

KANE COUNTY

DIVISION OF TRANSPORTATION

**FABYAN PARKWAY FEASIBILITY
STUDY**
(Western Avenue to Kirk Road)

Section: 03-00308-00-ES
Project No. 0116T1
October, 2004

**KANE COUNTY DIVISION OF TRANSPORTATION
FABYAN PARKWAY FEASIBILITY STUDY
FEASIBILITY STUDY OUTLINE AND INDEX**

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I. EXECUTIVE SUMMARY

The Kane County Division of Transportation requested engineering services for the preparation of a Feasibility Study for the Fabyan Parkway Corridor from Western Avenue to Kirk Road. The Kane County Division of Transportation and the City of Batavia financed this Feasibility Study. The corridor length within the Study limits is 2.58 miles. The following locations will be studied separately by the County in the future and are excluded from the study.

- Western Avenue Intersection
- Kirk Road Intersection
- Bridge over the Fox River

The limits of this Feasibility Study are illustrated in Figure 1.1 and Figure 1.2.

The purpose for this Feasibility Study is to identify and evaluate opportunities for improved efficiency, mobility, and safety along this section of Fabyan Parkway while accommodating future projected traffic.

Existing Fabyan Parkway carries approximately 30,000 vehicles per day, with channelized auxiliary lanes at major intersections. Traffic projections estimate volumes will increase up to 60,000 vehicles per day in the year 2025. The Feasibility Study will determine the feasibility and impacts for providing additional auxiliary lanes at intersections while maintaining four through traffic lanes to accommodate projected 2015 traffic. The Feasibility Study will also determine the feasibility and impacts for providing additional auxiliary lanes at intersections while providing six through traffic lanes to accommodate projected 2025 traffic.

The following tasks have been completed for the Feasibility Study:

- Initial data collection
- Intersection studies for 2003, 2015, and 2025 traffic
- Traffic simulation models for 2003, 2015, and 2025 traffic
- Provide recommended improvements for immediate, intermediate, and long term ranges with preliminary concept cost estimates for planning budget purposes
- Preliminary design studies for vertical and horizontal alignments based on 50 mph design speed
- Environmental Screening
- Concept drainage analysis
- Meetings with project Stakeholders

In order for satisfactory levels of traffic mobility and safety to be achieved with future projected traffic on the Fabyan Parkway corridor, considerations were given to the following improvement alternatives:

- Intermediate Range Improvements (2015 traffic volumes) - Four through lane cross section with no access at low volume side road access points, auxiliary lanes at remaining intersections, and traffic signals at high volume side road access points when warranted.
- Intermediate Range Improvements (2015 traffic volumes) - Four through lane cross section with right-in/right-out intersections at low volume side road access points, auxiliary lanes at full access intersections, and traffic signals at high volume side road access points when warranted.
- Intermediate Range Improvements (2015 traffic volumes) - Four through lane cross section with a center Two Way Left Turn Lane (TWLTL), auxiliary lanes at full access intersections, traffic signals at high volume side road access points where warranted.
- Long Range Improvements (2025 traffic volumes) - Six through lane cross section with no access at low volume side road access points, auxiliary lanes at remaining intersections, and traffic signals at high volume side road access points when warranted. This proposed improvement includes a raised (non-mountable) center median along the length of the section.

The findings from the above considerations are shown below. The Feasibility Study evaluates these items in further detail.

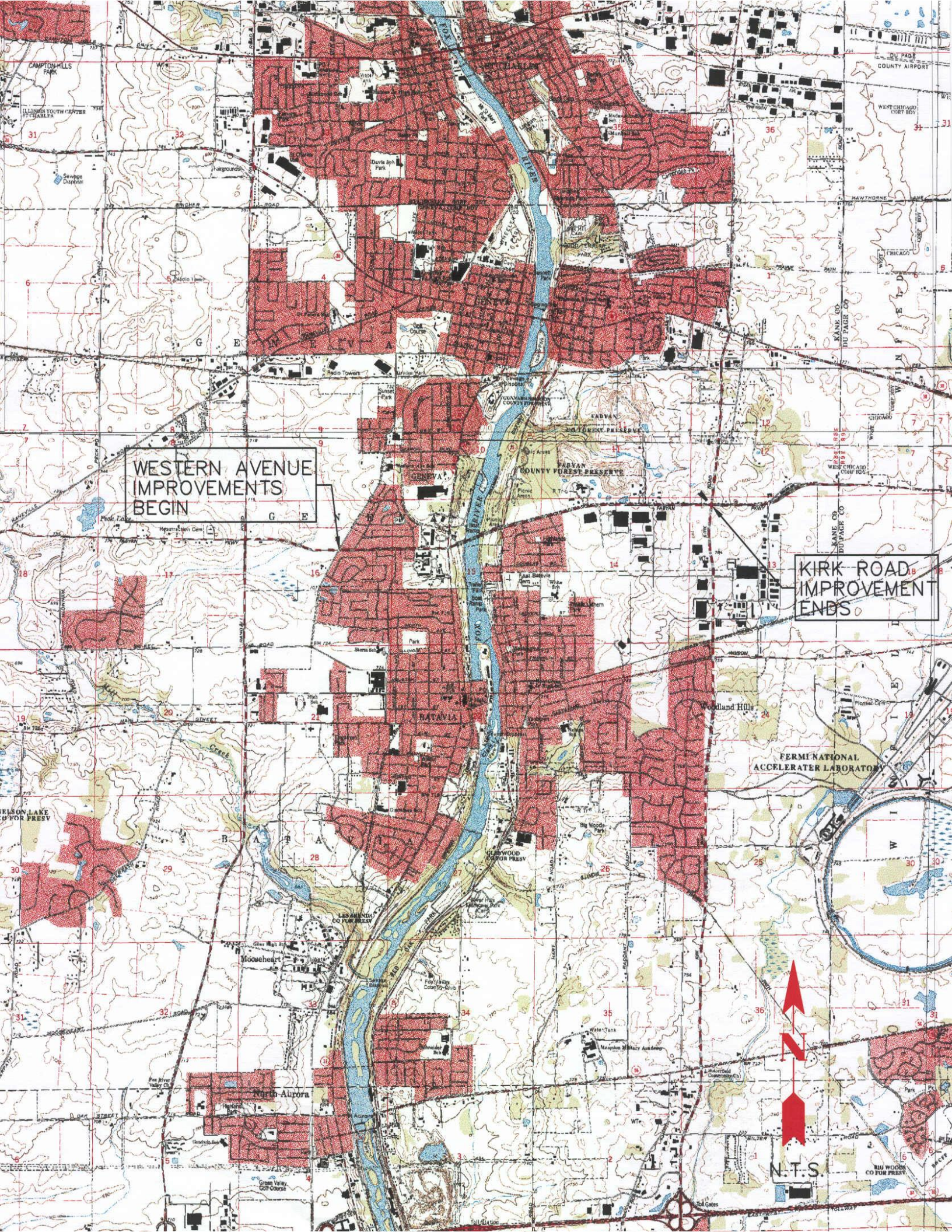
1. Engineering standards and economical considerations suggest that the preferred Long Range Improvement (2025 traffic volumes) should be a six through lane cross section with no access at low volume side road access points, auxiliary lanes at remaining intersections, and traffic signals at high volume side road access points when warranted.
2. Engineering standards and economical considerations suggest that the preferred Intermediate Range Improvement (2015 traffic volumes) should be a four through lane cross section with no access at low volume side road access points, auxiliary lanes at remaining intersections, and traffic signals at high volume side road access points where warranted.
3. All other alternatives considered were found not to accommodate future traffic volumes with satisfactory levels of mobility and safety, and did not meet many Traffic Engineering Standards set forth by the Illinois DOT, AASHTO, and Institute of Transportation Engineers.

This Feasibility Study has been prepared for the exclusive use of the Kane County Division of Transportation in accordance with the terms of an engineering Agreement dated April 8, 2003 between Farnsworth Group, Inc. and Kane County. The study is not intended nor represented to be suitable for use by anyone other than the Kane County Division of Transportation for any purpose. Corridor deficiencies and recommendations outlined in the study regarding serviceability and safety are not intended nor represented to be all-inclusive. As such, the study is intended to address feasibility issues only. A detailed Phase 1 Study, field survey, and design must be completed prior to initiating improvements. Use of the study including analysis and recommendations by anyone other

than the Kane County Division of Transportation shall be at their own risk without any responsibility to Farnsworth Group, Inc. or Kane County.

