



WISCONSIN INDEPENDENT NETWORK
PROJECT ID # 01-788
PLACE 48 COUNT FIBER TO MAYO CLINIC
212 11TH ST S., LA CROSSE
LA CROSSE COUNTY, WISCONSIN

UNIT SUMMARY
CONTRACTOR TO COMPLETE

<u>DESCRIPTION</u>	<u>UNIT</u>	<u>QUANTITY</u>
DIRECTIONAL BORE TO PLACE (1) 1.25" DUCT	BMDB1	1050'
REMOVE & REPLACE SIDEWALK (SQUARE FEET)	UGRC	50 SQ.FT.
REMOVE & REPLACE ASPHALT (SQUARE FEET)	UGRA	4 SQ.FT.
PLACE (1) 24" x 36" x 36" COMPOSITE HAND HOLE	UH36	2
WARNING MARKER POST WITH TEST STATION	BM53 (TS)	2
BLOWING CABLE - 48 STRAND	UFOB(48)	1155'
PULLING CABLE - 12 STRAND	UFOP(12)	450'
PULLING CABLE - TRACER WIRE	UFOP(TRACER)	200'
BURIED FILLED FIBER OPTIC CLOSURE	HBFO(96)	1
BURIED FILLED FIBER OPTIC CLOSURE	HBFO(48)	1
FUSION SPLICE	HO1	18
ENTER EXISTING SPLICE HAND HOLE	WUH	3
PULL CABLE SLACK WITHIN EXISTING DUCT	WUD	100'
ABOVE GRADE BUILDING ENTRANCE	BM21	1
FIBER DISTRIBUTION PANEL	FDP	1

WIN Project Engineer:
 John Louis
 Outside Plant Engineer
 Cell: 715-864-2918

Contract Engineer
 Shera Purdy
 Mi-Tech Services
 Office: (608) 244-4140
 Cell: (608) 438-4139

Construction Contractor Information

Name: _____
 Phone: _____
 Foreman: _____
 Cell: _____
 Address: _____

AS STAKED

AS BUILT DATE:

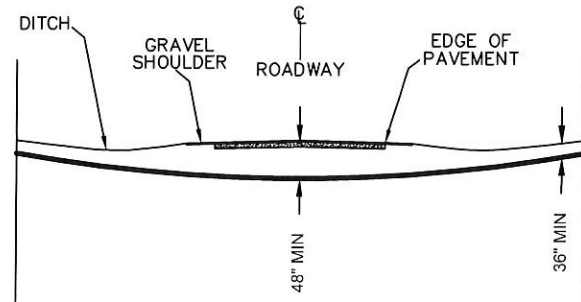
SOC CODE _____ - _____ - _____ - _____

GENERAL CONSTRUCTION NOTES

- 1) Wisconsin State Law requires excavators to notify Diggers Hotline a minimum of three (3) business days prior to all excavations (excluding Saturdays, Sundays, and legal Holidays). Hand dig with care within the 18" safety zone when exposing underground utilities. Caution - Diggers Hotline does not mark all private lines.
- 2) Underground utilities have been plotted from available records and field observations but are not necessarily exact. It is the contractor's responsibility to field locate all underground obstructions and utilities prior to construction. Complete repair of any and all damages incurred shall be at the expense of the construction contractor. Fiber placement subject to change upon field locate completion.
- 3) Coordinate all construction activities with WIN Project Engineer prior to construction.
- 4) Contractor is responsible for any erosion control, which includes submitting erosion plans, related to this project, should it become necessary.
- 5) Construction contractor shall provide all information for as-built drawings, including but not limited to: Fiber sequential's at hand hole walls and end of fiber; Depths of fiber at a minimum of 200' intervals along with centerline of all hard surface crossings, ie: roads, alleys, drives, waterways pipelines, railroads; Actual GPS location of hand holes; Actual running line from right-of-way, back of curb, edge of pavement or other known landmarks shown on sheets; Actual location of warning markers; and any other information required to produce an accurate and permanent record of the project.
- 6) The top of all hand holes set shall match final grade.
- 7) The contractor shall comply with all Wisconsin Independent Network policies and procedures and all requirements from local permitting authorities. The various permits obtained for the project are on file in the office of the Wisconsin Independent Network engineer.
- 8) Miscellaneous structures and obstructions such as sign posts; mail boxes; meter boxes; or other obstructions shall be avoided or removed and reinstalled to original or better condition.
- 9) The contractor shall be responsible, at all times; for the maintenance of streets and other utilities affected by construction operations - debris shall not be permitted to accumulate and all premises shall be maintained in a neat and workmanlike condition.
- 10) The contractor shall take adequate precautions to protect existing facilities, sidewalks, curbs, pavements, utilities, foliage, and adjoining property and structures outside of right-of-way; and to avoid damage thereto.
- 11) The following special provisions shall apply to traffic regulation during the extent of this project:
 - a. There shall be, at all times, adequate vehicle and pedestrian access for ingress and egress for the properties adjacent to the project.
 - b. During non-working hours, the contractor shall keep the existing traffic lanes clear from interference including all approaches and intersections.
 - c. If lane blockage is unavoidable, the contractor shall notify the traffic engineering department, police department, fire department, ambulance services, school bus garages, and other agency operations as appropriate so these agencies may re-route their vehicles around the construction zone(s).
 - d. Contractor is responsible to adhere to the Wis DOT manual on traffic control along with submitting traffic plans if required by permitting authority.
- 12) If required, trenches in paved areas shall be saw-cut to the full depth of surfacing or as required by the permitting authority. Paved surfaces shall be repaired in accordance with the permitting authority's specifications.
- 13) The contractor shall comply with all current and applicable Occupational Safety and Health Administration (OSHA), federal, state, and local rules and regulations governing the safety of employees and material during excavation, trenching, ditching, and installation and backfilling operations on this project.
- 14) No trench or excavation site shall be left open overnight or unattended.
- 15) Right-of-way restoration and street and sidewalk repair/replacement shall be in compliance with the local permitting authority.
- 16) All fiber cable minimum depth must be 36". 48" minimum depth under roadways and waterways. See typical roadway and waterway crossing details.
- 17) Inner ducts occupied by cable shall be sealed at termination points using rubber plugs and compression bands. Foam sealant will not be used.
- 18) Brushing and trimming as-required. Brush, branches, and refuse from clearing operations shall, without delay, be removed from the vicinity of the right-of-way.
- 19) Construction contractor(s) shall have a copy of the permit(s) on-site and shall be available for inspection immediately upon request by the permitting authority or permitting authority representative.
- 20) No excavation, digging, tunneling, trenching, boring, plowing, installation of facilities, equipment or improvements above, on or beneath the surface of any right-of-way may begin without a signed permit from the governing permitting authority.

