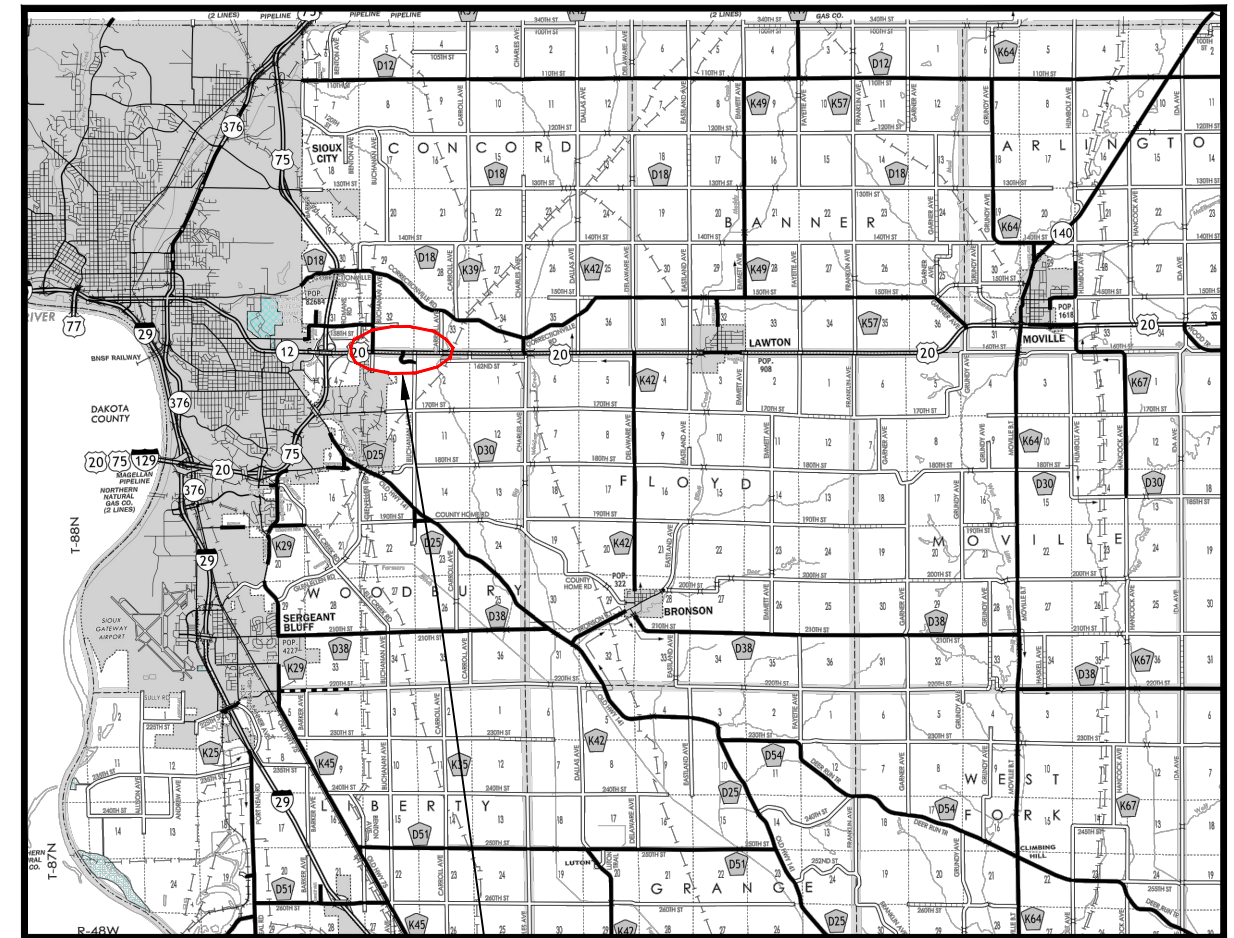


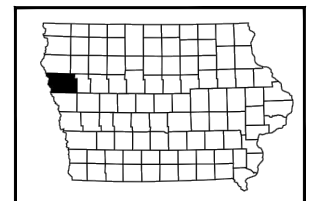
IOWA COMMUNICATIONS NETWORK

CONSTRUCTION DRAWINGS FOR: HWY 20 FIBER RELOCATE WOODBURY COUNTY

PROJECT LOCATION



PROJECT LOCATION



PROJECT OVERVIEW:

PLACEMENT OF APPROXIMATELY 9470'
1 1/4" DIAMETER HDPE DUCT AND 920'
OF 2" DIAMETER HDPE DUCT WITH
48 COUNT FIBER. (12,610' FIBER)

BIDDING NOTE:

BIDDERS WILL REVIEW ON-SITE QUANTITIES OF PLOW VS. BORE.
ATTENTION TO AREAS NOT CLEARED & GRUBBED & FARMSTEAD
AT 477+00. MAINTAIN 36" TO 42" DEPTHS AT FLOW LINE OF SWALES
AND WATERWAYS. MANDATORY BORES AT PAVED DRIVES & ROADS.

CONTACTS

COMPANY	TYPE	NAME	PHONE	EMAIL
Iowa Communications Network (ICN)	OSP Engineer	Chris Harris	515-725-8925	chris.harris@icn.state.ia.us
Iowa Communications Network (ICN)	ICN Materials	Paul Damge	515-725-4749	paul.damge@icn.state.ia.us
Fiber Network Services (FNS)	Splicing Coordination	Jason Akers	515-725-4400	icnnocosp@iowa.gov
Iowa DOT Maintenance Garage	Local Manager	Ron Gleiser	712-261-0196	ron.gleiser@iowadot.us
Fiber Network Services (FNS)	Field Technician	Garret LeFebvre	319-550-0544	garret.lefebvre@iowa.gov
NOTIFY THE DOT A MINIMUM OF 48 HRS PRIOR TO CONSTRUCTION				

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*THIS CONTACT LIST IS NOT ALL-INCLUSIVE. CONTRACTOR IS RESPONSIBLE FOR REQUESTING LOCATES OF ALL UTILITIES.



HWY 20 FIBER RELOCATE
WOODBURY COUNTY

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IOWA COMMUNICATIONS NETWORK
400 EAST 14TH STREET
GRIMES STATE OFFICE BUILDING
DES MOINES, IOWA 50319
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ENGINEER GENERAL NOTES AND LEGENED

ALL CONDUIT AND HANDHOLE INSTALLATIONS, REMOVALS, MODIFICATIONS, AND TEMPORARY WORK SHALL BE DONE ACCORDING TO THE FOLLOWING NON-INCLUSIVE CONDITIONS:

SECTION 1.0 SCOPE OF WORK

1.01 INSTALLATION DESCRIPTION:

INSTALL CONDUIT AND ALL RELATED APPURTENANCES FOR FIBER OPTIC CABLE INSTALLATION. SEE PLANS FOR EXACT LOCATION, LENGTHS, QUANTITIES, AND DIMENSIONS OF PROPOSE IMPROVEMENTS.

1.02 SEE SHEET 3 FOR LOCATION OF ENGINEER'S ESTIMATE OF MATERIALS.

1.03 THE CONTRACTOR SHALL PROVIDE ALL MATERIAL, EQUIPMENT, LABOR, INSTALLATION, RESTORATION, UTILITY RELOCATION CHARGES, JOB SITE DELIVERY COSTS AND INCIDENTALS TO COMPLETE THE DESCRIBED OR ILLUSTRATED WORK, UNDER THIS CONTRACT.

1.04 ANY CHANGE-ORDER REQUEST MUST BE PRESENTED IN WRITING TO THE OWNER'S REPRESENTATIVE AND APPROVED PRIOR TO PROCEEDING WITH THE REQUESTED CHANGE. DOCUMENTATION CONCERNING ANY AND ALL CHANGE ORDERS WILL BE REDUCED TO FORMAL RECORD, FILED WITH THE OWNER'S REPRESENTATIVE, AND BE MADE AVAILABLE FOR FUTURE REFERENCE.

