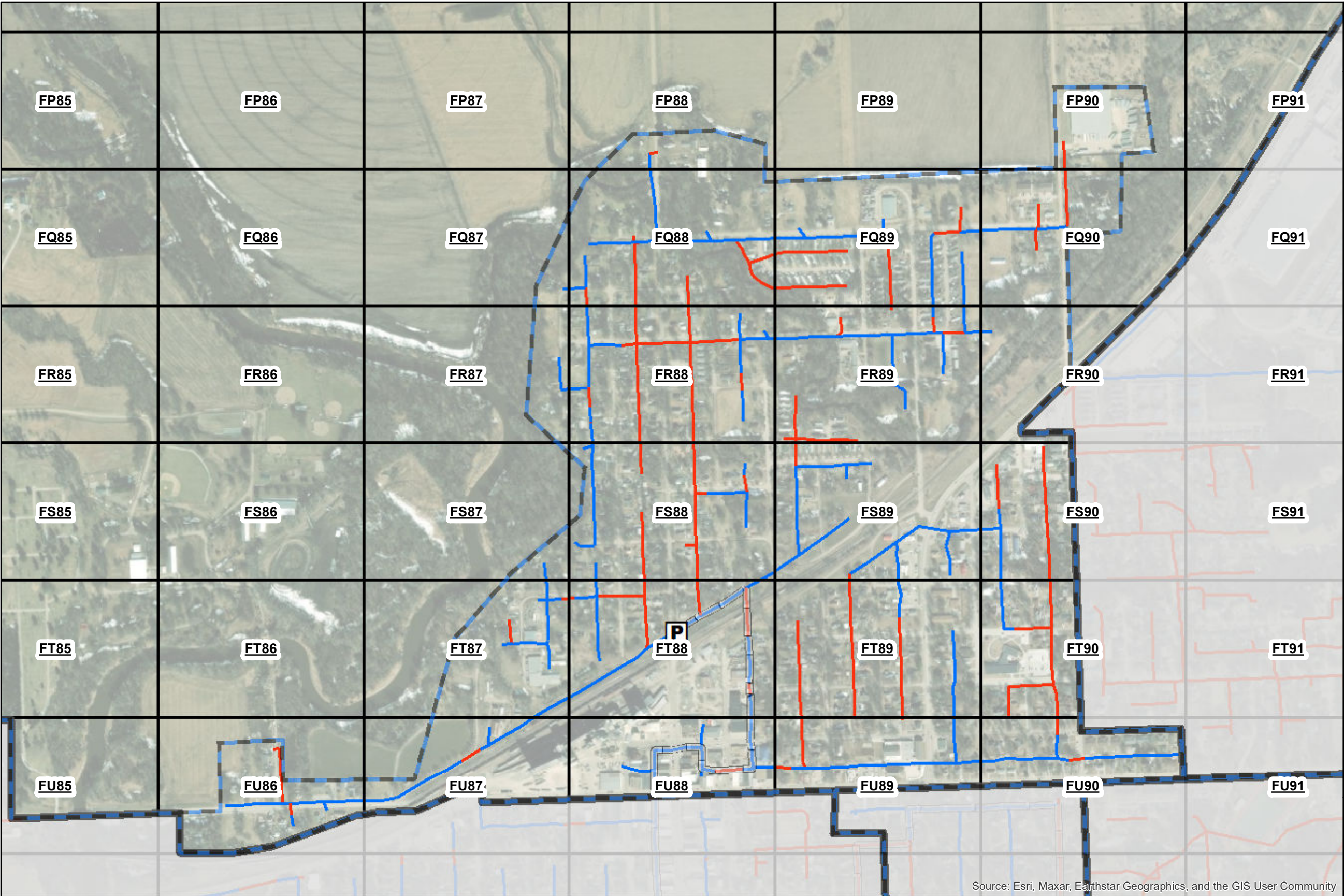




PON: CRE-01-01
DCR: DCR-187

PERMIT:
LEGEND Date: 6/20/2023

- PON
- 1152 PON Cabinet
- Cable Category
 - Feeder
- ROUTE
 - Underground
 - Aerial

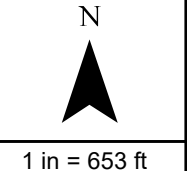
Note: "For clarity and simplicity, Sheets with no conduit (edges particularly) are not shown"

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



Notes:

Revisions:

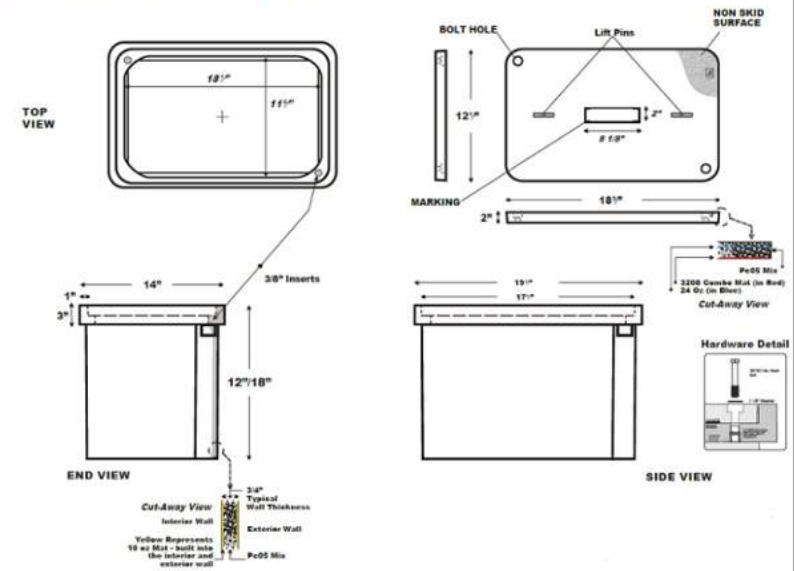


ROW CONSTRUCTION PROJECT NOTES		
1. The City shall be notified a minimum of forty eight (48) hours in advance of initial project construction. 2. The contractor shall adhere to the current City standard specifications, approved special provisions, City standard plans, right-of-way construction procedures manual. 3. The locations of all aerial and underground utility facilities may not be indicated on the project plans. The contractor is required to contact the One Call 811 notification center (dial 811) forty-eight (48) hours prior to working in the city right of way. No excavation will be permitted in the area of the underground utilities until all facilities have been located and identified to the satisfaction of all parties. The contractor shall be responsible for protection of all underground and aerial utilities and infrastructure. 4. Whenever underground facilities are in close proximity to the proposed pathway location or whenever the vertical location of the underground facility is unknown, the permittee shall use special measures to determine the locations of such underground facilities. a. If the permittee is conducting the excavation by digging from the surface, when in a close proximity to the underground facilities, the permittee shall use hand digging, hydro excavating, air excavating, or any other techniques that are approved by the City to locate such facility. b. If the permittee is conducting the excavation by tunneling or boring, the permittee shall determine the vertical location of the underground facility by potholing or any other method approved by the City. 5. Project plans shall dimension new facilities being installed. Measurements shall be taken from existing adjacent visible structures (curbs, poles, cabinets, manholes, inlets, fire hydrants, etc.) clearly identifying location of such facility. The contractor shall verify dimensions taken from city files. 6. Unless specified on the plan sets, the depth of installed facilities in city row shall be at a minimum as follows. a. Thirty-two (30) inches in soil, if rock present and is an issue twenty-four (24) inches can be used. b. Forty-two (42) inches below a projected slope from the flow line of a ditch at a three (3) horizontal and one (1) vertical slope. c. Forty-eight (48) inches under a roadway measured from the surface of said roadway to the top of the installation. d. Forty-eight (48) inches under a storm water or creek channel design bottom of pipe, and e. <u>Maintain a minimum of twenty-four (24) inches of vertical and horizontal spacing from existing utilities.</u> f. Be located as far from the existing or proposed curb line as possible to avoid potential future conflicts. 7. All potholes in sidewalk panels will be filled unless directed by City inspector. If colored, textured or patterned concrete is existing, replacement patches, and panels panels will be replaced to match as practicable. Owner may be required to put money into escrow to cover all repairs prior to starting work. 8. All non-street surface materials that are disturbed by excavation and backfilling operations shall be replaced and restored. 9. City street surface materials disturbed shall be backfilled, tamped and repaved by city forces or approved paving contractor. 10. All Conduit, vaults and Pedestals shall be located in the public ROW and in public utility easements. 11. All Aerial shown on attached planset will be permitted separately by Pole Owners. All pole permits submitted to pole owners will follow NESC codes.	12. If sidewalk, wheel chair ramps or any portion of the pedestrian facilities are removed or closed, a pedestrian detour shall be established and maintained during the time of the closure and the entire pedestrian facility shall be restored within seventy-two (72) hours, unless the contractor provides a hard surface alternate route approved by the city. 13. All pedestrian detours and any reconstruction of pedestrian facilities shall meet current Americans with Disability Act (ADA) standards and specifications. 14. All pedestrian detours shall be part of an approved Traffic Control Plan (TCP). 15. All holes made in city pavements for the purpose of performing vacuum excavations to locate underground utilities shall be restored to their original condition with the reinstated core flush with and in the original orientation as the existing surface matching existing pavement surface appearance. 16. When the contractor is not actively working, all equipment, fencing, debris, etc, shall not be placed within the triangular area required for sight distance of vehicles exiting or entering an adjacent property or intersection. 17. All excavations shall be adequately fenced and covered when contractor is not present or project site left unattended. 18. No lane closures allowed on arterial streets during AM and PM peak hours unless approved by City Traffic and Right of Way Construction section(s) staff. 19. All work zone traffic control, including pedestrian control measures, shall be in compliance with the MUTCD, ADA, and the City Standard Specifications. 20. The contractor shall notify all affected owners of adjacent properties a minimum of forty-eight (48) hours prior to beginning of construction and provide updates to the affected owners when construction phases change that affect the areas of work associated with the permit. 21. The contractor shall maintain a set of "as built" plans on site with dimensioning. These plans shall be presented upon request to any city representative. 22. A current city right of way construction permit and city approved plan set shall be maintained on each work site by the contractor. The contractor shall present such permit and plan set upon request to any city representative. 23. Any field adjustments to installation of facilities, which vary from the plans that have been submitted and approved during the permit application process, shall comply with the following: a. The contractor must stop work immediately and contract the facility owner. b. The <u>facility owner's representative</u> shall contact the city's construction inspector and provide him with the details c. The City inspector will make a determination on how to proceed. This determination may range from approval over the phone or via email to delaying the project until plans can be updated and appropriate review can be conducted. of the proposed changes. c. The City inspector will make a determination on how to proceed. This determination may range from approval over the phone or via email to delaying the project until plans can be updated and appropriate review can be conducted.	Special Notes 1. All conduit shall be bored unless specified otherwise. 2. Contractors shall notify land owner prior to work on all private developments. 3. A reminder to the reader. the drawings are scaled, thus dimension is available at all locations. 4. The contractor shall bypass all MST pedestals with distribution conduit where installed parallel to MST conduit. Similarly, bypass the T18 "Flowerpot" with MST conduit where installed parallel to future drop conduit.
Allo FIBER		N 

Nebraska811

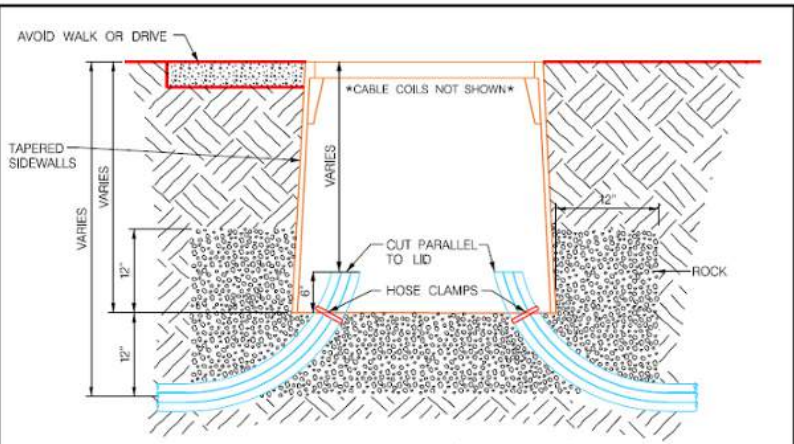
Know what's below.
811 before you dig.

1118 Polymer Concrete Series / Tier 15



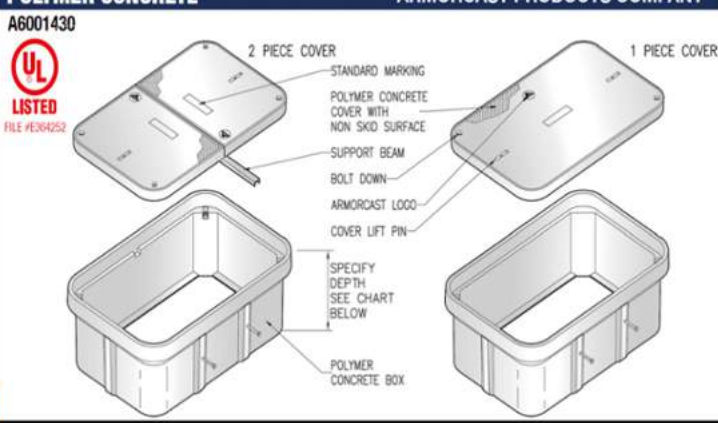
DESCRIPTION	NORMAL SIZE W x L x D	LOAD RATING	ANSI TIER	PART NUMBER
Box & Cover Assembly	12" x 18" x 18"	60lbs	15	1118

- ALLO PULL BOX
- NOTES:
1. ALLO PULL BOX SHALL HAVE 2 PIECE COVER
 2. ALLO PULL BOX SHALL BE LABELED "FIBER OPTICS"
- T18**



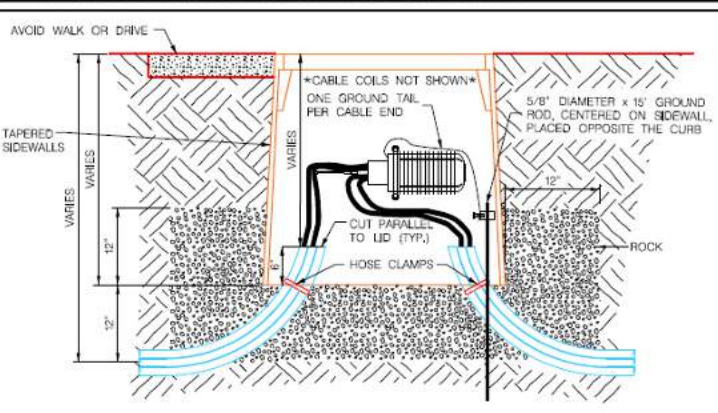
- ALLO PULL BOX INSTALLATION
- NOTES:
1. AT ALL CABLE PULLING LOCATIONS, COIL 60' OF EACH FIBER CABLE (MST TAILS EXCLUDED)

POLYMER CONCRETE ARMORCAST PRODUCTS COMPANY



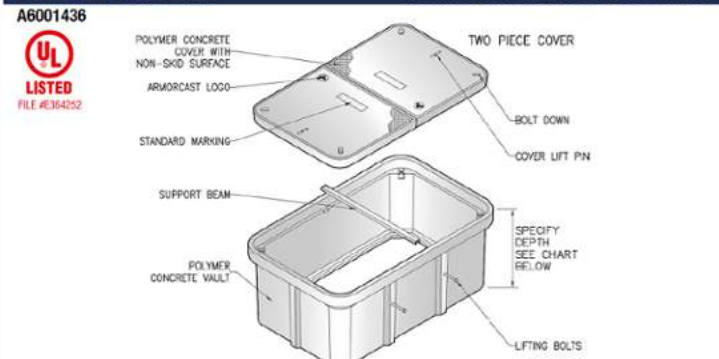
DESCRIPTION	NORMAL SIZE W x L x D	LOAD RATING	ANSI TIER	PART NUMBER
Box & Cover Assembly	30" x 48" x 36"	20K	15	A6001430TAPCX36

- ALLO SPLICE VAULT AND CITY T48 PULL BOX
- NOTES:
1. ALLO SPLICE VAULT SHALL HAVE 1 PIECE COVER
 2. CITY T48 PULL BOX SHALL HAVE 2 PIECE COVER
 3. ALLO SPLICE VAULT SHALL BE LABELED "FIBER OPTICS"
 4. CITY T48 PULL BOX SHALL BE LABELED "FIBER"
- T48**



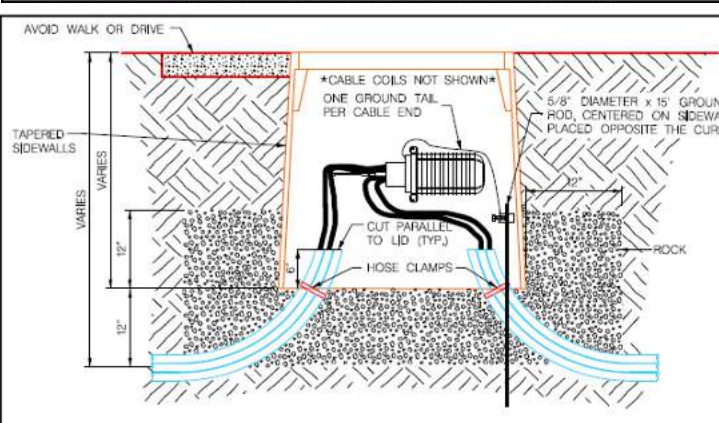
- ALLO SPLICE VAULT INSTALLATION
- NOTES:
1. AT ALL SPLICE VAULTS, COIL 75' OF EACH FIBER CABLE TAIL AND 60' OF EACH MST TAIL.