WESTERN AVENUE
IMPROVEMENTS
BEGIN

KIRK ROAD
IMPROVEMENT
ENDS



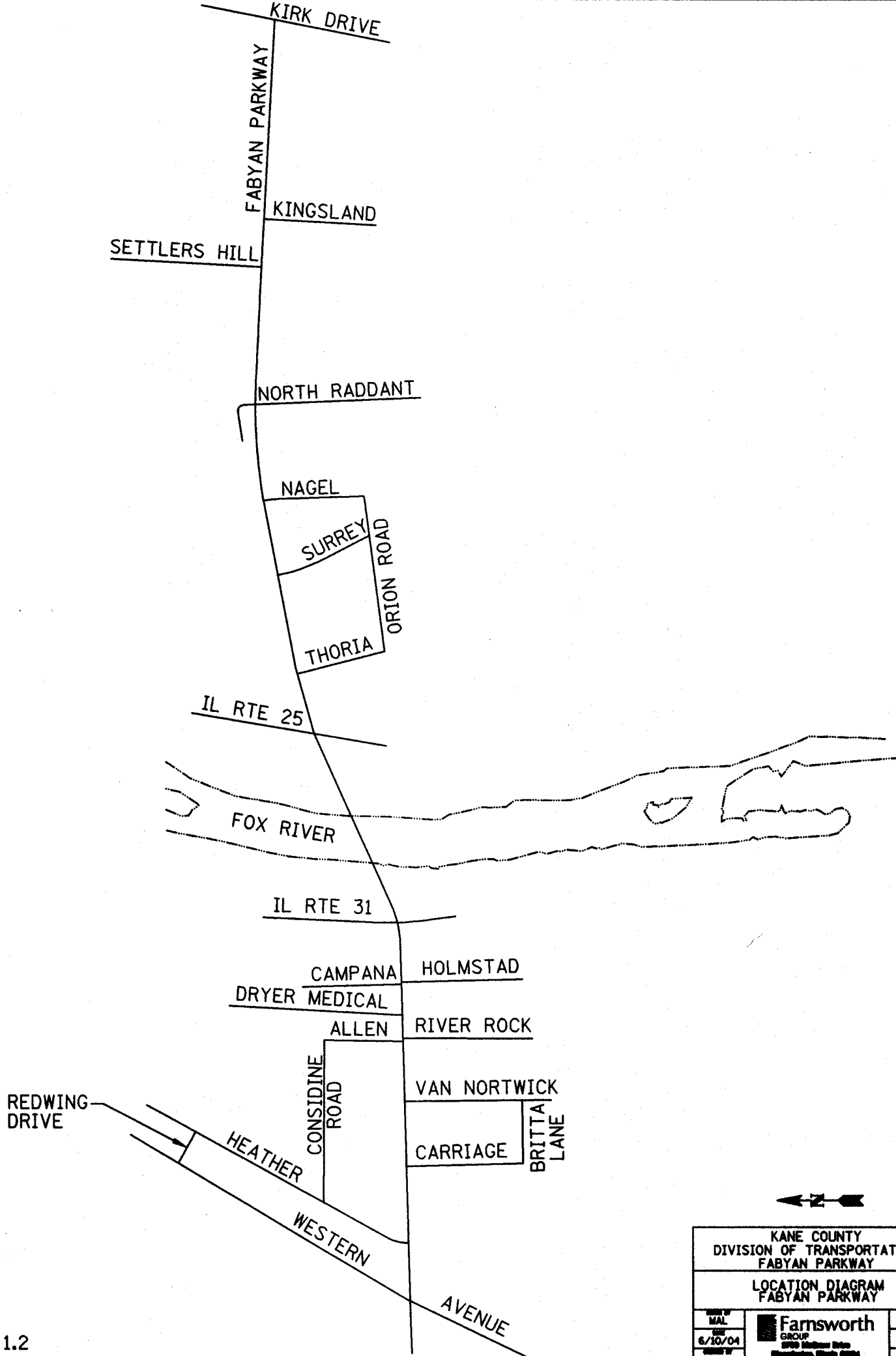


FIGURE 1.2

KANE COUNTY DIVISION OF TRANSPORTATION FABYAN PARKWAY		
LOCATION DIAGRAM FABYAN PARKWAY		
DATE 6/10/04	Farnsworth GROUP 3700 Madison Drive Madison, Illinois 62201 (618) 437-1000	PROJECT 24-7161

II. ROADWAY CLASSIFICATION

A. Roadway History

A brief roadway improvement history is shown below. Specific dates and data are shown from the Fabyan Parkway Evaluation and Improvement Study dated April 19, 1990 by CMT Consulting Engineers and existing plans received from Kane County.

- May 9, 1969 - Technical Report “National Accelerator Laboratory – Highway Conference” prepared by the Illinois Department of Transportation suggested that Averill Road and Campana Road be connected in a single roadway system carrying traffic over the Fox River. The Averill-Campana Road, now known as Fabyan Parkway, was planned to help solve east –west traffic problems between Randall Road and Alternate US 30 (now IL 38) and decrease traffic volumes on the State Street Bridge in Geneva and the Wilson Street Bridge in Batavia.
- May, 1970 – This section of Fabyan Parkway was added to the Federal Aid Secondary System of Kane County.
- December, 1970 – Kane County Board designated Fabyan Parkway from Randall Road to the Dupage County line as a freeway. This allowed the facility limited access rights. This freeway classification which allows the County to limit access should not be confused with its functional classification designation as an Arterial.
- 1972 to 1973 – Bridge work over the Fox River for Fabyan Parkway was completed.
- 1974 to 1976 - Fabyan Parkway was widened to a four-lane roadway cross section.
- 1975 - This section of Fabyan Parkway was reclassified under the Federal Aid Urban System.
- 1981 – The intersection of Fabyan Parkway and Kirk Road was widened and improved under Section 80-00201-04-CH.
- 1986 – An 8 foot wide bituminous concrete walkway path was constructed along the north side of Fabyan Parkway from IL 25 to Kirk Road under Section 86-00201-04-SW.
- 1989 – An 8 foot wide bituminous concrete walkway path was constructed along the south side of Fabyan Parkway from Western Avenue to IL 31 under Section 88-00201-02-SW.
- 1994 – The intersections of Fabyan Parkway with Western Avenue and Heather Road were widened and improved. Traffic signals were provided at the Fabyan and Western intersection. Work was completed under Section 92-00201-05-CH.

- 1995 – Fabyan Parkway was resurfaced from just east of Western Avenue to the west leg of the IL 31 intersection under Section 95-00201-02-RS.
- 1996 – The intersections of Fabyan Parkway with Raddant Road and Nagel Road were reconstructed. Traffic signals were provided at the Fabyan and Raddant intersection. Work was completed under Section 92-00201-04-CH.

B. Roadway Design Criteria and Designation

For the purposes of this Feasibility Study, Kane County directed Farnsworth Group, Inc. to evaluate existing and proposed conditions along Fabyan Parkway based upon the following current design criteria hierarchy at the May 15, 2003 Project Kick-off Meeting. The IDOT Administrative Policies Manual is to be utilized for all conditions unless its Policy does not cover an item under evaluation. The order of evaluation criteria hierarchy as requested by the County is listed below from top to bottom.

- IDOT Administrative Policies Manual
- IDOT Federal Aid Procedures for Local Highway Improvements Manual
- IDOT Bureau of Design and Environment Manual
- AASHTO – A Policy on Geometric Design of Highways and Streets

The current Design Designation and data for the Fabyan Parkway study area is listed in Figure 2.1.

FABYAN PARKWAY - DESIGN DESIGNATION AND DATA

Route Name:	Fabyan Parkway
Project Limits:	Western Avenue to Kirk Road
County:	Kane County
KDOT Section Number:	03-00308-00-ES
KDOT Project Number:	0116T1
County Roadway Classification:	Freeway
Functional Classification:	Strategic Regional Arterial (Closed Suburban)
Truck Route:	Class II
2003 Average Daily Traffic:	Varies 28,800 to 35,700
2015 Average Daily Traffic:	Varies 38,700 to 47,900
2025 Average Daily Traffic:	Varies 49,600 to 61,400
Existing Posted Speed Limit:	Varies 40 mph to 45 mph
Proposed Design Speed:	50 mph
Bridge Structure Number over Fox River:	S.N. 045-3097
Design Policies Evaluated:	3R or Reconstruction based on proposed improvement scope of work

Figure 2.1

III. ACCESS MANAGEMENT

A. Proposed Improvements to Access Management

1. Auxiliary Lanes

The addition of auxiliary lanes on Fabyan Parkway would provide a higher level of safety and Level of Service (LOS) at each intersection. Auxiliary lanes are recommended at each intersection even when traffic signals are not warranted. It is recommended that auxiliary lanes be added as soon as practical. If budget constraints are a concern, the high accident locations as referenced in Exhibit No. 11 should be addressed first.

The need for auxiliary lanes results from speed differential between vehicles preparing to turn and vehicles continuing through the intersection. In cases where left turning vehicles are present, an auxiliary lane would remove the stopped or slowing vehicles from the through lane and provide a safer area for these vehicles to wait for an acceptable gap in the oncoming through movement. By separating the stopped or slowing vehicles from the through movement, the number of rear end accidents occurring on Fabyan Parkway should be reduced. The average travel time should also be slightly reduced resulting in a higher LOS for the corridor.

2. Limiting Points of Access

Fabyan Parkway is currently classified as a Strategic Regional Arterial (SRA). The existing roadway network allows Local Streets (i.e. Carriage Drive, Heather Lane, Thoria Road, Surrey Road, etc) to access a SRA Route without intermediate Collector Streets. A majority of the current safety and operational problems could be improved by focusing on access management and not adding through lanes on Fabyan Parkway. (It should be noted that the current through lane configuration on Fabyan Parkway is well within operational limits.) Because the side roads are Local Streets and not Collectors, the following conditions occur:

- The high volume on the Arterial provides few gaps to facilitate side street traffic.
- There are few or no auxiliary lanes to access the Local Streets.
- Traffic volume Signal Warrants will most likely never be met.

By limiting the number of intersections at which vehicles may access the Arterial, the remaining Local Streets that retain access will operate more as a Collector due to the additional traffic redistributed from the closed access points. Once the new traffic patterns are set and the additional traffic is quantified, improvements such as the need for traffic signals can

be evaluated in more detail. For the purposes of this report, it is assumed that all traffic currently using the road to be closed will be rerouted down the existing frontage street and back onto Fabyan Parkway. The traffic signalization locations proposed in this report are based on this assumption and the future traffic growth projections. The intersections where future signalization is recommended can be found in the Intersection Analysis and Proposed Improvements section of this report.

The ultimate scenario for this corridor calls for four intersections to be closed without access to and from Fabyan Parkway as recommended by the IDOT BDE Manual in Section 46-3.03. In this section, the IDOT manual states that “each driveway and cross street reduces mobility and safety”. Furthermore, it recommends that the following Access Management measures be considered for suburban SRA Routes:

- Eliminate Local Street Access
- Restrict Curb Cuts
- Consolidate Access Points
- Restrict Left-Turns into Points of Access

The closure of the Local Streets referenced below should take place as soon as practical. Local Street closure should improve operations and safety throughout the corridor. In the order of their importance to the safety and LOS of the corridor, the Local Streets proposed to be closed are Carriage Drive, Thoria Road, Surrey Road and Heather Lane. The modified access to Fabyan Parkway by vehicles currently using these four streets will result in an average of less than sixty seconds of additional travel time. The closures would not affect the emergency vehicle response time for these areas as emergency access could be maintained by use of a mountable curb, grassy paver surface, and breakaway decorative fencing at locations where streets have been closed. The reasons for denying each road access to and from Fabyan Parkway are listed below.

a. Carriage Drive

- i. Access to Fabyan Parkway can be maintained for residents by using Britta Lane to access Van Nortwick Avenue.
- ii. Van Norwick Avenue has an existing roadway cross section that is more suitable for the additional traffic caused by closing Carriage Drive.
- iii. Safety could be improved by future improvements to Van Nortwick Avenue such as the addition of auxiliary lanes and/or traffic signals.

b. Thoria Road

- i. Access to Fabyan Parkway can be maintained for residents by using Orion Road to access Nagel Boulevard.
- ii. Nagel Boulevard has an existing cross section that is more suitable for the additional traffic caused by closing Thoria Road and Surrey Road.
- iii. Safety could be improved by future improvements to Nagel Boulevard such as the addition of auxiliary lanes and/or traffic signals. It should be noted that the intersection of Thoria Road and Fabyan Parkway was a high accident location in 2000.
- iv. The existing traffic queue length from the traffic signal on westbound Fabyan Parkway/IL 25 frequently blocks Thoria Road. This effectively limits access at Thoria Road during periods of high volume on Fabyan Parkway.

c. Surrey Road

- i. Access to Fabyan Parkway can be maintained for residents by using Orion Road to access Nagel Boulevard.
- ii. Nagel Boulevard has an existing cross section that is more suitable for the additional traffic caused by closing Thoria Road and Surrey Road.
- iii. Safety could be improved by future improvements to Nagel Boulevard such as the addition of auxiliary lanes and/or traffic signals. It should be noted that the intersection of Surrey Road and Fabyan Parkway was a high accident location in 2001.
- iv. The existing traffic queue length from the traffic signal on westbound Fabyan Parkway/IL 25 currently blocks Surrey Road. This effectively limits access at Surrey Road during periods of high volume on Fabyan Parkway.

d. Heather Lane

- i. Access to Fabyan Parkway can be maintained for residents by using Considine Road to access Allen Drive. Access to Western Avenue also remains available from Redwing Drive.
- ii. Heather Lane is very close to Western Avenue and causes conflicting movements and blockage to frequently occur. Conversely, Allen Drive would provide gaps suitable for future traffic signal interconnection between existing signals at IL 31 and future signals at Van Nortwick Avenue.

