Information for File #2014-01903-ERH

Applicant: Blue Earth County Public Works, c/o Mr. Al Forsberg, Principal Engineer

Agent: N/A

Corps Contact: Eric Hanson, U.S. Army Corps of Engineers, 180 5th Street East, Suite 700, St. Paul, Minnesota 55101-1678; eric.r.hanson@usace.army.mil; 651-290-5386

Primary County: Blue Earth

Location: Sections 9, 16, 21, 28, 33, Township 106 North, Range 27 West; and Sections 4, 9, 16, and 21 Township 105 North, Range 27 West.

Information Complete On: April 10, 2015

Posting Expires On: April 23, 2015

Authorization Type: Section 404 Letter of Permission (LOP-05-MN)

This application is being reviewed in accordance with the practices for documenting Corps jurisdiction under Sections 9 & 10 of the Rivers and Harbor Act of 1899 and Section 404 of the Clean Water Act identified in Regulatory Guidance Letter 07-01. We have made a preliminary determination that the aquatic resources that would be impacted by the proposed project are regulated by the Corps of Engineers under Section 404 of the Clean Water Act. Our jurisdictional review and final jurisdictional determination could result in modifications to the scope of the project's regulated waterbody/wetland impacts and compensatory mitigation requirements identified above.

PROJECT INVOLVES:
A Listed State-Impaired Water: The project would **not** have direct impacts to any listed state-impaired waters. The wetlands that would be impacted for this project drain into the Maple River, which is connected to the Minnesota River via the LeSueur River and the Blue Earth River.

FEMA 100-Year Floodplain: The project area is **not** within the FEMA 100 or 500-year floodplains.

PROJECT DESCRIPTION AND PURPOSE: The applicant proposes to reconstruct a portion of County State Aid Highway 1 from Trunk Highway 30 to Good Thunder in order to eliminate safety deficiencies, poor drainage and deteriorated pavement. The proposal will also correct unsafe vertical and horizontal curves, steep inslopes and poor sight distances.

NAME, AREA AND TYPES OF WATERS (INCLUDING WETLANDS) SUBJECT TO LOSS: The proposed action would result in a permanent impact to 1.04 acres (45,229 square feet) of wetland communities, including the permanent impact to 41,578 square feet (0.95 acre) of Wetland 1, a Type 3 (PEMC) seasonally flooded wetland adjacent to

an unnamed tributary to Judicial Ditch #8, and the permanent impact to 3,653 square feet (0.098 acre) of Wetland 2, a Type 1 (PEMA) temporarily flooded wet meadow wetland abutting Judicial Ditch #8. There are no temporary wetland impacts, stream impacts, or lake impacts proposed for this project.

ALTERNATIVES CONSIDERED:

1. *No-Build:* The applicant considered not building the project. This alternative would avoid all wetland impacts, but would also not address the safety deficiencies associated with narrow shoulder, steep inslopes, limited sight distance and sharp vertical curves. This alternative was rejected by the applicant because it would not meet the applicant's objectives and would therefore not be a practicable alternative.

2. *Off-site Alternatives:* The applicant considered completely reconstructing the roadway on a different alignment with modern construction specifications, such as shoulder widths, sight lines, and inslopes. Reconstructing the road on a new alignment would be much more costly than updating an existing roadway due to the need to procure private lands and secure the necessary easements. It would also involve substantially larger impacts to wetlands and tributaries for the addition of new crossings. Therefore, this alternative was rejected because it would not be practicable.

3. *On-site Alternative Configurations:* Alternative configurations were considered and in one location (from Sta. 105+00 to Sta. 125+00) an alternative alignment was selected in order to reduce impacts to the Maple River. The remainder of the proposal involves only minor changes to the existing roadway. Therefore, realigning segments of the roadway at other locations would be an unnecessary, more costly and result in more impacts to aquatic resource. Therefore, alternative configurations along the remainder of the project corridor were rejected due to cost and practicability.

WETLAND AVOIDANCE AND MINIMIZATION INFORMATION: The Proposed Action would result in direct impacts to 0.76 acres (33,228 square feet) of wetland habitat. Measures to avoid and minimize impacts to wetlands were considered in the design of the Proposed Action. In one location, the road alignment was shifted to avoid impacts to the Maple River (see On-site Alternative Configurations above). Throughout the remainder of the project, impacts were further minimized by staying as close to the existing alignment as much as possible, breaking slopes from 1:4 to 1:3 outside the recovery area and keeping the road grade as low as possible within required state standards.

COMPENSATORY MITIGATION: The applicant proposes mitigate for unavoidable impacts to wetlands by purchasing wetland bank credits through the local road wetland replacement program at a 2:1 ratio. The number of credits proposed is in line with the mitigation ratios established in current St. Paul District policy.

DRAWINGS: See attached drawings.

MINNESOTA DEPARTMENT OF TRANSPORTATION
BLUE EARTH COUNTY DEPARTMENT OF PUBLIC WORKS
CSAH 1
CONSTRUCTION PLANS FOR GRADING AND SURFACING

STATE AID PROJECT NO. 007-601-013

BETWEEN STATE HW 30 AND GOOD THUNDER

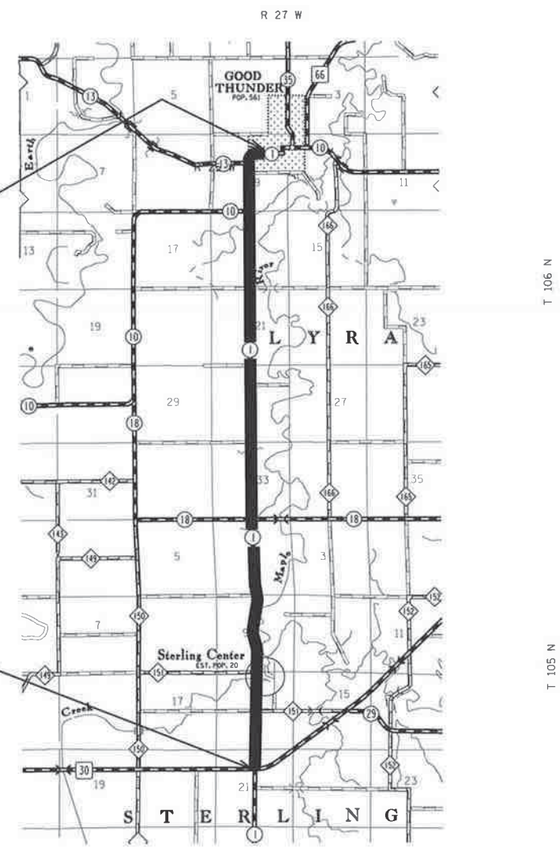
FROM A POINT 1300' NORTH OF THE CENTER OF SECTION 09-106-27

TO A POINT 458' WEST OF THE SE COR OF THE NW 1/4 OF THE NE 1/4 OF SECTION 09-106-27

GROSS LENGTH	42,850 FEET	8.115 MILES
NET LENGTH	42,850 FEET	8.115 MILES

END SAP 007-601-013
STA 439+00

BEG SAP 007-601-013
STA 10+50



PROJECT LOCATION

DESIGN DESIGNATION CSAH 1

ADT (CURRENT YEAR) 2015 = 599
ADT (FUTURE YEAR) 2035 = 898
10 TON DESIGN
R VALUE 10
ESAL 164,000

DESIGN SPEED 55 MPH
BASED ON STOPPING SIGHT DISTANCE
HEIGHT OF EYE 3.5 - HEIGHT OF OBJECT 2'
DESIGN SPEED NOT ACHIEVED AT :

N

FOR PLANS AND UTILITIES SYMBOLS SEE TECHNICAL MANUAL

GOVERNING SPECIFICATIONS

THE 2014 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSRUCTION, AND THE 2014 EDITION OF THE MATERIALS LAB SUPPLEMENTAL SPECIFICATIONS FOR CONSTRUCTION SHALL GOVERN

INDEX OF SHEETS

SHEET No'S	1	TITLE
SHEET No'S	2	EST. QUANTITIES
SHEET No'S	3-11	TYPICAL SECTIONS & DETAILS
SHEET No'S	12-41	QUANTITIY TABULATIONS & DETAILS
SHEET No'S	42-43	UTILITIES
SHEET No's	44-61	PLAN & PROFILES
SHEET No's	62-70	CONSTRUCTION PLANS
SHEET No'S	X1-X87	PROPOSED X-SECTIONS
SHEET No'S	X88-X90	APPROACHES X-SECTIONS
SHEET No'S	B1-B21	BOX CULVERT PLANS

THIS PLAN CONTAINS 181 SHEETS

SCALE

PLAN	100'	
PROFILE	100' HORIZ.	10' VERT.
INDEX MAP	1 MILE	
CROSS SECTIONS	10' HORIZ.	10' VERT.

UTILITIES

EXISTING UTILITY INFORMATION SHOWN ON THIS PLAN HAS BEEN PROV BY THE UTILITY OWNER. THE CONTRACTOR SHALL FIELD VERIFY EXAC LOCATIONS PRIOR TO COMMENCING CONSTRUCTION AS REQUIRED BY STA LAW. NOTIFY GOPHER STATE ONE-CALL AT 1-800-252-1166 OR 612-4

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY LE THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES CI/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTI DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."