POLYMER CONCRETE ARMORCAST PRODUCTS COMPANY

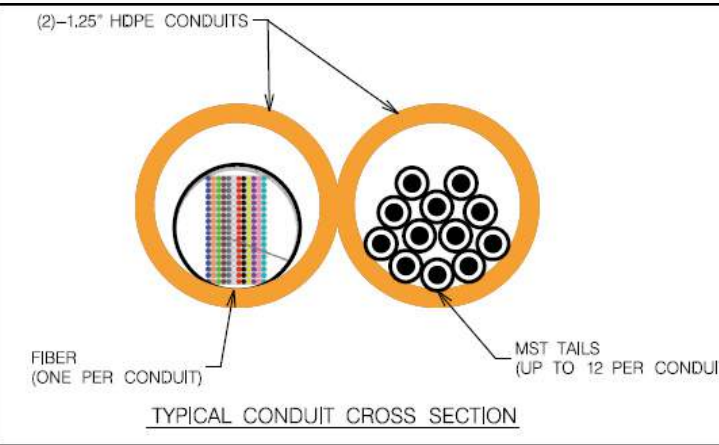


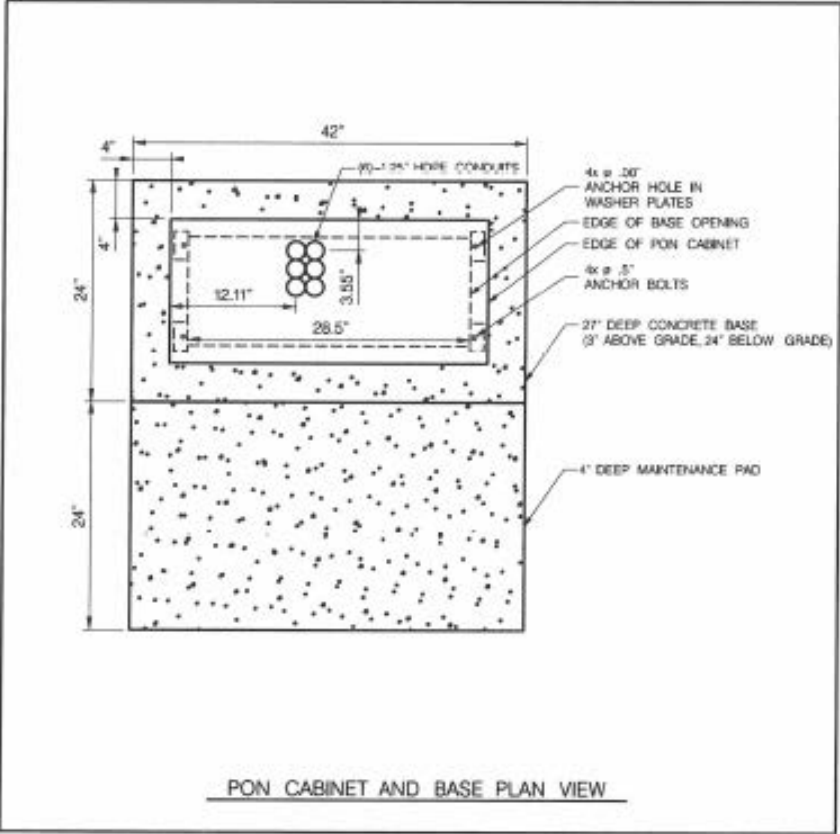
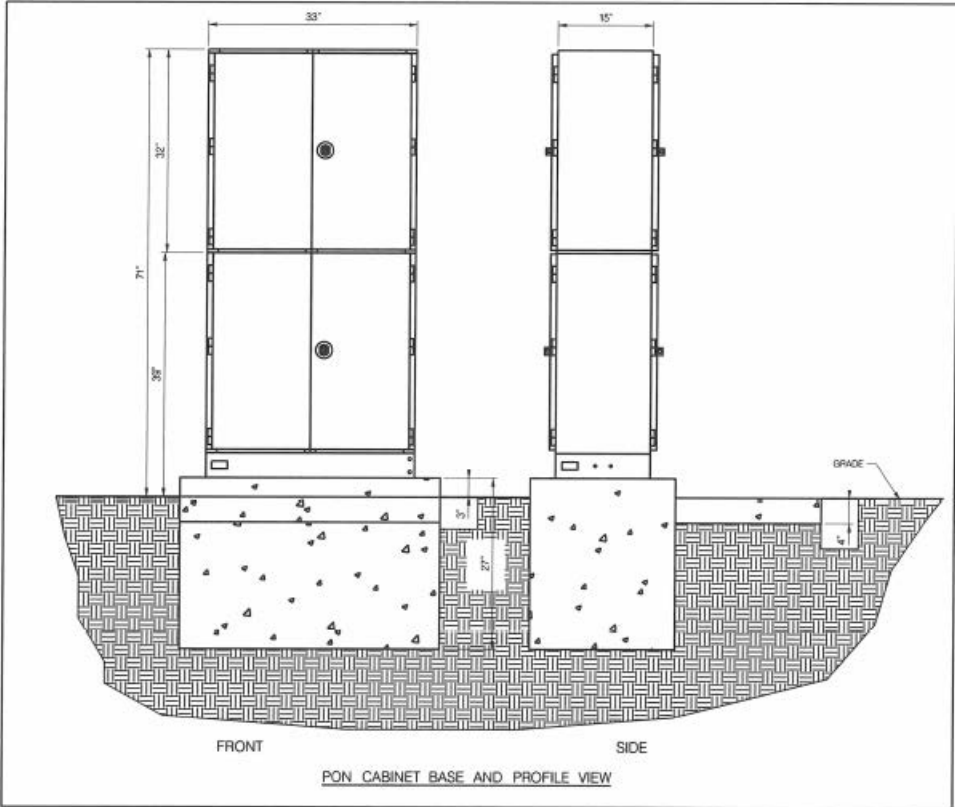
DESCRIPTION	NORMAL SIZE W x L x D	LOAD RATING	ANSI TIER	PART NUMBER
Box & Cover Assembly	36" x 60" x 36"	20K	15	A6001436TAPCX36

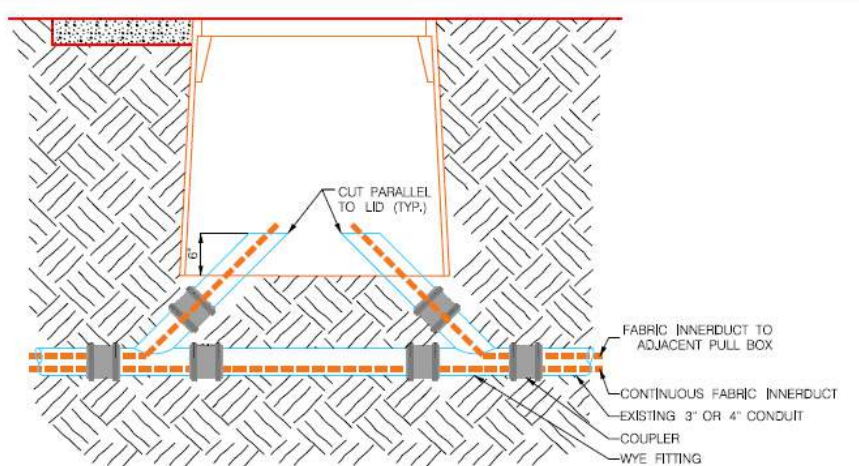
- ALLO MAINTENANCE VAULT
- NOTES:
1. ALLO MAINTENANCE VAULT SHALL HAVE 2 PIECE COVER
 2. ALLO MAINTENANCE VAULT SHALL BE LABELED "FIBER OPTICS"
- T60**



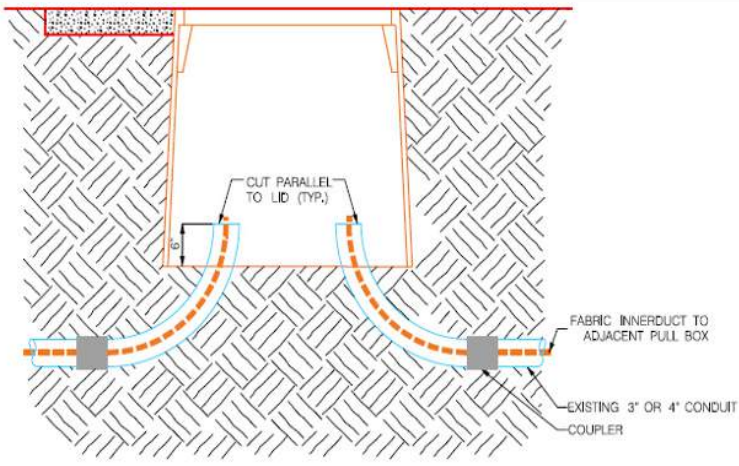
- ALLO MAINTENANCE VAULT INSTALLATION
- NOTES:
1. AT ALL MAINTENANCE VAULTS, COIL 75' OF EACH FIBER CABLE (MST TAILS EXCLUDED).



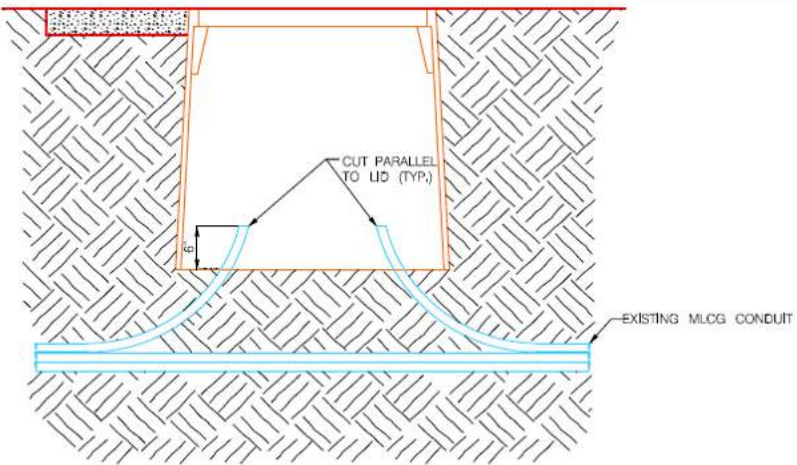




CAPTURE 3" OR 4" CONDUIT WITH EXISTING FIBER DETAIL



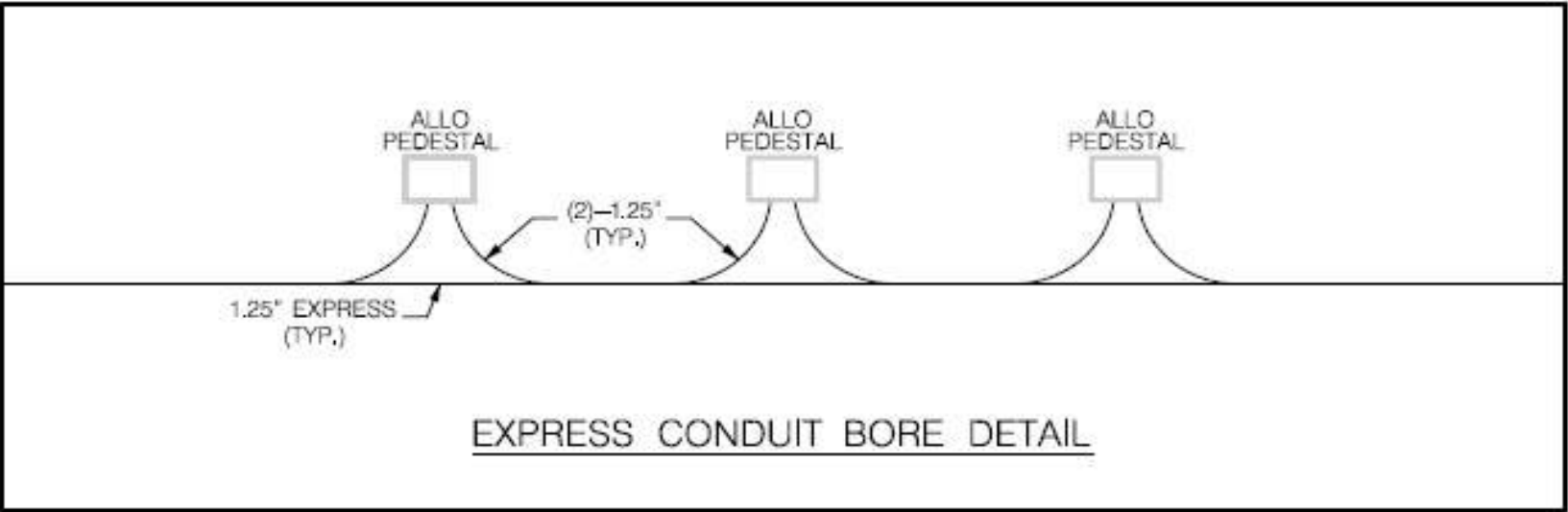
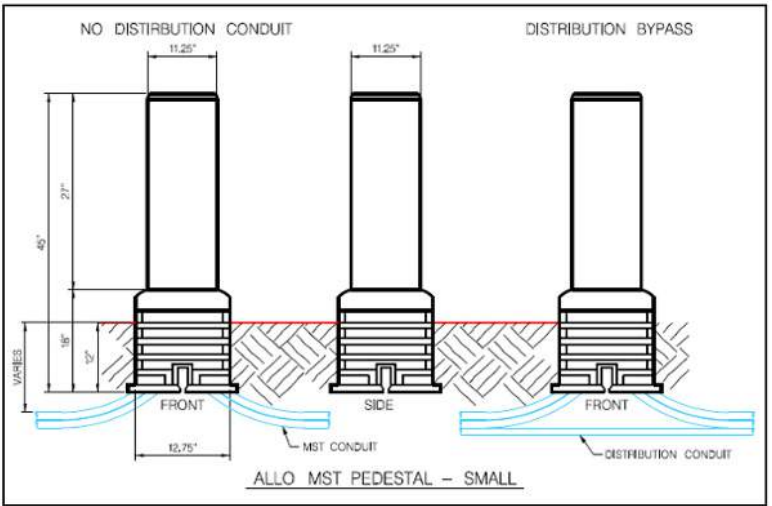
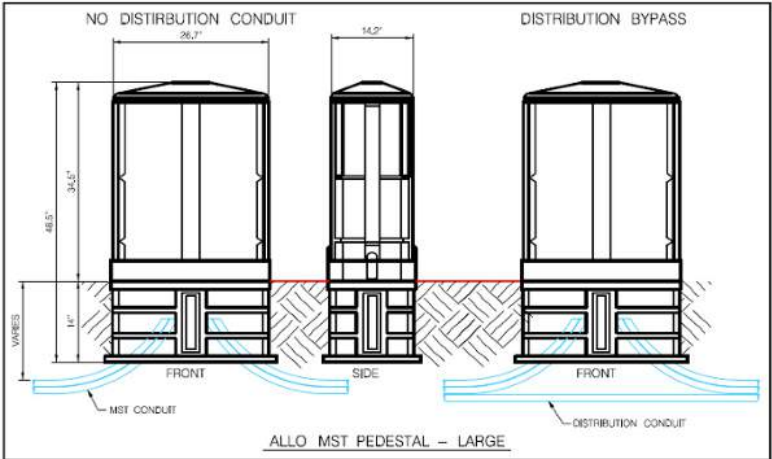
CAPTURE EMPTY 3" OR 4" CONDUIT DETAIL



CAPTURE MLCG DETAIL

Typicals here represent various sweeps of conduit. Follow City standards for bedding. MLCG stands for Main Line Conduit Group, any bundle of conduit placed in the ground together.

Express Conduit are detailed by midspan call outs.
48f - 288f, 1 - 1.25" per cable Should be expressed to T36, T48, T60 boxes bypassing pedestals.
432f - 864, 1 - 2.0" per cable Should be expressed to T36, T48, T60 boxes bypassing pedestals.



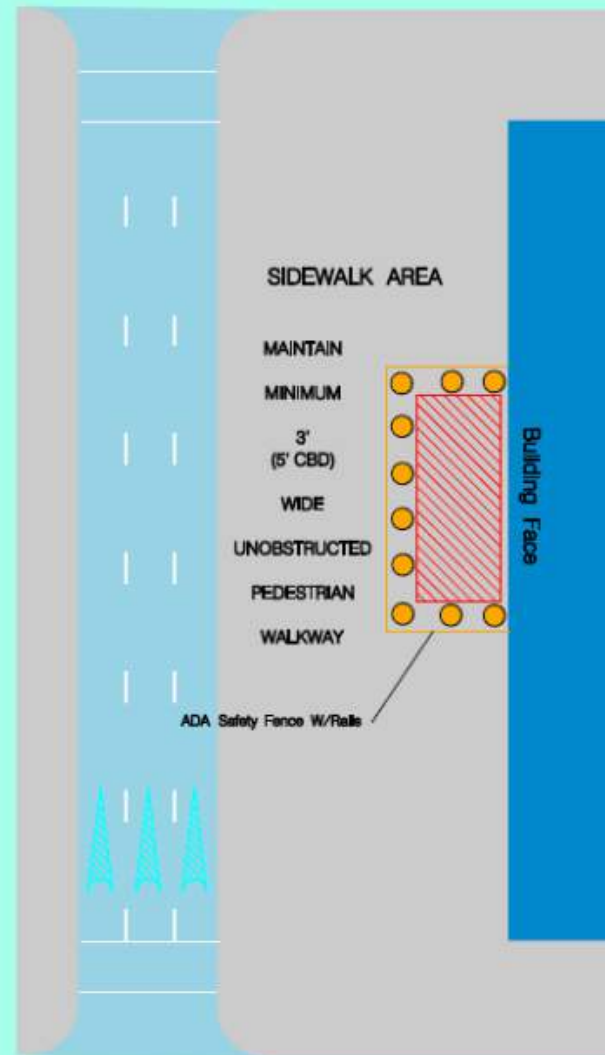
EXPRESS CONDUIT BORE DETAIL



12

WORK IN THE PEDESTRIAN AREAS

Maintain a clear and unobstructed pedestrian walkway around the work zone, or post warning signs for closures at adjoining intersections.