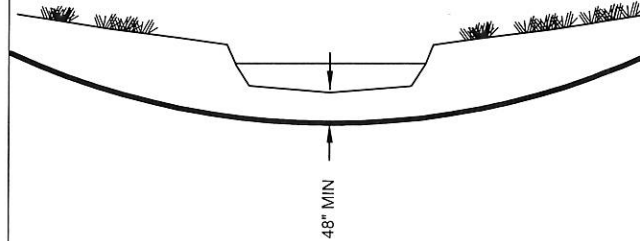
TYPICAL DETAIL DRAWINGS

TYPICAL ROADWAY CROSSING



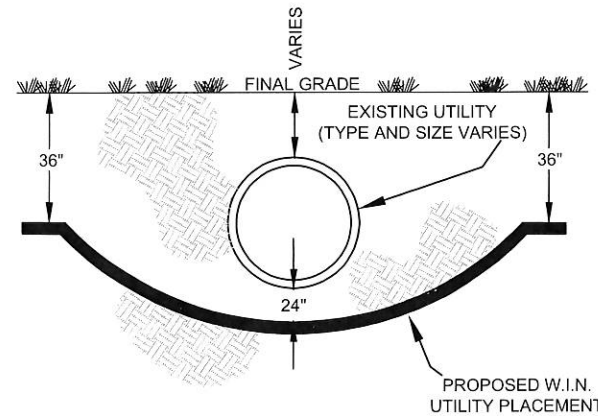
ALL DIMENSIONS SHOWN ARE MINIMUM DEPTHS
 PROPOSED FACILITIES PLACEMENT SHALL CROSS ALL EXISTING STREETS AT 48" MINIMUM DEPTH
 PERMITTING AUTHORITIES MAY REQUIRE GREATER THAN 48" MINIMUM DEPTH ROAD CROSSINGS

TYPICAL WATERWAY CROSSING



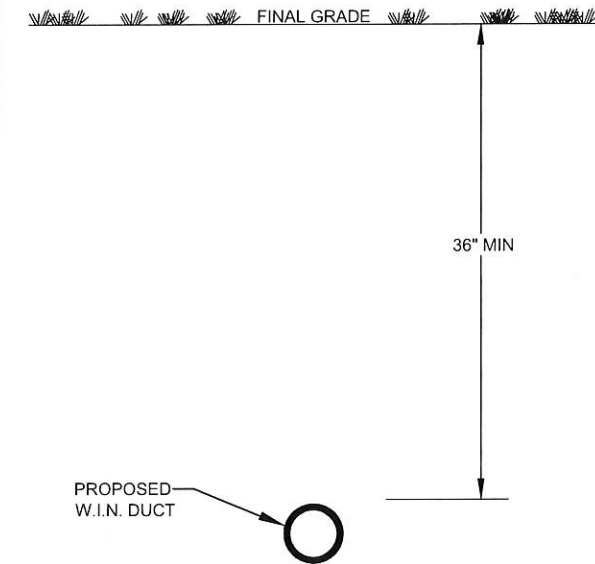
ALL DIMENSIONS SHOWN ARE MINIMUM DEPTHS
 PROPOSED FACILITIES PLACEMENT SHALL CROSS ALL WATERWAYS AT 48" MINIMUM DEPTH FROM BASE OF WATERWAY
 PERMITTING AUTHORITIES MAY REQUIRE GREATER THAN 48" MINIMUM DEPTH