Points of access onto Fabyan Parkway could also be limited by the installation of a raised curb median. If the Fabyan Parkway cross section is ever expanded to a

six through lane section, then a raised curb median should be constructed. The construction of the raised curb median would improve the safety for the vehicles using the corridor by further separating head-to-head traffic movements, and it would completely deter the occurrence of mid-block left turning vehicles trying to cross over three lanes of traffic. A future Phase I study should evaluate opportunities for isolated openings in the raised median for emergency vehicle access. For more information on this subject see the Roadway Cross Section Elements section of this report.

B. Other Improvement Alternatives Considered

The improvements listed below were considered and a descriptive evaluation of each improvement's validity is given. Improvements listed below are not the recommended upgrades for this portion of the Fabyan Parkway corridor. Farnsworth Group recommends that the County strongly pursue the proposed improvements to Access Management referenced above relative to Limiting Points of Access with street closures, new auxiliary lanes, and associated traffic signals.

1. Two-Way Left Turn Lane (TWLTL)

A TWLTL was evaluated as a possible improvement to the Fabyan Parkway corridor. The evaluation of the TWLTL was performed using the IDOT BDE Manual criteria from Chapter 48-4. The criteria and the existing or proposed condition on Fabyan Parkway are listed below.

- “Only provide TWLTL in areas with a high number of existing driveways per mile (e.g. 10-35 driveways total per mile on both sides of the street).”
Ø PARTIALLY MEETS CRITERIA. The Fabyan Parkway corridor does not meet this criterion as a whole. However, two segments within the corridor do meet this criterion due to two separate groups of higher density residential driveways.
- “Only provide TWLTL in areas of existing high-density commercial development.”
Ø DOES NOT MEET CRITERIA.
- “Only provide TWLTL in areas with substantial mid-block left turns.”
Ø DOES NOT MEET CRITERIA.
- “Only provide TWLTL in areas where space is not available for raised-curb median widths and a need for left-turn lanes exists.”
Ø DOES NOT MEET CRITERIA.
- “On existing four-lane undivided highways, a TWLTL will often be advantageous for traffic volumes between 10,000 and 40,000 ADT. The 40,000 ADT value assumes left-turn percentages less than or equal to 30%.”

- Ø PARTIALLY MEETS CRITERIA. The 20-year design traffic ADT is greater than 40,000. However, the projected ADT does not exceed 40,000 in any area of the corridor until approximately 2011.
- “Pedestrian crossing volumes are also a consideration because of the large paved area that must be traversed when a TWLTL is present.”
 - Ø NOT APPLICABLE.
- “The design speed of an urban street is a major factor in TWLTL applications...For design speeds higher than 45 mph, the use of TWLTL is not recommended.”
 - Ø DESIGN SPEED FOR THE CORRIDOR IS 50 MPH.
- “On urban or suburban arterials without medians, traffic conflicts often result because of a significant number of mid-block left turns combined with significant opposing traffic volumes. This may lead to a disproportionate number of mid-block, rear-end and/or sideswipe crashes. Review and evaluate the available crash data to determine if disproportionately high numbers of these crashes are occurring.”
 - Ø NOT ABLE TO DETERMINE MID-BLOCK ACCIDENTS BASED ON ACCIDENT DATA PROVIDED.

Below is a list of the Advantages and Disadvantages of implementing a TWLTL design based on the existing and proposed conditions in the Fabyan Parkway corridor. This list is based on the criteria above and traffic engineering fundamentals.

a. Advantages

- i. Operations will most likely be acceptable during non-peak traffic.
- ii. Removes mid-block left turning vehicles from the through lane. The mid-block left turning vehicles are relatively low in volume and a product of the residential driveways with access to Fabyan Parkway.

b. Disadvantages

- i. Dangerous Left In – Left Out movement from Local Streets and entrances is encouraged during high volume periods on Fabyan Parkway. During high volume periods, small gaps in east/west traffic exist making left turn movements dangerous and difficult.
- ii. The maximum traffic volumes stated in the IDOT BDE Manual for a TWLTL are expected to be exceeded before the twenty-year design period is reached.
- iii. A six through lane cross section is being considered for implementation close to 2025. According to the BDE Manual, a TWLTL for such a section should be considered on a case by case basis due to safety concerns. Due to safety concerns, Farnsworth

Group does not recommend the implementation of a TWLTL for a six through lane section of Fabyan Parkway.

- iv. If implemented, a TWLTL has a potentially high Cost/Benefit Ratio.
- v. The design speed on Fabyan Parkway is greater than the maximum recommended design speed for implementation of a TWLTL.
- vi. Obtaining additional right-of-way and easements could not be avoided by implementing this improvement.

The Criteria, Advantages, and Disadvantages listed above detail why a TWLTL is not recommended for implementation. The following statement, given in Section 46-3.02(a) of the IDOT BDE Manual, reinforces the recommendation. “This design (TWLTL) may be considered in suburban areas where there are numerous existing access points and where other solutions to control access (e.g., frontage roads, access closures, raised curb medians) cannot be implemented.” To date, neither of these conditions has been met on this section of the Fabyan Parkway corridor.

2. Right In – Right Out for Side-Roads Recommended for Closure

If the side-roads that are recommended for closure in this study cannot be closed, then access must be limited by some other means. The most reasonable way to limit access without completely restricting access with Fabyan Parkway would be to construct Right In – Right Out intersections. Below is a list of the Advantages and Disadvantages of limiting access by implementing Right In – Right Out intersections.

a. Advantages

- i. Maintains partial access with Fabyan Parkway.
- ii. Limited redistribution of traffic.
- iii. Acceptable operations at each Right In – Right Out location during non-peak times.

b. Disadvantages

- i. Blockage will occur at downstream Local Streets from extended upstream traffic queue lengths at signalized intersections during peak times on Fabyan Parkway in some locations.
- ii. Ingress/egress speed differential results in less safe movement under heavy traffic resulting in the possible need for deceleration/acceleration lanes. The addition of deceleration/acceleration lanes at each intersection results in a high Cost/Benefit Ratio for this improvement.

- iii. Each intersection, where Right In – Right Out access is implemented, will operate similar to the existing condition during peak times.
- iv. Motorists are not 100% deterred from making a difficult and dangerous left turn into or out of the Local Street.
- v. Obtaining additional right-of-way and easements could not be avoided by implementing this improvement.
- vi. Traffic signals may not be warranted at adjacent intersections if partial access is maintained at side-roads currently proposed for closure.

The Right In – Right Out improvements should be considered as a last resort due to the high Cost/Benefit Ratio and review of the disadvantages associated with constructing Right In – Right Out improvements.

3. Residential Access Lane

Each residential driveway located on the north side of Fabyan Parkway between Heather Lane and Allen Drive or located on the south side of Fabyan Parkway between Thoria Road and Surrey Road may be considered for a future residential access lane. The purpose of this lane is to provide the appropriate deceleration and acceleration lanes to reduce the speed differential between the turning residential vehicles and the through traffic on Fabyan Parkway. This lane would be long enough to allow cars to exit or merge onto Fabyan Parkway near running speed.

The main purpose of the residential access lane would be to reduce rear end accidents on Fabyan Parkway caused by the speed differential. However, there also may be some minor improvements to the LOS experienced in the aforementioned areas of the corridor. The possibility of a minor improvement to the LOS exists due to the removal of turning (slower) residential vehicles from the through lanes on Fabyan Parkway.

It should be noted that it is not known if mid-block rear end accidents are occurring on Fabyan Parkway due to the speed differential between residential vehicles turning into driveways and through cars on Fabyan Parkway. This information could not be derived from the accident reports given to the Farnsworth Group. It is recommended that before Final Phase 1 report evaluation and design, the local law enforcement officials should be asked to note this information on future accident reports, and residents could be asked for input to obtain previous occurrence data. A favorable recommendation for this improvement could only be made after sufficient and applicable data is obtained from future accident reports and the residents. This could be studied further as part of a future Phase 1 Report.

C. Kane County Cougars' Stadium and Future Development Entrance

To help reduce traffic congestion associated with Kane County Cougars home games, a Fabyan Parkway entrance to the stadium is being reviewed by the County. The proposed location of the entrance may be approximately 1200 feet west of the Fabyan Parkway and Kirk Road intersection. Future development is possible directly south of the proposed entrance location, and future access to the undeveloped property should line up with the future entrance to the Kane County Cougars stadium.

Access Management policies dictate that the access to the existing undeveloped areas should be a shared roadway with entrances to the businesses or local streets adjoining to the access road and not Fabyan Parkway. This will allow for less points of conflict on Fabyan Parkway, which will help maintain satisfactory levels of safety and mobility.

A four-leg intersection with a new development should generate enough traffic to warrant traffic signals. If traffic signals are warranted, then green time and phasing can be maximized at a four-leg intersection by allowing simultaneous left turning movements. The presence of actuated traffic signals should also help the dispersion of event traffic from the Kane County Cougars stadium.