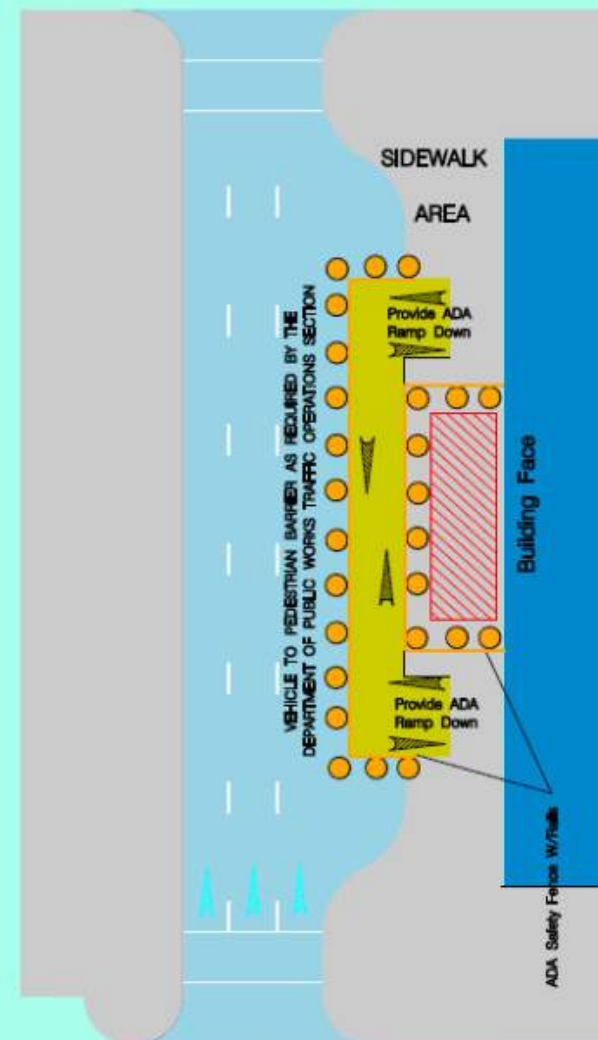


13

WORK IN THE PEDESTRIAN AREAS

PEDESTRIAN DETOUR IN CENTRAL BUSINESS DISTRICT (CBD)

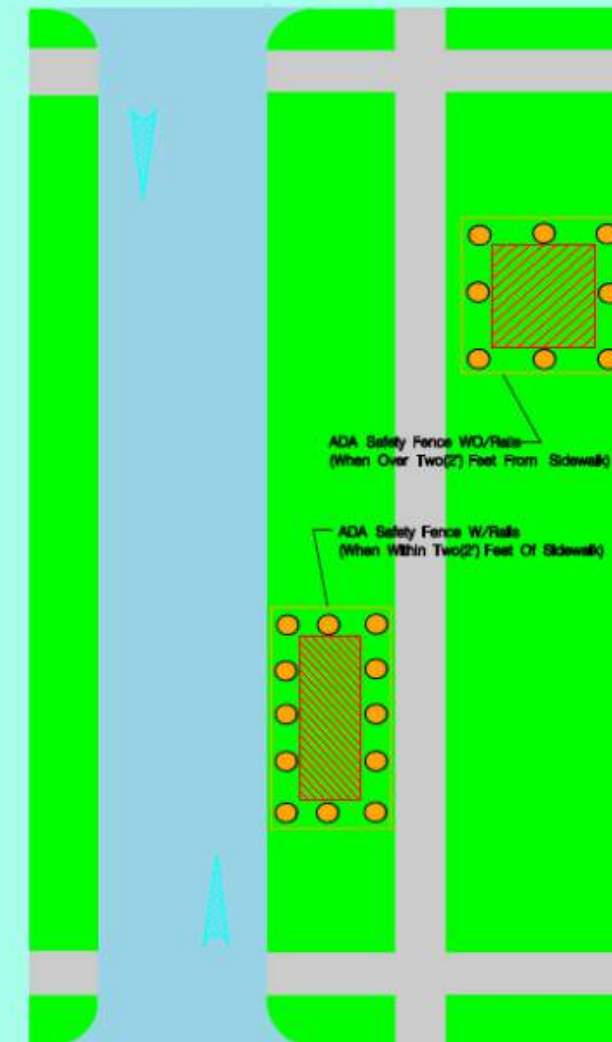
Maintain a minimum of 5' unobstructed pedestrian walkway around the work zone using constructed walkway or protected area as designated by the Department of Public Works Traffic Operations Section.



14

WORK IN THE PEDESTRIAN AREAS

Protection of Excavations & Hazards not in roadways or sidewalks

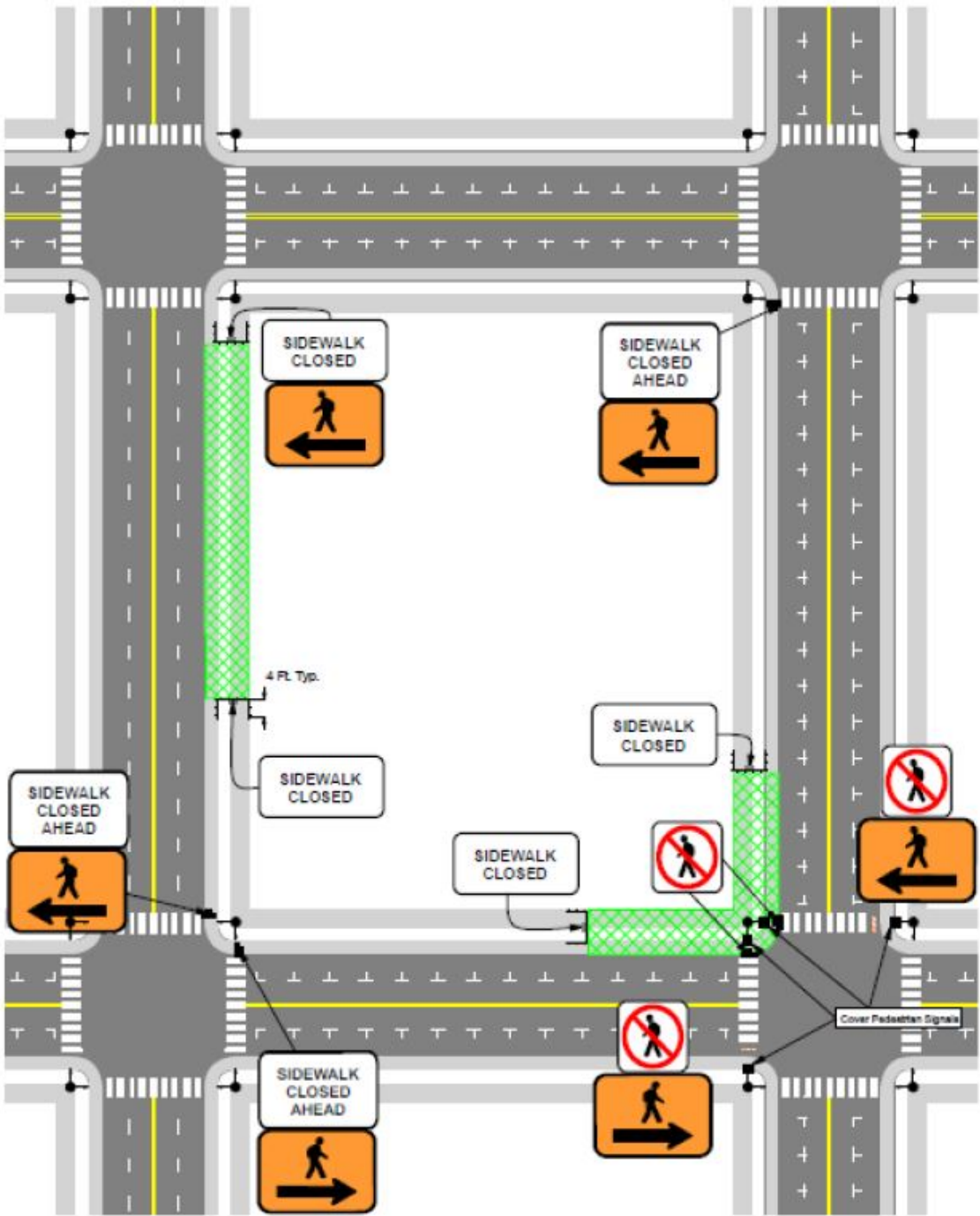


Nebraska 811
Know what's below.
811 before you dig.

Sidewalk Closure

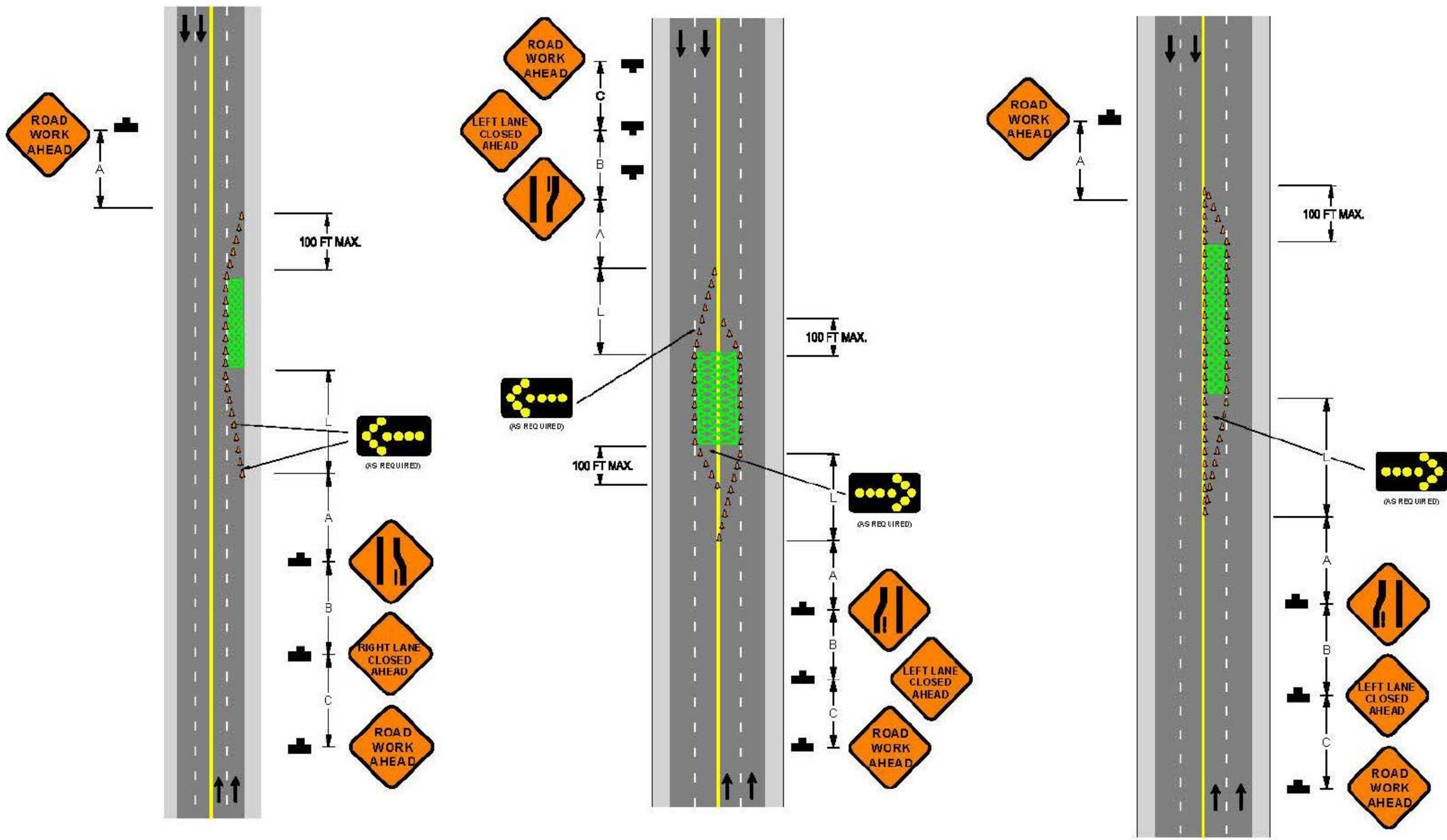
See Page A9 for A, B, C, L Distances

1) This plan shows the pedestrian traffic control measures only. Additional traffic control measures may be required to manage vehicular traffic.



Through Lane Closures on Higher Volume Streets (Collectors, Arterials Etc..)

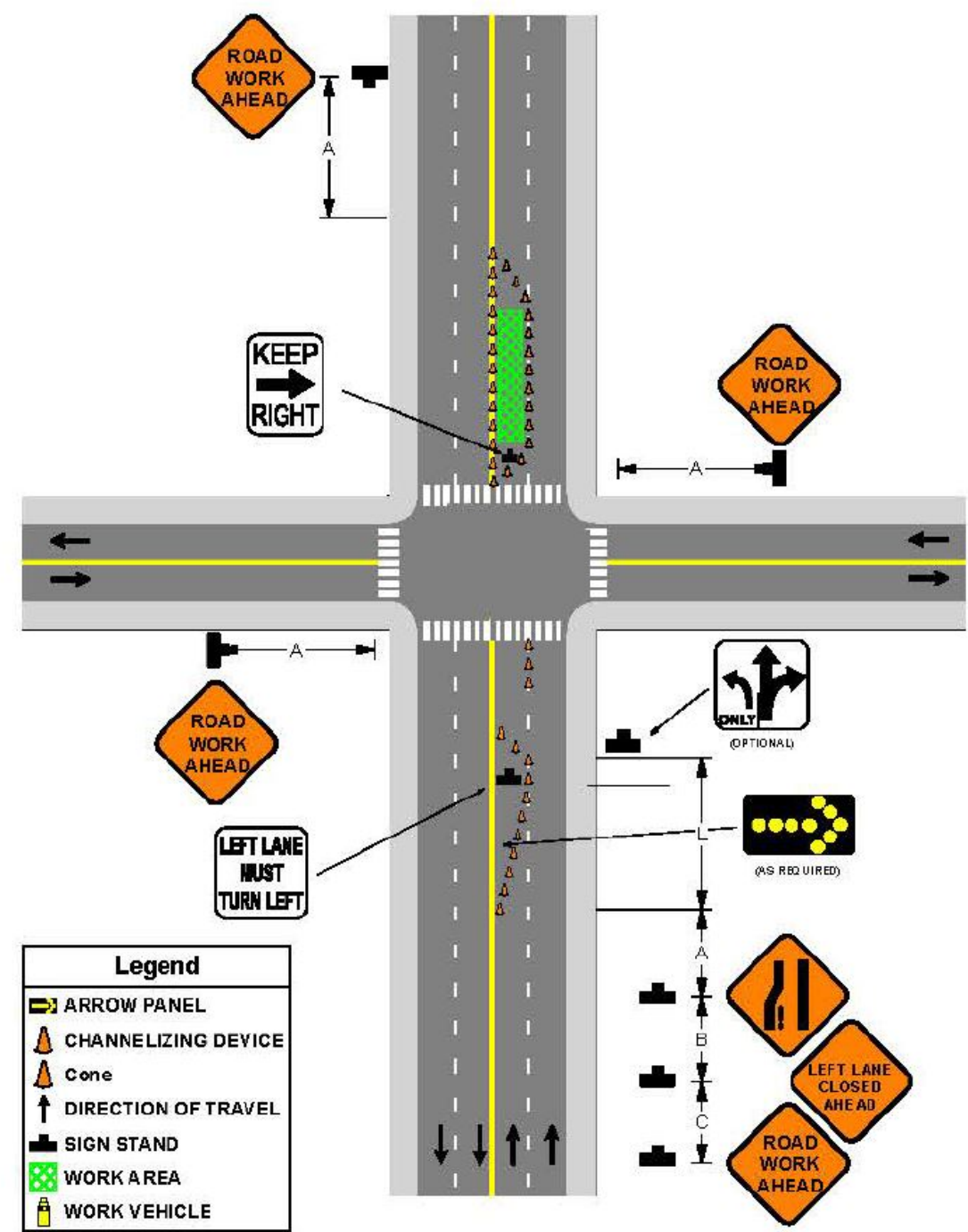
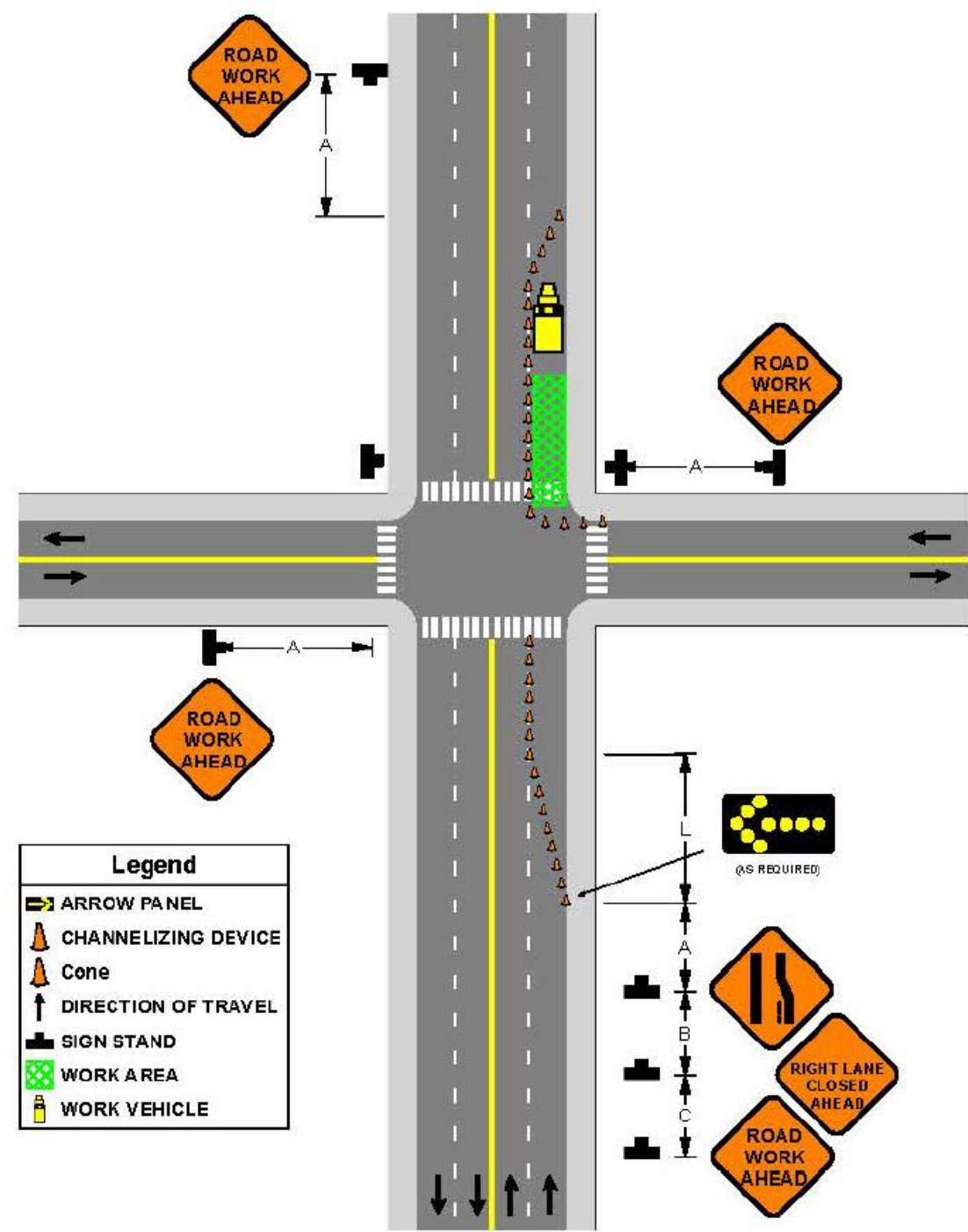
See Page A9 for A, B, C, L Distances