TYPICAL UTILITY CROSSING



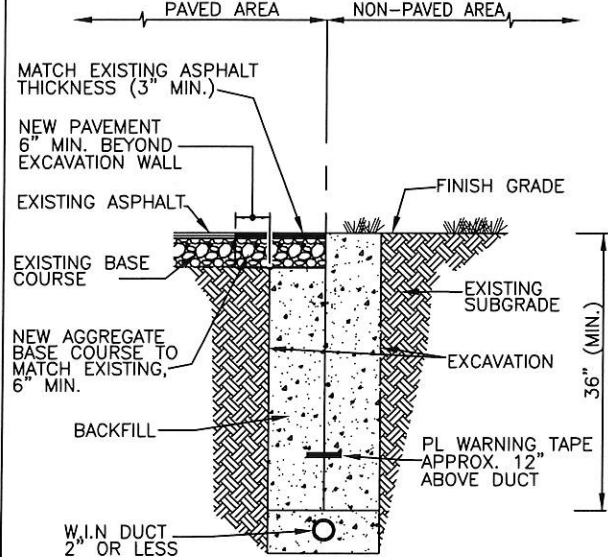
ALL DIMENSIONS SHOWN ARE MINIMUM DISTANCES
 PROPOSED FACILITIES PLACEMENT SHALL CROSS ALL EXISTING UTILITIES WITH A 24" MINIMUM VERTICAL AND HORIZONTAL SEPARATION
 FOREIGN UTILITY OWNERS AND/OR PERMITTING AUTHORITIES MAY REQUIRE GREATER THAN 24" SEPARATIONS

TYPICAL BORE DETAIL



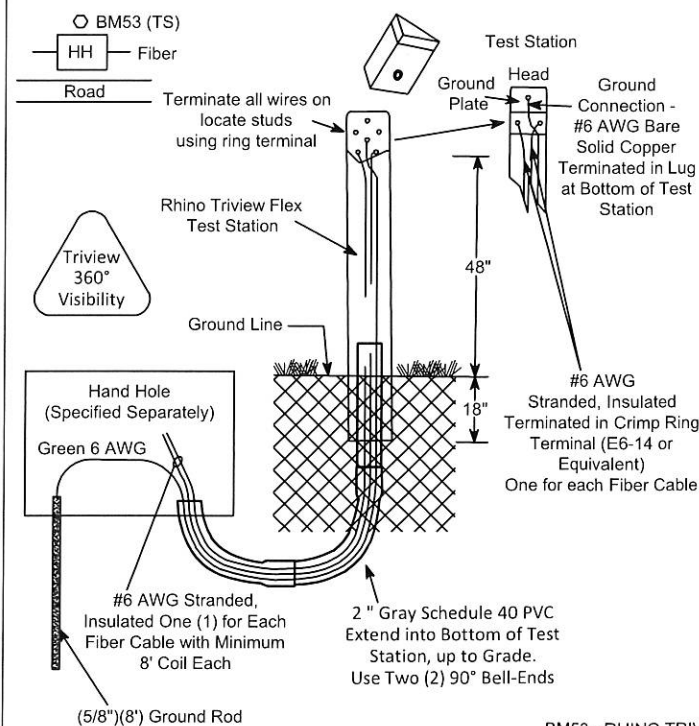
MAINTAIN MINIMUM HORIZONTAL AND VERTICAL SEPARATION OF EXISTING UTILITIES; REVIEW PERMITTING AUTHORITIES SPECIFICATIONS AND DETAILS FOR SEPARATION REQUIREMENTS
 NOT TO SCALE

TYPICAL TRENCH DETAIL BMT1 (ONE DUCT - 2" OR LESS) 1 DUCT HORIZONTALLY BY 1 DUCT VERTICALLY



MAINTAIN MINIMUM HORIZONTAL AND VERTICAL SEPARATION OF EXISTING UTILITIES; REVIEW PERMITTING AUTHORITIES SPECIFICATIONS AND DETAILS FOR SEPARATION REQUIREMENTS
 NOT TO SCALE

TYPICAL WARNING SIGN MARKER POST

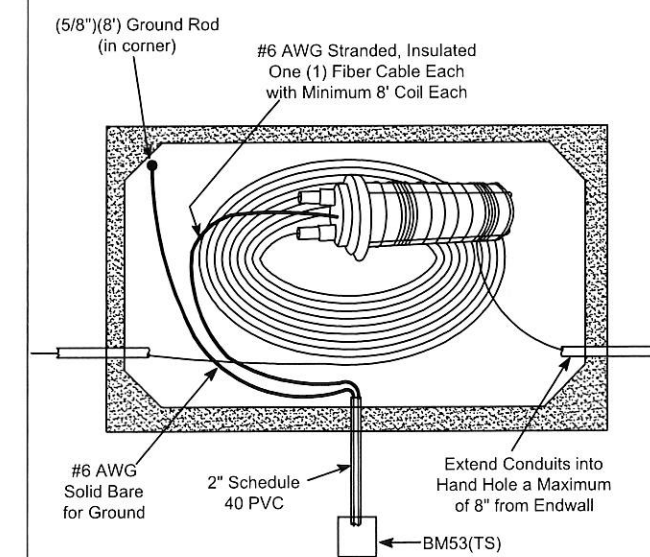


BM53 - RHINO TRIVIEW 72"
 BM53(TS) - RHINO TRIVIEW 84" (TEST STATION POST)