The spacing of the future intersection allows for the coordination of the future traffic signal at Kingsland Drive and Kirk Road. Currently, the spacing between Kingsland Drive and Kirk Road is too far for traffic signal interconnection to be effective. This is due to traffic platoons from Kirk Road spacing out before they reach the Kingsland Drive intersection. The presence of the intermediate traffic signal will help keep the platoons together and allow for interconnection to be effective.

See Exhibit Number 16 for additional agency coordination relative to this issue.

IV. ROADWAY CROSS SECTION ELEMENTS

A. Lane Widths

The existing roadway cross section for Fabyan Parkway within the study consists of an edge of pavement to edge of pavement roadway width of 52 feet throughout the entire corridor with exception given to the Nagel Boulevard and North Raddant Road intersections. The 52-foot pavement width allows for two 12-foot lanes in each direction with a 4-foot painted median until a left turn lane is introduced at the intersections of IL 31 and IL 25 and Fabyan Parkway. Just east and west of both IL 31 and IL 25, Fabyan Parkway's through lanes taper from their normal 12-foot width to a 10-foot and 11-foot configuration, to accommodate the right and left through lanes respectively. This configuration allows for a 10-foot wide left turn lane. The aforementioned intersections of Nagel Boulevard and North Raddant Road with Fabyan Parkway show an existing through lane width of 12 feet being utilized on Fabyan Parkway throughout this area of the corridor.

The Highway Capacity Manual (HCM) 2000 indicates that "a 12-foot lane width is typical of an urban street" (10-24). HCM 2000 further states that "urban streets can be as narrow as 10 feet, but the lane closest to a raised median may be extra wide to allow for some shy distance between vehicles and the median" (10-24). If a lane width is less than 12 feet, HCM decreases all free flow capacities. By lowering the free flow capacity at an intersection, the delay experienced by roadway users increases, and the Level of Service suffers. The above concepts illustrate the importance of a proper lane width, and also conveys the need for Fabyan Parkway to have a consistent 12-foot lane width throughout the entire corridor.

The Administrative Policies Manual also recommends the use of 12-foot lanes for Arterial Streets. All new improvements for Fabyan parkway should accommodate a minimum of 12-foot lanes.

B. Curbs and Shoulders

The existing cross sections for Fabyan Parkway within the study area consist of an urban section with curb and gutter. The existing combination concrete curb and gutter throughout the corridor varies from type B6.12 to type B6.24, with a majority of the type B6.24 being constructed on the newer sections of the corridor. These sections are generally located west of the IL 25 and Fabyan Parkway intersection. New combination concrete curb and gutter for future improvements should be type B6.24 per page 5-8-26 of the Administrative Policies Manual. Type B6.24 curb and gutter also provides hydraulic benefits relative to other curb and gutter types.

Posted Speed in the corridor varies from 40 mph, west of IL 31, to 45 mph east of IL 31. The design policy manuals have different criteria for the appropriate posted speed that is allowed for a roadway section that has barrier type curb. Below is Table IV-1 that lists the maximum posted speed allowed for a street with barrier curb adjacent to the traffic lane.

	ADMINISTRATIVE POLICIES MAN.	FAPHLI MAN.	BDE MAN.
SPEED	40 mph	40 mph	45 mph

Table IV-1: Maximum Speeds for Barrier Curbed Highways

The existing cross section for Fabyan Parkway within the study area does not include shoulder at any locations other than the bridge over the Fox River. The purpose of shoulders on an arterial is to improve safety and Level of Service. Drivers generally feel safer if there is distance between the traveled way and curb and gutter. This leads to an improved Level of Service because drivers will operate their vehicles at higher speeds in sections where shoulders are present. The added pavement width is also optimal for situations where the need arises for a driver to stop due to an emergency or any other situation that takes their immediate attention from the roadway. By allowing vehicles to exit the through lane and come to a stop on the shoulder, the safety level of the roadway is maintained because a stopped vehicle is not blocking the through lane. The addition of a shoulder is not required with an urban curb and gutter section unless the posted speed on the roadway is equal to or greater than 50 mph per the Bureau of Design and Environment Manual. It may not be feasible to add shoulders on this section of Fabyan Parkway due to additional right-of-way already required by the extra pavement on each side of the traveled roadway for the additional proposed through lanes and auxiliary lanes.

C. Medians

The Administrative Policies Manual makes the following statement in regard to use of medians through an Arterial such as Fabyan Parkway.

“Streets designed for four or more lanes should include width for appropriate median treatment whenever practical. There are substantial advantages for each increment in median width, and it should be made as wide as practical for the specific conditions. Paint stripe separations must be two to four feet wide (multi-lane arterial streets require a four-foot median).” (page 5-8-21)

The current use of median on Fabyan Parkway meets this design policy. Fabyan Parkway has an existing cross section that includes four 12-foot lanes and a four-foot painted median throughout the corridor. When there is substantial demand on Fabyan Parkway for the installation of a third through lane in each direction, it is recommended that the use of a five to six-foot wide raised or curbed median should be strongly considered for implementation. The use of the raised or curbed median will help separate head to head traffic, and it should help improve the safety throughout the corridor by eliminating mid-block left turns. However,

it would eliminate left turn movements in and out of private driveways along this section.

D. Pavement Cross Slopes

“For multi-lane improvements, center lanes shall maintain a slope of 3/16 inch per foot, but the slope of additional lanes should be increased approximately 1/16 inch per foot. The total cross slope attained on multi-lane pavements shall not exceed 3/10 inch per foot” (Administrative Policies Manual, 5-8-12).

The existing typical cross sections for Fabyan Parkway show that this design policy is met throughout the corridor, but a report written by CMT, Inc. on April 19, 1990 shows deficiencies near Van Nortwick Avenue and near North Raddant Road. Since the completion date of that report, construction of a new concrete roadway near North Raddant Road has been completed under section 92-00201-04-CH (in 1996). The design plan typical sections from that project show that all design criteria for pavement cross slope were met. No significant changes to areas of Fabyan Parkway near Van Nortwick Avenue have taken place since the CMT Inc. report. Therefore, it is assumed that the existing cross slope of Fabyan Parkway near Van Nortwick Avenue does not currently meet design criteria. Existing pavement cross slopes should be further evaluated after a topography survey is completed during Phase 1 services.

E. Existing Roadway Typical Sections

See Exhibit Number 2 for all existing roadway typical sections provided by the County.

V. ROADWAY ALIGNMENT

A. Design Speed and Average Daily Traffic

1. Design Speed

“Design speed is a primary factor in highway design and usually equals or exceeds the legal statutory speed limit. AASHTO has historically defined design speed as ‘the maximum safe speed that can be maintained over a specified section of highway when conditions are so favorable that the design features of the highway govern’.” (Traffic Engineering Handbook, 352)

The first element in determining the design speed of the corridor is obtaining the existing posted speed limit. On Fabyan Parkway the existing posted speed limit varies from 40 mph (west of IL 31) to 45 mph (east of IL 31). Taking that variance in statutory speed under consideration, the design speed within the corridor should be at least 45 mph. It is also assumed that a substantial portion of the motoring public may travel at speeds in excess of 45 mph. Consideration of these factors and direction from the Kane County Division of Transportation led to choosing a design speed of 50 mph for the evaluation part of this feasibility study.

2. Average Daily Traffic

Existing and projected Average Daily Traffic (ADT) for the study area of Fabyan Parkway separated the corridor into three sections. These sections were given to Farnsworth Group as west of IL 31, east of IL 31 and west of Kirk Road. After consideration and concurrence from Kane County Division of Transportation, a traffic growth rate of 2.5% was utilized to project the ADT from the year 2000 to the years designated within this study. Figure 2.1 should be referenced for a description of the ADT throughout the corridor. Quantitatively, the most congested (largest ADT) section is located east of IL 31, and the least congested (smallest ADT) section is located west of IL 31.

B. Vertical Alignment

Fabyan Parkway’s existing vertical alignment was analyzed using 3R Policy and Reconstruction design criteria from the Illinois Department of Transportation Administrative Policies Manual, Federal-Aid Procedures for Local Highway Improvements (FALHPI) Manual, and the Illinois Department of Transportation Bureau of Design and Environment (BDE) Manual.

The geometric improvements that are recommended in Section VI of this study, titled “Intersection Analysis and Proposed Improvements”, govern when 3R or

Reconstruction design criteria is to be employed. Page 5-8-137 of the Administrative Policies Manual states:

“3R includes work undertaken primarily within existing right-of-way to preserve and extend the service life and enhance the safety of an existing highway facility or element thereof when reconstruction is not warranted. It is that work necessary to return roadways, bridges, and attendant facilities to a condition of acceptable structural and/or functional adequacy, generally through various combinations of improvements.”

The above scope description for 3R Policy suggests that all widening that is recommended to take place immediately or as a part of the Intermediate Range Improvements will be governed by 3R design criteria. Due to the recommended addition of a through lane in each direction near the year 2025, all geometric improvements for that time period will be controlled by Reconstruction design criteria.

Required lengths for each crest vertical curve within the corridor were calculated using the equation:

$$L = K * A$$

L = Length of crest vertical curve

$$K = \frac{SSD^2}{200(\sqrt{h_1} + \sqrt{h_2})^2}$$

A = Algebraic difference between the two tangent grades in %

In the K equation, SSD is equal to Stopping Sight Distance. The variables h_1 and h_2 are the height of eye above the road surface and height of object above the road surface respectively. Both h_1 and h_2 differ according to which design policy is being used.

Each design criteria further states that the minimum length of any crest vertical curve is determined by calculating which of the following equations render a larger value for L .

$$L = K * A$$

$$L = 3 * (\text{Design Speed})$$

Required lengths for each sag vertical curve within the corridor were calculated using the equation given on the next page.

$$L = K * A$$

L = Length of sag vertical curve

$$K = \frac{SSD^2}{200(h_3 + 3.5 SSD)}$$

A = Algebraic difference between the two tangent grades in %

In the K equation, SSD is equal to Stopping Sight Distance, and the variable h₃ is height of headlights above the pavement surface.

Table V-1 below summarizes the existing information for all the vertical curves that constitute Fabyan Parkway's existing vertical alignment within the study limits.