ONE CALL:	1-800-252-1166
ELECTRIC: BENCO	1-507-387-7963
TELEPHONE: HICKORY TECH	1-507-387-1730
GAS: NORTHWEST GAS CO.	1-507-524-4103

ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND ORDINANCES WILL BE COMPLIED WITH , IN THE CONSTRUCTION OF THIS PROJECT.

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME MY DIRECT SUPERVISION AND THAT I AM DULY LICENSED PROFESSIONAL ENGINEER UNDER OF THE STATE OF MINNESOTA

COUNTY ENGINEER — ALAN FORS

DATE _____ LICENSE No.

DISTRICT STATE AID ENG'R : REVIEWED FOR COMPLIANCE WITH STATE-AID RULES/POLICY — DATE: _____

STATE AID ENG'R : APPROVED FOR STATE-AID FUNDING — DATE: _____

ALL UNDERGROUND UTILITIES
LOCATIONS ARE APPROXIMATE

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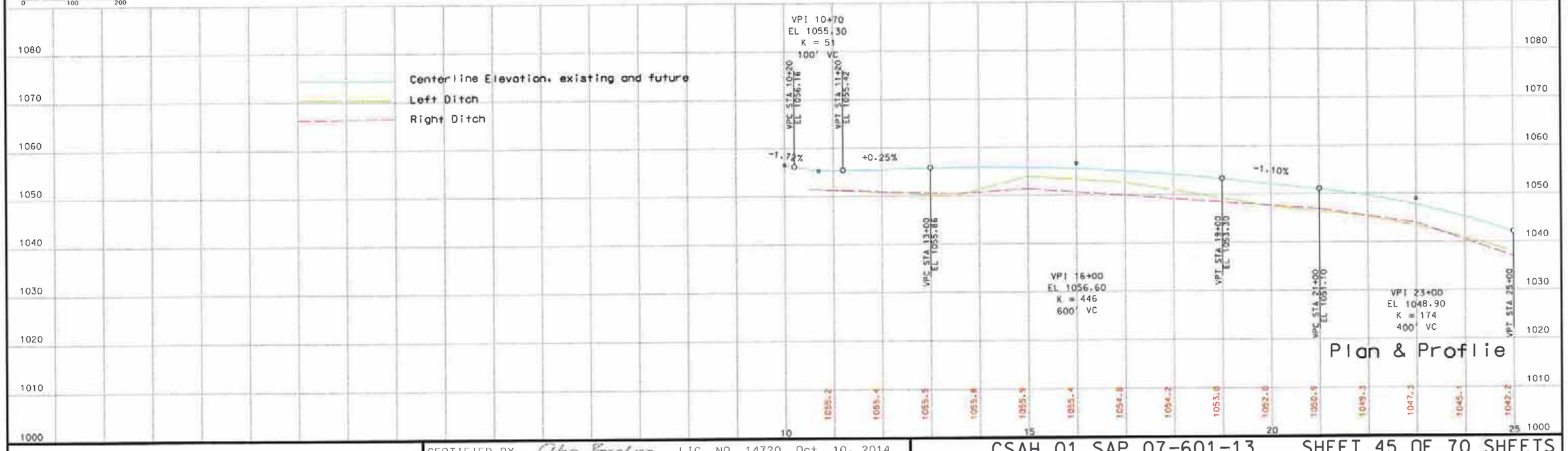

Plan & Proflie

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CSAH 01 SAP 07-601-13 SHEET 45 OF 70 SHEETS

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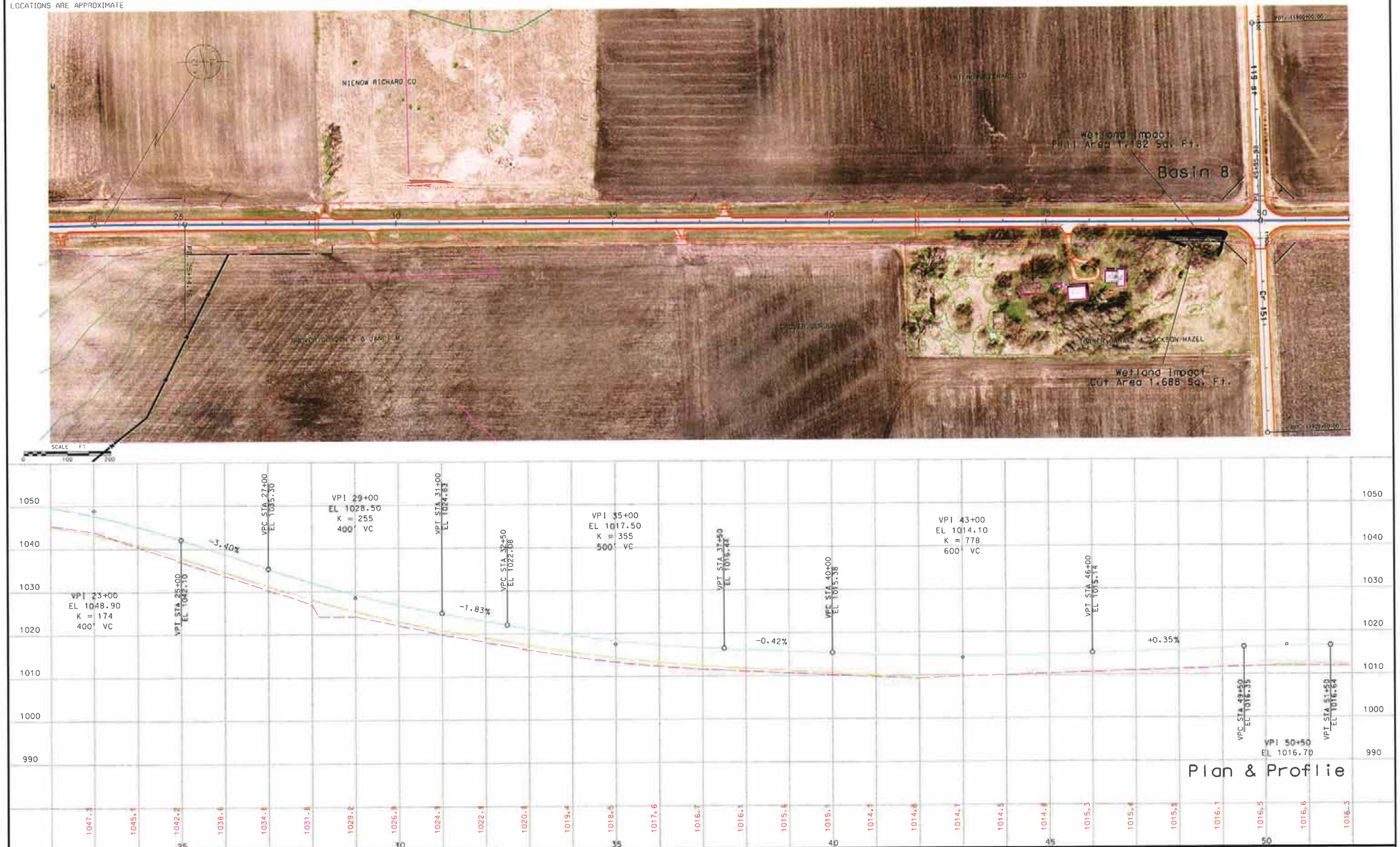

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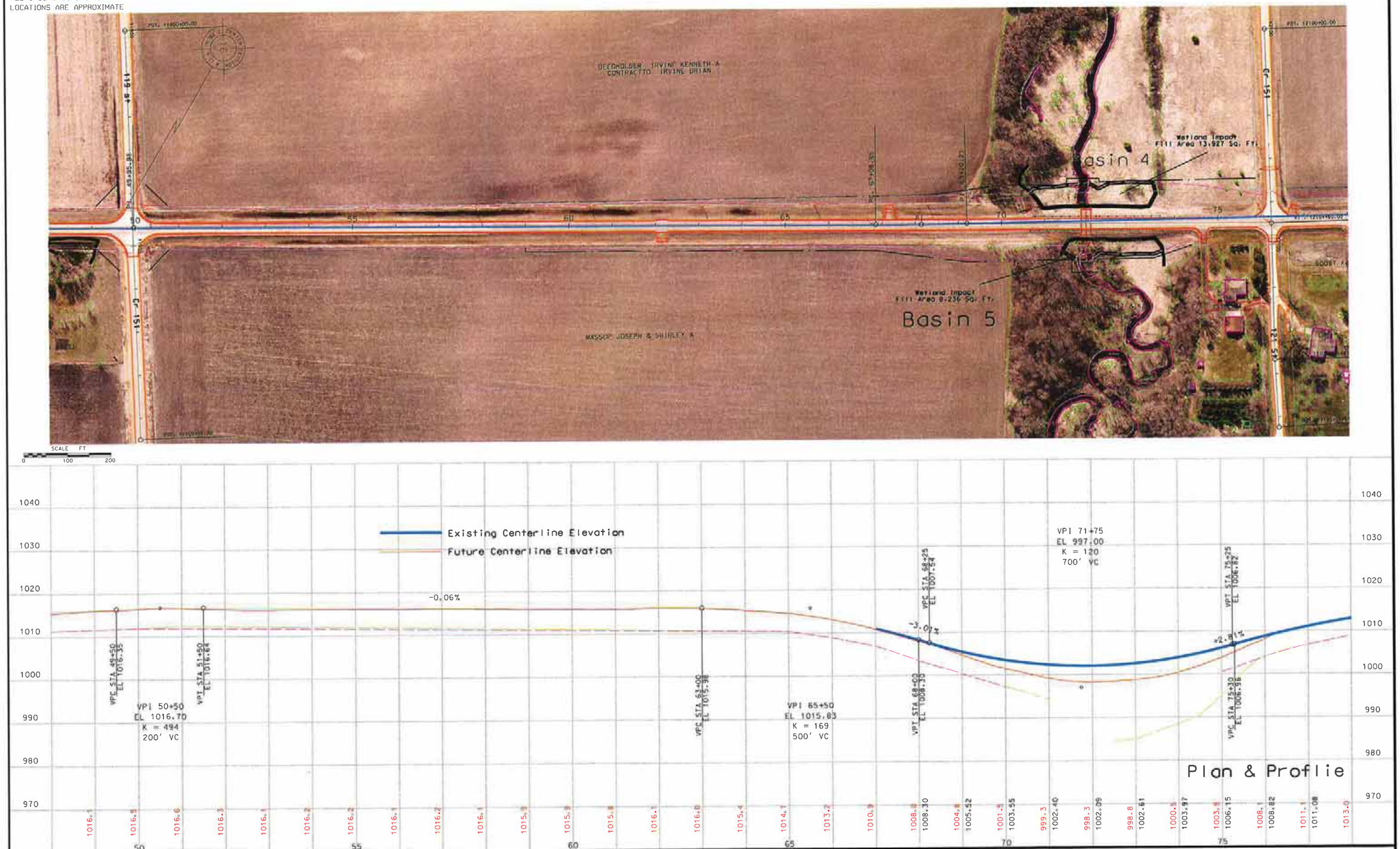