-- NOTES --

- Cap Colors:
 - Black: Warning Post Only
 - White: Hand Hole with Slack
 - Green: Test Station at Splice Locations
- Test Station to be Installed in Center of Long Side of Hand Hole Away from Roadway
- Contractor Supplied Conduit from Hand Hole to Test Station will be 2" Gray Schedule 40 PVC Extended into Bottom of Test Station Above Grade Level
- Test Station Conductors:
 - Ground Rod to Locate Plate - #6 Bare Solid
 - Test Station to Hand Hole for Each Cable - #6 Stranded, Insulated
 - #6 Bare Solid Terminated in Lug at Top of Test Station for Ground
 - Stranded #6 to be Terminated in Crimp Ring Terminal T&B E-6-14 or Equivalent

TYPICAL HANDHOLE DETAIL VIEW FROM TOP



6" COMPACTED #1 WASHED STONE (not shown)
 1/4" SCREEN MESH (not shown)
 NOT TO SCALE

SHEET LEGEND



COUNTY:
LA CROSSE

TOWNSHIP:
LA CROSSE

TOWN:
T16N / T15N

RANGE:
R7W

SECTION:
S32 / S5

MUNICIPALITY:
CITY OF LA CROSSE

ROAD NAME:
10TH ST SOUTH



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PROJECT ID # 01-788

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MAYO CLINIC
212 11TH ST S., LA CROSSE