VERTICAL CURVE LOCATION	CURVE TYPE	LENGTH	K	A
24+00 to 25+00	SAG	100	111.111	0.90
27+50 to 28+50	SAG	100	666.667	0.15
31+50 to 32+50	CREST	100	555.556	0.16
48+90 to 54+90	CREST	600	250.72	2.39
63+88.10 to 66+38.10	SAG	250	73.983	3.38
83+52.90 to 85+02.90	SAG	150	154	0.97
109+42.21 to 110+92.21	CREST	150	144.23	1.04
113+42.21 to 114+92.21	SAG	150	230.769	0.65
116+67.21 to 118+67.21	CREST	200	285.714	0.70
120+17.21 to 122+17.21	SAG	200	148.148	1.35
122+67.21 to 125+67.21	CREST	300	285.74	1.05

Table V-1: Existing Vertical Curve Information

The minimum 3R design criteria for each policy manual is shown below based on a 50 mph design speed.

MANUAL	MIN. "K" URBAN SAG CURVE	MIN. "K" URBAN CREST CURVE
ADMIN. POLICIES MANUAL	SEE FAPLHI GUIDELINES	SEE FAPLHI GUIDELINES
FAPLHI MANUAL	ALL SAG CURVES CAN BE RETAINED	30
BDE MANUAL	ALL SAG CURVES CAN BE RETAINED	19*

Table V-2: 3R Design Criteria Guidelines for Vertical Curves

*Assumes level grades, see BDE Manual for adjustments reflecting downgrade conditions.

The results from the 3R analysis are shown in Table V-3 below. These results should be used to determine if any vertical profile adjustments should be completed during a 3R construction project corresponding with improvements

recommended to occur immediately or approximately near the year 2015. A "N" designates not meeting policy; a "Y" designates meeting policy.

VERTICAL CURVE LOCATION	CURVE TYPE	ADMIN. POLICIES MAN.	FAPLHI MAN.	BDE MAN.
24+00 to 25+00	SAG	Y	Y	Y
27+50 to 28+50	SAG	Y	Y	Y
31+50 to 32+50	CREST	Y	Y	Y
48+90 to 54+90	CREST	Y	Y	Y
63+88.10 to 66+38.10	SAG	Y	Y	Y
83+52.90 to 85+02.90	SAG	Y	Y	Y
109+42.21 to 110+92.21	CREST	Y	Y	Y
113+42.21 to 114+92.21	SAG	Y	Y	Y
116+67.21 to 118+67.21	CREST	Y	Y	Y
120+17.21 to 122+17.21	SAG	Y	Y	Y
122+67.21 to 125+67.21	CREST	Y	Y	Y

Table V-3: Existing Vertical Curve 3R Design Criteria Evaluation Results

The minimum reconstruction design criteria for each policy manual is shown in Table V-4 based on a 50 mph design speed.

MANUAL	MIN. "K" URBAN SAG CURVE	MIN. "K" URBAN CREST CURVE
ADMIN. POLICIES MANUAL	90	110
FAPLHI MANUAL	90	110
BDE MANUAL	96	84*

Table V-4: Reconstruction Design Criteria Guidelines for Vertical Curves (*Assumes level grades, see BDE Manual for adjustments reflecting downgrade conditions.)

The results from the Reconstruction analysis are in Table V-5 on the next page. These results should be used to determine if any vertical profile adjustments should be completed during a Reconstruction project along Fabyan Parkway corresponding with improvements recommended to occur approximately near the year 2025. A "N" designates not meeting policy; a "Y" designates meeting policy.

VERTICAL CURVE LOCATION	CURVE TYPE	ADMIN. POLICIES MAN.	FAPLHI MAN.	BDE MAN.
24+00 to 25+00	SAG	N	N	N
27+50 to 28+50	SAG	N	N	N
31+50 to 32+50	CREST	N	N	N
48+90 to 54+90	CREST	Y	Y	Y
63+88.10 to 66+38.10	SAG	N	N	N
83+52.90 to 85+02.90	SAG	Y	Y	Y
109+42.21 to 110+92.21	CREST	Y	Y	Y
113+42.21 to 114+92.21	SAG	Y	Y	Y
116+67.21 to 118+67.21	CREST	Y	Y	Y
120+17.21 to 122+17.21	SAG	Y	Y	Y
122+67.21 to 125+67.21	CREST	Y	Y	Y

Table V-5: Existing Vertical Curve Reconstruction Design Criteria Evaluation Results

C. Horizontal Alignment

Fabyan Parkway’s existing horizontal alignment was analyzed using 3R and Reconstruction design criteria from the Illinois Department of Transportation Administrative Policies Manual, Federal-Aid Procedures for Local Highway Improvements (FALHPI) Manual, and the Illinois Department of Transportation Bureau of Design and Environment (BDE) Manual.

The geometric improvements that are recommended in Section VI of this study titled “Intersection Analysis and Proposed Improvements” govern when 3R or Reconstruction design criteria is to be employed. Page 5-8-137 of the Administrative Policies Manual states:

“3R includes work undertaken primarily within existing right-of-way to preserve and extend the service life and enhance the safety of an existing highway facility or element thereof when reconstruction is not warranted. It is that work necessary to return roadways, bridges, and attendant facilities to a condition of acceptable structural and/or functional adequacy, generally through various combinations of improvements.”

The above scope description for 3R Policy suggests that all widening that is recommended to take place immediately or as a part of the Intermediate Range Improvements will be governed by 3R Policy design criteria. Due to the recommended addition of a through lane in each direction near the year 2025, all geometric improvements for that time period will be controlled by Reconstruction design criteria.

Three different horizontal alignments are considered in this study.

- Existing horizontal alignment
- Realigning the intersection of IL 31 and Fabyan Parkway

- Complete realignment of the intersection of IL 31 and Fabyan Parkway, the Fox River Bridge, and the intersection of IL 25 and Fabyan Parkway

1. Horizontal Alignment

An evaluation of the existing horizontal alignment was completed in a similar fashion to the procedures used to evaluate the vertical curves through the corridor. All existing horizontal curve data is shown in Exhibit No. 3 “Existing Plan Geometrics and Profile”.

Existing plans and field observations show that two kinks currently exist in the horizontal alignment of Fabyan Parkway. The first kink in the alignment is at the intersection of IL 31 and Fabyan Parkway. The other kink is located at the intersection of IL 25 and Fabyan Parkway.

It is generally accepted that the deflection angle created by two intersecting tangents should be minimized for all situations. Furthermore, if the deflection angle created by the intersection of two tangents is greater than one degree, a horizontal curve should be instituted to help create a smoother transition and safer ride for the roadway users. Both of the aforementioned points of intersection do not meet these generally accepted transportation engineering principles. This being said, all Proposed Exhibits show a new proposed horizontal curve at the intersection of IL 31 and Fabyan Parkway. Complete realignment of the bridge and both intersections does not appear to be economically feasible. The IL 25 kink is not as severe or as the IL 31 kink, and it is located close enough to the eastern bridge abutment to require significant work to the structure to incorporate a new horizontal alignment. Therefore, for the purposes of this Feasibility Study, the IL 25 intersection alignment is shown to remain.

In addition to the kinks, two horizontal curves are located within the limits of the study corridor. Table V-6 below illustrates their station location and how each existing horizontal curve compares against the 3R Policy design criteria from each manual listed at the beginning of Section II-B of this study. Table V-7 below illustrates the station location and how each horizontal curve compares against the Reconstruction design criteria from each manual. A "N" designates not meeting policy; a "Y" designates meeting policy.

HORIZONTAL CURVE LOCATION	ADMIN. POLICIES MAN.	FALPLI MAN.	BDE MAN.
107+20.77 to 120+62.44	Y	Y	Y
121+73.85 to 137+24.24	Y	Y	Y

Table V-6: Existing Horizontal Curve 3R Design Criteria Evaluation Results

HORIZONTAL CURVE LOCATION	ADMIN. POLICIES MAN.	FALPLI MAN.	BDE MAN.
107+20.77 to 120+62.44	Y	Y	Y
121+73.85 to 137+24.24	Y	Y	Y

Table V-7: Existing Horizontal Curve Reconstruction Design Criteria Evaluation Results

The above tables illustrate that both horizontal curves with the project limits meet all design criteria applicable to this study.

2. Realigning the intersection of IL 31 and Fabyan Parkway

The kink at IL 31 and Fabyan Parkway is the more severe and dangerous of the two existing kinks in the horizontal alignment. It is recommended that this section of the corridor be realigned as part of a 3R project as soon as practical. For the purposes of this study, the realignment is shown with the Intermediate Range geometric plans. All future improvements are based on this alignment, with the curve data given on the plan and profile sheets in Exhibit No. 5 of the Appendix.

3. Complete realignment of the intersection of IL 31 and Fabyan Parkway, the Fox River Bridge, and the intersection of IL 25 and Fabyan Parkway

Complete realignment of the above intersections and the Fox River Bridge includes realigning in such a manner as to eliminate the kink at IL 25 and IL 31. In order to do this, a new Fox River Bridge would need to be constructed, and a less severe horizontal curve would be installed at the intersection of IL 31 and Fabyan Parkway. This idea was excluded at this time due to extreme construction cost and very low feasibility that construction would actually take place.

VI. INTERSECTION ANALYSIS AND PROPOSED IMPROVEMENTS

A. Immediate Intersection Spot Improvements

All deficiencies and recommendations listed in Exhibit 12 in the Appendix titled “Analysis of Existing Traffic Control Devices” apply to this section. The recommendations given forth in this section are items that could be completed immediately using a relatively small amount of funds while generally improving the safety, Level of Service, and turning movements at each of the intersections noted. Unlike Exhibit 12, recommendations below will be discussed on an improvement by improvement basis.

A more thorough explanation of the major pavement marking and geometric issues listed in the "Analysis of Existing Traffic Control Devices" is given in this section. The improvements to be discussed within the numbered sections below are as follows:

- Solutions to the Pavement Rutting at the Fabyan Parkway and IL 31/IL 25 intersections.
- Providing Lane Delineation Intersection Pavement Markings at the Fabyan Parkway and IL 31/25 intersections.
- Providing IL 25 Intersection Pavement Widening in the northeast and southwest intersection quadrants.
- Improving the Kingsland Drive eastbound deceleration storage and tapers, and improving the southwest and southeast intersection quadrant turning radii.

1. At the intersections of IL 31/IL 25 and Fabyan Parkway, there are severe pavement rutting problems on Fabyan Parkway. Repairing the rutting will provide vehicles with a much safer roadway cross section to traverse the intersections.

Pavement cores and/or performance analysis of the pavement, base course, sub-base and subgrade have not been completed to determine the cause of the severe rutting. This analysis should be completed in the planning and design phase prior to determining the appropriate repair. If the problem stems from inadequate bituminous concrete mix or problems in the base course, sub-base and/or subgrade, it may be necessary to perform a full depth removal and replacement of this section of Fabyan Parkway. However, based on the results of the geotechnical testing as recommended above, a much simpler project consisting of milling and resurfacing may be adequate to immediately remedy the rutting problem.