1.05 THE ENGINEER WILL NOT BE RESPONSIBLE NOR ASSUME ANY LIABILITY FOR NEGLIGENT ACTS OR ERRORS OF OMISSIONS OF ANY CONTRACTOR, ANY SUBCONTRACTOR, OR ANY OF THE CONTRACTOR'S OR SUBCONTRACTORS' AGENTS OR EMPLOYEES OR ANY OTHER PERSONS (EXCEPT ENGINEER'S OWN EMPLOYEES) AT THE PROJECT SITE OR OTHERWISE PERFORMING ANY OF THE WORK OF THE PROJECT. ANY CONTRACTOR OR SUBCONTRACTOR, AS WELL AS THE ENGINEER, WILL BE RESPONSIBLE FOR HIS OWN SAFETY PROGRAM. NEITHER THE PROFESSIONAL ACTIVITIES OF THE ENGINEER, NOR THE PRESENCE OF THE ENGINEER OR HIS OR HER EMPLOYEES AND SUB-CONSULTANTS AT THE CONSTRUCTION SITE, SHALL RELIEVE ANY CONTRACTOR OF HIS OR HER OBLIGATIONS, DUTIES AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, SUPERINTENDING OR COORDINATING ALL PORTIONS OF THE WORK OF CONSTRUCTION IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES. THE ENGINEER AND HIS OR HER PERSONNEL HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR OR OTHER ENTITY OR THEIR EMPLOYEES IN CONNECTION WITH ANY HEALTH OR SAFETY PRECAUTIONS.

SECTION 2.0 MATERIALS

2.01 ALL MATERIALS INSTALLED WITHIN THE LIMITS OF THIS PROJECT SHALL BE IN CONFORMANCE WITH STANDARD RECOMMENDATIONS OF THE NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION (NEMA) AND AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI).

2.02 ALL TRENCHED CONDUIT, ELBOWS, AND COUPLINGS SHALL BE HDPE UNLESS OTHERWISE NOTED. ALL BORED CONDUIT AND COUPLINGS SHALL BE HDPE SDR-13 UNLESS OTHERWISE NOTED.

2.03 JOB SITE MATERIAL WILL BE DELIVERED TO AND MAINTAINED AT THE STREET WORK AREAS IN A WELL MANAGED MANNER, TO MINIMIZE CONGESTION OR INCONVENIENCE TO OTHER WORKERS, OR CONTRACTORS WORKING UNDER ALTERNATE PERMITS.

SECTION 3.0 GENERAL NOTES

3.01 CONTRACTOR IS ADVISED TO READ ALL NOTES ON DRAWINGS, CAREFULLY.

3.02 THE CONTRACTOR SHALL VERIFY EXISTING STREET RIGHTS OF WAY TO THE EXTENT NECESSARY TO VERIFY PROPOSED WORK REMAINS WITHIN THESE RIGHTS OF WAY AND DOES NOT INFRINGE ON PRIVATE PROPERTY NOT OWNED BY THE OWNER.

3.03 SCALE FOR DRAWINGS IS FOR GENERAL INFORMATION ONLY. LOCATIONS AND DIMENSIONS SHALL BE TAKEN AS SHOWN AND THE DRAWINGS SHALL NOT BE SCALED.

3.04 CONTRACTOR SHALL COORDINATE ALL WORK WITH ALL PUBLIC AND PRIVATE UTILITIES AS WELL AS CITY AND STATE AGENCIES.

3.05 INSTALL CONDUIT MINIMUM OF 10'-0" BELOW ALL WATERWAYS AND CULVERT CROSSINGS. CONTRACTOR TO VERIFY CULVERT DEPTH PRIOR TO CONDUIT INSTALLATION.

3.06 NUMEROUS ELEVATION CHANGES. TOPOGRAPHY LINES SHOWN ON DRAWING FOR REFERENCE ONLY.

3.07 DUE TO EXISTING FORESTED AREAS, SOME TREE REMOVAL AND TRIMMING REQUIRED FOR CONDUIT OR HANDHOLE INSTALLATION WITHIN THE RIGHT-OF-WAY.

3.08 RIGHT OF WAY LOCATIONS ARE APPROXIMATE. FIBER INSTALLATION 4'-0" MINIMUM OFF RIGHT-OF-WAY.

SECTION 4.0 EXISTING UTILITIES

4.01 EXISTING CONDITIONS, STRUCTURES, UTILITIES AND SURFACE FEATURES SHOWN WERE OBTAINED FROM UTILITY ATLASES AND FROM DRAWINGS FURNISHED BY THE VARIOUS UTILITIES AND ARE ASSUMED TO BE ACCURATE AND CORRECT. THE CONTRACTOR SHALL PERFORM HIS OWN SURVEY AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS OF EXISTING STRUCTURES PRIOR TO STARTING ANY WORK.

4.02 FOR BORED INSTALLATIONS, THE CONTRACTOR SHALL PERFORM TEST HOLES AT ALL UTILITY CROSSINGS TO VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO ANY EXCAVATION, AND TO LOCATE ANY POSSIBLE OBSTRUCTIONS. ALL TEST HOLES SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

4.03 FOR TRENCHED INSTALLATIONS, THE CONTRACTOR SHALL PERFORM TEST HOLES PER PLAN OR AS DEEMED NECESSARY TO VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO ANY EXCAVATION, AND TO LOCATE ANY POSSIBLE OBSTRUCTIONS. ALL TEST HOLES SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

4.04 THE CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF ALL OVERHEAD OBSTRUCTIONS PRIOR TO THE COMMENCEMENT OF WORK.

4.05 EXISTING UTILITIES ARE SHOWN AT THEIR APPROXIMATE LOCATION. THE CONTRACTOR SHALL CONTACT IOWA ONE CALL AT 1(800)-292-8989 A MINIMUM OF 48 HOURS (EXCLUDING WEEKENDS AND GOVERNMENT HOLIDAYS) PRIOR TO COMMENCEMENT OF ANY PAVEMENT CUTS OR EXCAVATION TO REQUEST LOCATING AND MARKING OF EXISTING UTILITIES PRIOR TO PERFORMING ANY EXCAVATION WORK IN OR AROUND ANY UTILITY.

4.06 ALL EXCAVATION WORK NEAR AND AROUND EXISTING STRUCTURES AND UTILITIES SHALL BE BY HAND METHOD.

4.07 ALL DISCREPANCIES SHOULD BE REPORTED TO OWNER (515-725-4610). ANY QUESTIONS OR COMMENTS THE CONTRACTOR MAY HAVE ARE TO BE DISCUSSED WITH THE OWNER PRIOR TO CONSTRUCTION.

4.08 FURTHER, THE CONTRACTOR SHALL RECORD THE LOCATION AND ELEVATION OF ALL UTILITIES ENCOUNTERED, AND INSTALLATION OF NEW WORK, AS THE WORK PROGRESSES AND SHALL PREPARE RECORD DRAWINGS (RED-LINES) BASED ON HIS RECORDS. AS PART OF THE RECORD DRAWINGS, CONTRACTOR SHALL ALSO PROVIDE HORIZONTAL AND VERTICAL CONFIGURATION OF CONDUITS WHERE MULTIPLE CONDUITS ARE INSTALLED. THESE RECORDS TO BE SUPPLIED TO THE OWNER AT COMPLETION OF WORK.

4.09 AT SEWER DRAINS FROM HOMES OR OTHER BUILDINGS, IF THERE IS INTERFERENCE, REPLACE INKIND. IN ALL CASES WHERE SEWER WORK IS DONE, A PERMIT SHOULD BE OBTAINED AND A SEWER INSPECTOR SHOULD BE PRESENT DURING THE WORK.

4.10 CONTRACTOR SHALL SUPPORT ALL WATER MAINS IN EXCESS OF 12" IN DIAMETER WITH A PERMANENT TYPE OF STRUCTURE UNLESS OTHERWISE NOTIFIED BY THE WATER DEPARTMENT, AND IS INCLUDED IN COST FOR DOING THE WORK. AT NO TIME DURING CONSTRUCTION SHALL WATER MAINS GO UNSUPPORTED FOR A SPAN GREATER THAN 8'-0".

4.11 CONTRACTOR RESPONSIBLE FOR OBTAINING AND PROVIDING REVIEW AND DESIGN OF ANY AND ALL TEMPORARY UTILITY SUPPORT SYSTEMS PRIOR TO CONSTRUCTION.

4.12 CONTRACTOR SHALL NOTIFY ALLIANT IN SITUATIONS WHERE STEEL PIPE CONDUCTOR IS NICKED DURING EXCAVATION. ALLIANT WILL EVALUATE THE EXTENT OF THE DAMAGE SO AS TO DETERMINE WHETHER REPAIR IS REQUIRED PRIOR TO BACKFILL AND GRADE SURFACE RESTORATION.

SECTION 5.0 WORK

5.01 NO STORAGE OF EQUIPMENT OR MATERIALS IN THE ROADWAY IS PERMITTED UNLESS THE CONTRACTOR OBTAINS WRITTEN PERMISSION FROM THE CITY, STATE, AND/OR GOVERNING BODY.

5.02 THE CONTRACTOR SHALL MARK ALL OPENINGS ON THE SURFACE PRIOR TO THE COMMENCEMENT OF EXCAVATION. ALL OPENINGS ON PAVED SURFACES SHALL BE SAW CUT PRIOR TO REMOVAL OF PAVEMENT.