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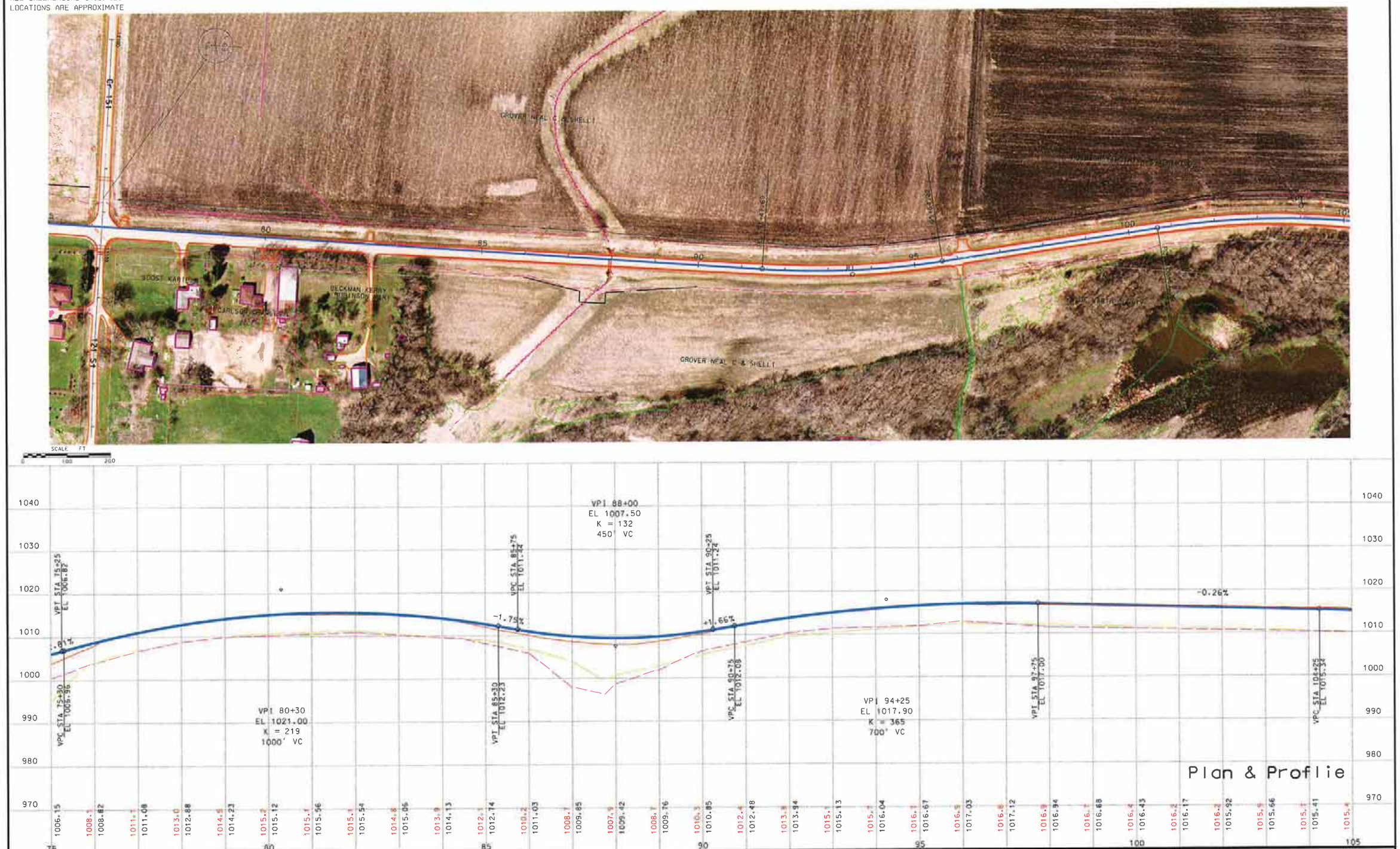

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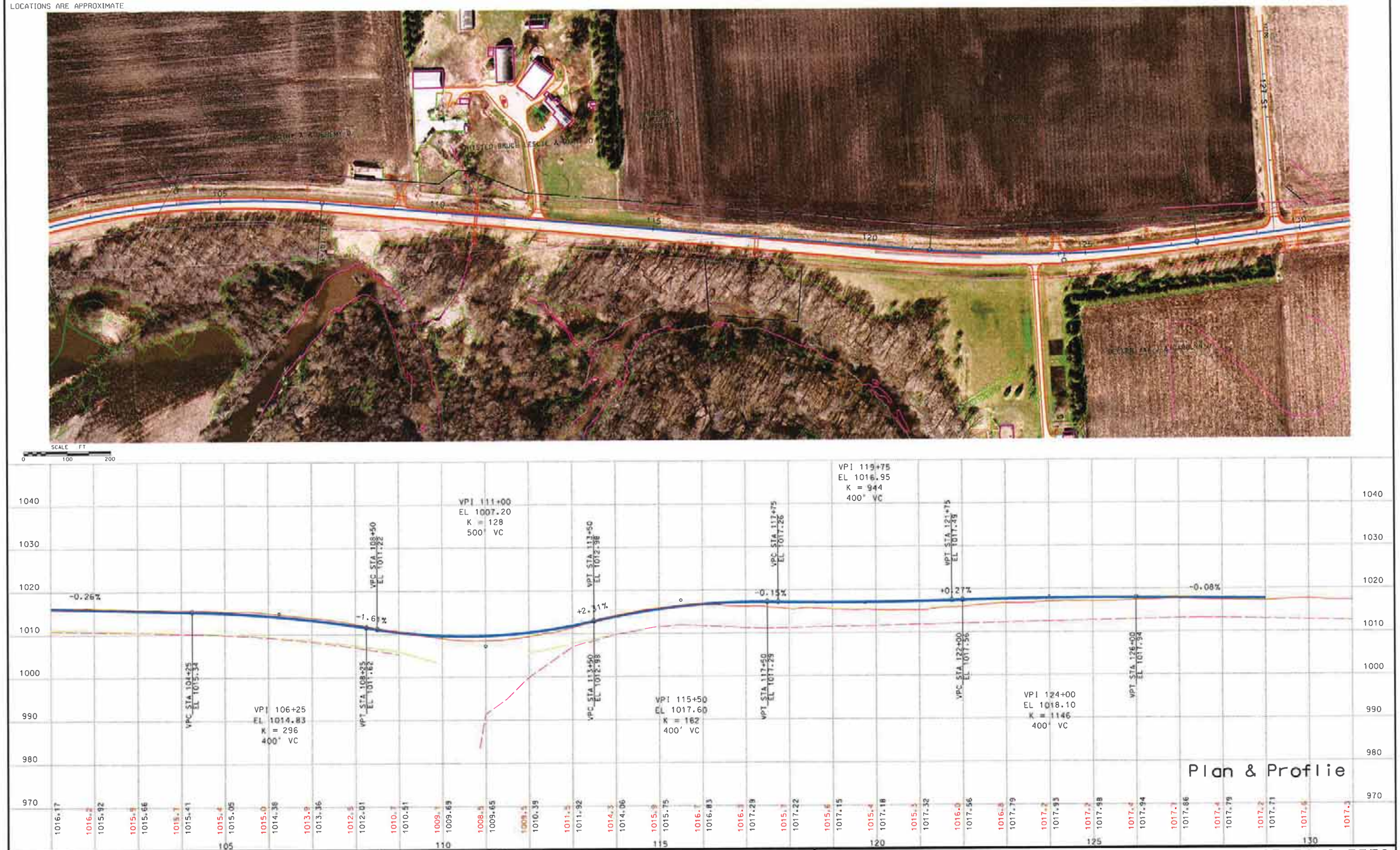