2. Due to the skews at the intersections of Fabyan Parkway with IL 31 and IL 25, the Manual on Uniform Traffic Control Devices (MUTCD) suggests that lane delineation pavement markings with a two-foot stripe and a six-foot gap be placed for the Fabyan Parkway through movements (See

MUTCD 3B-22). This will help drivers determine the proper path to safely and more efficiently traverse the intersection. The accident reports show that 19% of all the accidents that occur at Fabyan Parkway and IL 31 are same direction side impacts. This accident type is consistent with poor lane delineation.

Faded pavement markings through each intersection may cause driver confusion. It has been KDOT's experience that pavement marking skip dashes through these intersections have faded and deteriorated quickly, but it is believed that an inlaid polyurea pavement marking would last long enough to successfully enhance the safety of the intersections without causing the maintenance issues associated with rapid pavement marking deterioration. IDOT District 1 approval may be required prior to placing skip dash pavement markings through the intersections of Fabyan Parkway with IL 31 and IL 25.

3. The intersection radius located on the northeast and southwest quadrants at Fabyan Parkway and IL 25 has approximately three to four feet of truck tracking behind the existing concrete curb and gutter. Larger trucks making the westbound and eastbound right movements are not able to make this turning movement without traversing over the existing curb. Field observations show that some single unit vehicles also cannot navigate the turn without tracking over the curb. The alignment at this intersection compounds the problem. The radius could be designed to handle the tracking of a larger truck (i.e. WB-65 since Fabyan Parkway is a Class II Truck Route). This intersection pavement widening work would improve safety and operations at the intersection as trucks would not have to turn as slowly to complete the movement.
4. Accidents could be reduced and traffic operations improved at the intersection of Kingsland Drive and Fabyan Parkway if the right turn deceleration lane for eastbound traffic was improved. The existing deceleration lane has a storage distance of 135 feet and a taper length of 50 feet. Using the design policy hierarchy set forth in the project kickoff meeting, Figure 36-3I in IDOT's Bureau of Design and Environment (BDE) Manual indicates that for 45 mph stop condition the minimum taper length is 200 feet. The minimum requirement for the entire deceleration lane (taper plus storage) is 385 feet. This results in a minimum storage length of 185 feet. Based on the BDE Manual the existing auxiliary turn lane does not meet policy. A short taper does not allow vehicles to exit the through lane at running speed. This results in vehicle deceleration in the Fabyan Parkway through lane and a "slowing" of the through vehicles. In order to reduce speed differential at the intersection the entire turn lane should be reconstructed to meet policy.

The southwest and southeast combination concrete curb and gutter radii at Kingsland Drive do not facilitate the right turn movement of large trucks without tracking over the curb. It was observed that a truck making the right turn movement from eastbound Fabyan Parkway onto Kingsland Drive cannot use the deceleration lane and must turn from the right eastbound through lane on Fabyan Parkway to avoid tracking over the curb.

A majority of the heavy vehicles using this intersection are accessing the industrial park that is located south of Kingsland Drive and are WB-55 or larger. It is recommended that both the radii be reconstructed and pavement widened to facilitate a WB-65 turning movement since Fabyan Parkway is a Class II Truck Route. This intersection pavement widening work would improve safety and operations at the intersection as trucks would not have to turn as slowly to complete the movement and could make the turn from the deceleration lane.

B. Intermediate Range Improvements

The Intermediate Improvement analysis was completed with the traffic projections for 2015, and it is the earliest analysis completed to warrant many of the recommended improvements in this section. Many of the improvements are most likely warranted well before 2015.

The improvements proposed for this time period fall into the general category of Geometric Improvements with Traffic Signals. These subjects are related because the existing side roads are functionally classified as Local Streets and not Collectors. By limiting the number of access points along Fabyan Parkway, as discussed in the Access Management section, new travel patterns may cause a need for geometric improvements and possibly traffic signals. Geometric improvements, specifically auxiliary lanes, should be strongly considered because of the current accident problems at the existing intersections. Auxiliary lanes are recommended at each intersection even when traffic signals are not warranted.

1. Geometric Improvements and Traffic Signals

Auxiliary lanes on Fabyan Parkway will improve safety and operations at each intersection. Limiting the number of access points onto Fabyan Parkway will result in more traffic using intersections that are maintained as full access. The exact demand on the fully maintained intersections will be unknown until this improvement is implemented and traffic counts are performed at the fully maintained intersections. For the purposes of this report, it is assumed that all traffic currently using the street to be closed will be rerouted down the existing frontage street and back onto Fabyan Parkway causing an increase of volume on the fully maintained side street. This diversion of traffic will generate enough traffic to meet

traffic volume signal warrants in most cases based on traffic growth projections.

The need for the auxiliary lanes is not completely a result of traffic volume. Vehicles slowing down to turn right or stopping to turn left onto Local Streets is the cause of many accidents occurring on Fabyan Parkway. The number of accidents at side street intersections may be reduced with the addition of auxiliary lanes, which offer shelter for the exiting vehicle. Traffic signals should be installed where MUTCD volume warrants are met. All proposed auxiliary lanes should be installed as soon as practical to improve the safety for all vehicles along the existing roadway network.

As discussed earlier, Fabyan Parkway is functionally classified as an Arterial Street. The IDOT Administrative Policies Manual requires the use of a four-foot painted median for an Arterial Street as a minimum. The existing typical cross sections throughout the corridor employ a four-foot painted median. Proposed Intermediate Improvements shall incorporate a four-foot painted median as a minimum for separation of traffic. Accident data should be reviewed to rule out the need for a raised median. Proposed Long Range Improvements shall incorporate a minimum five-foot raised concrete median throughout the corridor due to the addition of a through lane in each direction.

In order for the geometrics listed below to be fully constructed, it is necessary for the existing bridge over the Fox River to be widened. The auxiliary lanes at Fabyan Parkway and IL 31 and IL 25 need to be extended onto the bridge and its approaches if the storage lengths caused by the projected 2025 traffic volumes are to be satisfied. The storage lengths from the 2025 traffic volumes are being used for the Intermediate Improvements to satisfy the Administrative Policies Manual's requirement for a design period of 20 years for all Arterial Streets.

A proposed entrance street and intersection on Fabyan Parkway for the Kane County Cougar's stadium is currently in planning stages. The proposed location of the entrance may be approximately 1200 feet west of the Fabyan Parkway and Kirk Road intersection. KDOT will coordinate this location with the Forest Preserve in the future. The proposed entrance will add a significant number of vehicles to the Fabyan Parkway corridor. The appropriate use of auxiliary turn lanes for the entrance is not known at this time. Geometric and signalization details will need to be finalized during completion of a separate Intersection Design Study.

The next page begins a list of intersections with the Intermediate Range improvements.

- a. Van Nortwick Avenue
 - i. A left turn deceleration lane for westbound left traffic will limit left turning vehicles from impeding westbound through vehicles traveling in the left through lane. This would reduce the number of conflict points and improve the Level of Service in this area.
 - ii. A right turn deceleration lane for eastbound traffic will limit right turning vehicles from impeding eastbound through vehicles traveling in the right through lane. This would reduce the number of conflict points and improve the Level of Service in this area.
 - iii. The closure of Carriage Drive will result in additional traffic at Van Nortwick Avenue. The intersection may meet traffic signal volume warrants (specifically warrant 1B) at some point in the future. However, the projected traffic for 2015 falls short of traffic volume warrants. It is anticipated that with the addition of the auxiliary turn lanes, the accident warrant should not be met. Without the closure of Carriage Drive, Van Nortwick Avenue may never meet traffic signal volume warrants.

- b. Allen Drive/River Rock Road
 - i. A left turn deceleration lane for eastbound and westbound left traffic will limit left turning vehicles from impeding through vehicles traveling in the left through lanes. This would reduce the number of conflict points and improve the Level of Service in this area.
 - ii. A right turn deceleration lane for westbound traffic will limit right turning vehicles from impeding westbound through vehicles traveling in the right through lane. This would reduce the number of conflict points and improve the Level of Service in this area. A right turn deceleration lane already exists for eastbound traffic, but it does not meet the current standards set forth in the IDOT BDE Manual. This should be improved to meet current design policy.
 - iii. The closure of Heather Lane will result in additional traffic at Allen Drive. The intersection should meet traffic signal volume warrants (specifically warrant 1B) at some point in the future. The traffic signal should be installed if Heather Lane is closed and traffic is redistributed. Without the closure of Heather Lane, Allen Drive may never meet traffic signal volume warrants.
 - iv. During a future Phase 1 study, Allen Drive and River Rock Road should be evaluated for a slight realignment at the intersection with Fabayn Parkway. This realignment should improve intersection operations. The improvement should line up the side road through lanes, and if auxiliary left turn lanes were to be installed they should be positively offset to allow for better sight distance for left turning vehicles.

- c. Dreyer Medical Entrance
 - i. A left turn deceleration lane for eastbound left traffic will limit left turning vehicles from impeding eastbound through vehicles traveling in the left through lane. This would reduce the number of conflict points and improve the Level of Service in this area.
 - ii. A right turn deceleration lane for eastbound traffic will limit right turning vehicles from impeding eastbound through vehicles traveling in the right through lane. This would reduce the number of conflict points and improve the Level of Service in this area.
 - iii. Closure of this entrance should take place as soon as possible. The current parking lot configuration shows Dreyer Medical has its own entrance as well as sharing access to Fabyan Parkway with Campana. For optimal safety and Level of Service, Dreyer Medical should share access with Campana. KDOT should review the current Entrance Access Agreement in place with Dreyer Medical. If closure is possible, the improvements above would not be needed.

- d. Campana/Holmstad Entrance
 - i. A left turn deceleration lane for eastbound and westbound left traffic will limit left turning vehicles from impeding through vehicles traveling in the left through lanes. This would reduce the number of conflict points and improve the Level of Service in this area.
 - ii. A right turn deceleration lane for westbound traffic will limit right turning vehicles from impeding westbound through vehicles traveling in the right through lane. This would reduce the number of conflict points and improve the Level of Service in this area. A right turn deceleration lane already exists for eastbound traffic, but it does not meet the current standards set forth in the IDOT BDE Manual. This should be improved to meet current design policy.

