED ROAD	---
UNPAVED ROAD	---
FENCE	-X-X-
EXISTING POWER LINE	---
EXISTING POLE	o
EXISTING GUY/ANCHOR	-
PROPERTY CORNER MARKER	□
PROPOSED POWER LINE	---
PROPOSED POLE	●
EXISTING RIGHT-OF-WAY LINE	---
PROPOSED RIGHT-OF-WAY LINE	---
PROPOSED VAULT	□



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JORDANELLE-MIDWAY TRANSMISSION LINE
MIDWAY RIGHT-OF-WAY MAP

Section 3, Township 4 South, Range 4 East, SLB&M
Wasatch County, Utah

Option C (Underground)

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Typical Span Lengths Proposal
Span Length: 300ft - 395ft
16 Total Structures
Structure Height Above Ground:
70ft - 85ft



Reduced Pole Height Proposal
Span Length: 185ft - 395ft
21 Total Structures
Structure Height Above Ground:
65ft - 83ft



46kV – 138kV Rights-of-Way with Vegetation



46kV – 138kV Rights-of-Way with Vegetation



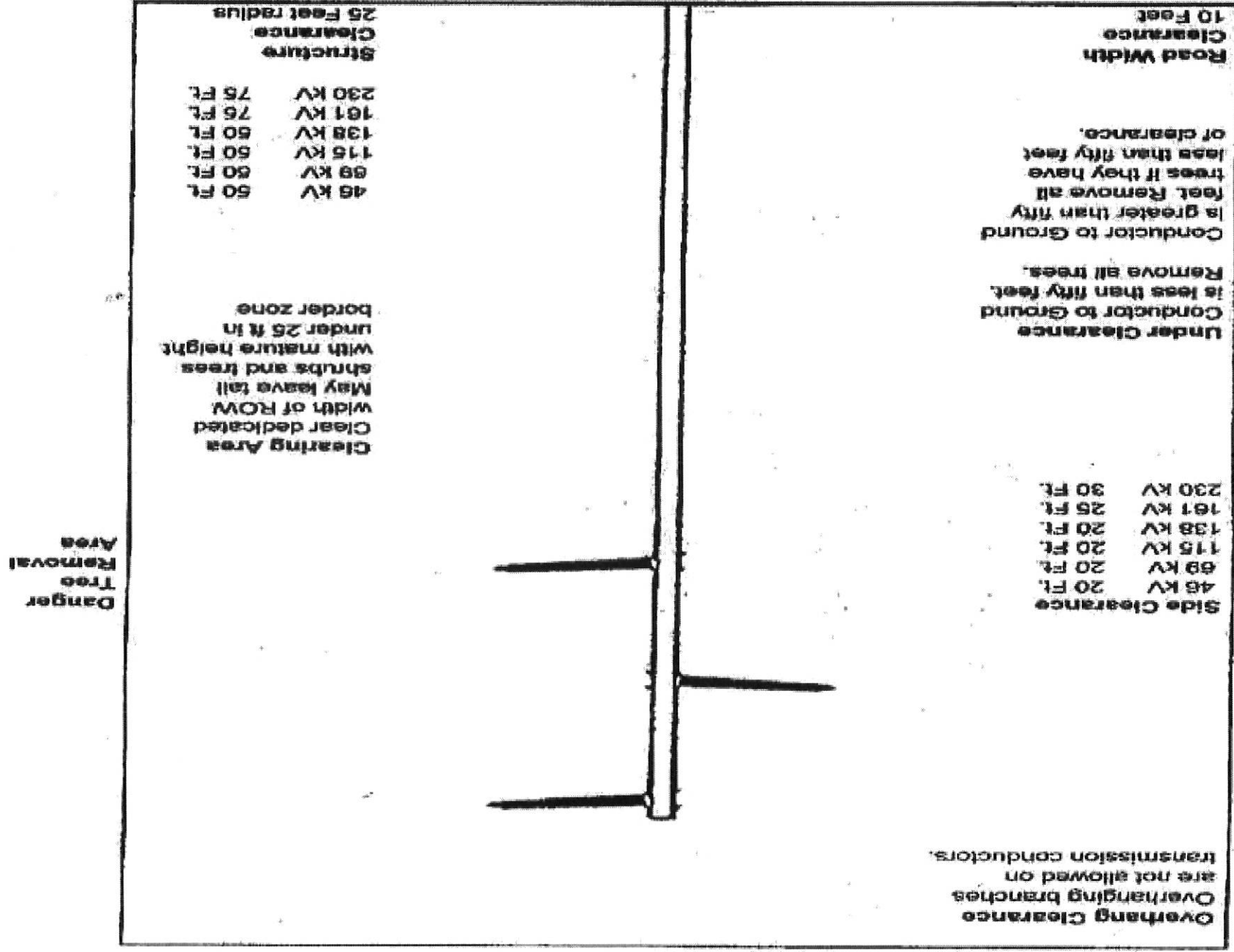
46kV – 138kV Rights-of-Way with Vegetation