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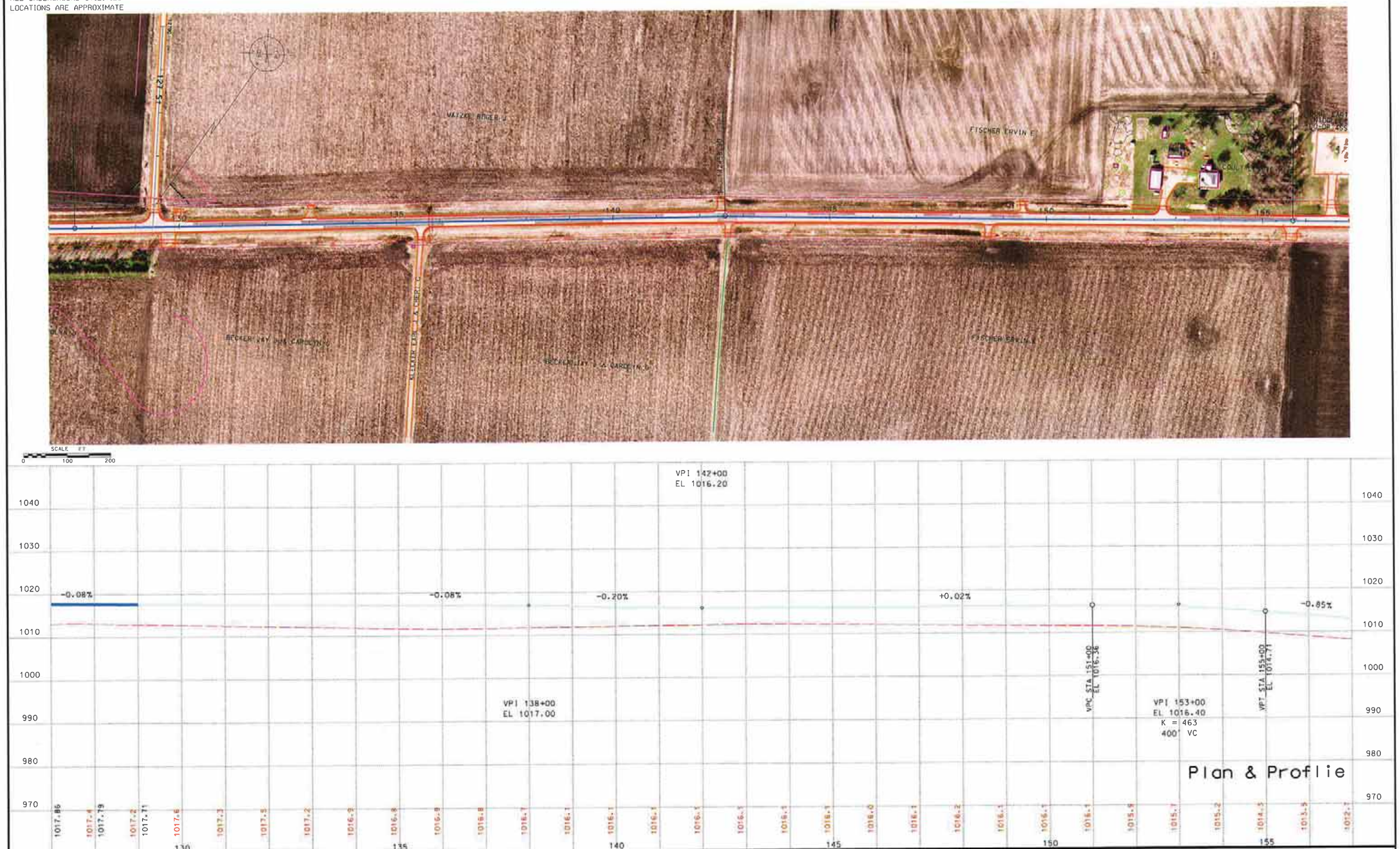

Plan & Proflie

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CSAH 01 SAP 07-601-013 SHEET 50 OF 70 SHEETS

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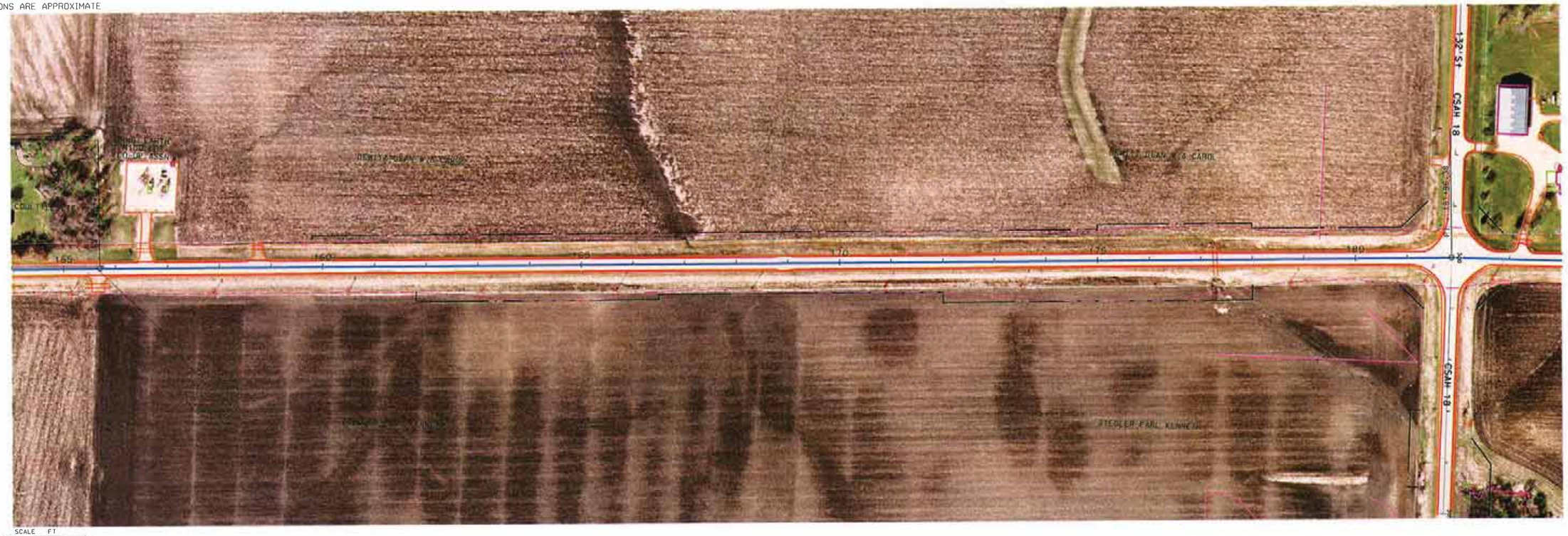

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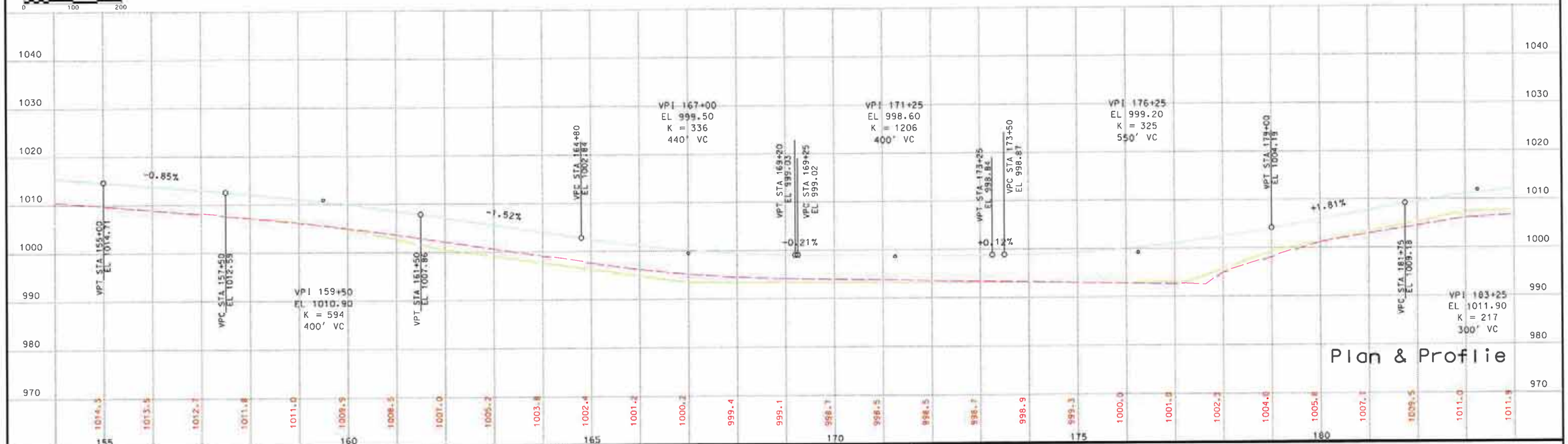