- e. IL 31
 - i. Dual left turn lanes for eastbound and westbound left turning traffic should be added to this intersection to sufficiently raise the capacity and Level of Service that can be provided to the left turn traffic and the through vehicles. This would reduce the number of conflict points and improve the Level of Service in this area.
 - ii. A right turn deceleration lane for all approaches would improve safety and Level of Service by allowing right turn vehicles to exit the right through lane on all approaches without impeding the speed of the through vehicles. This improvement would reduce the number of conflict points and accidents in the area. It would also improve the Level of Service because the majority of right turning vehicles would be able to exit the through lane. This reduces the

- length of the traffic queue in the through lane and the amount of time taken to discharge all the queued vehicles.
- iii. The traffic signal timings were optimized for the projected 2015 traffic and proposed improvements, with an average intersection delay of 35.7 seconds (Level of Service D).
 - iv. Improvements to the horizontal alignment shown as Alternative 1 by Patrick Engineering in their Alignment Analysis Report dated July, 2001 should be considered for implementation.
 - v. The existing bus stop location in the southeast intersection quadrant should be maintained.
- f. IL 25
- i. A right turn deceleration lane for the eastbound, westbound, and northbound approaches would improve safety and Level of Service by allowing right turn vehicles to exit the right through lane on these approaches without impeding the speed of the through vehicles. This improvement would reduce the number of conflict points and accidents in the area. It would also improve the Level of Service because the majority of right turning vehicles would be able to exit the through lane. This reduces the length of the traffic queue in the through lane and the amount of time taken to discharge all the queued vehicles.
 - ii. The traffic signal timings were optimized for the projected 2015 traffic and proposed improvements, with an average intersection delay of 39.3 seconds (Level of Service D).
- g. Nagel Boulevard
- i. A right turn deceleration lane for eastbound traffic will limit right turning vehicles from impeding eastbound through vehicles traveling in the right through lane. This would reduce the number of conflict points and improve the Level of Service in this area.
 - ii. With the possibility of future development and the additional vehicles from the possible closure of Thoria Road and Surrey Road, it is projected that Nagel Boulevard will warrant traffic signals.
- h. North Raddant Road
- i. The traffic signal timings were optimized for the projected 2015 traffic and proposed improvements, with an average intersection delay of 16.3 seconds (Level of Service B).
- i. Settler's Hill
- i. The existing temporary traffic signal that was installed to accommodate Waste Management's Landfill is to be removed when the landfill is closed. The estimated closure of this site is 2006.

- j. Kingsland Drive
 - i. A left turn deceleration lane for westbound left traffic will limit left turning vehicles from impeding westbound through vehicles traveling in the left through lane. This would reduce the number of conflict points and improve the Level of Service in this area.
 - ii. The projected traffic volume for Kingsland Drive meets traffic volume warrant 1B (Interruption of Continuous Flow). It is recommended that a traffic signal be installed. The traffic signal timings were optimized for the projected 2015 traffic, with an average intersection delay of 4.4 seconds (Level of Service A).
 - iii. The intersection widening improvements recommended under Immediate Spot improvements should already be incorporated.

The signal timings, set by using the projected traffic volumes (2015) from each intersection with a traffic signal, are included as Exhibit 9 in the Appendix of this study. All cycle lengths were set for either 150 seconds or 75 seconds. By using 150 or 75 seconds it may be possible to effectively coordinate the traffic signals using time based coordination. It is recommended that the use of time based coordination be fully explored because of the coordination of cycle lengths throughout the corridor. The use of hardwire or fiber optic interconnection should only be installed once time based coordination has been ruled out as an effective method of signal coordination. KDOT is planning a near future rehabilitation project for the bridge over the Fox River. It may be beneficial to add conduit quantities to the bridge rehabilitation project due to the possibility of future signal interconnect work.

The proposed signal timings at IL 31 provide adequate green time for a pedestrian wanting to access the River Trail. A walking speed of 3.5 feet per second was assumed, and it was found to be possible for a pedestrian to cross the intersection at this speed. It is recommended that PED signals be installed at this intersection to provide safety for those wanting to use the River Trail.

C. Long Range Improvements

All the improvements proposed in this section of the study are recommended to be implemented by the year 2025 based on current traffic projections. The projected increases in traffic volumes throughout the corridor begin to cause a significant demand for more capacity by the year 2025 and an additional through lane will be necessary for eastbound and westbound traffic.

As with any long range projections, these recommendations should be evaluated periodically to determine any necessary revisions or modifications due to a change in area growth or travel patterns that may occur between the 2015 projections and the 2025 projections.

The IDOT Administrative Policies Manual requires the use of a five-foot raised concrete median for an Arterial Street as a minimum. All proposed improvements shall incorporate a five-foot raised concrete median as a minimum for separation of traffic.

Recommendations listed in this section are changes to the Intermediate Range Improvements. Below is a list of intersections and the recommendations that would be of benefit.

1. Van Nortwick Avenue
 - a. By the year 2025, the through traffic on Fabyan Parkway is projected to increase enough to warrant installation of a third through lane for eastbound and westbound traffic on Fabyan Parkway. A third through lane for eastbound and westbound traffic extends west and originates at Western Avenue.
 - a. The projected traffic volumes for Van Nortwick Avenue may meet traffic volume Signal Warrant 1B (Interruption of Continuous Flow). It is recommended that a traffic signal be installed. The optimized timings for the projected 2025 traffic at this intersection yield an average delay of 3.9 seconds (Level of Service A).

2. Allen Drive/River Rock Road
 - a. By the year 2025, the through traffic on Fabyan Parkway is projected to increase enough to warrant installation of a third through lane for eastbound and westbound traffic on Fabyan Parkway.
 - b. The signal proposed for implementation on or before 2015 was optimized. New optimized timings for the projected 2025 traffic volumes produce an average intersection delay of 5.5 seconds (Level of Service A).

3. Campana/Holmstad Entrance
 - a. By the year 2025, the through traffic on Fabyan Parkway is projected to increase enough to warrant installation of a third through lane for eastbound and westbound traffic on Fabyan Parkway.
 - b. All auxiliary lanes for eastbound and westbound traffic added by the Intermediate Range recommendations shall be reconstructed in addition to the third through lane in each direction on Fabyan Parkway.
 - c. Due to increased traffic volumes on Fabyan Parkway and the progression of vehicle platoons from IL 31 to Allen Drive, it is recommended that a traffic signal be placed at this intersection. Optimized signals timings at this intersection for 2025 projections yield an average delay of 6.8 seconds (Level of Service A).

4. IL 31
 - a. By the year 2025, the through traffic on Fabyan Parkway is projected to increase enough to warrant installation of a third through lane for eastbound and westbound traffic on Fabyan Parkway.
 - b. Dual left turn lanes for southbound and northbound left turning traffic should be added to this intersection to sufficiently raise the capacity and Level of Service that can be provided to the left turn traffic and the through vehicles. This would reduce the number of conflict points and improve the Level of Service in this area. KDOT does not have jurisdiction over this improvement, but the operations of the entire intersection could suffer if this improvement is not completed. IDOT District 1 would need to coordinate this work.
 - c. All auxiliary lanes added by the Intermediate Range Improvements shall be reconstructed in addition to the third through lane on Fabyan Parkway.
 - d. The traffic signal timings were optimized for the projected 2025 traffic and all proposed improvements, with an average intersection delay of 42.9 seconds (Level of Service D).

5. IL 25
 - a. By the year 2025, the through traffic on Fabyan Parkway is projected to increase enough to warrant installation of a third through lane for eastbound and westbound traffic on Fabyan Parkway.
 - b. By the year 2025, the through traffic on IL 25 is projected to increase enough to warrant installation of a second through lane for northbound and southbound traffic on IL 25. KDOT does not have jurisdiction over this improvement, but the operations of the entire intersection could suffer if this improvement is not completed. IDOT District 1 would need to coordinate this work.
 - c. Dual left turn lanes for left turning traffic should be added to each intersection approach to sufficiently raise the capacity and Level of Service that can be provided to the left turn traffic and the through vehicles. This would reduce the number of conflict points and improve the Level of Service in this area.
 - d. All auxiliary lanes added by the Intermediate Range Improvements shall be reconstructed in addition to the third through lane on Fabyan Parkway and the second through lane on IL 25.
 - e. The traffic signal timings were optimized for the projected 2025 traffic and all proposed improvements, and an average intersection delay of 34.7 seconds (Level of Service C) was achieved.

6. Nagel Boulevard
 - a. By the year 2025, the through traffic on Fabyan Parkway is projected to increase enough to warrant installation of a third through lane for eastbound and westbound traffic on Fabyan Parkway.

- b. The traffic signal proposed for implementation on or before 2015 was optimized for 2025 traffic. Optimized timings for the projected 2025 traffic volumes produced an average intersection delay of 6.0 seconds (Level of Service A).

7. North Raddant Road

- a. By the year 2025, the through traffic on Fabyan Parkway is projected to increase enough to warrant installation of a third through lane for eastbound and westbound traffic on Fabyan Parkway.
- b. The existing traffic signal was optimized for 2025 traffic. Optimized timings for the projected traffic volumes produced an average intersection delay of 16.3 seconds (Level of Service B).
- c. Dual left turn lanes for northbound left turning traffic may need to be added to this intersection to sufficiently raise the capacity and Level of Service that can be provided to the left turn traffic. This would reduce the number of conflict points and improve the Level of Service in this area.

8. Kingsland Drive

- a. By the year 2025, the through traffic on Fabyan Parkway is projected to increase enough to warrant installation of a third through lane for eastbound and westbound traffic on Fabyan Parkway. A third through lane for eastbound and westbound traffic extends east and terminates at Kirk Road.
- b. The existing traffic signal was optimized for 2025 traffic. Optimized timings for the projected 2025 traffic volumes produced an average intersection delay of 3.9 seconds (Level of Service A).

The signal timings, set by using the projected 2025 traffic volumes from each intersection with a traffic signal, are included as Exhibit 10 of the Appendix to this study. All cycle lengths were set for either 150 seconds or 75 seconds. By using 150 or 75 seconds it may be possible to effectively coordinate the traffic signals using time based coordination. It is recommended that the use of time based coordination be fully explored because of the coordination of cycle lengths throughout the corridor. The use of hardwire or fiber optic interconnection should only be installed once time based coordination has been ruled out as an effective method of signal coordination.