5.03 CONTRACTOR RESPONSIBLE FOR OBTAINING AND PROVIDING REVIEW AND DESIGN OF ANY AND ALL SHORING SYSTEMS PRIOR TO CONSTRUCTION.

5.04 CONTRACTOR SHALL ASSUME ALL ELECTRICAL CABLES ARE ENERGIZED AND SHALL BE SUPPORTED SO AS NOT TO STRESS ANY PORTION OF THE CABLE.

5.05 CONTRACTOR SHALL PROVIDE APPROPRIATE ENGINEERED DE-WATERING MEASURES, IF NECESSARY, TO ENSURE GROUNDWATER TABLE REMAINS AT A DEPTH BELOW THE BASE OF THE EXCAVATION AT ALL TIMES DURING EXCAVATION, INSTALLATION AND BACKFILLING OPERATIONS.

5.06 THE ENGINEER SHALL BE NOTIFIED FOR RESOLUTION OF SITUATIONS WHERE CONDUIT DEPTH BELOW GRADE DEVIATES BY MORE THAN 3" AS CURRENTLY SHOWN ON PLAN/PROFILE DRAWINGS.

5.07 THE ENGINEER SHALL ALSO BE NOTIFIED FOR DISPOSITION OF SITUATIONS WHERE THE CONDUIT CANNOT MAINTAIN SEPARATIONS PER PLAN.

SECTION 6.0 SAFETY

6.01 CONTRACTOR SHALL TAKE ALL NECESSARY SAFETY PRECAUTIONS TO PROTECT UTILITIES, PEDESTRIANS, WORKERS AND VEHICULAR TRAFFIC. THE CONTRACTOR SHALL PROVIDE TEMPORARY FENCES, BARRICADES, ETC. AS REQUIRED TO PROTECT ADJACENT PROPERTY AND THE PUBLIC DURING ALL PHASES OF CONSTRUCTION.

6.02 THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY BARRICADES, SIGNAGE, WARNING LIGHTS AND OTHER DEVICES AND KEEP ALL TRAFFIC CONTROL OPERATIONAL 24 HOURS A DAY AT ALL OPEN TRENCH LOCATIONS AND AT LOCATIONS WHICH DO NOT HAVE A FINISHED SURFACE OR ROAD PLATES.

6.03 THE CONTRACTOR SHALL COORDINATE INGRESS AND EGRESS TO ADJACENT PROPERTIES AND/OR CONSTRUCTION AFFECTED BY THE PROPOSED WORK.

SECTION 7.0 RESTORATION







7.01 THE CONTRACTOR SHALL OBTAIN A PERMIT TO PERFORM ALL RESTORATION WORK IN THE CONTRACTOR'S NAME. ALL PAVING SHALL BE COMPLETED WITHIN 15 WORKING DAYS AFTER EXCAVATION IS BACKFILLED UNLESS OTHERWISE ARRANGED IN ADVANCE WITH GOVERNING AGENCY.

7.02 CONTRACTOR SHALL BREAK OUT SIDEWALK, DRIVEWAY, CURB AND GUTTER, PAVEMENT AND RESTORE TO PERMANENT CONDITION. CONTRACTOR TO CONFORM CONCRETE TO COLOR, FINISH, AND TEXTURE OF EXISTING SIDEWALKS, CURB AND GUTTER.


7.03 THE CONTRACTOR IS RESPONSIBLE FOR THE RESTORATION OF THE AREAS DISTURBED BY CONSTRUCTION ACTIVITIES. CONTRACTOR TO PAY ALL FEES AND OBTAIN ALL PERMITS FOR RESTORATION.

7.04 THE CONTRACTOR IS TO RESTORE ALL DAMAGED STRUCTURES AND UTILITIES TO THE SATISFACTION OF THE FACILITY OWNER, IN THE EVENT THAT DAMAGE OCCURS.

LEGEND

FENCE	— X — X — X —
EXISTING ROW LINE	— — — — —
EXISTING FIBER OPTIC LINE	— FO — FO —
EXISTING OVERHEAD LINE	— OH — OH —
EXISTING STORM DRAIN	— SD — SD —
EXISTING ELECTRIC (BURIED)	— E — E —
EXISTING GAS LINE	— G — G —
EXISTING STORM SEWER	— > — > —
EXISTING SANITARY SEWER	—) —) —
EXISTING WATER LINE	— W — W —
EXISTING ICN FIBER	— — — — —
EXISTING ICN (AERIAL)	— A — — — —
EXISTING ICN CONDUIT	— — — — —
TO BE ABANDONED	— — — — —
PROPOSED ICN FIBER	— — — — —
PROPOSED AERIAL	— A — — — —
PROPOSED ICN CONDUIT	— — — — —
CENTERLINE OF ROAD	— — — — —
EXISTING WATERWAY BOUNDARY	— — — — —
PROPOSED ICN HANDHOLE	
EXISTING ICN HANDHOLE	
PROPOSED HANDHOLE (BY OTHERS)	
EXISTING CULVERT LOCATION	
EXISTING UTILITY POLE	
EXISTING SANITARY MANHOLE	



HWY 20 FIBER RELOCATE WOODBURY COUNTY		
1		IOWA COMMUNICATIONS NETWORK 400 EAST 14TH STREET GRIMES STATE OFFICE BUILDING DES MOINES, IOWA 50319 ICN © 2019, COPY WITH PERMISSION
2		
3		
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STANDARD INSTALLATION REQUIREMENTS:

GENERAL REQUIREMENTS:

1. THE CONTRACTOR SHALL POTHOLE ALL EXISTING UTILITIES.
2. PROVIDE THE OWNERS OF ANY NATURAL GAS UTILITY 48 HOURS ADVANCE NOTICE THAT WORK IS SCHEDULED IN THE VICINITY OF THEIR LINES/MAINS SO THAT THEY CAN PROVIDE STANDBY AND PROTECT SERVICES.
3. MAINTAIN PROOF OF NOTIFICATION TO AND RECEIPT OF NOTIFICATION BY THE GAS UTILITY.
4. PERMITS AND COORDINATION
 - 4.1. SECURE ALL NECESSARY STATE AND LOCAL (CITY, COUNTY, ETC.) PERMITS, PUBLIC OR PRIVATE EASEMENTS, FACILITY PERMITS, USAGE PERMITS, AND ANY OTHER PERMIT REQUIRED BY AN AUTHORITY HAVING JURISDICTION (AHJ).
 - 4.2. ICN WILL OBTAIN AND PROVIDE COPIES OF IDOT PERMITS.
 - 4.3. IF PERMITS ARE REQUIRED TO BE IN THE NAME OF THE OWNER RATHER THAN THE CONTRACTOR, THE CONTRACTOR SHALL PREPARE THE PERMIT FOR THE OWNER'S SIGNATURE.
 - 4.4. COORDINATE INSTALLATION WITH ALL OWNERS AND AHJ OVER THE ROUTE, THE FIBER, RIGHT-OF-WAY AND BUILDINGS IN WHICH END POINTS WILL BE LOCATED.
 - 4.5. FAILURE TO COORDINATE WITH THE AHJ AND TO OBTAIN ALL NECESSARY PERMITS IS AT THE PERIL OF THE CONTRACTOR.
 - 4.6. RIGHT-OF-WAY PERMIT FEES ARE AN AUTHORIZED EXTRA ABOVE THE QUOTED BID PRICE. EXCAVATION PERMITS SHALL BE BY THE CONTRACTOR.
 - 4.7. ENSURE ALL FACILITIES ARE PLACED WITHIN THE PUBLIC RIGHT-OF-WAY.
5. ENSURE THAT PERSONNEL WORKING IN THE ROW ARE EQUIPPED WITH AND USE PROPER SAFETY EQUIPMENT AND ATTIRE.
6. ALL TOOLS AND TEST EQUIPMENT REQUIRED TO DO A PROJECT SHALL BE PROVIDED BY THE CONTRACTOR OR ITS SUBCONTRACTOR(S). SECURITY OF TOOLS AND TEST EQUIPMENT SHALL BE THE RESPONSIBILITY OF EACH WORKER. THE ICN SHALL NOT BE RESPONSIBLE FOR THE SECURITY OF ANY PROPERTY LEFT ON ICN'S PROPERTY OR ON PROPERTY CONTROLLED BY THE ICN OR THE STATE OF IOWA.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTRUCTING ITS EMPLOYEES IN SAFETY MEASURES CONSIDERED APPROPRIATE FOR THE JOB. IN ADDITION, THE CONTRACTOR SHALL NOT PERMIT PLACING OR USE OF TOOLS OR MATERIALS IN TRAFFIC LANES OR OTHER LOCATIONS. THE TOOLS OR MATERIALS SHALL NOT BE PLACED IN SUCH A MANNER SO AS TO CREATE SAFETY HAZARDS TO STATE EMPLOYEES, CONTRACTING AGENCY EMPLOYEES, THE PUBLIC OR THEMSELVES.
8. EXCAVATIONS AND TRENCHES: THE ICN REQUIRES ALL OPEN EXCAVATIONS OR TRENCHES TO BE MONITORED AND ATTENDED TO DURING CONSTRUCTION PER. THE ICN REQUIRES ALL OPEN EXCAVATIONS AND TRENCHES BACKFILLED THE SAME DAY. IF THE CONTRACTOR IS REQUIRED TO LEAVE AN EXCAVATION OR TRENCH OPEN, THEN THE CONTRACTOR SHALL PROPERLY FENCE AND/OR COVER THE EXCAVATION FOR SAFETY. CONTRACTOR SHALL FOLLOW ALL OSHA REQUIREMENTS FOR EXCAVATION AND TRENCH SAFETY.
9. CONTRACTOR AND ITS EMPLOYEES SHALL COMPLY WITH ALL OSHA REGULATIONS. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE STATE AND FEDERAL LAWS.
10. CONTRACTOR SHALL COMPLY WITH ALL IOWA ONE CALL REQUIREMENTS AS PROVIDED BY IOWA CODE, CHAPTER 480.
11. PROVIDE ALL LABOR AND SUPERVISION FOR THE PROJECT.
12. PROVIDE AND INSTALL MATERIALS NEEDED TO RESULT IN A FULLY FUNCTIONAL SYSTEM MEETING ICN STANDARDS, WHETHER OR NOT THE MATERIALS OR METHODS ARE SPECIFICALLY MENTIONED IN THIS DOCUMENT. SEE THE LIST OF ICN-FURNISHED MATERIALS.
13. INSTALL CABLE ROUTE MARKERS FURNISHED BY ICN. WHERE POSSIBLE, INSTALL MARKERS ADJACENT TO POLES, BUILDINGS OR IN OTHER PROTECTED AREAS.
14. A COPY OF THIS SCOPE OF WORK AND THE ENGINEERING PLAN FOR THIS PROJECT SHALL BE ON SITE AND AVAILABLE ANY TIME WORK IS BEING PERFORMED. FAILURE TO HAVE THE REQUIRED DOCUMENTS ON SITE MAY RESULT IN ICN REQUIRING THE CONTRACTOR TO STOP WORKING UNTIL THE REQUIRED DOCUMENTS ARE ON-SITE.
15. SUBCONTRACTORS SHALL MEET THE SAME QUALIFICATIONS STATED FOR CONTRACTORS. CONTRACTOR SHALL OBTAIN APPROVAL OF THE CONTRACTING AGENCY'S PROJECT MANAGER PRIOR TO USING A SUBCONTRACTOR ON ANY PROJECT.
16. RESTORE ALL DAMAGE TO PRIVATE PROPERTY, RIGHT-OF-WAY, ICN PROPERTY, AND ANY OTHER PROPERTY DAMAGED IN THE COURSE OF THE WORK.
 - 16.1. ANY DISRUPTION OF GRASS IN AN INDIVIDUAL'S YARD OR IN A PRIVATE MAINTAINED AREA OF THE PUBLIC RIGHT OF WAY (THE AREA BETWEEN THE SIDEWALK AND THE STREET CURB) MUST BE RESTORED THROUGH RE-SODDING. ANY DISRUPTION OF THE GRASS IN THE MEDIAN WAY OR AN UNIMPROVED SHOULDER MUST BE RESTORED EITHER THROUGH RE-SODDING OR RE-SEEDING AS REQUIRED BY THE ROW OWNER.
 - 16.2. AREAS SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.
 - 16.3. DIRT SHALL BE MECHANICALLY COMPACTED AROUND HANDHOLES AND PITS.
 - 16.4. LAWNS SHALL BE SODDED WITH LIKE GRASS.
 - 16.5. CONTRACTOR IS RESPONSIBLE FOR WATERING THE SOD UNTIL IT HAS KNITTED TO THE GROUND BENEATH.
 - 16.6. ALL DEBRIS SHALL BE REMOVED FROM THE CONSTRUCTION AREAS INCLUDING BUT NOT LIMITED TO: CONSTRUCTION MATERIALS, TRASH, LARGE OBJECTS OR STONES WITHIN BACKFILLED AREAS, ETC.

DUCT INSTALLATION REQUIREMENTS

1. HDPE DUCT SHALL BE NO LESS THAN 48 INCHES DEEP.
2. DUCT SHALL BE INSTALLED IN THE PUBLIC RIGHT-OF-WAY.
3. WHEN CROSSING A HIGHWAY IN DOT RIGHT-OF-WAY, DUCT SHALL BE NO LESS THAN 48 INCHES BELOW GRADE UNDER THE ROADWAY AND SHOULDERS. HDPE MAY BE USED UNDER THE ROADWAY AND SHOULDERS IF INSTALLED AT A MINIMUM DEPTH OF 48".
4. SHOULD IT BE NECESSARY TO CROSS PRIVATE PROPERTY, THE CONTRACTOR MAY APPLY TO THE ICN FOR AN EXCEPTION, AND REQUEST PERMISSION TO SECURE AN EASEMENT. THE EASEMENT IS REQUIRED TO BE IN THE NAME OF ICN AND THE CONTRACTOR SHALL HAVE THE EASEMENT PREPARED BY A LAND SURVEYOR LICENSED IN THE STATE OF IOWA. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FEES UNLESS PREVIOUSLY AUTHORIZED BY THE ICN.
5. AT THE CONCLUSION OF THE PROJECT, PROVIDE AND LEAVE A PULL ROPE IN ALL DUCTS, CONDUITS AND PATHWAYS, INCLUDING INDOOR, OUTDOOR, NEW AND EXISTING.
6. DIRT SHALL BE MECHANICALLY COMPACTED AT ALL DUCT SPLICES, BORE PITS AND AROUND HANDHOLES.
7. GROUND SHALL BE RESTORED TO THE CONDITION FOUND PRIOR TO CONSTRUCTION AND DEBRIS REMOVED PRIOR TO SODDING OR SEEDING.
8. ALL CONDUITS SHALL BE PLUGGED VIA DUCT SEAL OR OTHER METHOD UPON COMPLETION OF CABLE INSTALLATION.
9. IF SCHEDULE 40 PVC CONDUIT IS UTILIZED, ALL ANGLES (45, 90 DEGREE OR OTHER) REQUIRE FITTINGS TO LONG SWEEP TO ACCOMMODATE MINIMUM CABLE BEND RADIUS.
10. THE ICN REQUIRES PICTURES BY THE CONTRACTOR AND/OR ON-SITE INSPECTION BY ICN STAFF PRIOR TO COMPLETION OF THE PROJECT WHERE PIPE AND FITTINGS ARE NOT EXPOSED; I.E. UNDERGROUND, BEHIND A WALL, ETC.

HANDHOLE REQUIREMENTS

1. INSTALL HANDHOLES SO THAT THE LID IS LEVEL AND FLUSH WITH THE SURROUNDING NATURAL GRADE. THE LID SHALL NOT EXTEND ABOVE THE SURROUNDING NATURAL GRADE.
2. PROVIDE 1/2" OPENING HARDWARE CLOTH TYPE SCREEN WIRE BELOW THE HANDHOLE.
3. PROVIDE 5-6 INCHES OF 3/4" CRUSHED ROCK BELOW THE HANDHOLE. ROCK SHALL BE COMPACTED. GRAVEL SHALL EXTEND A MINIMUM OF 6 INCHES BEYOND THE OUTSIDE WALLS OF THE HANDHOLE. DO NOT USE PEA GRAVEL OR OTHER ROUND STONE.
4. DO NOT PLACE GRAVEL INSIDE HANDHOLE ABOVE THE HARDWARE CLOTH.
5. CONDUIT SHALL EXTEND A MINIMUM OF 6" ABOVE THE HARDWARE CLOTH/GRAVEL.
6. FAILURE OF THE CONTRACTOR TO INSTALL HANDHOLES AS SPECIFIED WILL CAUSE THE CONTRACTOR TO RETURN AND RE-INSTALL THE HANDHOLE ACCORDING TO THIS SPECIFICATION BEFORE PAYMENT FOR THE PROJECT IS MADE.
7. HANDHOLE INSTALLATIONS SHALL FOLLOW ICN STANDARD TYPICAL INSTALLATION; SEE TYPICAL DRAWING.