ENGINEERING	DATE
COMPLETED:	04/2019

REVISIONS

W.I.N. PROJECT ENGINEER
JIM BIRKENHEIER
OUTSIDE PLANT ENGINEER
715-838-4007

REDLINE

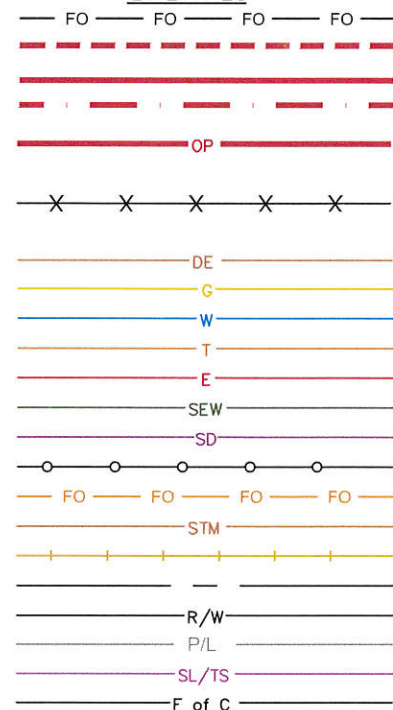
AS BUILT

SCALE NO SCALE



Mi-Tech
6484 Ronald Reagan Ave.
Madison, WI 53704
(800) 465-8050

LINETYPES



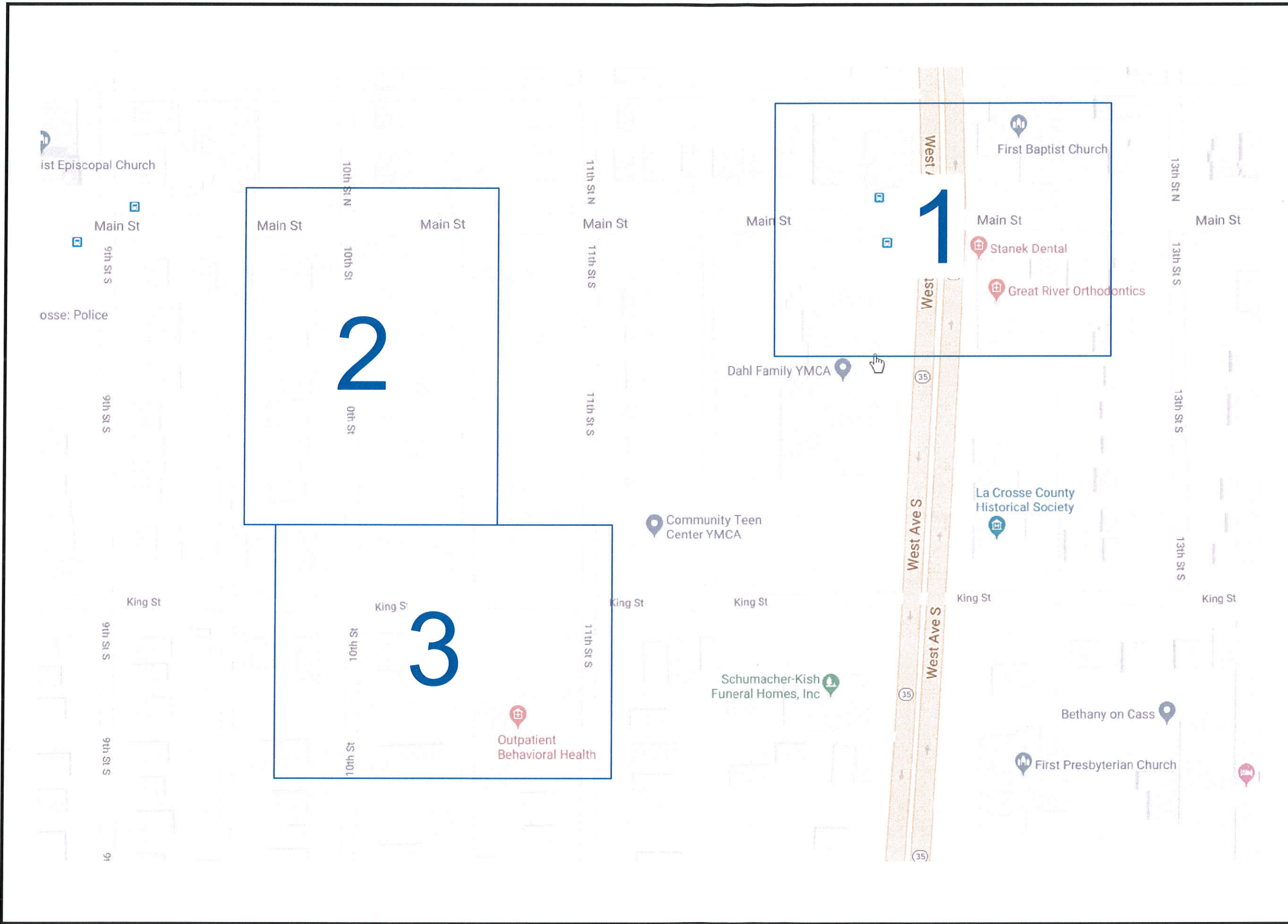
UG FIBER - EXISTING
UG FIBER - PROPOSED
UG FIBER - PROPOSED BORE
UG DUCT - PROPOSED
FIBER - PULL THRU EXISTING (OVERPULL)
UG FIBER - ABANDON-IN-PLACE
DISTRICT ENERGY
GAS
WATER
TELEPHONE
ELECTRIC
SANITARY SEWER (SEW)
STORM DRAIN
FENCE
FIBER OPTIC
STEAM
RAILROAD
ROAD CENTERLINE
RIGHT OF WAY
PROPERTY LINE
STREET LIGHT/TRAFFIC SIGNAL
EDGE OF PAVEMENT

SYMBOL DESCRIPTION

ASW	ASPHALT SIDEWALK
BIP	BLACK IRON PIPE
BSP	BLACK STEEL PIPE
CSW	CONCRETE SIDEWALK
EOP	EDGE OF PAVEMENT
EOTW	EDGE OF TRAVEL WAY
F of C	FACE OF CURB
HDPE	HIGH DENSITY POLYETHYLENE
HH	HANDHOLE
JB	JUNCTION BOX
MH	MANHOLE
MP	MILE POST
O/S	OFFSET
BOC	BACK OF CURB
RGS	RIGID GALVANIZED STEEL CONDUIT
R/W	RIGHT OF WAY
STA.	STATION

T	TELEPHONE
P	POWER TRANSFORMER
CB	CATCH BASIN/INLET
FH	FIRE HYDRANT
GB	GROUND/BOND
SL	STREET LIGHT
TR	TREE
C	CULVERT
WW	WING WALL
B	BRIDGE
W	LOCATABLE POLY DOME MARKER
HH	HANDHOLE - EXISTING
HH	HANDHOLE - PROPOSED
MH	MANHOLE - EXISTING
MH	MANHOLE - PROPOSED
PB	PULLBOX - EXISTING
PB	PULLBOX - PROPOSED
B	BUILDING CALLOUT - PROPOSED

V	VAULT - EXISTING
V	VAULT - PROPOSED
AS	AERIAL STORAGE - EXISTING
AS	AERIAL STORAGE - PROPOSED
V	VAULT/BUILDING STORAGE - EXISTING
V	VAULT/BUILDING STORAGE - PROPOSED
PA	POLE ANCHOR/DOWN GUY - EXISTING
PA	POLE ANCHOR/DOWN GUY - PROPOSED
PA	PROPOSED DOWN GUY ON EXISTING ANCHOR
M	MANHOLE
U	UTILITY POLE - EXISTING
P	POLE - PROPOSED
FDP	TERMINATION - EXISTING
FDP	TERMINATION - PROPOSED
SP	SPLICE POINT - EXISTING
SP	SPLICE POINT - PROPOSED



SHEET OVERVIEW



COUNTY:	LA CROSSE
TOWNSHIP:	LA CROSSE
TOWN:	T16N / T15N
RANGE:	R7W
SECTION:	S32 / S5
MUNICIPALITY:	CITY OF LA CROSSE
ROAD NAME:	10TH ST SOUTH



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COMPLETED:	04/2019

REVISIONS

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JIM BIRKENHEIER
OUTSIDE PLANT ENGINEER
715-838-4007