46kV – 138kV Rights-of-Way with Vegetation



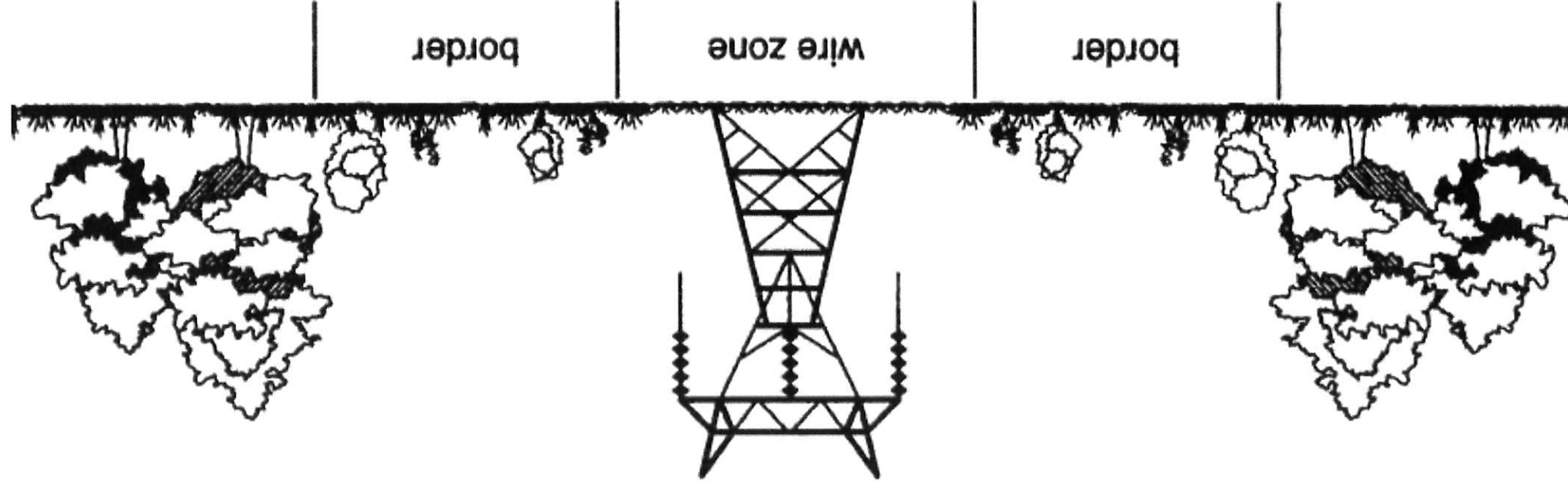
Figure 6.6 Single pole structure clearances.



345kV Rights-of-Way with Vegetation




Bramble & Byrnes Right-of-Way Method



Tree Replacement Vouchers

- Tree coupons good as cash at local nursery
- Suggested species lists for area (UCFC-UT, ISA & USFS)
- Work with property owners individually for unique site specifics
- Right Tree Right Place



**ROCKY MOUNTAIN
POWER**
A member of Xcel Energy

The Right Tree in The Right Place

A quality tree or shrub will beautify almost any property. This coupon entitles you to a _____ discount on trees and other plant material to help you landscape your yard.

First Name: _____ Last Name: _____
 Address: _____
 City: _____ State: _____ Zip: _____

Customer Instructions:
 Please take this coupon to any participating garden center or nursery, and receive a discount on low growing trees, bushes, or plants. Rocky Mountain Power is not responsible for the quality, planting, or care of the landscaping plants. This coupon is good toward the purchase of plant material only (trees, shrubs, or plants) and cannot be redeemed for cash or store credit. This non-transferable coupon is valid for one year after issue and will not be retained after the expiration date.

Garden Center or Nursery Instructions:
 Garden Center/Nursery: _____
 This coupon is good toward the purchase of plant material only (trees, shrubs, or plants) and cannot be redeemed for cash or store credit. This coupon is valid for one year after issue and is non-transferable. This coupon is only valid if it bears an embossed PackCorp Vegetation Management seal.

Once a month, please send all original Rocky Mountain Power coupons, along with an itemized invoice for the total amount due, to:
 Vegetation Management
 Rocky Mountain Power Service Center
 1509 W. North Temple
 Salt Lake City, UT 84116

Small tree planting tips:
 To reduce the need for future pruning, be sure you choose an appropriate tree for the space (especially around power lines). Some things to keep in mind as you're planting:

- Low-growing trees (under 25 feet when mature) may be planted adjacent to overhead power lines
- Plant tall-growing trees (over 25 feet when mature) at least 25 feet away from overhead power lines
- Trees that grow taller than 35 feet when mature should be planted 50 feet away from overhead lines
- Plant trees and shrubs at least 10 feet away from ground-mounted transformers
- Call 811 at least 48 hours before you plant to have your underground utilities located.

Issued By: _____