Legend

- ARROW PANEL
- CHANNELIZING DEVICE
- DIRECTION OF TRAVEL
- SIGN STAND
- WORK AREA

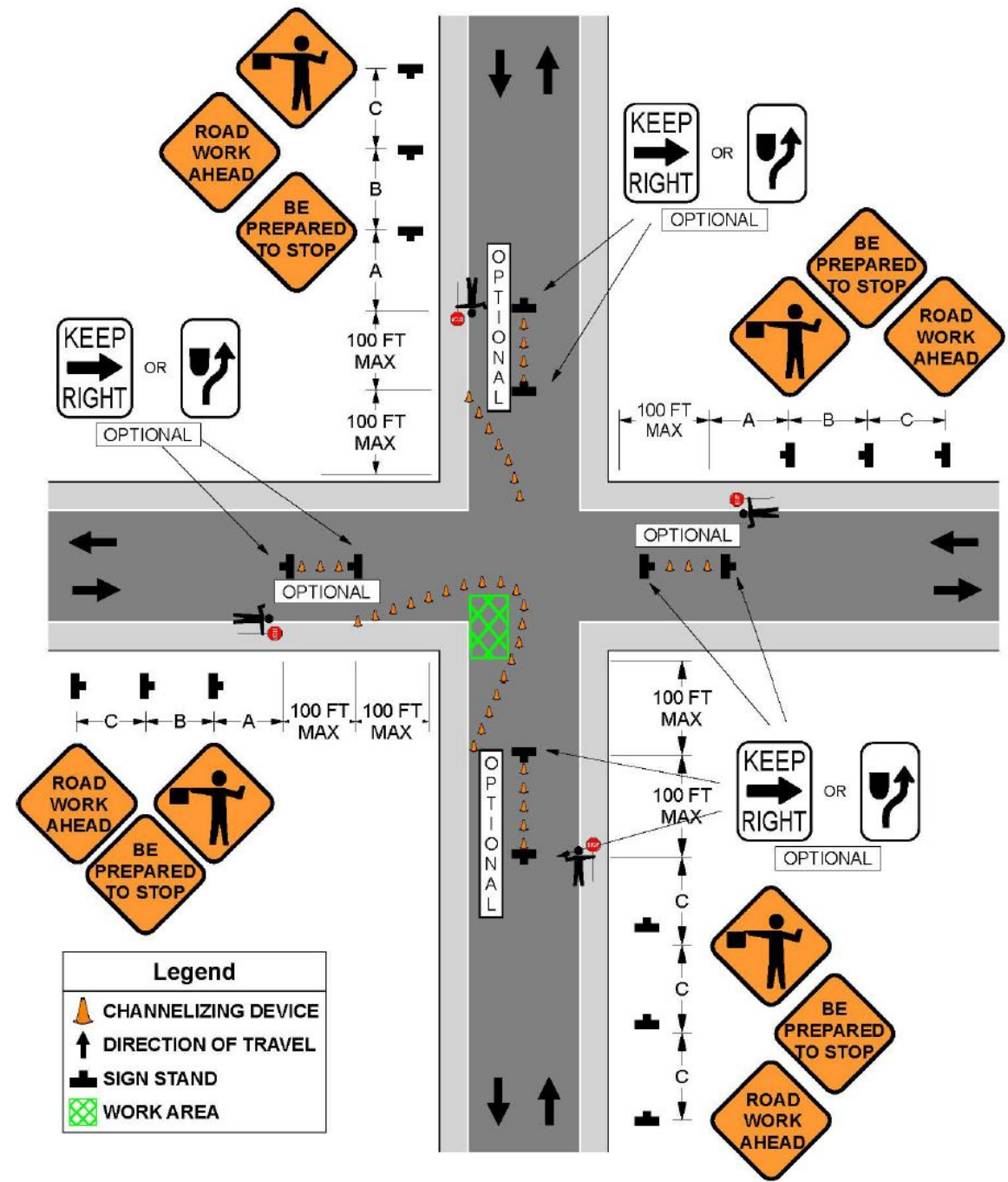
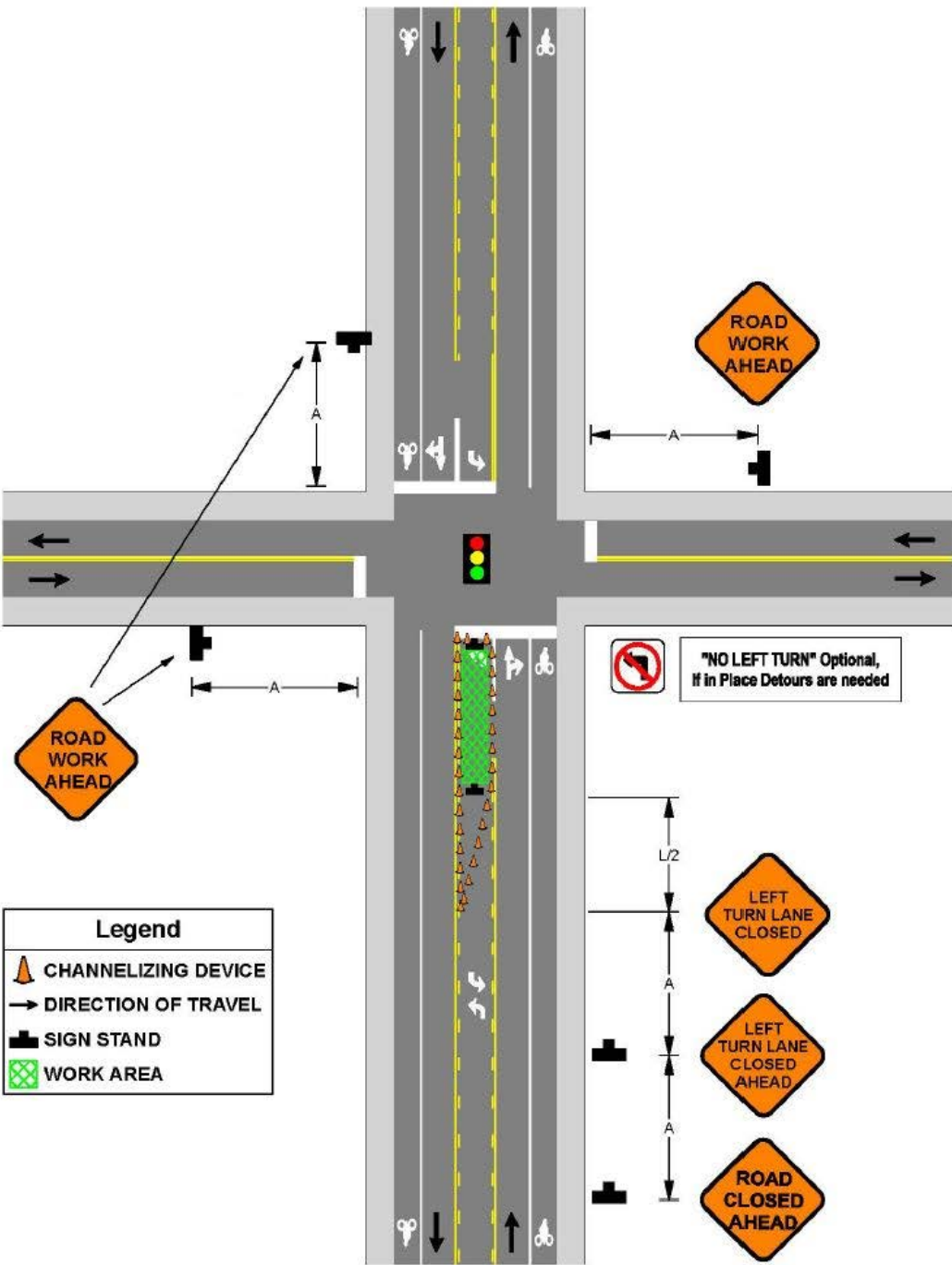


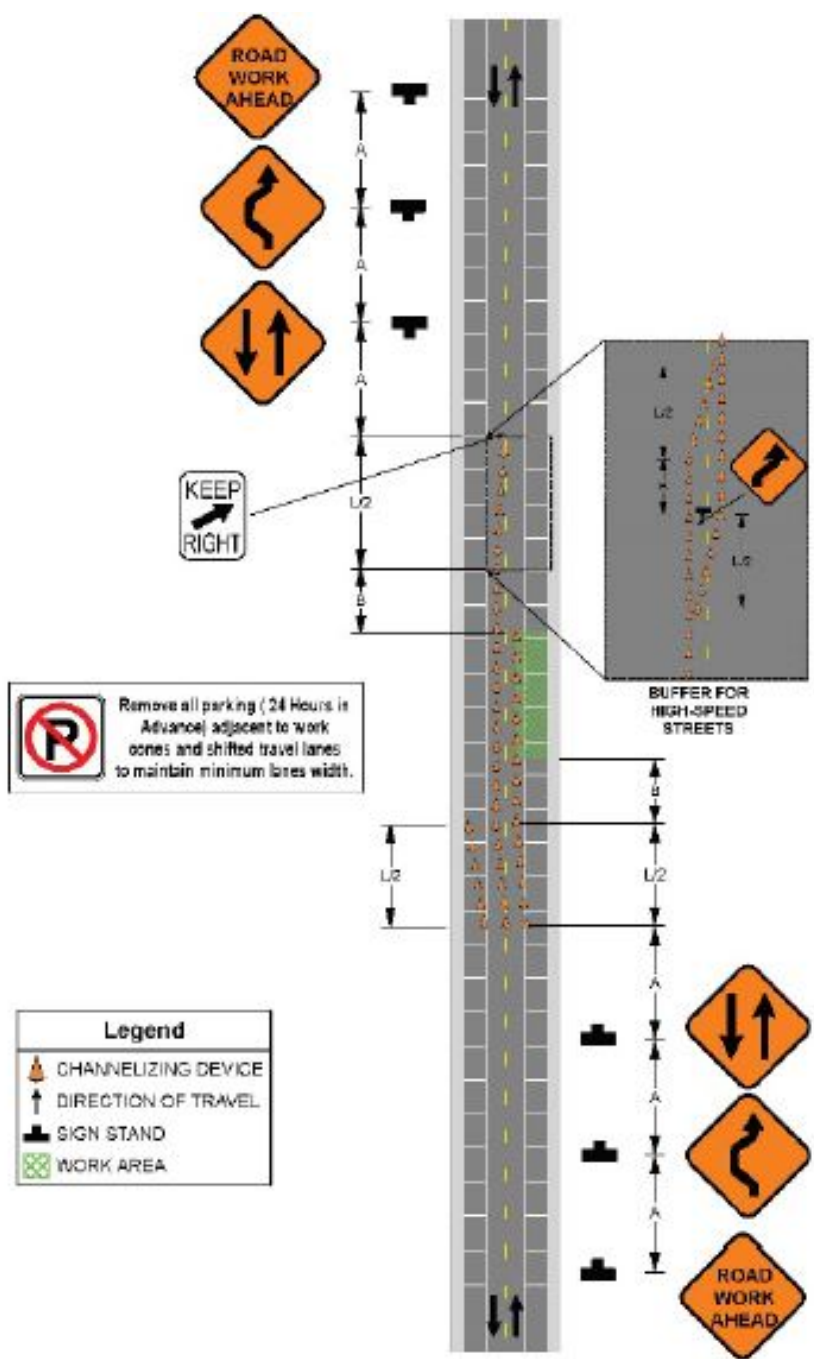
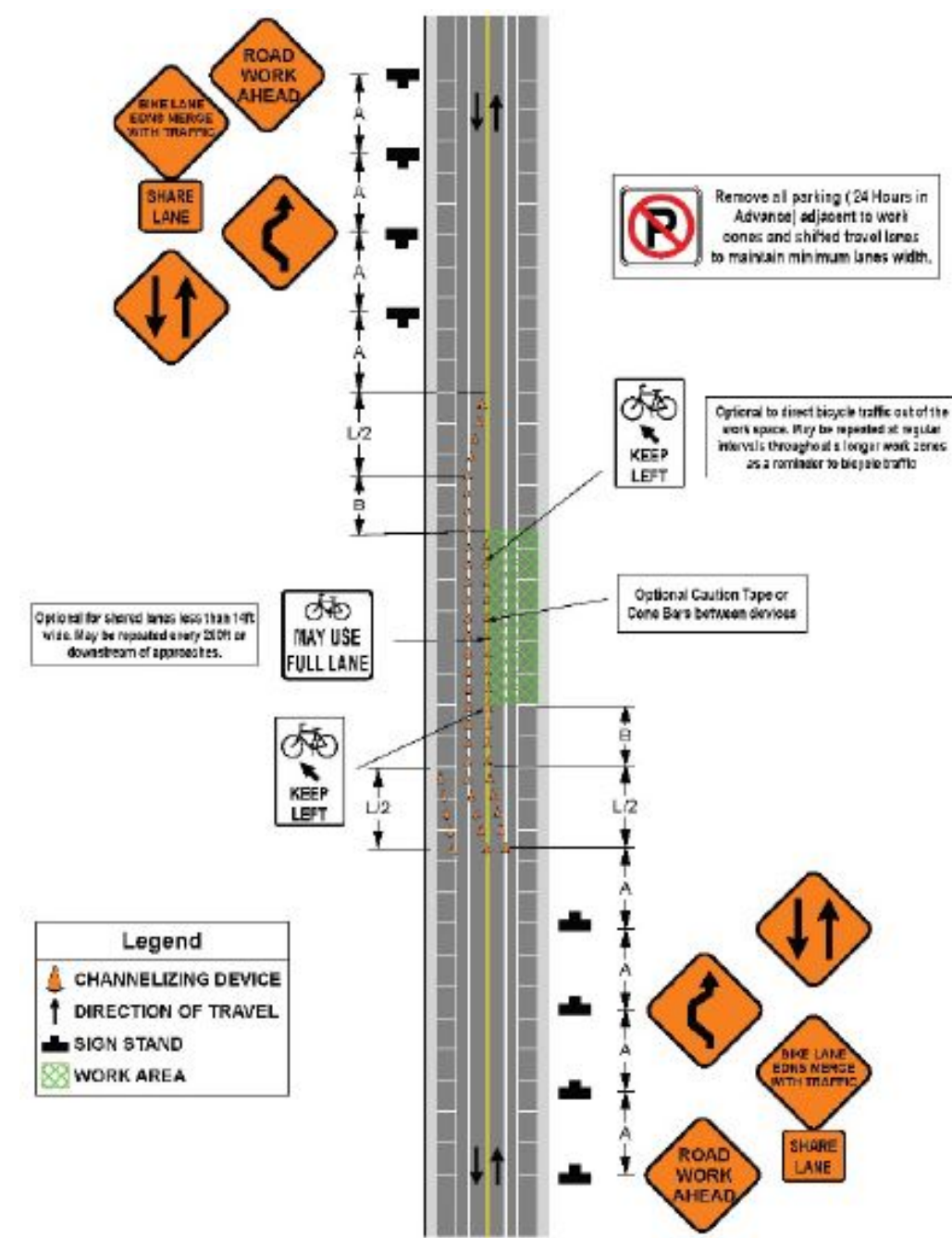


Left/Right Turn Lane Closures on Higher Volume Streets
(I.E. Collectors, Arterials, etc.) Within Signalized Intersections
(Contact Traffic Signal Staff)