REDLINE

AS BUILT

SCALE NO SCALE

mi-TECH
 Mi-Tech
 6484 Ronald Reagan Ave.
 Madison, WI 53704
 (800) 465-8050

NOTES:

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PERMITS REQUIRED THIS PRINT:
NONE



COUNTY:

LA CROSSE

TOWNSHIP:

LA CROSSE

TOWN:

T16N

RANGE:

R7W

SECTION:

S32

MUNICIPALITY:

CITY OF LA CROSSE

ROAD NAME:

MAIN ST



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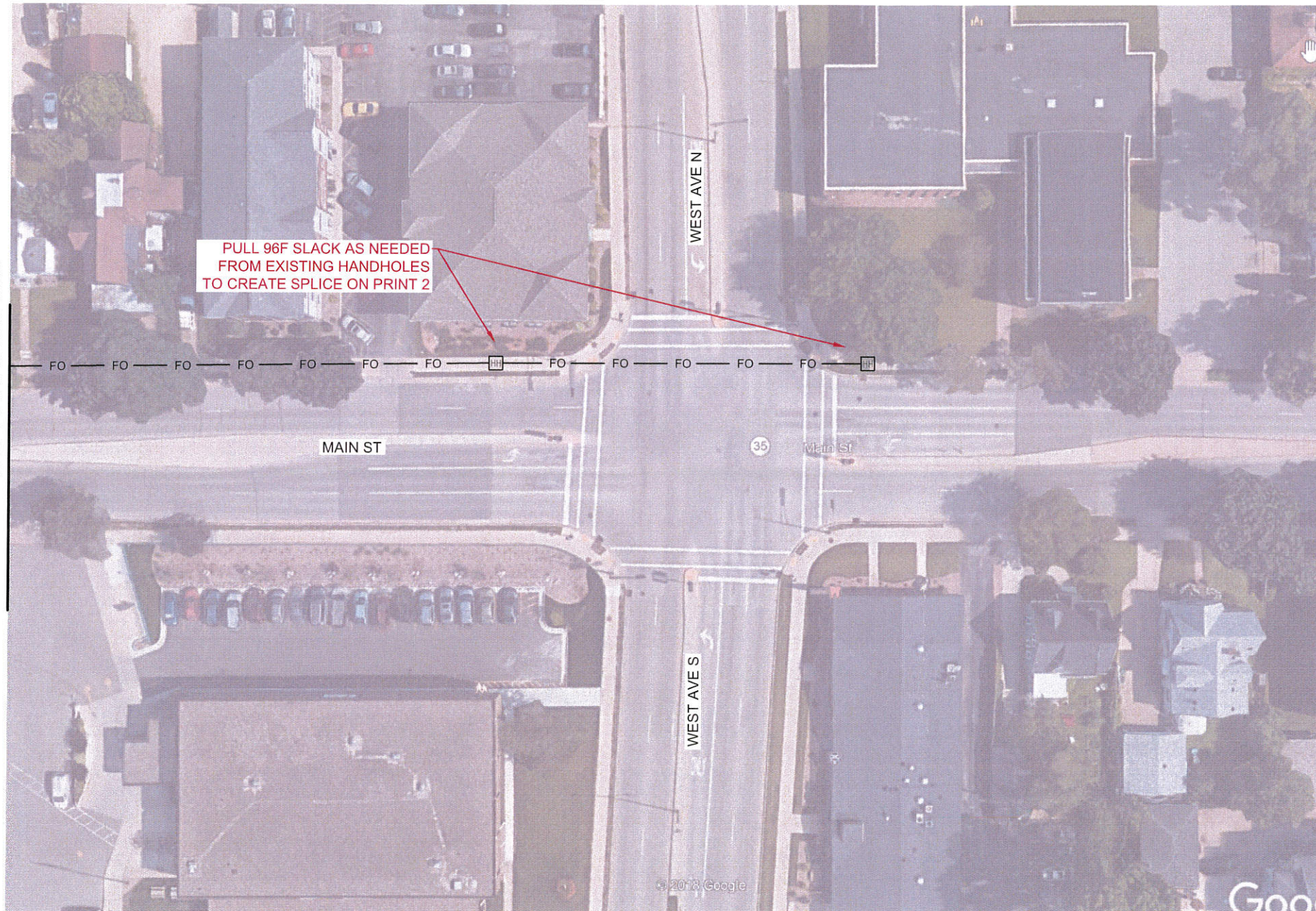
AS BUILT

SCALE NO SCALE



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AT MAIN ST & 10TH ST S INTERSECTION - PRINT 2
APPROXIMATELY 1,000' TO INTERSECTION



WISCONSIN STATUTE 182.0175 (1974) REQUIRES CONTRACTORS TO NOTIFY DIGGERS HOTLINE A MINIMUM OF THREE BUSINESS DAYS PRIOR TO EXCAVATION AT 811 OR (800) 242-8511 OR (262) 432-7910. EMAIL-A-LOCATE IS AVAILABLE AT: WWW.DIGGERSHOTLINE.COM