FIBER INSTALLATION REQUIREMENTS

1. INSTALL FIBER ACCORDING TO INDUSTRY "BEST PRACTICES".
2. THE CONTRACTOR SHALL NOT VIOLATE THE MANUFACTURER'S MINIMUM INSTALLATION BEND RADIUS WHEN THE CABLE IS UNDER TENSION, OR THE MINIMUM INSTALLED BEND RADIUS.
3. TO PREVENT EXCEEDING THE MANUFACTURER'S MAXIMUM PULLING TENSION DURING INSTALLATION OF THE FIBER OPTIC CABLE, THE CONTRACTOR SHALL USE A "BREAK-AWAY" PULLING SWIVEL WHEN INSTALLING CABLE.
4. THE "BREAK-AWAY" FUNCTION SHALL ACTIVATE AT OR BELOW THE MAXIMUM PULLING TENSION SPECIFIED BY THE CABLE MANUFACTURER.
5. THE CONTRACTOR SHALL TEST ALL STRANDS OF THE FIBER, ON THE REEL, PRIOR TO BEGINNING FIBER INSTALLATION. CONFIRM THAT ALL STRANDS MEET MANUFACTURER'S LOSS SPECIFICATIONS.
6. THE CONTRACTOR SHALL FIELD VERIFY ALL LENGTHS AND EXISTING CONDITIONS PRIOR TO STARTING CONSTRUCTION.
7. SLACK LOOPS IN HANDHOLES SHALL BE COILED, INSTALLED, AND SECURED TO AVOID DAMAGE TO THE COIL AND NOT INTERFERE WITH LIDS.
8. SLACK LOOPS AT SPLICES SHALL BE COILED TO MATCH THE EXISTING FIBER CABLE TAILS AND ALLOWANCE FOR SPLICE PREPARATION.
9. ICN FIBER IN ALL HANDHOLES SHALL BE LABELED WITH ICN WRAP AROUND CABLE TAGS OR OTHER LABELED CABLE TAGS.

BUILDING ENTRY REQUIREMENTS

1. WEATHER-SEAL ALL PENETRATIONS.
2. USE MORTAR OR SIMILAR CEMENT TO SEAL PENETRATION OF BRICK OR CEMENT BLOCK.
3. FIRESTOP PENETRATIONS OF ANY FIRE-RATED FLOOR, WALL OR CEILING.
4. REPLACE THE FIRESTOP MATERIAL IN ANY EXISTING FIRESTOPPED PENETRATION USED BY THE CONTRACTOR.
5. ALL OUTDOOR CONDUITS, OF ANY LENGTH, SHALL BE GALVANIZED IRON PIPE (GIP). EMT, PVC AND PLASTIC ARE PROHIBITED.
6. IMMEDIATELY UPON INSTALLATION, SEAL THE ENDS OF ALL DUCTS WITH DUCT SEAL OR EXPANSION FOAM TO PREVENT SILTATION OR FILLING WITH MOISTURE. THIS APPLIES TO BOTH NEW AND EXISTING DUCTS.
7. AT THE CONCLUSION OF THE PROJECT, ENSURE THAT A PULL ROPE IS LEFT IN ALL PATHWAYS, BOTH INSIDE AND OUTSIDE, NEW AND EXISTING.


LOCATE FACILITY REQUIREMENTS

1. TRACER WIRE SHALL BE CONTINUOUS.
2. SPLICES IN THE TRACER WIRE ARE NOT ALLOWED. IF TRACER WIRE IS ACCIDENTALLY SEVERED, REQUEST PERMISSION FROM ICN TO SPLICE.
3. WIRE SPLICES ONLY IN HANDHOLES.
4. USE EITHER AN EPOXY SPLICE KIT, SCOTCH 3M 3832 OR A MOLEX PERMASEAL BUTT SPLICE. 10-12 GA. SPLICE MATERIALS SHALL BE DESIGNED FOR UNDERGROUND APPLICATIONS.
5. LEAVE THE WIRE SPLICE VISIBLE IN THE HANDHOLE.
6. ROUTE A GROUND WIRE FROM THE GROUND INSIDE THE BUILDING, THROUGH THE ENTRY TO THE TII 163 TERMINAL.
7. SECURE ALL RISER CONDUITS WITH 3 EACH TWO-HOLE CONDUIT STRAPS.
8. WIRE THE PEDESTAL/TERMINAL SO THAT LOCATES MAY BE PERFORMED IN ANY DIRECTION AND FROM THE FAR END.
9. DO NOT LEAVE ANY EXPOSED TRACER WIRE OR GROUND WIRE.
10. PERMANENTLY GROUND THE TRACER WIRE AT THE HANDHOLE ON THE FURNISHED GROUND ROD.
11. AT THE CONCLUSION OF THE PROJECT LEAVE THE TRACER WIRE SHIELD SHORTED TO GROUND IN THE LOCATE TERMINAL.
12. USE TRACER WIRE THAT IS RATED FOR DIRECT BURIAL WHERE REQUIRED. TRACER WIRE SHALL BE #12 AWG, SOLID HF CCS 30 MIL HDPE HIGH FLEX TRACER WIRE; EITHER SOLID COPPER OR COPPER CLAD STEEL.
13. LABEL ALL WIRES IN THE LOCATE TERMINAL/PEDESTAL/TRIVIEW. (I.E. "GROUND", "FACING DMACC", "FACING NORTH" ETC.)
14. FAILURE TO LABEL THE LOCATE WIRES WILL CAUSE THE CONTRACTOR TO RETURN AND PROPERLY LABEL THE WIRES BEFORE PAYMENT FOR THE PROJECT IS MADE.
15. BOND TRACER WIRE(S) WITHIN SPLICE ENCLOSURES UTILIZING A 3M 4460-DI FO SHIELD BONDING KIT.
16. ROUTE TRACER WIRE(S) OUT OF SPLICE ENCLOSURE THROUGH A SINGLE PORT UTILIZING A FOSC CLOSURE SEALING KIT.
17. AT SPLICE LOCATIONS WITH NO LOCATE PEDESTAL, TRACER WIRES SHALL BE BONDED TOGETHER, WITHIN THE SPLICE ENCLOSURE.
18. AT EACH END OF ANY TRACER WIRE, USE APPROPRIATE-SIZED RING TERMINAL (CRIMP) CONNECTORS USING APPROPRIATE CRIMP TOOL; OR CREATE A WIRE EYELET AS PER TYPICAL INSTALLATION OF TRI-VIEW LOCATE PEDESTAL DETAIL.

DELIVERABLES/ACCEPTANCE:

1. CONTRACTOR SHALL PROVIDE CONSTRUCTION REDLINE AS-BUILTS WITH:
 - 1.1. OFFSETS TO FIXED OBJECTS TO THE CABLE/CONDUIT RUNNING LINE, HANDHOLES AND NEW FACILITIES.
 - 1.2. METER MARKS OF CABLE INSTALLATIONS AT HANDHOLE ENTRY/EXIT, SPLICE LOCATIONS, BUILDING ENTRIES, ETC.
 - 1.3. DEPTHS OF CABLE AND/OR CONDUIT INSTALLATION.
 - 1.4. ONE ORIGINAL SET OF AS-BUILT DRAWINGS MUST BE PROVIDED WITHIN TWO (2) WEEKS AFTER COMPLETION OF CONSTRUCTION FOR THE ICN MANAGEMENT RECORDS. REDLINE AS-BUILT DRAWINGS MUST BE COMPLETE.
2. CONTRACTOR SHALL PROVIDE SPLICING REDLINE OF ALL SPLICING COMPLETED AND VALIDATION THAT THE SPLICE PLAN WAS FOLLOWED.
3. CONTRACTOR IS RESPONSIBLE TO LOCATE FIBER UNTIL ACCEPTANCE BY THE ICN. ACCEPTANCE INCLUDES:
 - 3.1. SUBMISSION OF CONSTRUCTION AND SPLICING RED LINE DRAWINGS BY CONTRACTOR.
 - 3.2. ASSIGNMENT OF LINK NUMBER BY THE ICN (IF APPLICABLE).
 - 3.3. SUBMISSION OF FINAL AS BUILT DRAWING BY THE ICN TO THE ICN NETWORK MAINTENANCE PROVIDER.
 - 3.4. SUBMISSION TO IOWA ONE CALL AND THE ICN NETWORK MAINTENANCE PROVIDER'S CONTRACT LOCATER.
 - 3.5. THE MEASUREMENTS IN THE STATEMENT OF WORK ARE ESTIMATES AND NEED TO BE VERIFIED BY THE CONTRACTOR.
4. ONLY WRITTEN MODIFICATIONS TO THIS SCOPE OF WORK ARE BINDING - VERBAL CHANGES TO THIS SCOPE OF WORK BY ANY PERSON OR PERSONS ARE NOT BINDING, UNLESS CONFIRMED IN WRITING.
5. FINAL PAYMENT WILL NOT BE PROCESSED UNTIL ALL DELIVERABLES ARE RECEIVED AND ACCEPTED.