Closures on Lower Volume Streets for Workzones within Intersections

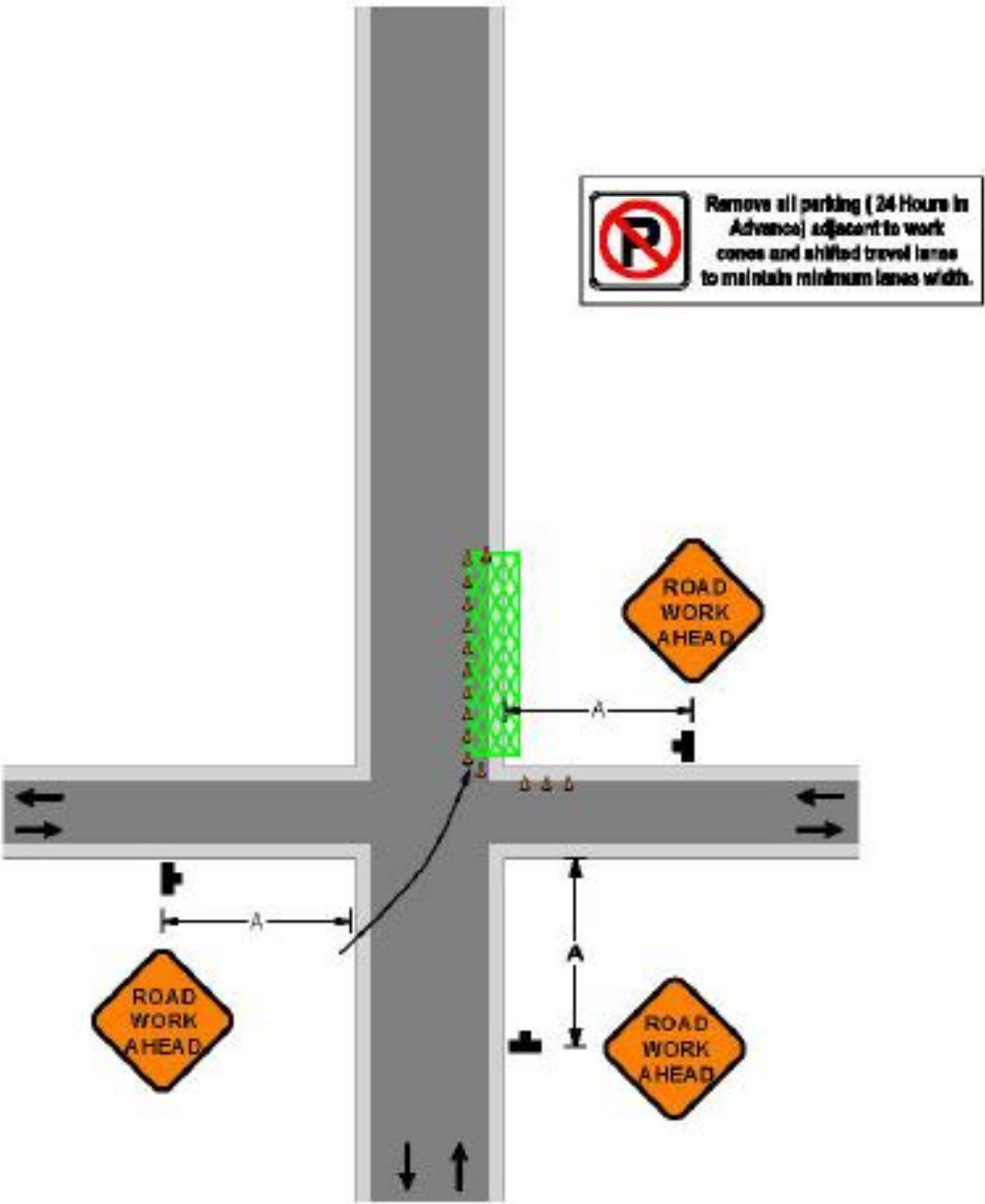
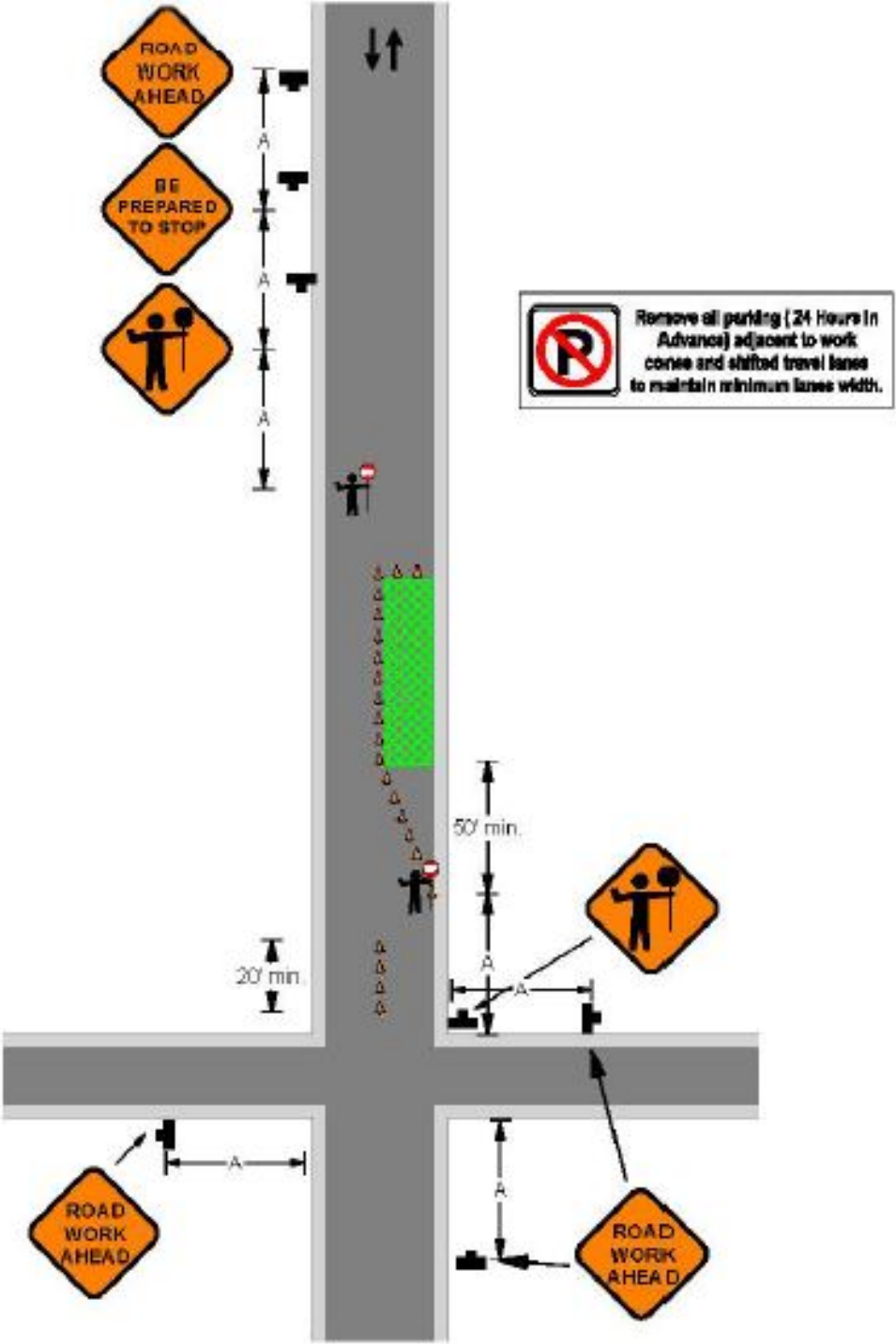
See Page A9 for A, B, C, L Distances





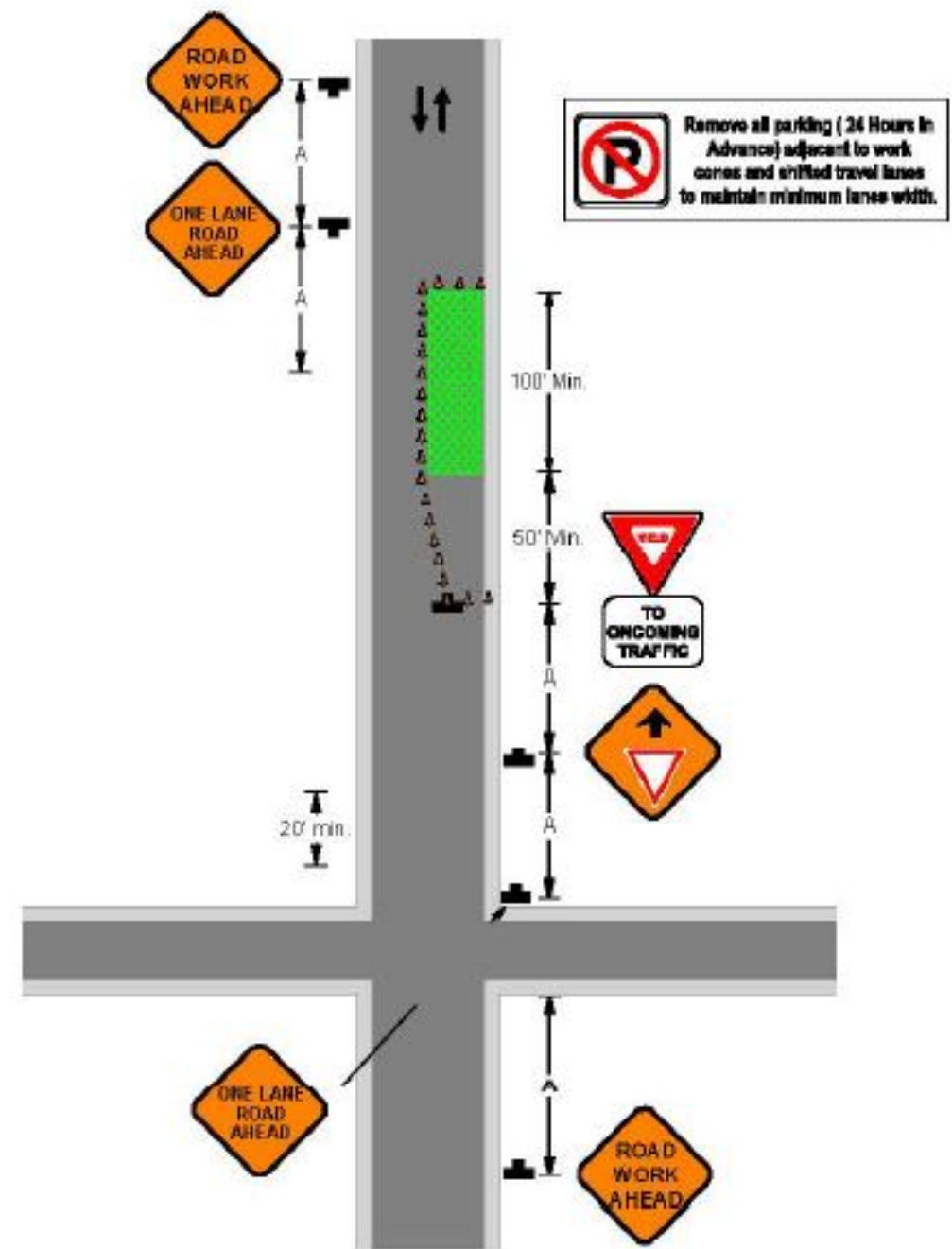
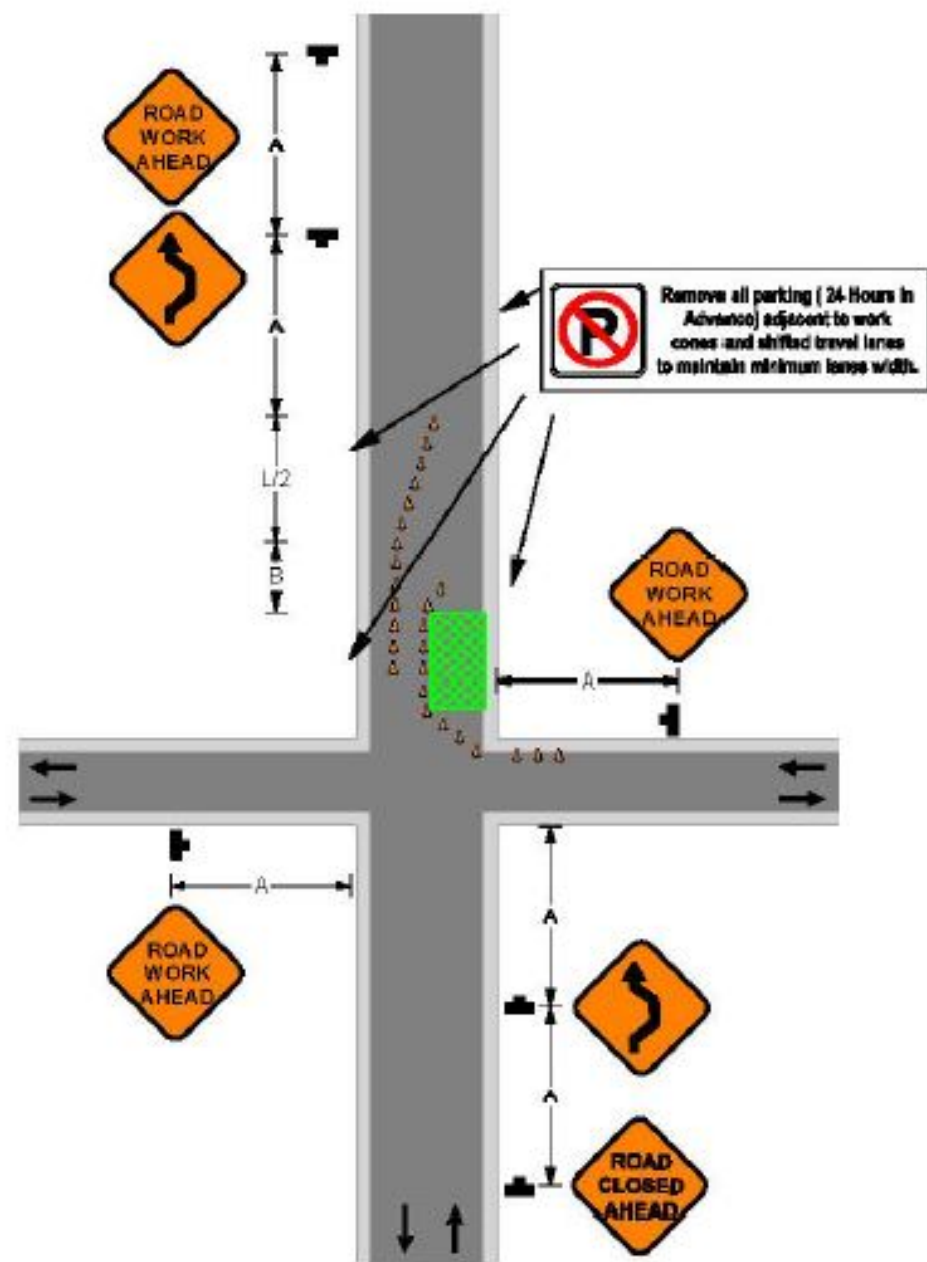
Partial street Closures on Lower Volume Streets

See Page A9 for A, B, C, L Distances



Partial street Closures on Lower Volume Streets

See Page A9 for A, B, C, L Distances



Road Type	Distance Between Signs**		
	A	B	C
Urban (low speed)*	100 feet	100 feet	100 feet
Urban (high speed)*	350 feet	350 feet	350 feet
Rural	500 feet	500 feet	500 feet
Expressway / Freeway	1,000 feet	1,500 feet	2,640 feet

Type of Taper	Taper Length (L)
Merging Taper	At least L
Shifting Taper	At least 0.5 L
Shoulder Taper	At least .33 L
One-Lane, Two Way Traffic Taper	100 Ft. (30m) Maximum
Downstream Taper	100 Ft. (30m) per Lane

Speed (S)	Taper Length (L) in feet
40 mph or less	$L = \frac{WS^2}{60}$
45 mph or more	$L = WS$

Where: L = taper length in feet
W = width of offset in feet
S = posted speed limit, or off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

Lane Width	Speed in MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH
10 Ft.	Merging Taper	105'	150'	205'	270'	450'	500'	550'	600'	650'
11 Ft.	Merging Taper	115'	165'	225'	294'	495'	550'	605'	660'	715'
12 Ft.	Merging Taper	125'	180'	245'	320'	540'	600'	660'	720'	780'