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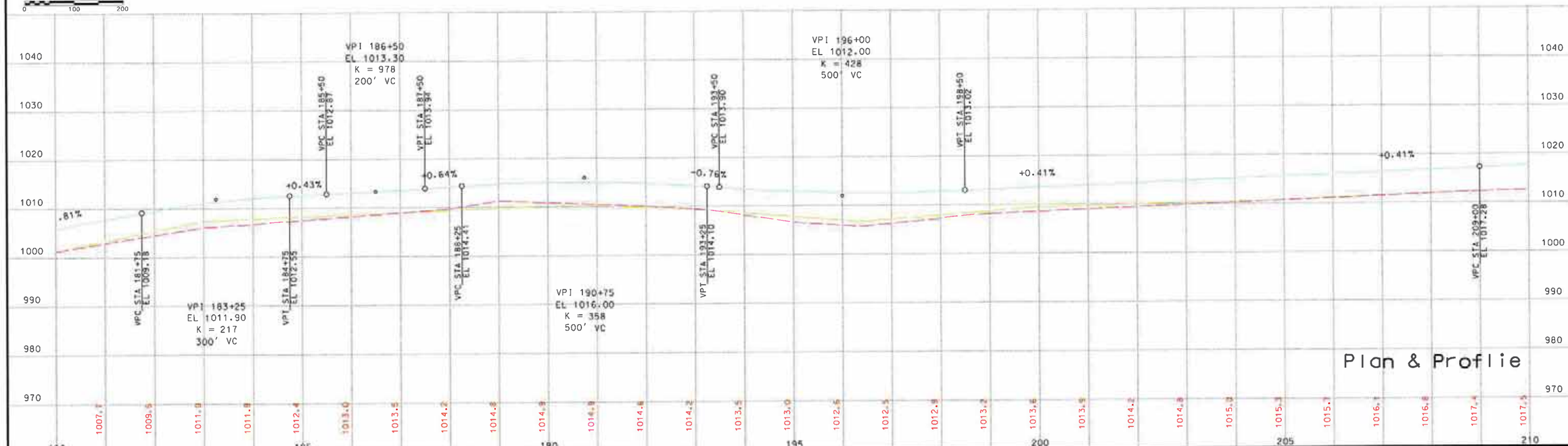

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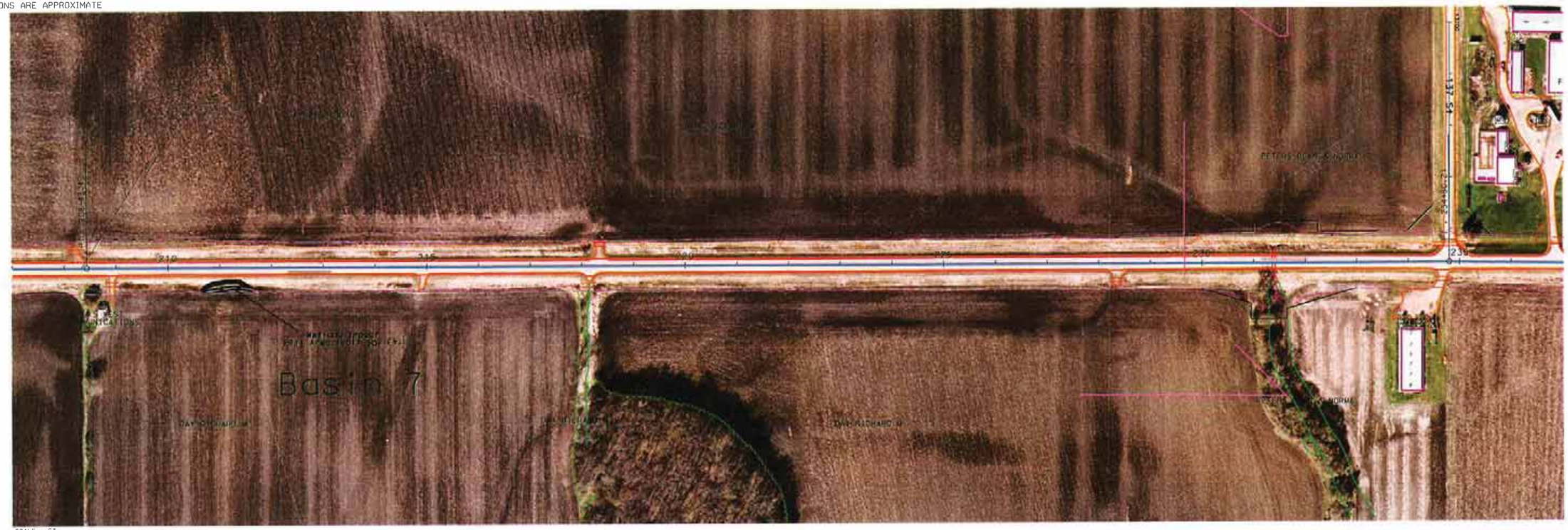

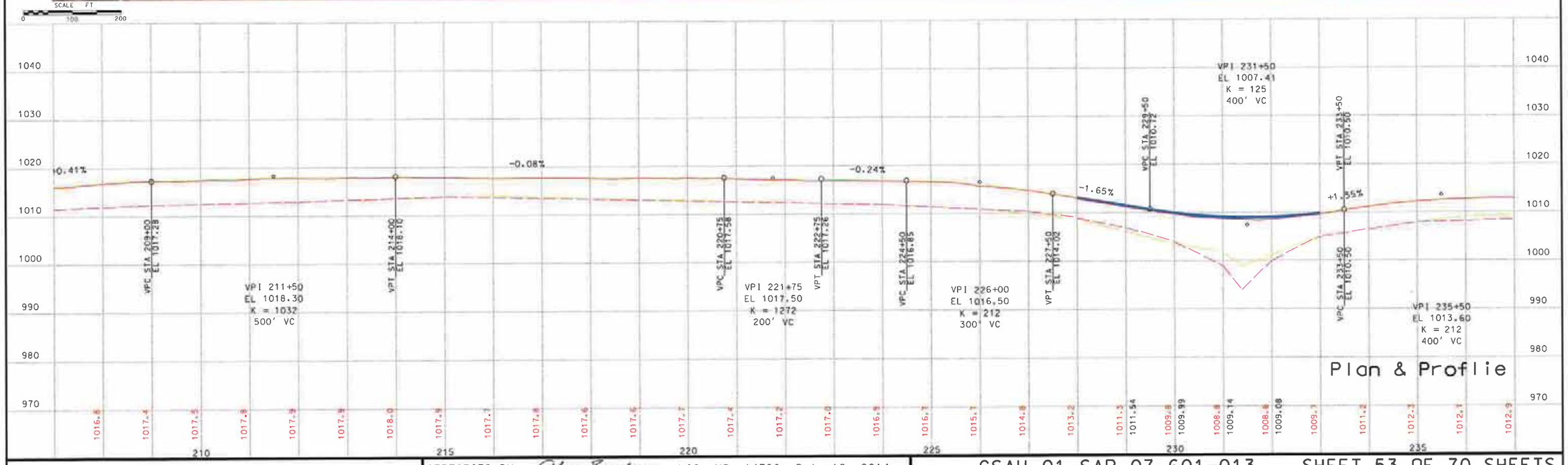

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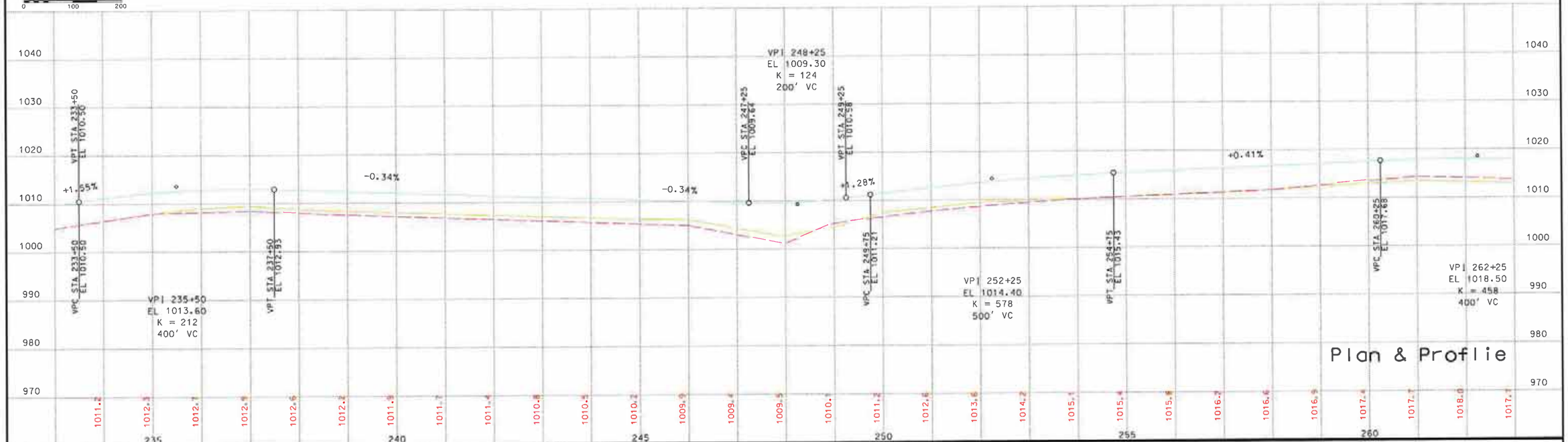