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ITEM	ICN PART NUMBER	QTY	NOTES
ICN PROVIDED MATERIALS			
48 strand Armored SM fiber		12,610	
24"x36"x36" Handhole with lid Tier 22		12	
TRIVIEW Test Station w/ Isolever 72" ORANGE (with 3 ICN decals applied) (Walker)	TVT172OB-EM9125	2	
Erico 1/2" x 6' Ground Rod (Graybar)	611360	2	
Burndy 1/2" Ground Rod Clamp (Anixter)	GRC12	2	
6 AWG Bare Solid Copper Ground Wire (Graybar) - 315' reel	88283891	20'	
TriView Warning Marker 78" with Orange Cap (with 3 decals - part number SD-9007K)	TVFL7800	11	
CONTRACTOR PROVIDED MATERIALS		X	
HDPE Conduit (13.5 SDR)		10,390	
6 AWG Bare Solid Copper Ground Wire (Graybar) - 315' reel			
<i>Contractor shall supply all other materials required for proper installation, including but not limited to: HDPE, Duct Splices, Grounding and Tracer Wires, Rock, Wire Mesh, etc.</i>		X	

NOTE ON HDPE CONDUIT AND SPLICES:

1. HDPE SHALL BE ORANGE SMOOTH WALL SDR 13.5
2. DUCT SPLICES SHALL BE MADE OF THE FOLLOWING (IN ORDER OF PREFERENCE.)
 - ELECTROFUSION
 - CRIMP ON
 - CLAMP ON / BOLT ON (SPLIT COUPLINGS)
 - PUSH ON
3. **ALL SPLICES SHALL BE AIR AND WATER TIGHT**
4. DUCT SPLICES SHALL BE OF A TYPE MADE SPECIFICALLY FOR JOINING HDPE CONDUIT
5. ALL DUCT SPLICES SHALL BE MADE IN SUCH MANNER AS TO ALLOW CONTINUOUS PULLING OF CABLE THROUGH DUCT.

ANY EXCEPTIONS MUST BE AGREED UPON IN WRITING PRIOR TO CONSTRUCTION:



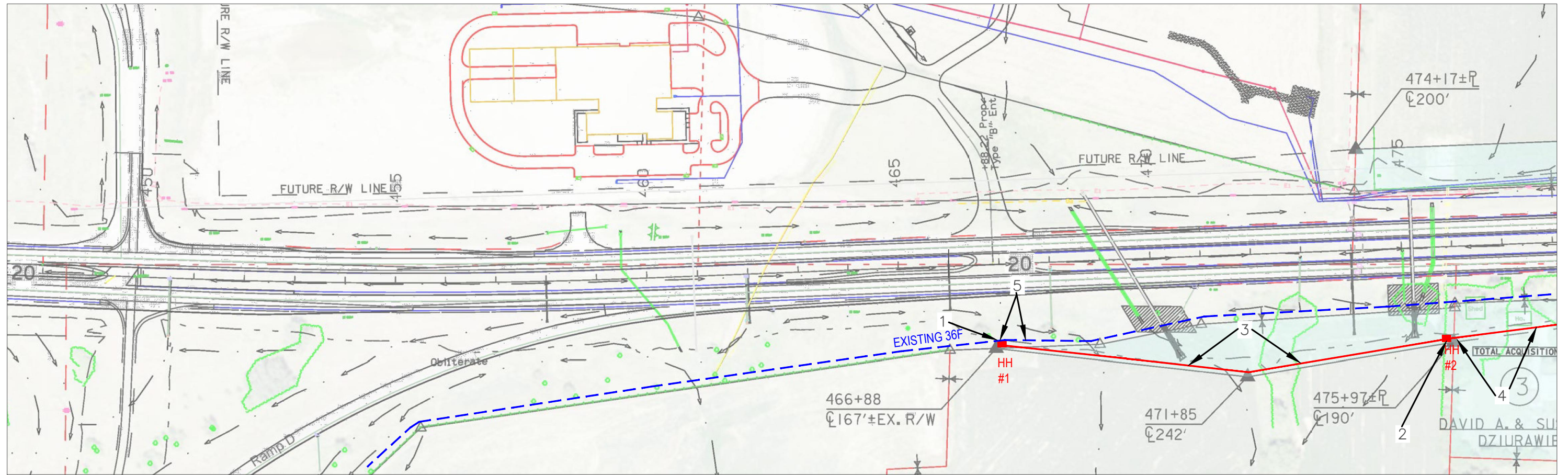
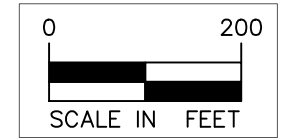
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NOTE: THE DOT HWY STATIONING IS STAMPED
IN THE FACE OF THE CURB FROM
APPROXIMATELY 465+00 TO 470+00



PLAN NOTES

1. STA. 466+90, 163' RT, PROPOSED HH# 1. PLACE HH ADJACENT TO THE EXISTING CABLE AND STUB A SECTION OF DUCT FROM HH TO CABLE. SET LID AT GRADE. (NEW SPLICE POINT)
2. STA. 475+90, 186' RT, PROPOSED HH# 2. SET LID AT GRADE.
3. PLACE AN 1 1/4" DIA. HDPE DUCT WITH 48F CABLE 4' OFF ROW LINE, FROM PROPOSED HH# 1 TO PROPOSED HH# 2. (APPROXIMATELY 905')
4. PLACE AN 1 1/4" DIA. HDPE DUCT WITH 48F CABLE 4' OFF ROW LINE, FROM PROPOSED HH# 2 TO PROPOSED HH# 3. (APPROXIMATELY 875')
5. EXPOSE 50' OF EXISTING CABLE AS SHOWN, FOR SPLICE TAIL USE.

GENERAL NOTES

1. REGARDING PLAN NOTE 5, EXPOSING SPLICE TAILS:
THE CONTRACTOR WILL COORDINATE WITH ICN TO OPEN THE TRENCHES THE AFTERNOON BEFORE SPLICE NIGHT AND RETURN THE FOLLOWING DAY TO BACKFILL. OPEN TRENCHES SHALL BE PROTECTED WITH STEEL POSTS AND ORANGE CONSTRUCTION FENCING.
2. PLACE A 100' SLACK COIL IN ALL HAND HOLES.
3. BACKFILL EXCAVATIONS AND COMPACT. FINE GRADE AND SEED PER PROVIDED IDOT SPEC.
4. PLACE ICN SUPPLIED ROW MARKERS AT ALL HH's.

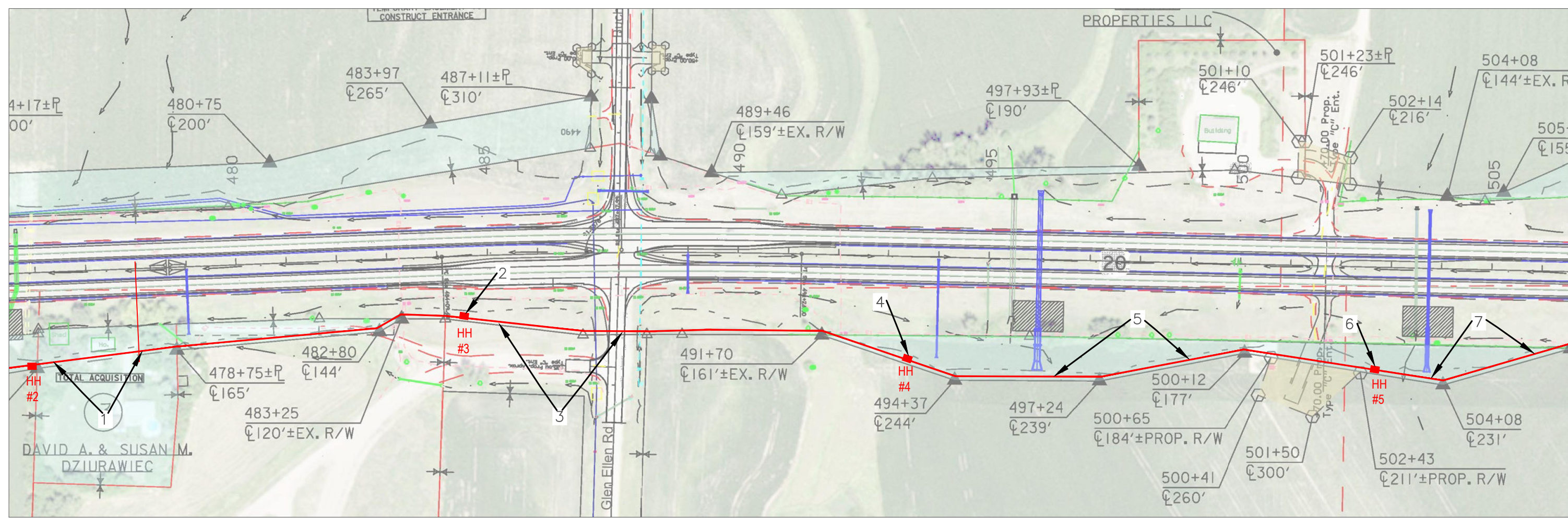
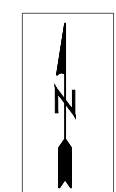
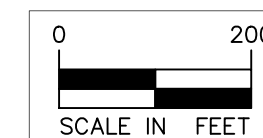
LEGEND