PON: CRE-01-01
DCR: DCR-187

PERMIT:
LEGEND Date: 6/20/2023

**PON**

**FIBEREQUIPMENT**

**MST 2**

**RISER**

POLE MR
Pole Use

**Power**

POLE NO MR
Pole Use

**Power**

STRUCTURE

**Small PED**

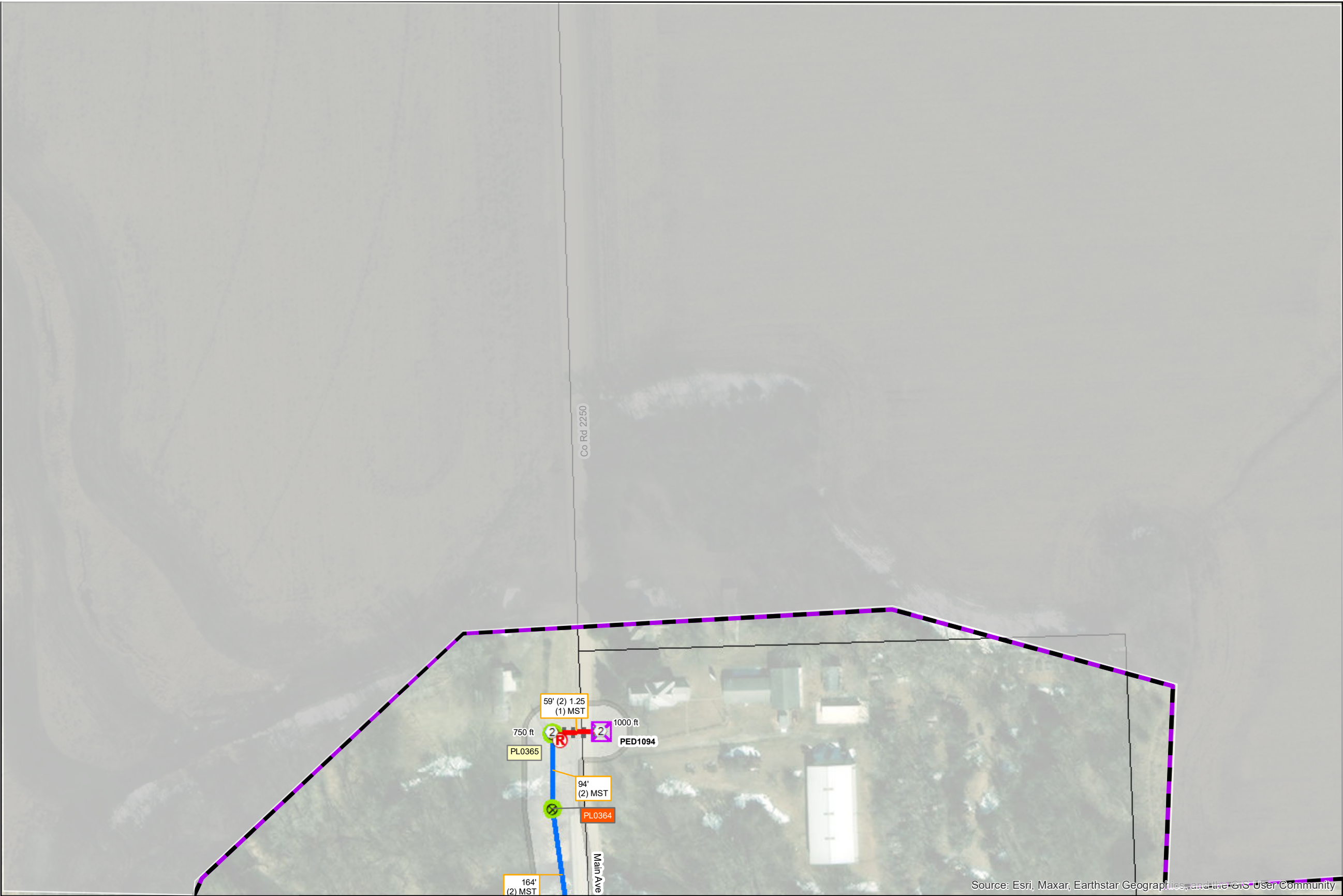
ROUTE
Placement Type

**UG Bore**

**Aerial Strand**

**Conduit**

**MST Runs**



FO87	FO88	FO89
FP87	FP88	FP89
FQ87	FQ88	FQ89



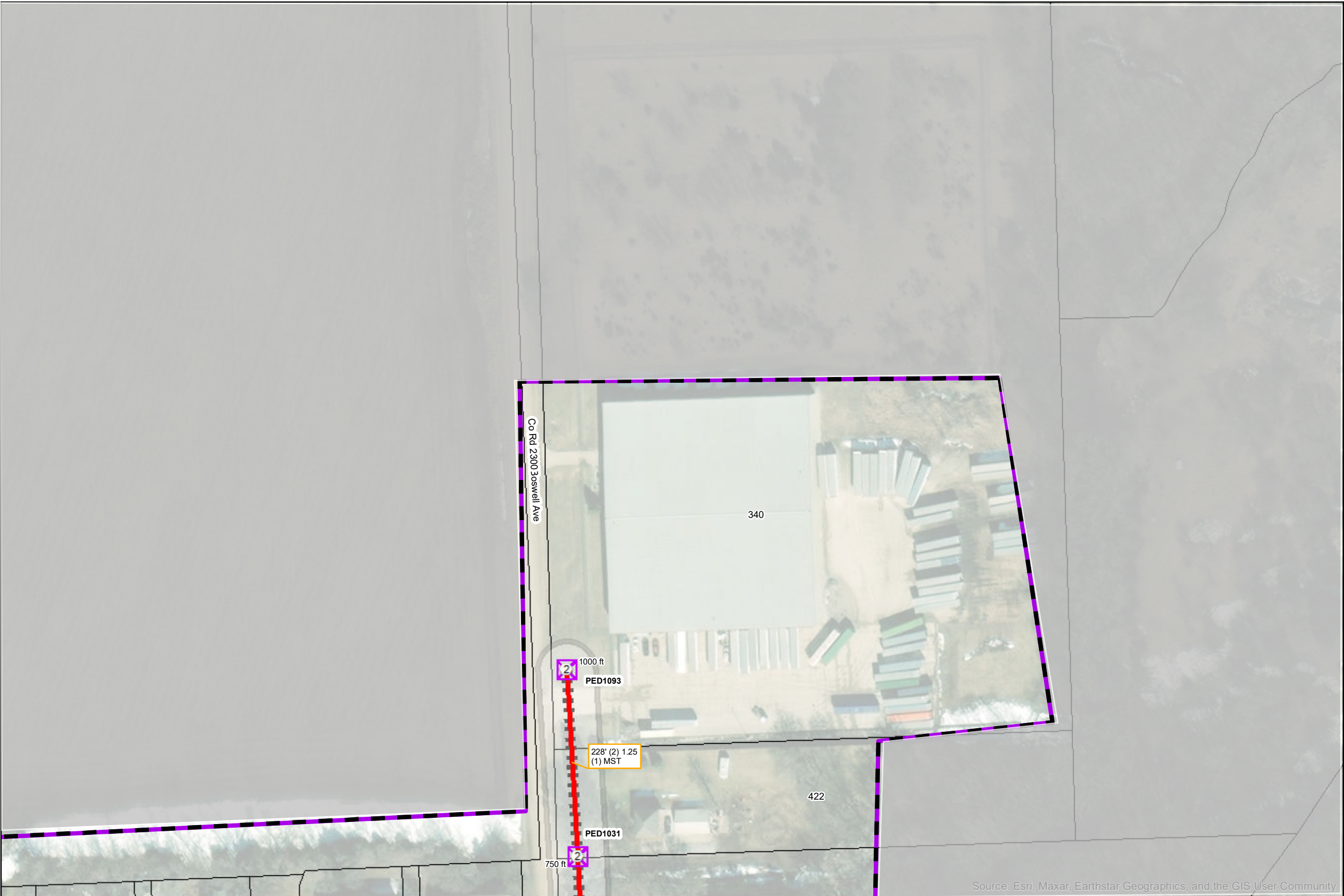
Notes:

Revisions:



1 in = 122 ft

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



PON: CRE-01-01
DCR: DCR-187

PERMIT:
LEGEND Date: 6/20/2023

PON

FIBEREQUIPMENT

MST 2

STRUCTURE

Small PED

ROUTE

Placement Type

UG Bore

Conduit

MST Runs

FO89	FO90	FO91
FP89	FP90	FP91
FQ89	FQ90	FQ91



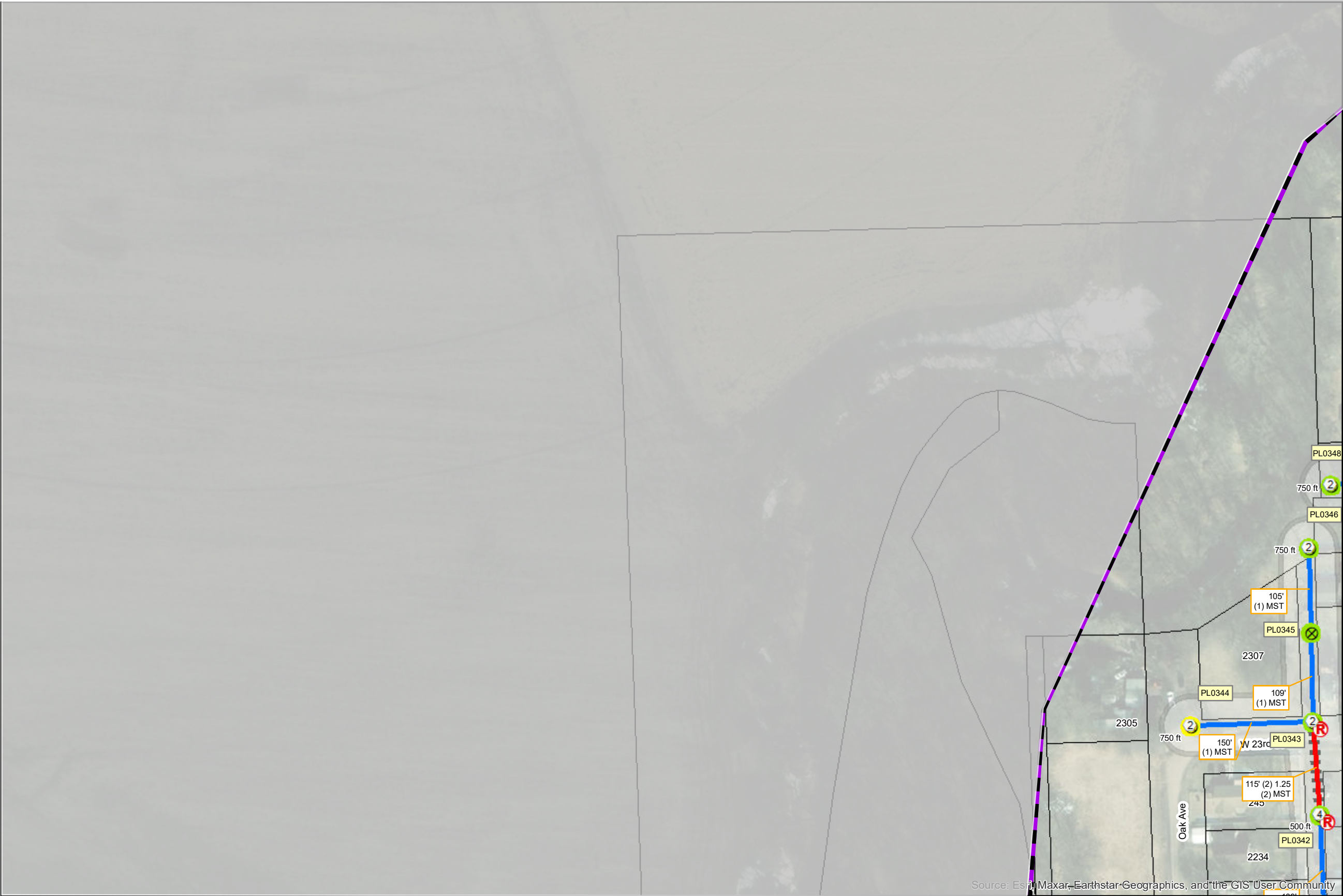
Notes:

Revisions:



1 in = 122 ft

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



Source: Esri, Maxar, Earthstar-Geographics, and the GIS User Community

PON: CRE-01-01
DCR: DCR-187

PERMIT:	
LEGEND	Date: 6/20/2023

PON

FIBEREQUIPMENT

④ MST 4

② MST 2

Ⓜ RISER

POLE NO MR

Pole Use

⊗ Power

⊗ Telecom

ROUTE

Placement Type

UG Bore

Aerial Strand

Conduit

MST Runs

FP86	FP87	FP88
FQ86	FQ87	FQ88
FR86	FR87	FR88

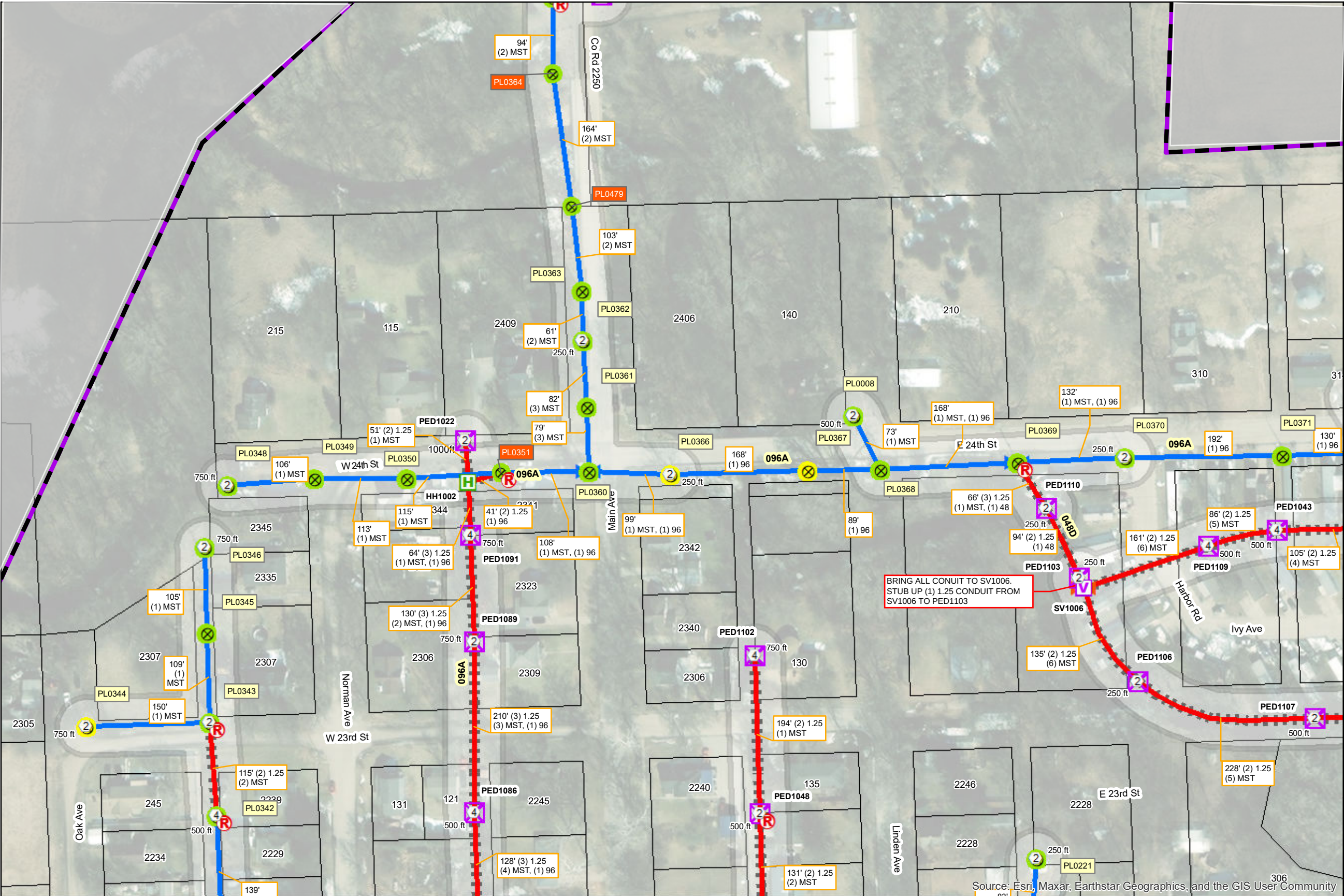


Notes:

Revisions:



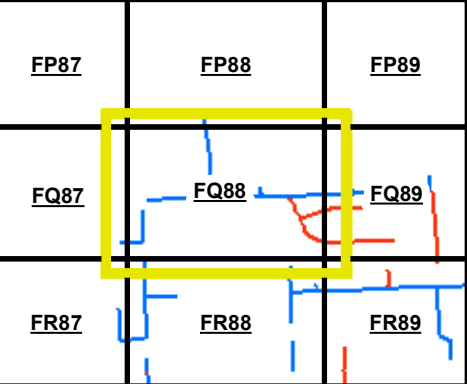
1 in = 122 ft



PON: CRE-01-01
DCR: DCR-187

PERMIT:
LEGEND Date: 6/20/2023

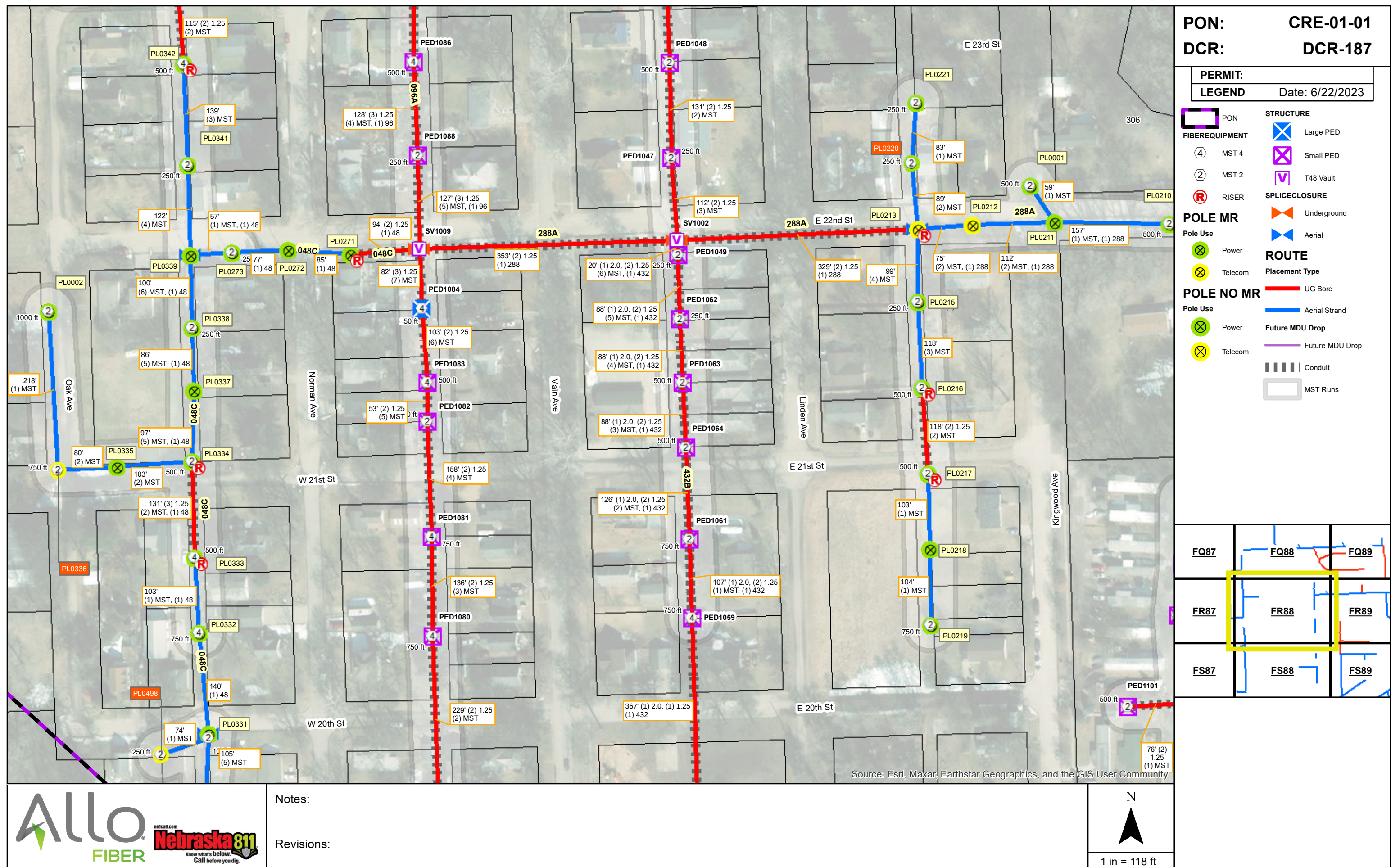
- | | |
|-------------------|------------------------|
| PON | STRUCTURE |
| FIBEREQUIPMENT | Small PED |
| MST 4 | T36 Vault |
| MST 2 | T48 Vault |
| RISER | SPLICECLOSURE |
| POLE MR | Underground |
| Pole Use | Aerial |
| Power | ROUTE |
| POLE NO MR | Placement Type |
| Pole Use | UG Bore |
| Power | Aerial Strand |
| Telecom | Future MDU Drop |
| | Future MDU Drop |
| | Conduit |
| | MST Runs |