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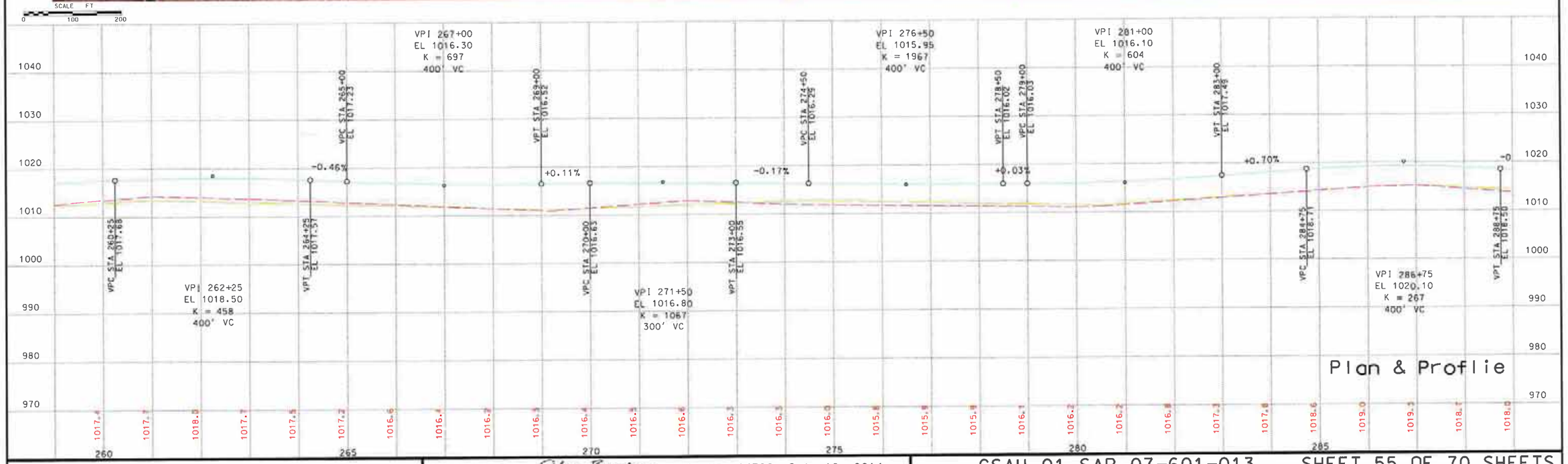

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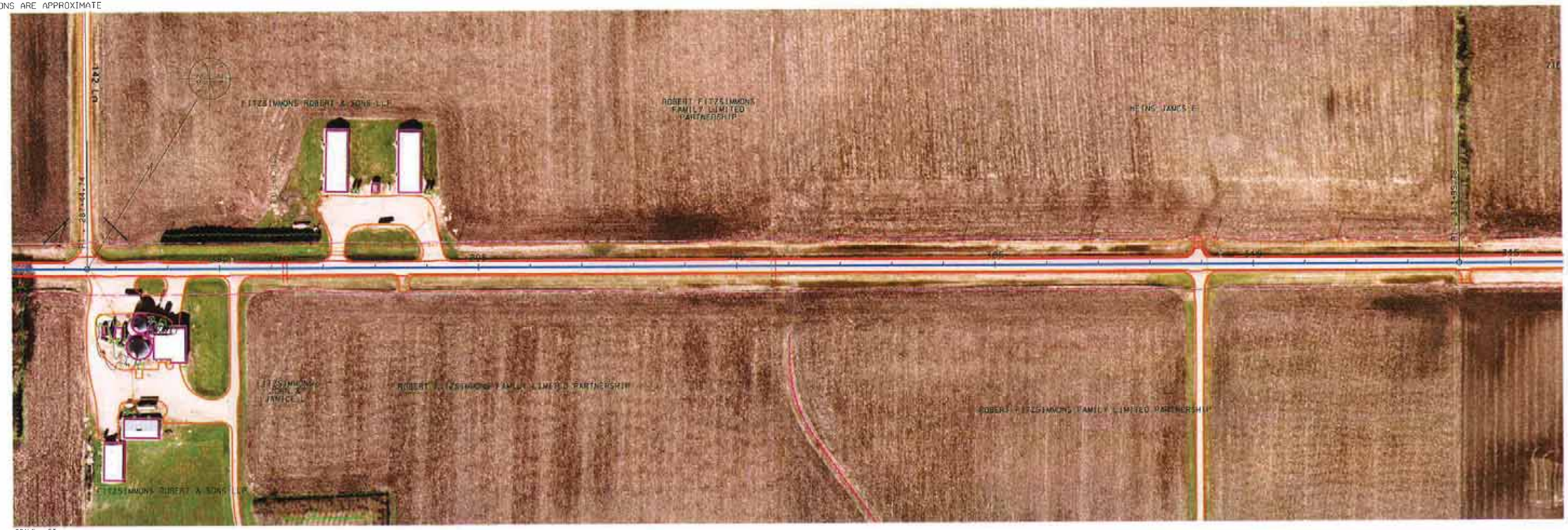

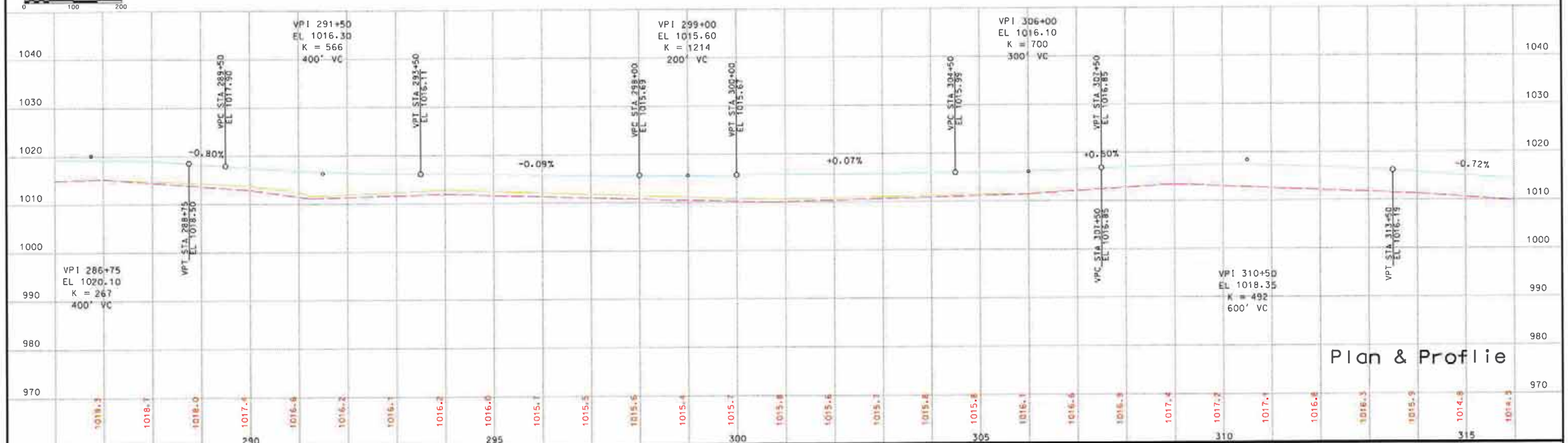

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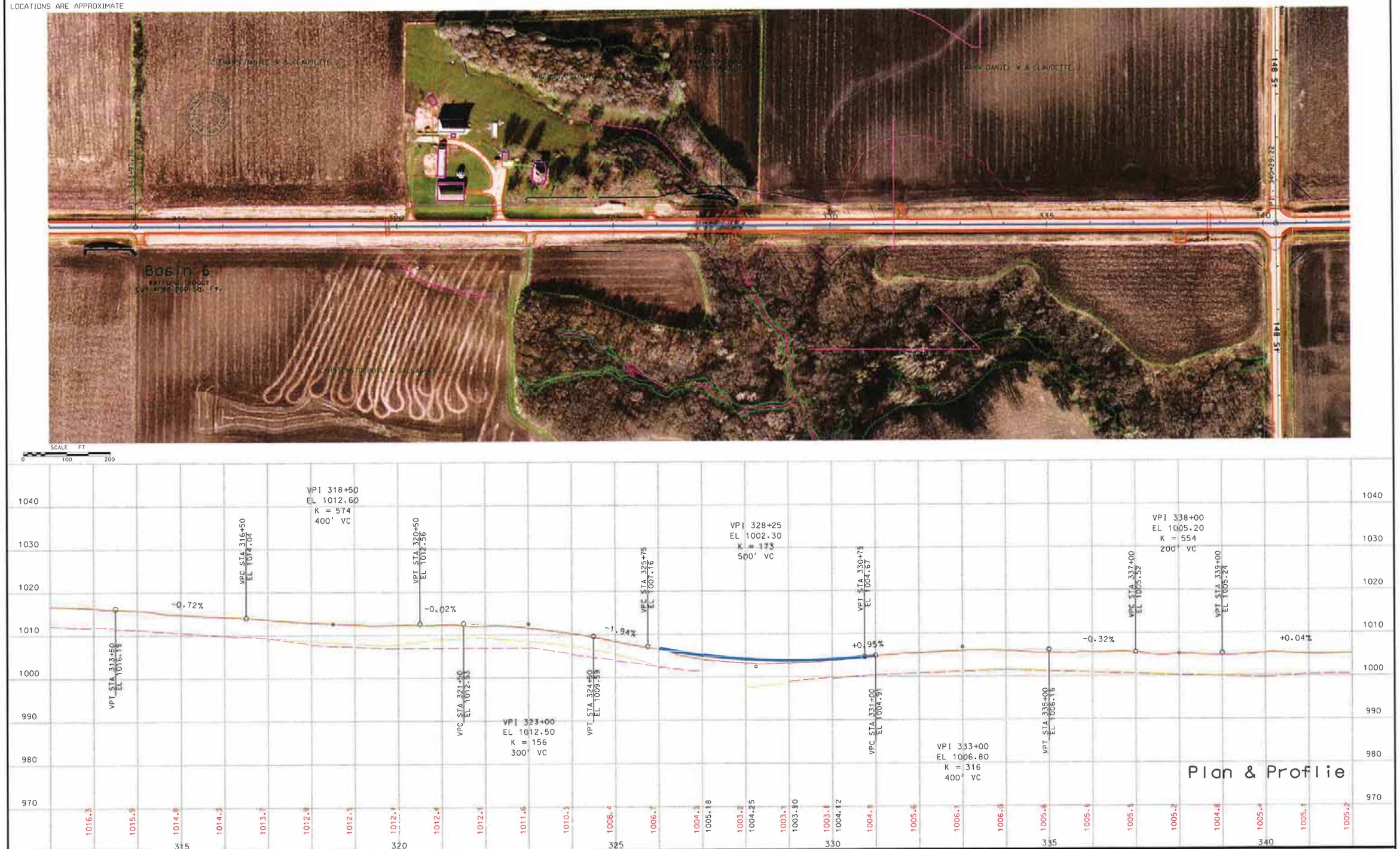