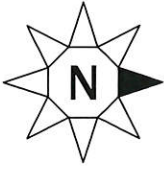
2 SHEET 2
 WUD = 100'
 BMDB1 = 540'
 UFOB(48) = 765' (COILS 225')
 UH36 = 1
 BM53(TS) = 1
 WUH = 1
 HBFO(96) = 1
 HO-1 = 6

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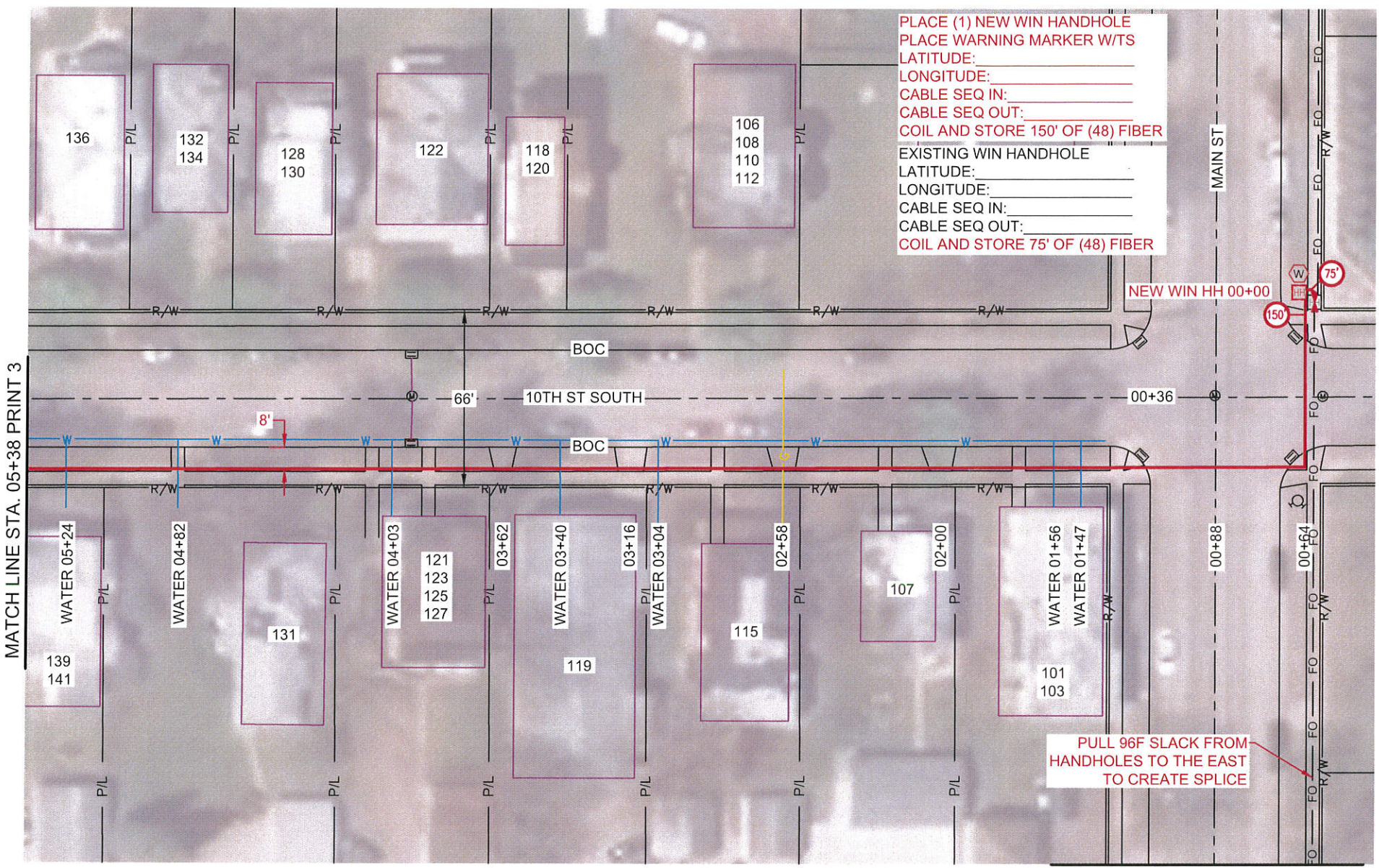
W.I.N. PROJECT ENGINEER
 JOHN LOUIS
 OUTSIDE PLANT ENGINEER
 715-864-2918

REDLINE

AS BUILT

SCALE 1" = 50'

mi-TECH
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 6484 Ronald Reagan Ave.
 Madison, WI 53704
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PLACE (1) NEW WIN HANDHOLE
 PLACE WARNING MARKER W/TS
 LATITUDE: _____
 LONGITUDE: _____
 CABLE SEQ IN: _____
 CABLE SEQ OUT: _____
 COIL AND STORE 150' OF (48) FIBER

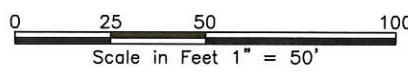
EXISTING WIN HANDHOLE
 LATITUDE: _____
 LONGITUDE: _____
 CABLE SEQ IN: _____
 CABLE SEQ OUT: _____
 COIL AND STORE 75' OF (48) FIBER