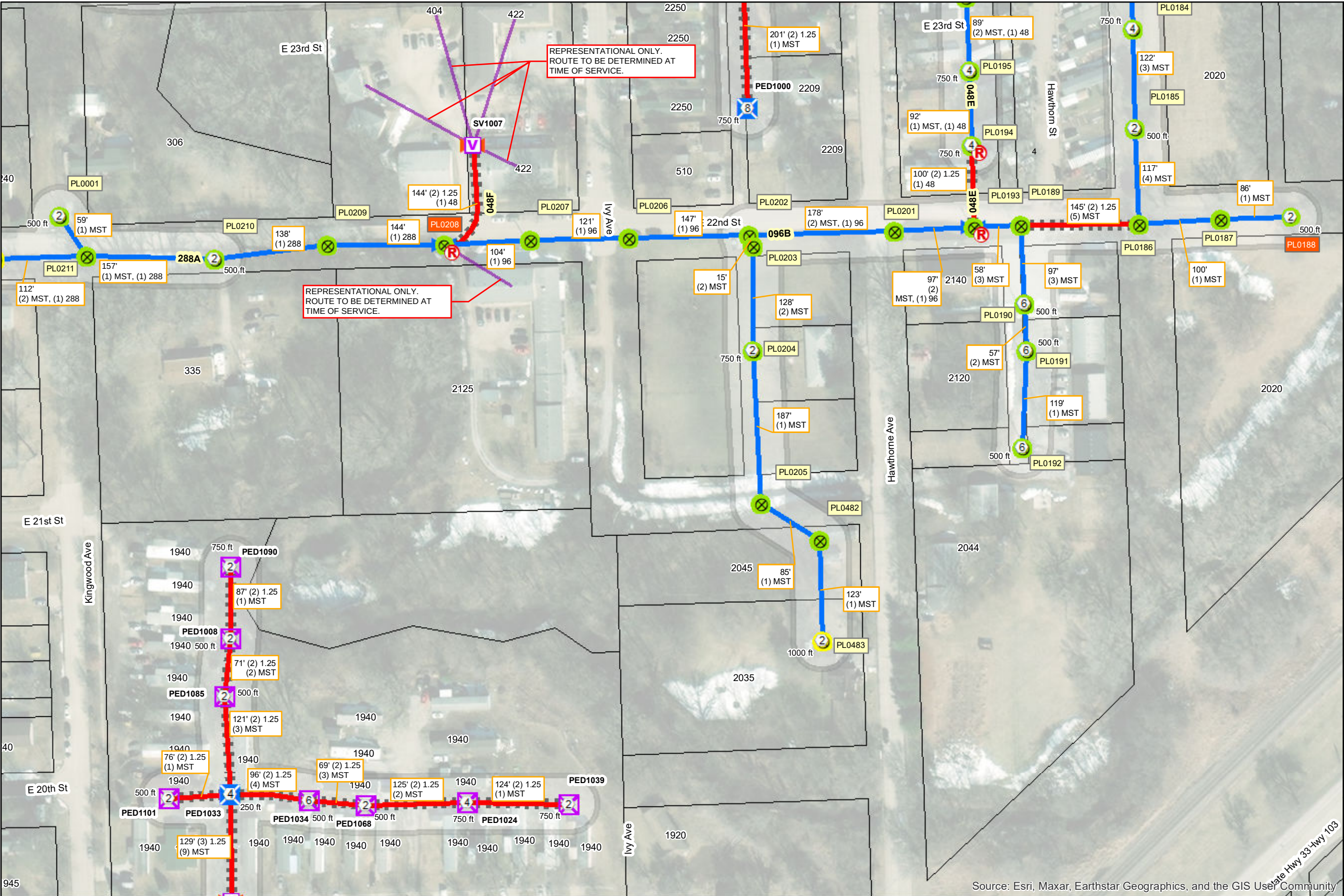


Notes:

Revisions:







PON: CRE-01-01
DCR: DCR-187

PERMIT:
LEGEND Date: 6/20/2023

PON

FIBEREQUIPMENT

MST 8

MST 6

MST 4

MST 2

RISER

POLE MR

POLE NO MR

STRUCTURE

Large PED

Small PED

T48 Vault

SPLICECLOSURE

Underground

Aerial

ROUTE

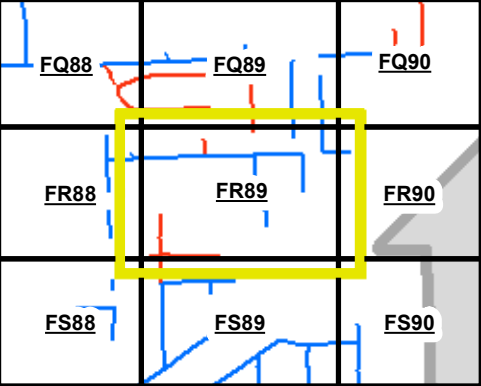
UG Bore

Aerial Strand

Future MDU Drop

Conduit

MST Runs



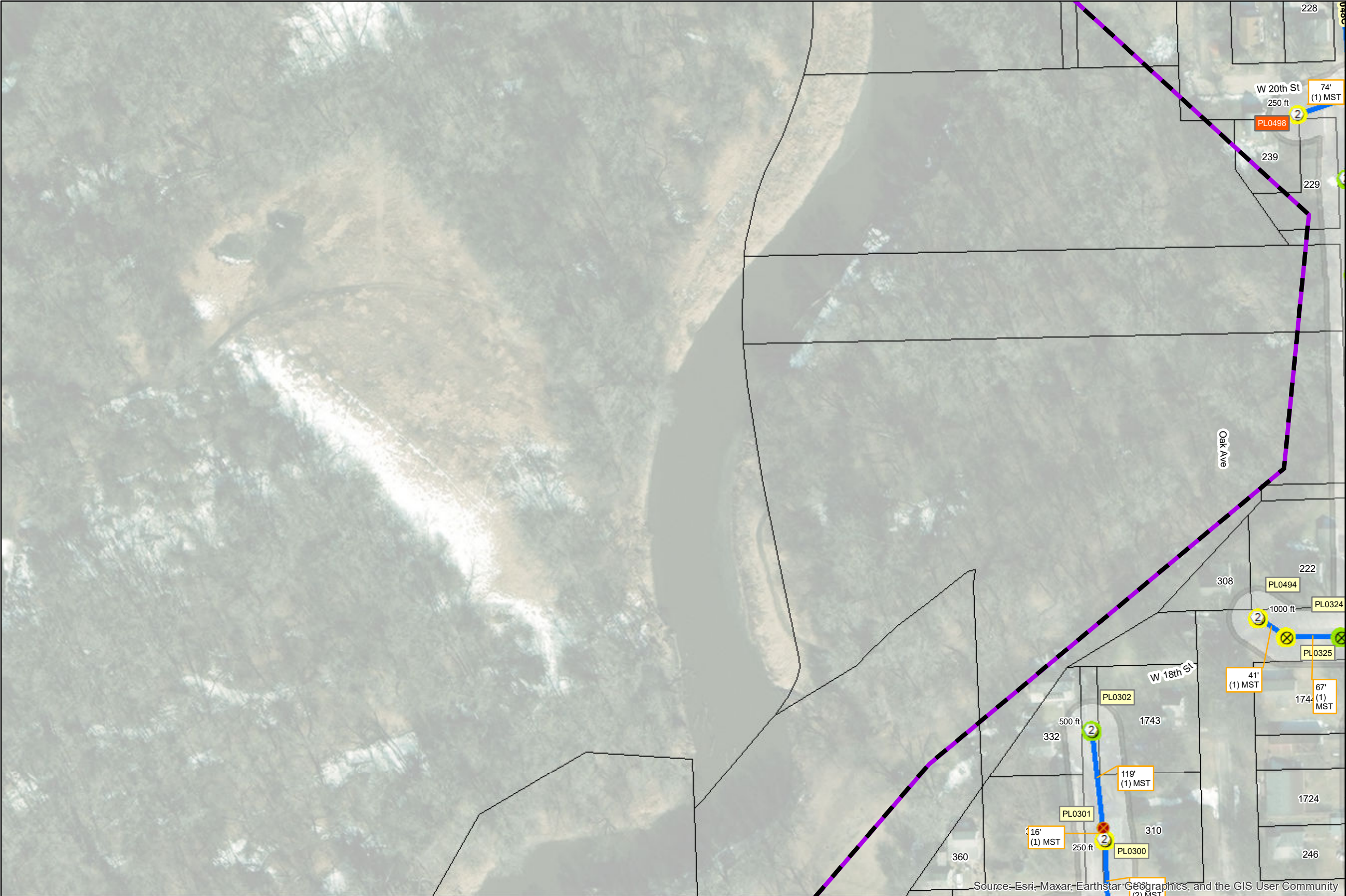
Notes:

Revisions:

N

1 in = 122 ft

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



PON: CRE-01-01
DCR: DCR-187

PERMIT:
LEGEND Date: 6/20/2023

PON
FIBEREQUIPMENT

MST 2

POLE MR
Pole Use

Telecom

POLE NO MR
Pole Use

Unknown

Power

Telecom

SPLICECLOSURE
Aerial

ROUTE
Placement Type

Aerial Strand

Future MDU Drop

Future MDU Drop

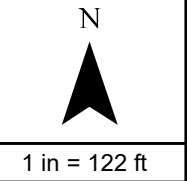
MST Runs

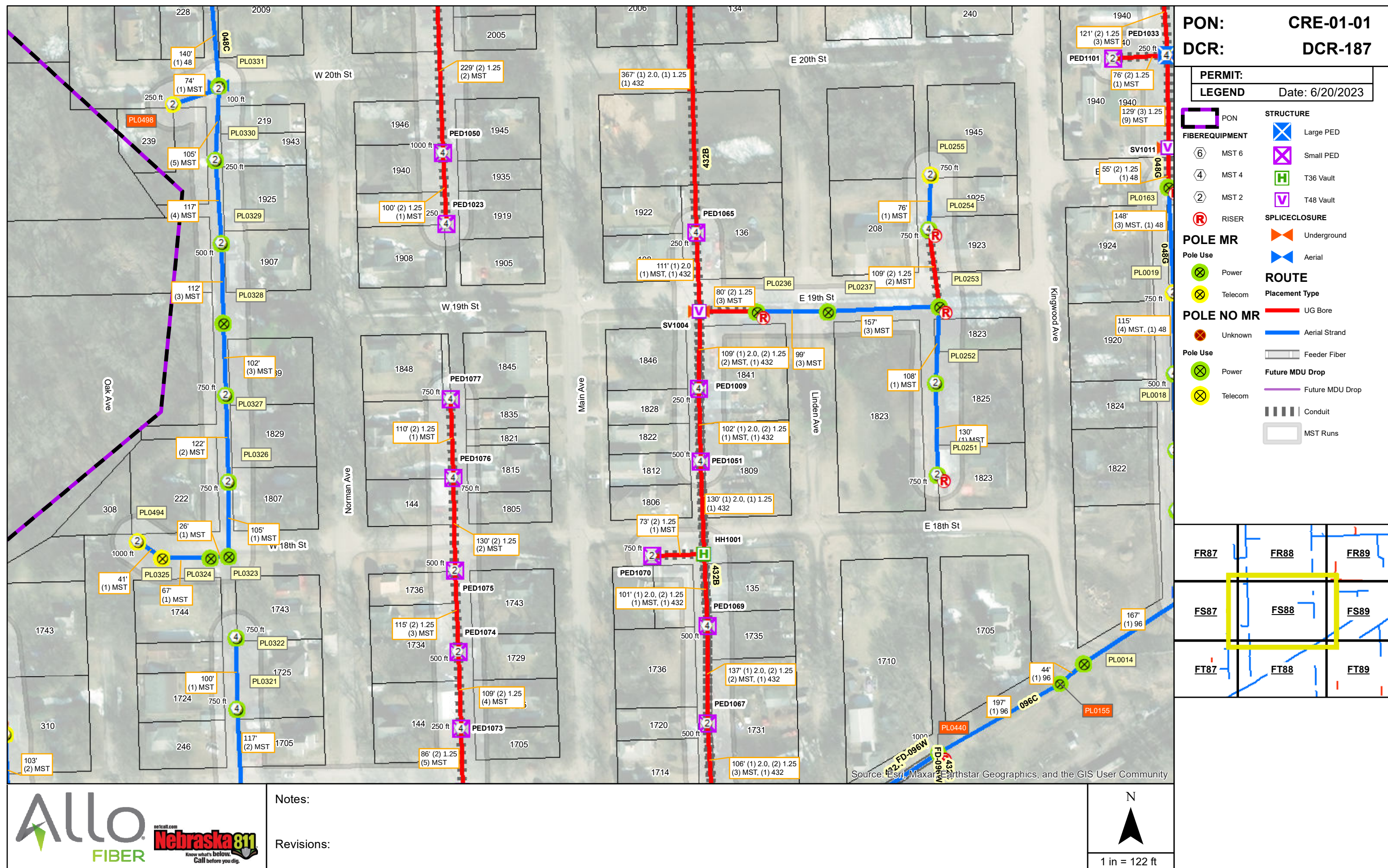
FR86	FR87	FR88
FS86	FS87	FS88
FT86	FT87	FT88

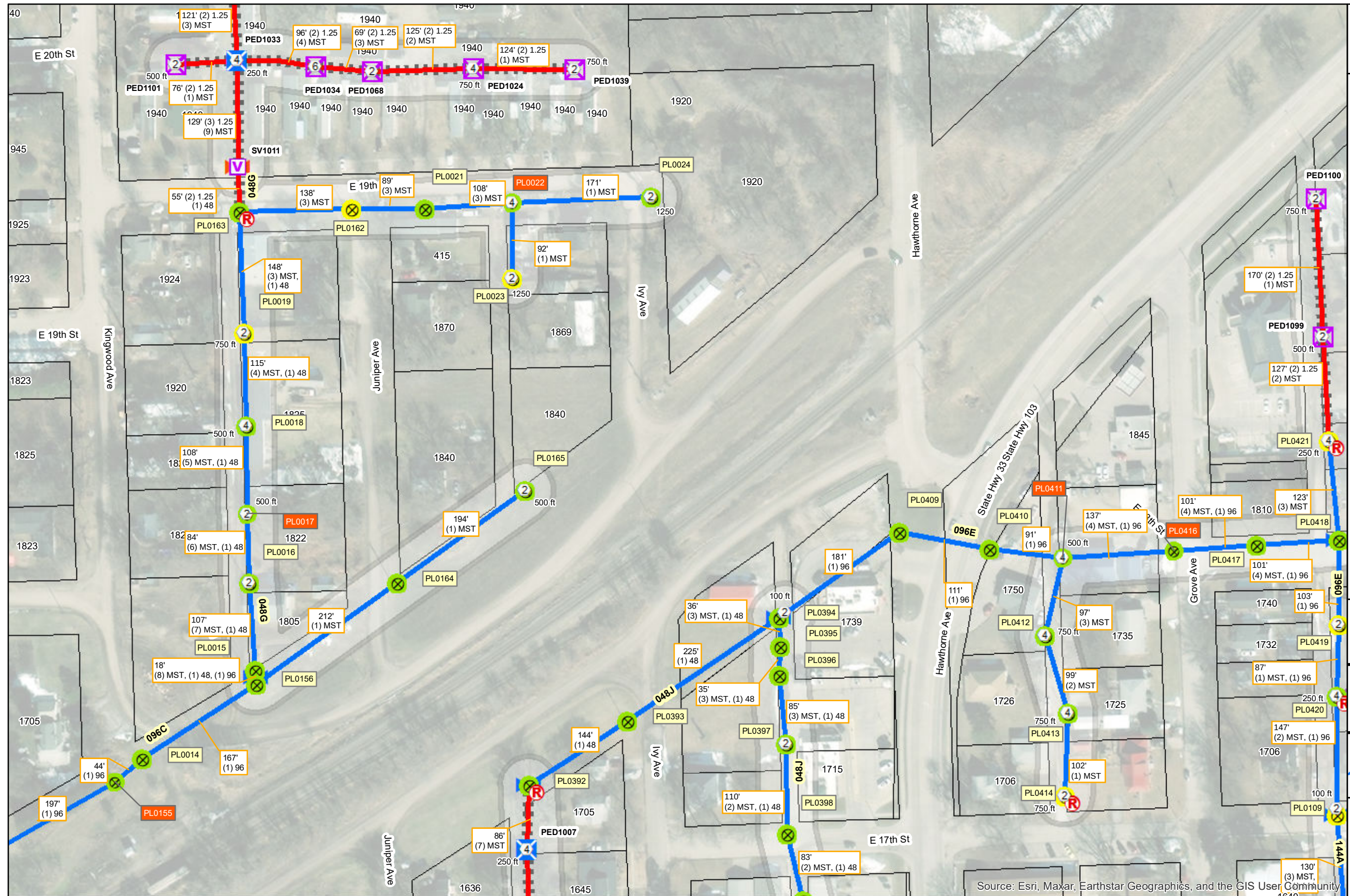


Notes:

Revisions:







PON: CRE-01-01

DCR: DCR-187

PERMIT:

LEGEND

Date: 6/20/2023

FIBEREQUIPMENT

⑥

MST 6

④

MST 4

②

MST 2

Ⓡ

RISER

⊗

Power

⊗

Telecom

⊗

Large PED

⊗

Small PED

Ⓡ

T48 Vault

⊗

Underground

⊗

Aerial

⊗

UG Bore

⊗

Aerial Strand

⊗

Future MDU Drop

⊗

Future MDU Drop

⊗

Conduit

⊗

MST Runs

POLE MR

Pole Use

⊗

Power

⊗

Telecom

POLE NO MR

Pole Use

⊗

Power

⊗

Telecom

ROUTE

Placement Type

⊗

UG Bore

⊗

Aerial Strand

⊗

Future MDU Drop

⊗

Future MDU Drop

⊗

Conduit

⊗

MST Runs

FR88

FR89

FR90

FS88

FS89

FS90

FT88

FT89

FT90

Notes:

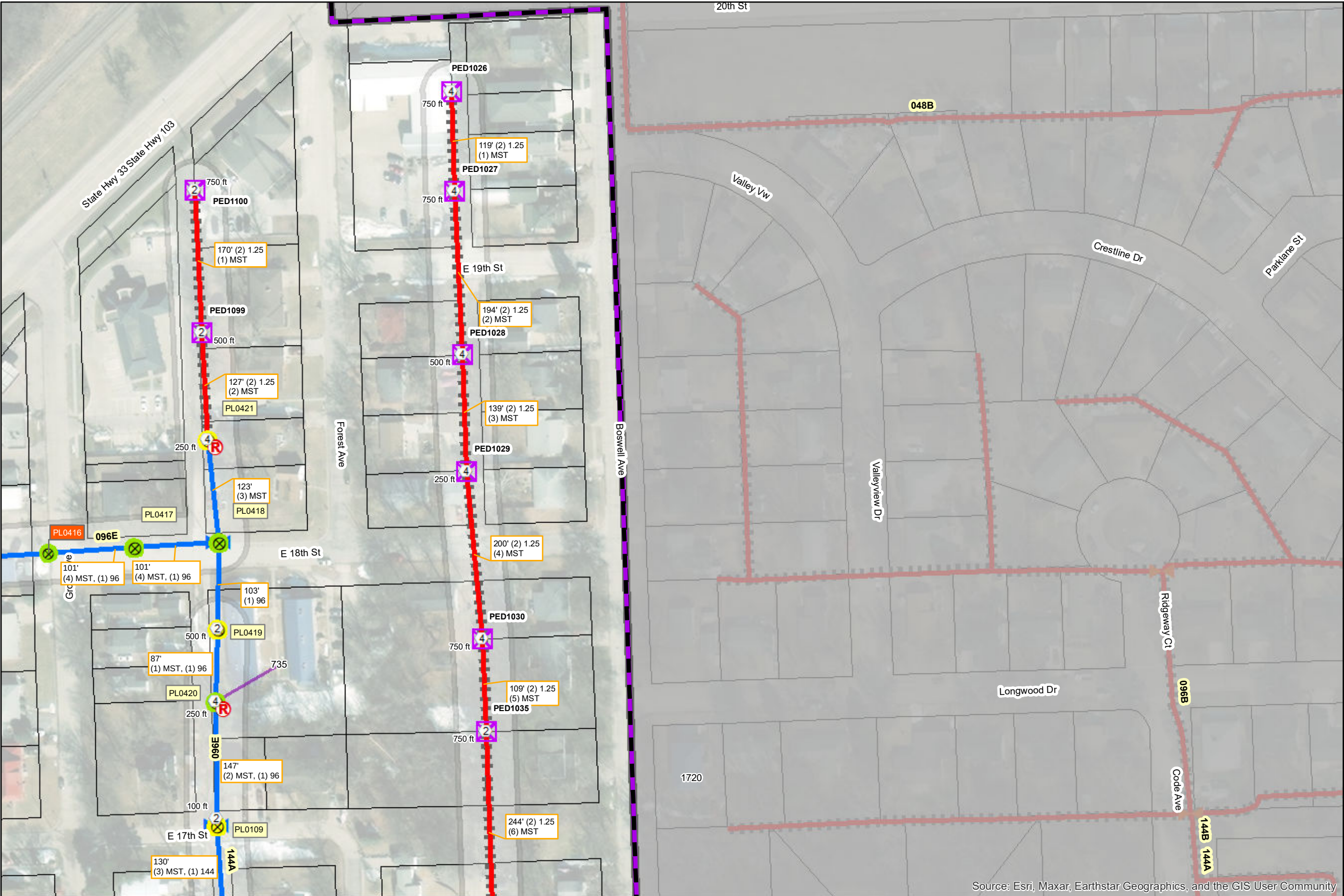
Revisions:

Allo FIBER

Nebraska 811

1 in = 122 ft

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PON: CRE-01-01
DCR: DCR-187

PERMIT:
LEGEND Date: 6/22/2023

PON

FIBEREQUIPMENT

MST 4

MST 2

RISER

Power

Telecom

STRUCTURE

SPLICECLOSURE

Underground

Aerial

ROUTE

Placement Type

UG Bore

Aerial Strand

Future MDU Drop

Future MDU Drop

Conduit

MST Runs

FR89	FR90	FR91
FS89	FS90	FS91
FT89	FT90	FT91

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

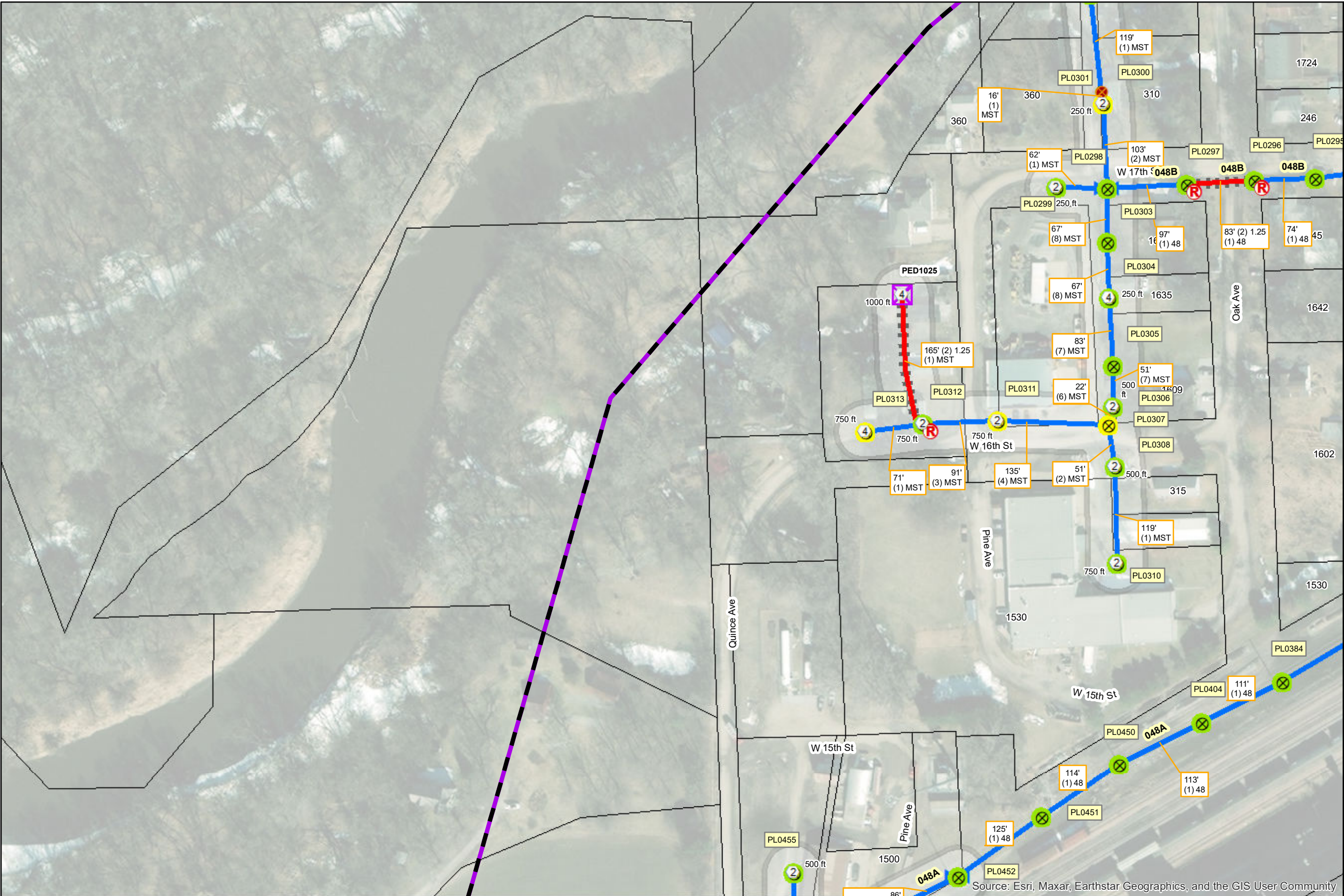


Notes:

Revisions:



1 in = 118 ft



PON: CRE-01-01
DCR: DCR-187

PERMIT:
LEGEND Date: 6/20/2023

PON

FIBEREQUIPMENT

MST 4

MST 2

RISER

Unknown

Power

Telecom

STRUCTURE

SPLICECLOSURE

Aerial

ROUTE

Placement Type

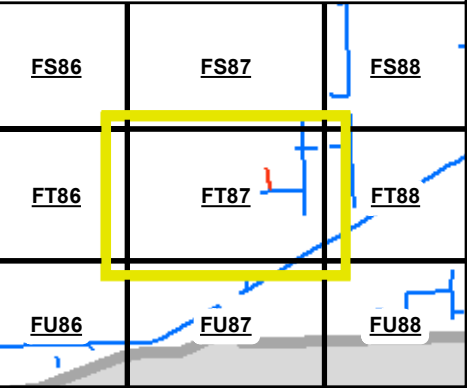
UG Bore

Aerial Strand

Future MDU Drop

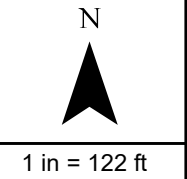
Conduit

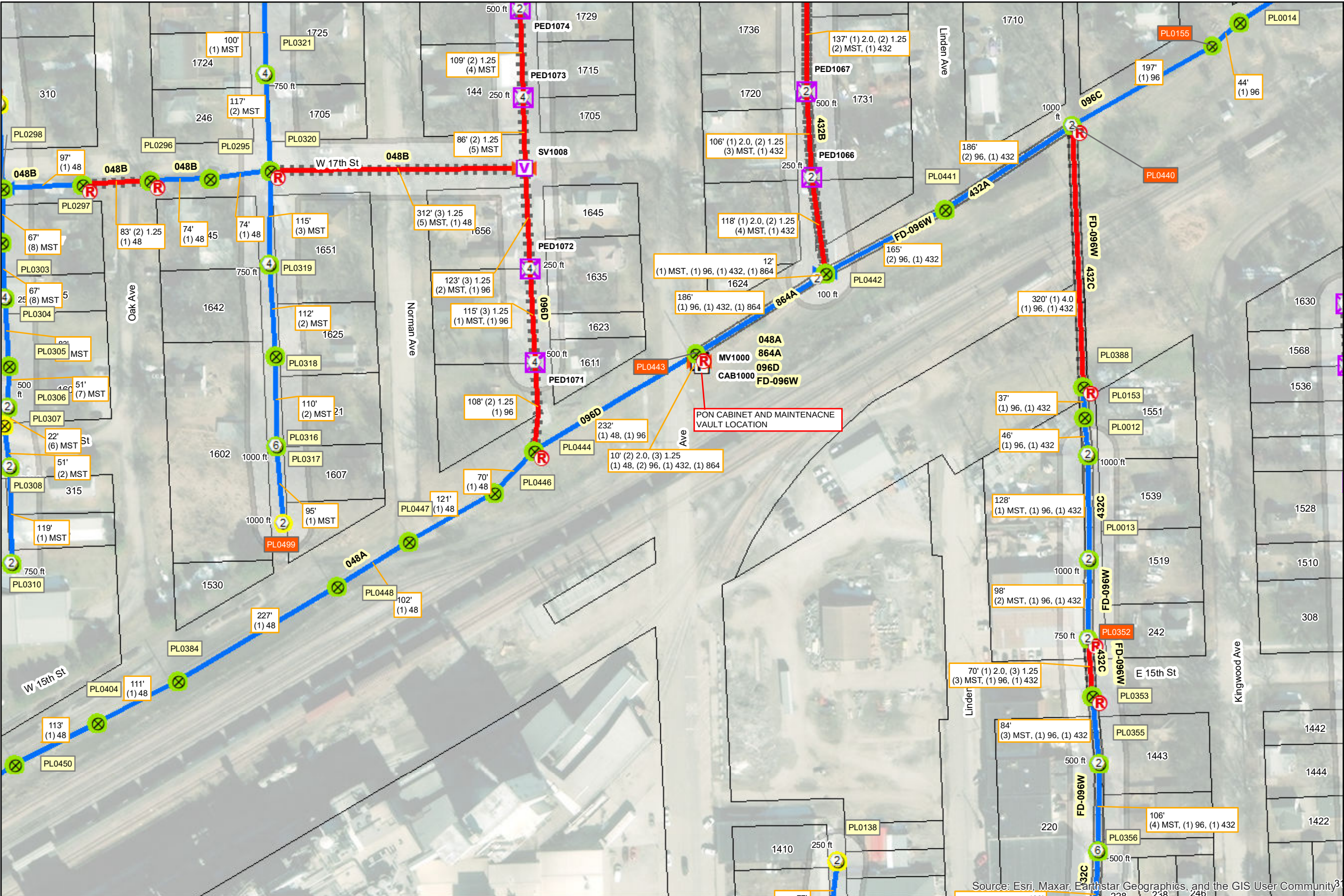
MST Runs



Notes:

Revisions:





PON: CRE-01-01
DCR: DCR-187

PERMIT:
LEGEND Date: 6/20/2023

PON

FIBEREQUIPMENT

MST 6

MST 4

MST 2

RISER

Pole MR Power

Pole MR Telecom

Pole NO MR Unknown

Pole NO MR Power

Pole NO MR Telecom

STRUCTURE

1152 Cabinet

Small PED

T48 Vault

T60 Vault

SPLICECLOSURE

Underground

Aerial

ROUTE

Placement Type

UG Bore

Aerial Strand

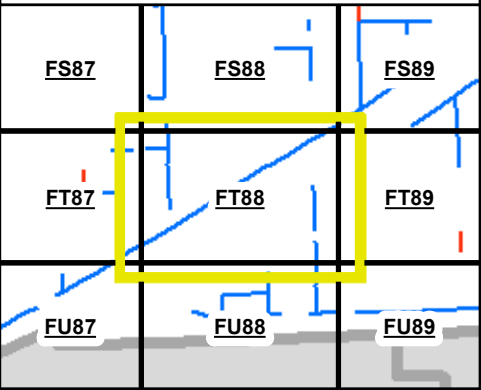
Feeder Fiber

Future MDU Drop

Future MDU Drop

Conduit

MST Runs

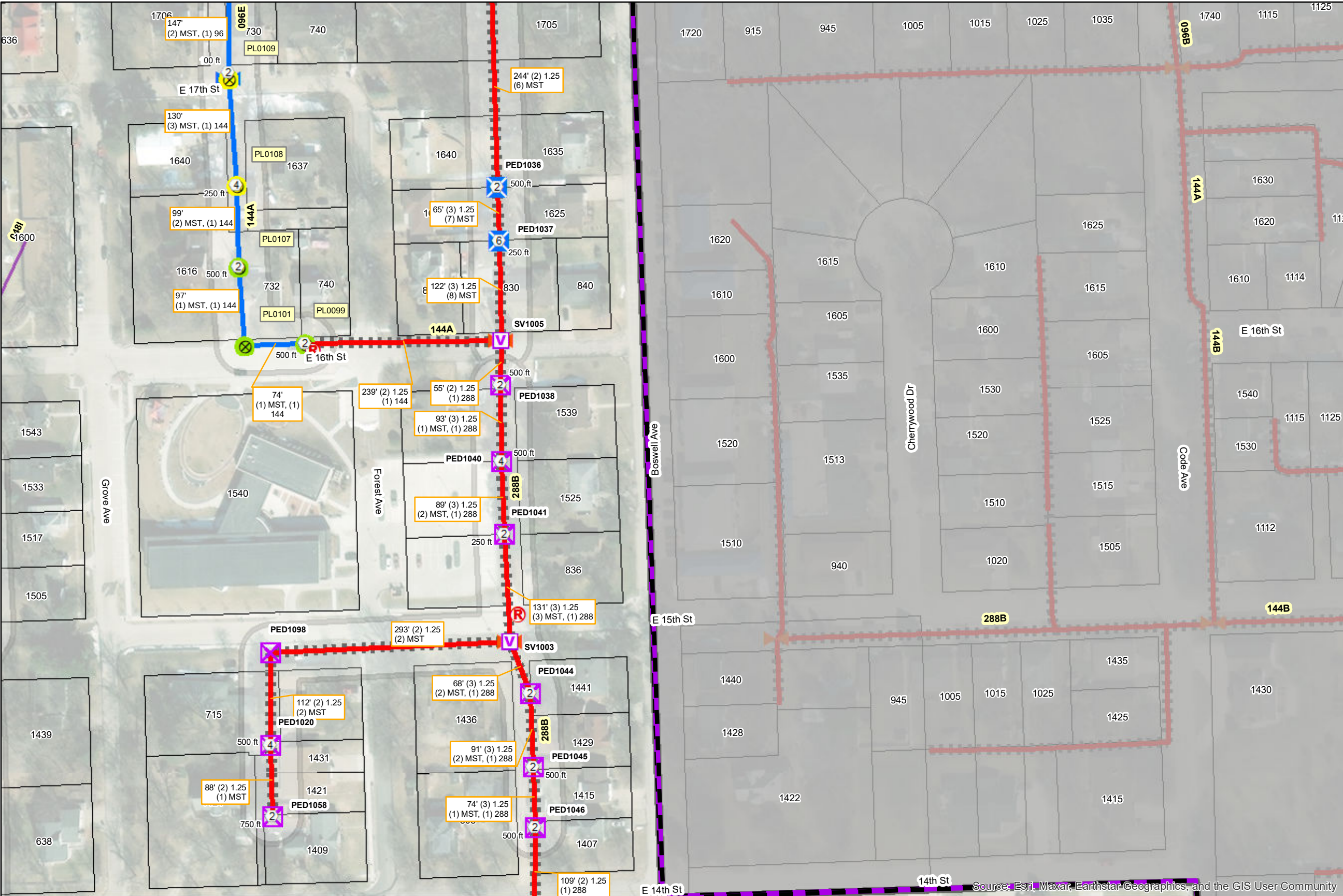


Notes:

Revisions:

N

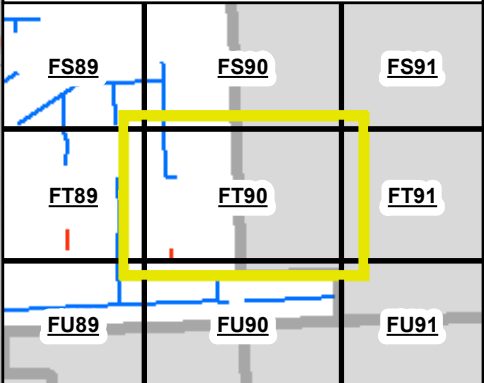
1 in = 122 ft



PON: CRE-01-01
DCR: DCR-187

PERMIT: _____
LEGEND Date: 6/20/2023

PON	STRUCTURE
FIBEREQUIPMENT	Large PED
MST 6	Small PED
MST 4	T48 Vault
MST 2	SPLICECLOSURE
RISER	Underground
POLE NO MR	Aerial
Pole Use	ROUTE
Power	Placement Type
Telecom	UG Bore
	Aerial Strand
	Future MDU Drop
	Future MDU Drop
	Conduit
	MST Runs



Notes: PLCS Project Routes have been permitted seperatly

Revisions:



1 in = 122 ft