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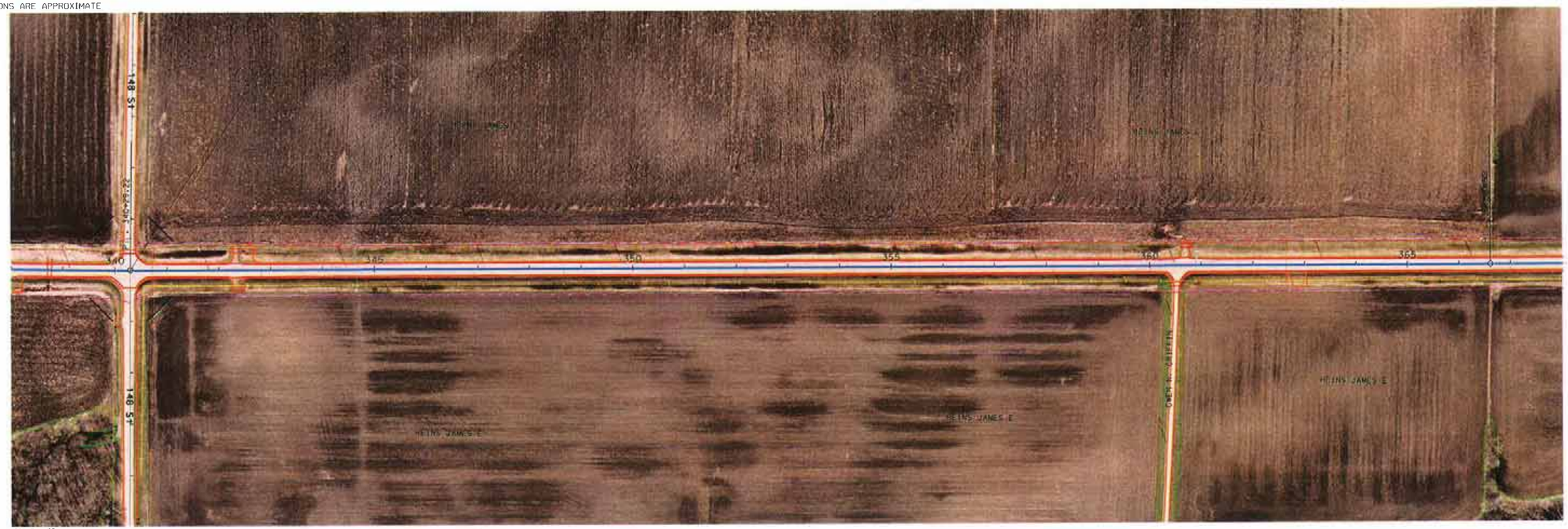

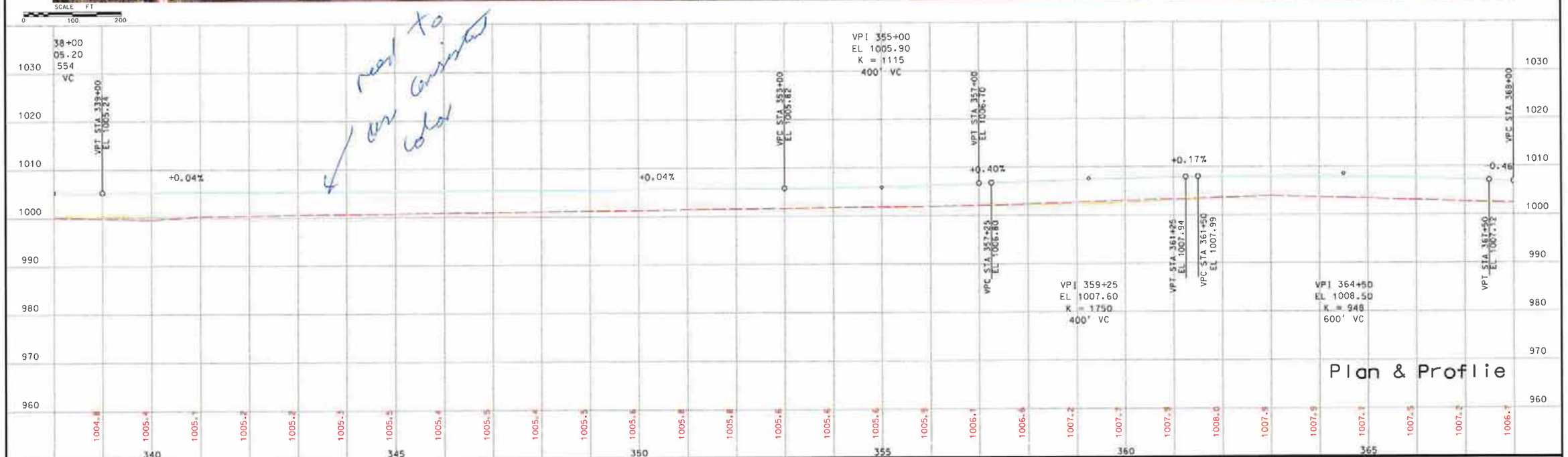

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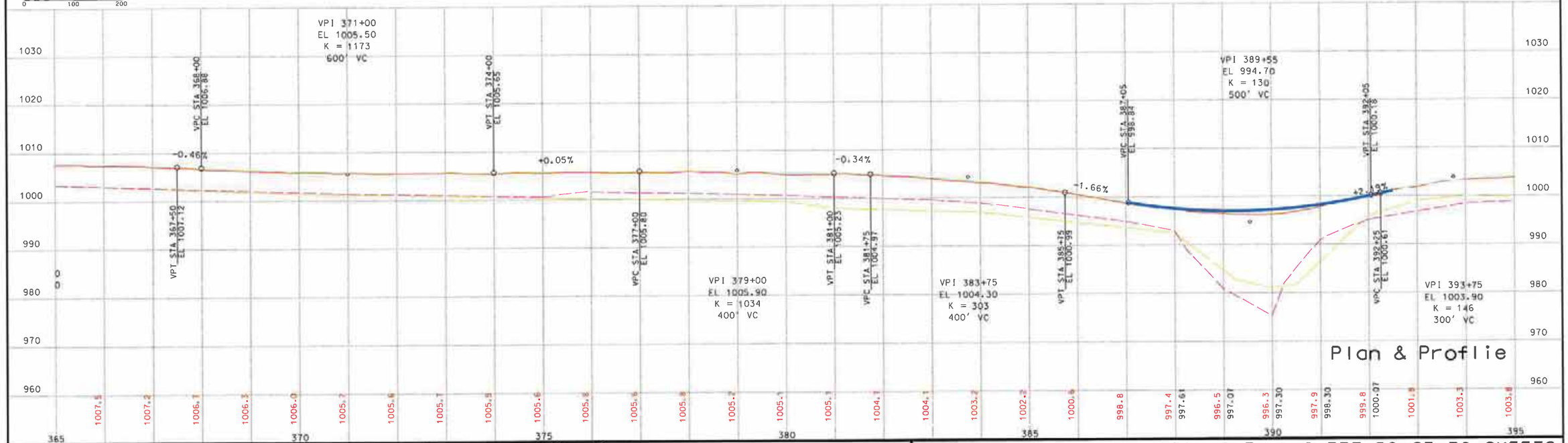

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CSAH 01 SAP 07-601-013 SHEET 59 OF 70 SHEETS