EXISTING ICN FIBER	
PROPOSED ICN DUCT	
RIGHT-OF-WAY	
EXISTING ICN HANDHOLE	
PROPOSED ICN HANDHOLE	

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PLAN NOTES

1. PLACE AN 1 1/4" DIA. HDPE DUCT WITH 48F CABLE 4' OFF ROW LINE, FROM PROPOSED HH# 2 TO PROPOSED HH# 3. (APPROXIMATELY 875')
2. STA. 484+60, 117' RT, PROPOSED HH# 3. SET LID AT GRADE.
3. PLACE AN 1 1/4" DIA. HDPE DUCT WITH 48F CABLE 4' OFF ROW LINE, FROM PROPOSED HH# 3 TO PROPOSED HH# 4. (APPROXIMATELY 900')
4. STA. 493+50, 213' RT, PROPOSED HH# 4. SET LID AT GRADE.
5. PLACE AN 1 1/4" DIA. HDPE DUCT WITH 48F CABLE 4' OFF ROW LINE, FROM PROPOSED HH# 4 TO PROPOSED HH# 5. (APPROXIMATELY 950') NOTE MINIMUM 5' DEPTH STA. 500+65 TO 502+43
6. STA. 502+50, 207' RT, PROPOSED HH# 5. SET LID AT GRADE.
7. PLACE AN 1 1/4" DIA. HDPE DUCT WITH 48F CABLE 4' OFF ROW LINE, FROM PROPOSED HH# 5 TO PROPOSED HH# 6. (APPROXIMATELY 820')

GENERAL NOTES

1. REGARDING PLAN NOTE 4, EXPOSING SPLICE TAILS: THE CONTRACTOR WILL COORDINATE WITH ICN TO OPEN THE TRENCHES THE AFTERNOON BEFORE SPLICE NIGHT AND RETURN THE FOLLOWING DAY TO BACKFILL. OPEN TRENCHES SHALL BE PROTECTED WITH STEEL POSTS AND ORANGE CONSTRUCTION FENCING.
2. PLACE A 100' SLACK COIL IN ALL HAND HOLES.
3. BACKFILL EXCAVATIONS AND COMPACT. FINE GRADE AND SEED PER PROVIDED IDOT SPEC.
4. PLACE ICN SUPPLIED ROW MARKERS AT ALL HH'S.

LEGEND

EXISTING ICN FIBER	
PROPOSED ICN DUCT	
RIGHT-OF-WAY	
EXISTING ICN HANDHOLE	
PROPOSED ICN HANDHOLE	

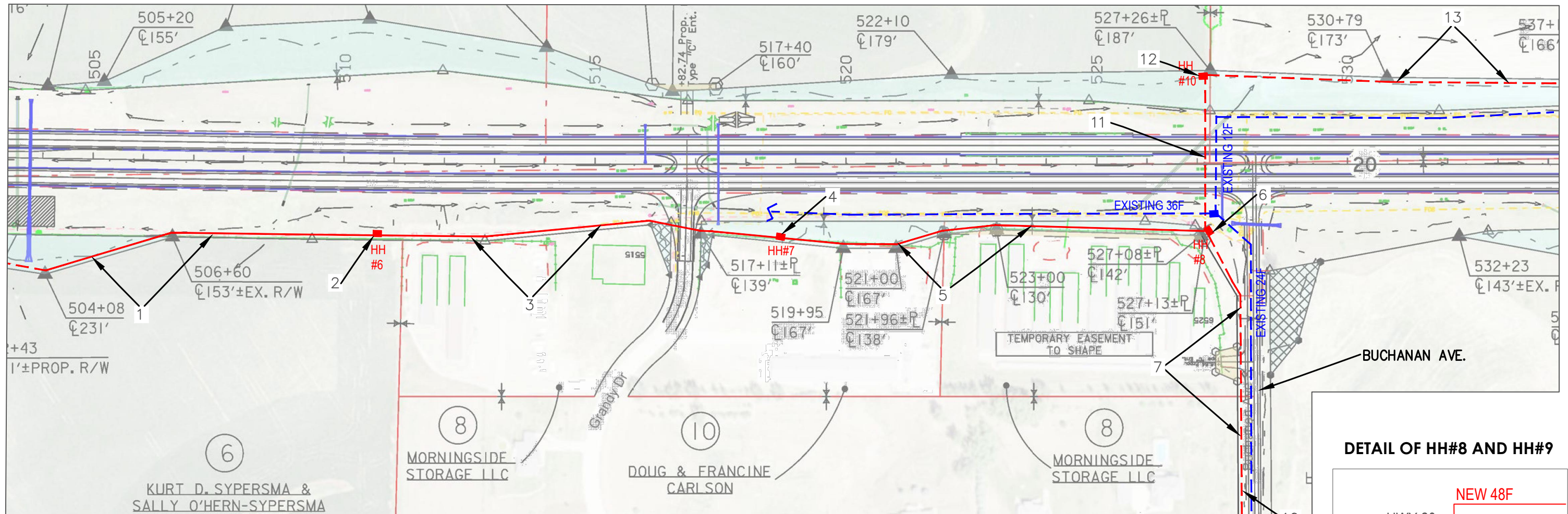
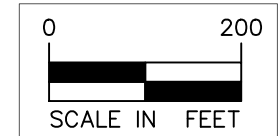
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LEGEND

EXISTING ICN FIBER	
PROPOSED ICN DUCT	
RIGHT-OF-WAY	
EXISTING ICN HANDHOLE	
PROPOSED ICN HANDHOLE	

GENERAL NOTES

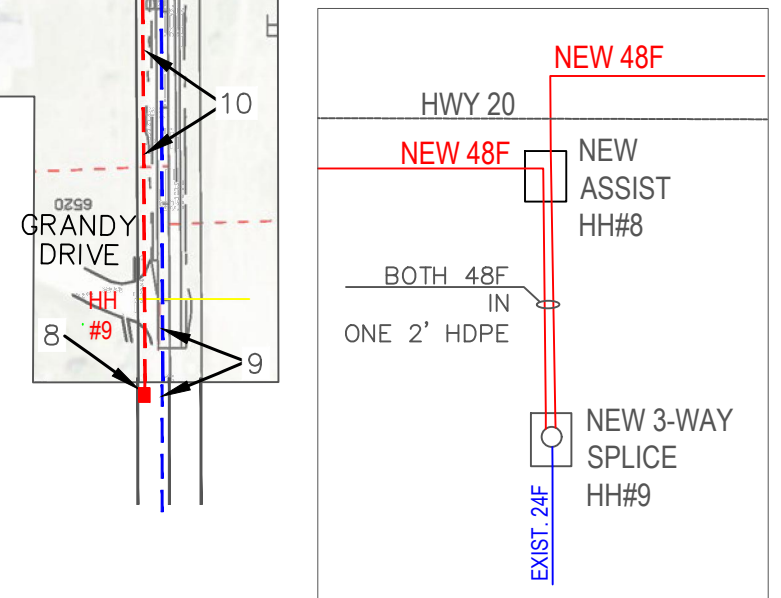
- REGARDING PLAN NOTE 9, EXPOSING SPLICE TAILS: THE CONTRACTOR WILL COORDINATE WITH ICN TO OPEN THE TRENCHES THE AFTERNOON BEFORE SPLICE NIGHT AND RETURN THE FOLLOWING DAY TO BACKFILL. OPEN TRENCHES SHALL BE PROTECTED WITH STEEL POSTS AND ORANGE CONSTRUCTION FENCING.
- PLACE A 100' SLACK COIL IN ALL HAND HOLES.
- BACKFILL EXCAVATIONS AND COMPACT. FINE GRADE AND SEED PER PROVIDED IDOT SPEC.
- PLACE ICN SUPPLIED ROW MARKERS AT ALL HH'S