PULL 96F SLACK FROM HANDHOLES TO THE EAST TO CREATE SPLICE

AT MAIN ST & WEST AVE S INTERSECTION - PRINT 1 APPROXIMATELY 1,000' TO INTERSECTION

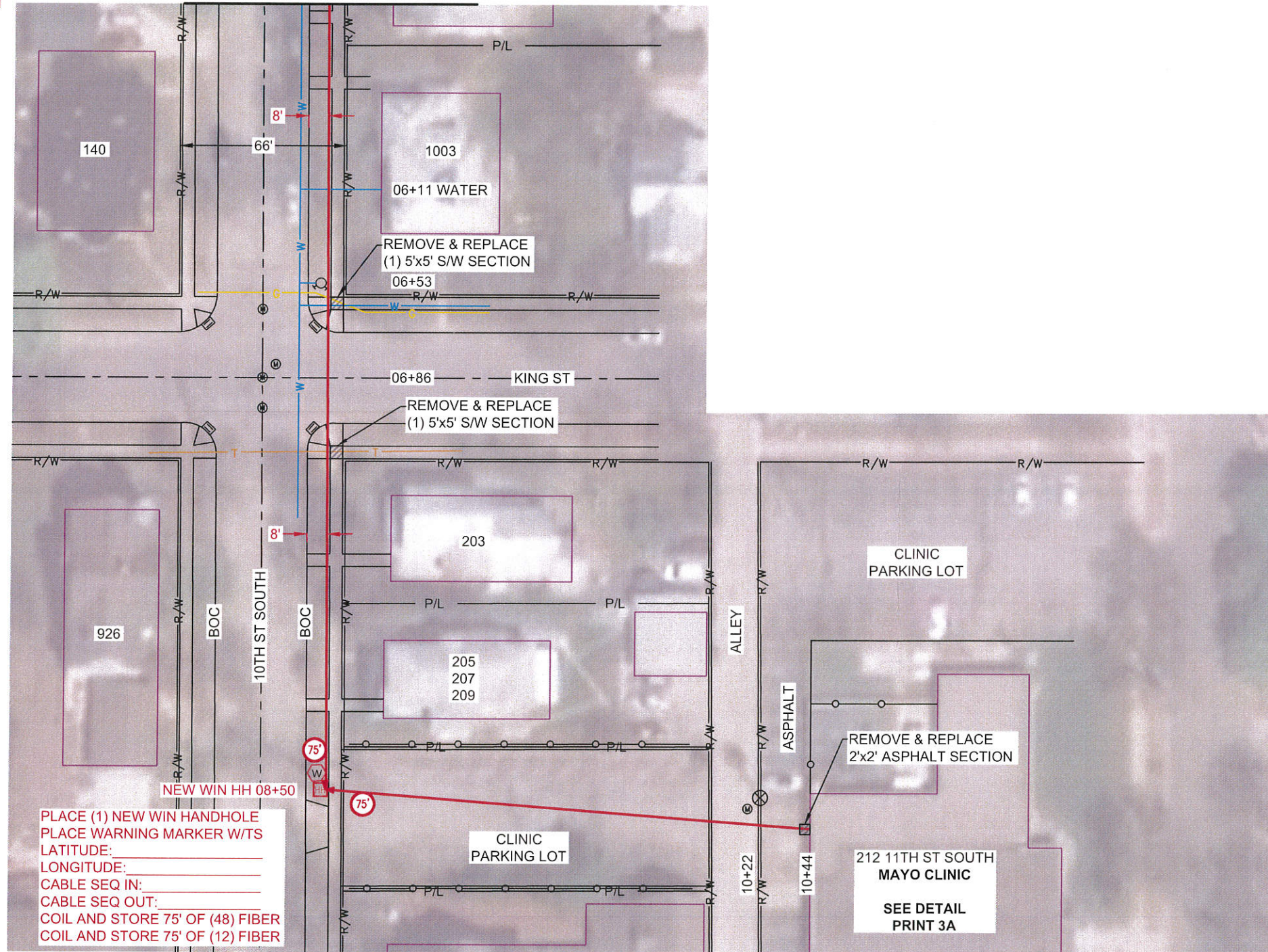


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- 3 SHEET 3
 BMDB1 = 510'
 UGRC = 50 SQ.FT.
 UGRA = 4 SQ.FT.
 UFOB(48) = 390' (COIL 75')
 UFOP(12) = 450' (COIL 75')
 UFOP(TRACER) = 200'
 UH36 = 1
 BM53(TS) = 1
 HBFO(48) = 1
 HO-1 = 12
 BM21 = 1
 FDP = 1

MATCH LINE STA. 05+38 PRINT 2



PLACE (1) NEW WIN HANDHOLE
 PLACE WARNING MARKER W/TS
 LATITUDE: _____
 LONGITUDE: _____
 CABLE SEQ IN: _____
 CABLE SEQ OUT: _____
 COIL AND STORE 75' OF (48) FIBER
 COIL AND STORE 75' OF (12) FIBER

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