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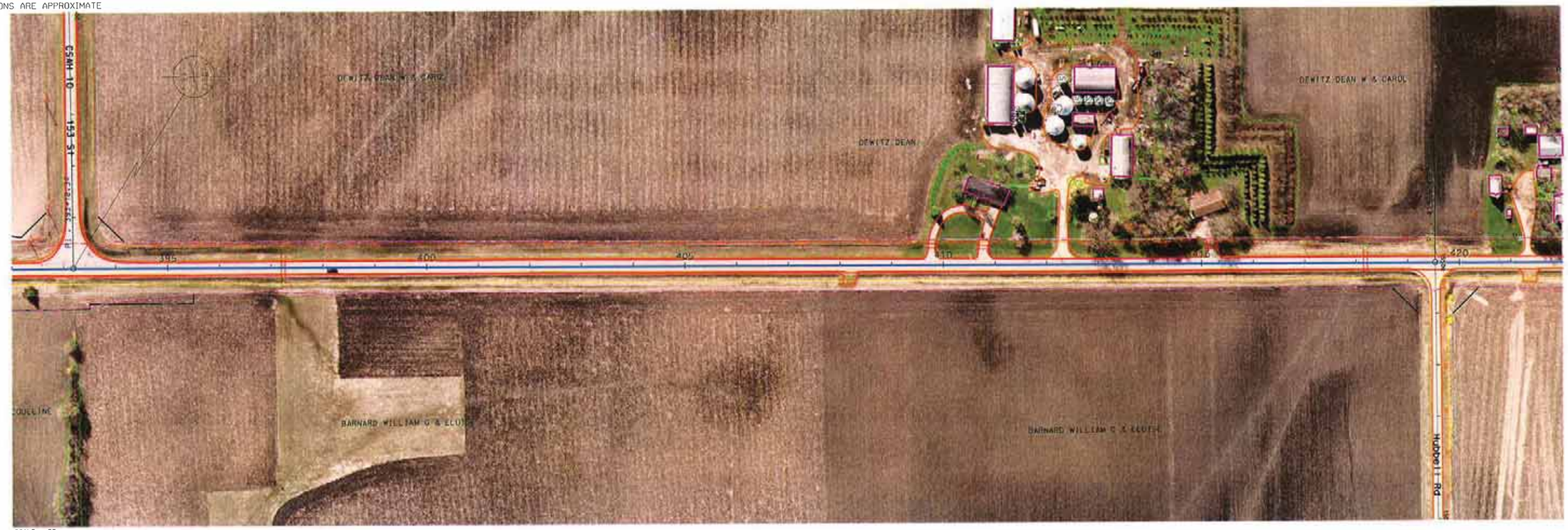

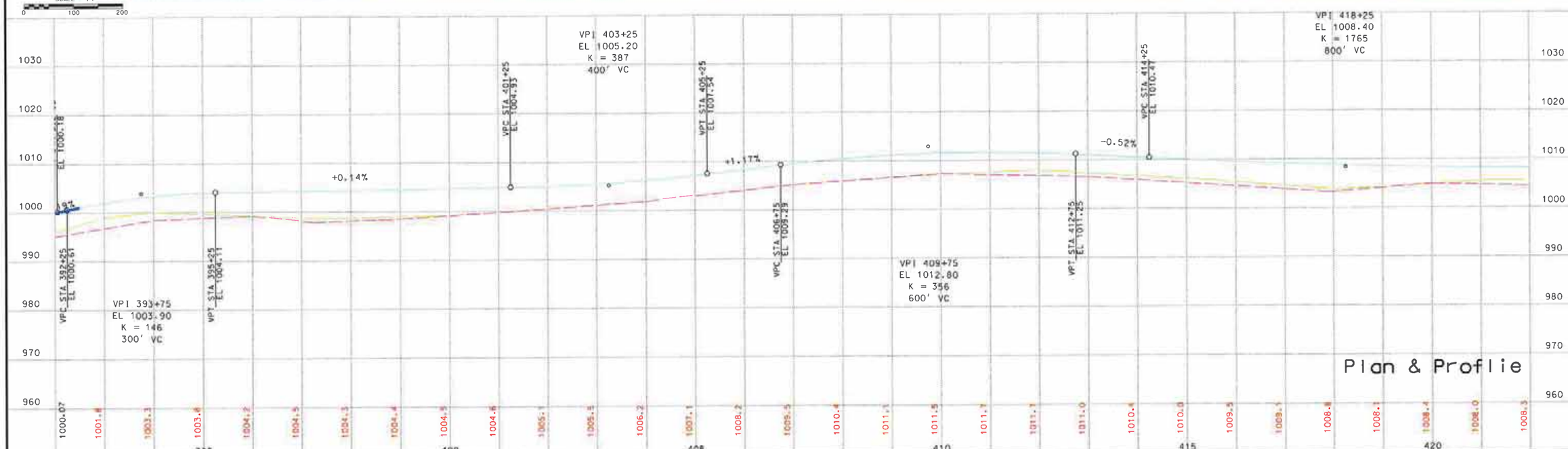

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CSAH 01 SAP 07-601-013 SHEET 60 OF 70 SHEETS

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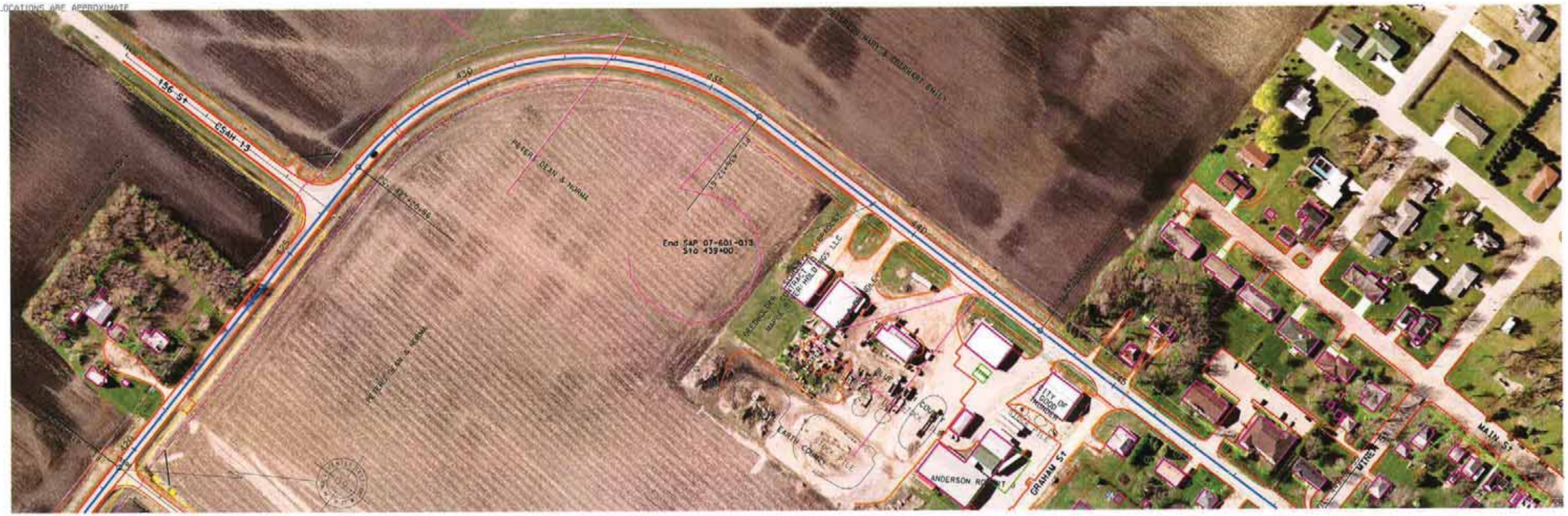

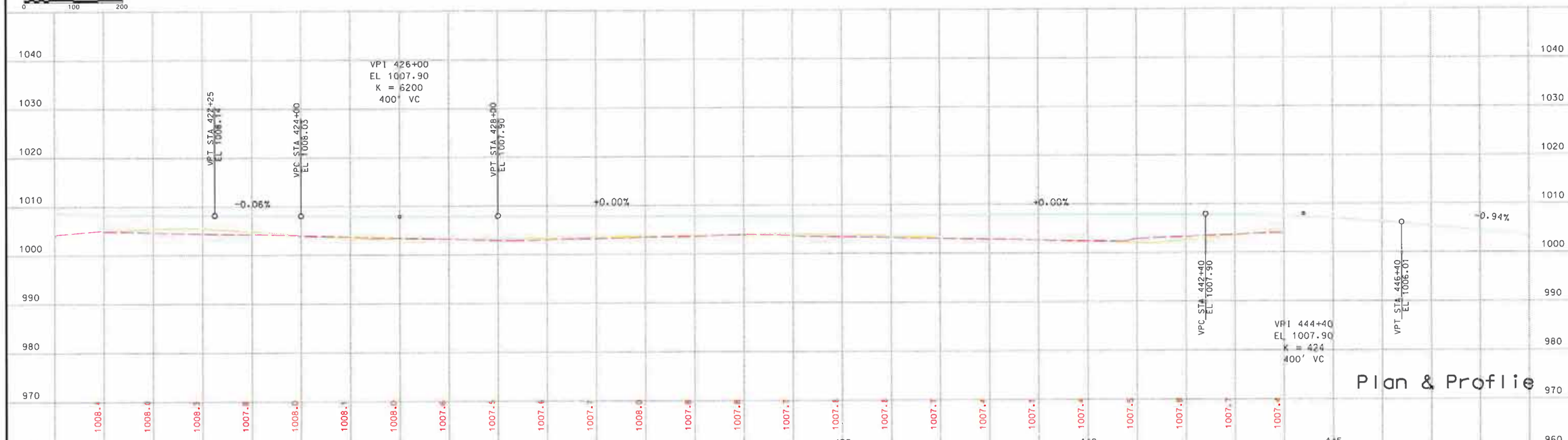

Plan & Profile

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CSAH 01 SAP 07-601-013 SHEET 61 OF 70 SHEETS

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