PLAN NOTES

- PLACE AN 1 1/4" DIA. HDPE DUCT WITH 48F CABLE 4' OFF ROW LINE, FROM PROPOSED HH# 5 TO PROPOSED HH# 6. (APPROXIMATELY 820')
- STA. 510+70, 149' RT, PROPOSED HH# 6. SET LID AT GRADE.
- PLACE AN 1 1/4" DIA. HDPE DUCT WITH 48F CABLE 4' OFF ROW LINE, FROM PROPOSED HH# 6 TO PROPOSED HH# 7. (APPROXIMATELY 820')
- STA. 518+90, 152' RT, PROPOSED HH# 7. SET LID AT GRADE.
- PLACE AN 1 1/4" DIA. HDPE DUCT WITH 48F CABLE 4' OFF ROW LINE, FROM PROPOSED HH# 7 TO PROPOSED HH# 8. (APPROXIMATELY 868')
- STA. 527+17, 151' RT, PROPOSED HH# 8. SET LID AT GRADE.
- PLACE A 2" DIA. HDPE DUCT WITH 48F CABLE 4' OFF ROW LINE, FROM PROPOSED HH# 8 TO PROPOSED HH# 9. (APPROXIMATELY 890')
- PROPOSED HH# 9, 100' SOUTH OF CL OF GRANDY DRIVE & 29' WEST OF CL OF BUCHANAN AVE. INSTALL GROUND ROD IN BOTTOM OF HH. INSTALL LOCATE PED ADJACENT TO HH. STUB A SECTION OF DUCT FROM FLOOR OF HH TO BASE OF PED. INSTALL GROUND WIRE FROM TOP OF PED AND CLAMP TO GROUND ROD. (NEW 3-WAY SPLICE POINT)
- EXPOSE 80' OF EXISTING ICN CABLE IN THE WEST LANE OF BUCHANAN AVENUE. TRENCH 20 BETWEEN EXISTING CABLE AND HH # 9. NOTE DOT TRAFFIC CONTROL TEMPLATE TC-211 WILL APPLY
- PULL 890' OF 48F CABLE THRU PREVIOUSLY PLACED 2" DIA. DUCT BETWEEN HH# 9 AND HH# 8. (2 CABLES IN THIS DUCT)
- PLACE AN 1 1/4" DIA. HDPE DUCT WITH 48F CABLE BETWEEN PROPOSED HH# 8 TO PROPOSED HH# 10. (APPROXIMATELY 325')
- STA. 527+10, 183' LT, PROPOSED HH# 10. SET LID AT GRADE.
- PLACE AN 1 1/4" DIA. HDPE DUCT WITH 48F CABLE 4' OFF ROW LINE, FROM PROPOSED HH# 10 TO PROPOSED HH# 11. (APPROXIMATELY 910')

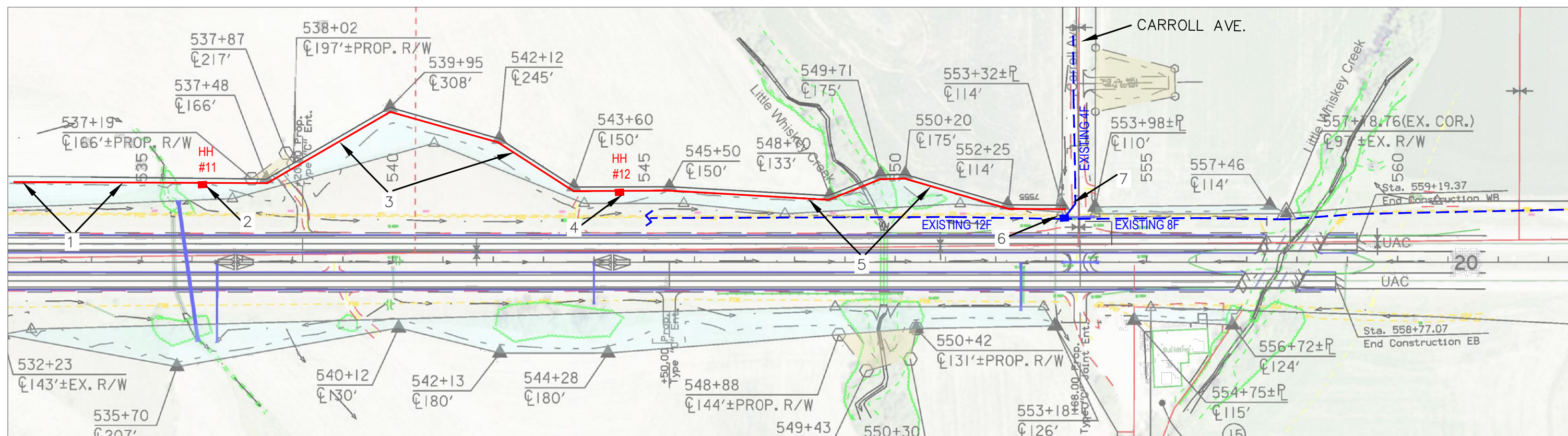
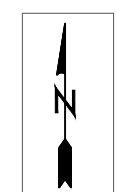
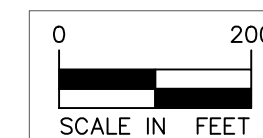
DETAIL OF HH#8 AND HH#9



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PLAN NOTES

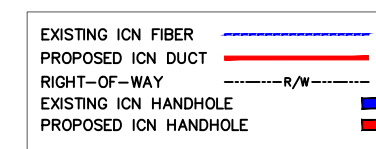
1. PLACE AN 1 1/4" DIA. HDPE DUCT WITH 48F CABLE 4' OFF ROW LINE, FROM PROPOSED HH# 10 TO PROPOSED HH# 11. (APPROXIMATELY 910')
2. STA. 536+25, 162' LT, PROPOSED HH# 11. SET LID AT GRADE.
3. PLACE AN 1 1/4" DIA. HDPE DUCT WITH 48F CABLE 4' OFF ROW LINE, FROM PROPOSED HH# 11 TO PROPOSED HH# 12. (APPROXIMATELY 910')
4. STA. 544+50, 146' LT, PROPOSED HH# 12. SET LID AT GRADE.
5. PLACE AN 1 1/4" DIA. HDPE DUCT WITH 48F CABLE 4' OFF ROW LINE, FROM PROPOSED HH# 12 TO THE RELOCATED EXISTING HH AT STA. 553+36 (APPROXIMATELY 910')
6. MOVE EXISTING HH APPROXIMATELY 15' NORTH. TRENCH-RELOCATE EXISTING EASTBOUND CABLE TO NEW LOCATION (MIN. DEPTH 4.5'). (3-WAY SPLICE POINT)
7. TRENCH - RELOCATE, EXISTING ICN NORTHERLY CABLE FROM UNDER SOUTHBOND LANE OF CARROLL AVE. TO RELOCATED HH. (MIN. DEPTH 4.5') INSTALL LOCATE PED. INSTALL GROUND ROD IN HH. STUB A SECTION OF DUCT FROM FLOOR OF HH TO BASE OF PED. CONNECT GROUND WIRE FROM TOP OF PED AND CLAMP TO GROUND ROD.

GENERAL NOTES

1. REGARDING PLAN NOTE 7, RELOCATING EXISTING CABLE: THE CONTRACTOR WILL COMPLETE RELOCATE WITH A MINIMUM AMOUNT OF DISRUPTION TO TRAFFIC ON CARROLL AVE. AND IMMEDIATELY RESTORE THE ROAD TO A PRE-CONSTRUCTION CONDITION.
2. PLACE A 100' SLACK COIL IN ALL HAND HOLES.
3. BACKFILL EXCAVATIONS AND COMPACT. FINE GRADE AND SEED PER PROVIDED IDOT SPEC.
4. PLACE ICN SUPPLIED ROW MARKERS AT ALL HH'S.

NOTES ON POTENTIAL ICN CONFLICT OF NORTHERLY CABLE ON CARROLL AVENUE:
 EXISTING ICN IS RUNNING UNDER THE SOUTH BOUND LANE OF CARROLL AVE.
 NO GRADE CHANGE OF ROAD IS PROPOSED.
 THIS ROAD WILL REMAIN AS A ROCK ROAD (NO SUBDRAIN)

LEGEND



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