The proposed signal timings at IL 31 provide adequate green time for a pedestrian wanting to access the River Trail. A walking speed of 3.5 feet per second was assumed, and it was found to be possible for a pedestrian to cross the intersection at this speed. It is recommended that PED signals be installed at this intersection to provide safety for pedestrians wanting to use the River Trail.

VII. CONCEPT DRAINAGE ANALYSIS

A. Current Design Criteria

The IDOT Administrative Policies Manual in Chapter 5 specifies the following drainage design criteria:

- Design shall be for a minimum 10 year flood frequency.
- Drainage areas and flows are to be calculated by the Rational Method.
- Minimum pipe diameter shall be 12 inches.
- A storm water velocity of three to ten feet per second shall be maintained in the pipe except in special cases where two feet per second will be permitted.
- Manholes are required at changes in storm sewer directions and pipe sizes. Maximum manhole spacing shall be 350 feet for pipe sizes up to and including 24 inch diameters. Maximum manhole spacing shall be 400 feet for pipe sizes over 24 inch diameter and including 36 inch diameter.
- Inlets shall be designed and spaced to allow a maximum storm water ponding encroachment onto the traveled lanes. For a roadway with two through lanes in each direction, encroachment is allowed up to ½ of a through lane. For a roadway with three through lanes in each direction, encroachment is allowed up to four feet on the center median side and up to ½ of a through lane on the outside lane.

The current Kane County Stormwater Ordinance must also be reviewed in detail, and the associated requirements for stormwater drainage and detention must be met for any future improvement. The ordinance includes the construction of roads as a “development”. Road construction projects must also comply with Section 203 of the ordinance (Site runoff storage/detention requirements) if conditions are met which include:

1. Any non-residential land use is to be constructed on a site more than one acre in size
2. Road development in rights-of-way under the ownership or control of a unit of local government which exceeds in the aggregate one acre

B. Existing Drainage System

The existing drainage system for Fabyan Parkway within the study limits consists generally of concrete curb and gutters and an underground storm sewer piping system. Storm drainage inlets and manholes collect the stormwater runoff from the pavement and allow it to flow within the storm sewer piping system. The storm sewer discharges the stormwater to natural drainage outfall locations, which include the Fox River. Exhibit 3 of the Appendix illustrates the current locations of the existing outfalls and drainage system. There are also isolated drainage

swale areas and culverts that channel the stormwater behind the curbs into the storm sewer piping system.

C. Concept Detention Requirements, Types, and Locations

Site runoff storage (detention) shall be provided if the future roadway improvement meets the criteria stated above under the Current Design Criteria section. The use of either Reservoir Detention or In-Line Detention for the Fabyan Parkway corridor was reviewed from a concept and a land availability standpoint due to the density of existing development within the corridor. Therefore, the corridor was separated into segments with the feasibility of Reservoir Detention being discussed for each segment. In-Line Detention should be considered for all areas where Reservoir Detention is deemed not feasible. Detailed drainage analysis and design will be necessary as part of a future Phase I Study and Phase II design work.

1. West of River Rock Road
This area has the possibility of utilizing Reservoir Detention if access to the golf course pond and retention areas, located north of Fabyan Parkway and just west of Western Avenue, could be obtained. If access to the existing golf course pond is denied, the feasibility of utilizing Reservoir Detention is greatly reduced.
2. River Rock Road to Just East of Thoria Road
The area between River Rock Road and just east of Thoria Road is a dense and mostly developed residential and commercial area. This existing area drains and outfalls to the Fox River in the southeast quadrant of IL 31 and the southwest quadrant of IL 25. Detention basins should be evaluated in further detail at these quadrants during a Phase I study.
3. Just East of Thoria Road to Just West of Settler's Hill
The area between the above limits is almost a completely developed residential and commercial area south of Fabyan Parkway. It does have one area that could possibly serve as a detention basin. This area is situated just west of Nagel Boulevard and directly west of the existing 7-Eleven convenience mart and gas station. A basin could also be evaluated north of Fabyan Parkway at the existing storm sewer outfall located just west of Surrey Road. These areas should be evaluated in further detail during a Phase I study.
4. Just West of Settler's Hill to Kirk Road
This area is sparsely developed at this time. There is existing commercial development located at the Kingsland Drive intersection. In-Line detention can be provided within existing adjacent basins and at existing outfalls for this roadway improvement. If additional detention is necessary, it could be easily provided along the undeveloped properties.

All areas considered for Reservoir and In-Line Detention should be fully analyzed as a part of a complete Phase I study. For all areas where Reservoir Detention is not possible due to existing development, In-Line Detention must be made available.

VIII. ENVIRONMENTAL SCREENING

A. Environmental Class of Action Determination (ECAD) Items

This section of Fabyan Parkway crosses over and is adjacent to many environmentally sensitive areas. The Flood Maps for the City of Batavia show the limits of the Floodplain for the Fox River within potential project limits. The National Wetlands Inventory Map for this area also illustrates mapped locations of existing wetland areas along the Fox River and north of Fabyan Parkway in close proximity to the golf course. Maps referenced above are attached to this report as Exhibit No. 17 in the Appendix.

The Illinois Department of Natural Resources completed a cursory review of the area for this Feasibility Study and did not identify endangered species within the project area. During future Phase 1 or Phase 2 work on this section, a formal sign-off would need to be obtained. The Illinois Historic Preservation Agency will most likely require an archaeological reconnaissance Phase 1 survey at a minimum for any substantial project within this area. Formal coordination and sign-off will need to be obtained from the IHPA during future Phase 1 or Phase 2 work.

Chapter 23 of the IDOT Bureau of Design and Environment Manual outlines in detail the Categorical Exclusion and ECAD process if Federal funds are involved in the project. The selection of the appropriate environmental documentation type for a project is based upon the project's potential for significant environmental impacts and the involvement of Federal funding participation or Federal approvals.

The BDE Manual indicates the project types eligible for the ECAD procedures are those which have the potential to be processed as Categorical Exclusions but which may have been processed as Environmental Assessments before the development of the ECAD procedures. Potential ECAD actions include project types other than the following:

1. Those project types specified in the FHWA environmental regulations (23 CFR 771.115(a)) as actions which normally require an Environmental Impact Statement (Class I).
2. Those project types specifically listed in 23 CFR 771.117 and BDE Manual Section 23-1 as Categorical Exclusions (Class II, 23 CFR 771.115(b)).
3. Those project types which the Illinois Division Office of FHWA has determined will normally require an Environmental Assessment (Class III,

23 CFR 771.115 (c)). Examples include new interchanges, bypasses, and projects involving substantial controversy on environmental grounds.

The ECAD procedures lead to the decision on whether an eligible project should be processed as a Categorical Exclusion or with an Environmental Assessment, or Environmental Impact Statement. The ECAD procedures provide a structure for evaluating and documenting the basis for that decision.

Figure 8.1 shows a list of the Environmental Class Action Determination items that may need to be evaluated as part of the ECAD process during future Phase 1 study work if the project qualifies for an ECAD. A Class of Action Determination Document may also need to be completed.

B. Preliminary List of Permits and Agency Coordination

Figure 8.2 shows a list of permitting agencies where a permit or coordination could be required for a future project. A checklist is also attached to Figure 8.2 which proves helpful during Phase 1 study work. The permits and coordination required will vary based on the type of funding utilized and the project scope of work. Current regulations should also be reviewed at the time of project implementation to determine permit requirements at that time.



**Illinois Department
of Transportation**

Class of Action Determination Record

Route: Fabyan Parkway

Section: 03-00308-00-ES

Location/Terminal: Western Avenue to Kirk Road

County: Kane

Job Number:

Date of Field Review:

Date of Initial Presentation:

Date of Latest Revision:

Figure 8.1

Resource & Issues	Potential Involvement (MM,DD,YY)		Date	Analysis and Results		Impacts Present (MM,DD,YY)		S t a t u s
	Yes	No		Use Journal		Yes	No	
	Type of Description			Yes	No			
I. Social/Economic								
1. Relocations - Business and Residential		X						
2. Changes in Travel Patterns	X							
3. Economic Impacts	X							
4. Change in Land Use & Economic Development		X						
5. Community Cohesion		X						
6. Public Facilities and Services	X							
7. Title VI and Other Protected Groups		X						
8. Environmental Justice		X						
9. Pedestrian & Bicycle Facilities	X							
II. Agricultural								
	X							
III. Cultural								
1. Archaeological Sites	X							
2. Historic Bridges		X						
3. Historic Districts and Buildings		X						
IV. Air Quality								
1. Attainment/Nonattainment Status	X							
2. Microscale Analysis	X							

Figure 8.1

Resource & Issues	Potential Involvement (MM,DD,YY)		Date	Analysis and Results		Impacts Present (MM,DD,YY)		Status
	Yes	No		Use Journal	Type of Description	Yes	No	
V. Noise								
	X							
VI. Energy								
	X							
VII. Natural Resources								
	X							
VIII. Water Quality/Resources								
1. Surface Water Resources/Quality	X							
2. Permits	X							
3. Groundwater Resources/Quality	X							
IX. Flood Plains								
1. 100-Year Flood Plain	X							
2. Regulatory Floodway	X							
X. Wetlands								
	X							
XI. Special Waste								
	X							
XII. Special Lands								
1. 4(F)	X							
2. 6(F)	?							The Phase 1 Study will need to determine if the project will involve use of lands that have Land and Water Conservation (LAWCON) funds involved.
3. Open Space Lands Acquisition and Development (OSLAD) Act Lands	?							The Phase 1 Study will need to determine if the project will involve use of lands that have OSLAD funds involved in its purchase and development.
XIII. Other Issues								

Figure 8.1

Resource & Issues	Potential Involvement (MM,DD,YY)		Analysis and Results		Impacts Present (MM,DD,YY)	Status
	Yes	No	Date	Use Journal Type of Description		
XIV. Permits Required (Check each that applies.)						
404 - Individual	X					See Resource and Issues # _____ for discussion.
404 - Nationwide	X					See Resource and Issues # _____ for discussion.
NPDES	X					See Resource and Issues # _____ for discussion.
Coast Guard	X					See Resource and Issues # _____ for discussion.
IDNR - Office of Water Resources	X					See Resource and Issues # _____ for discussion.
See Figure 7.2 for others that may apply.	X					See Resource and Issues # _____ for discussion.
						See Resource and Issues # _____ for discussion.
						See Resource and Issues # _____ for discussion.
XV. List of Preparers						
Initials	Name		Organization			

Figure 8.1

PRELIMINARY LIST OF PERMITS AND AGENCY COORDINATION

<u>SIGN-OFFS</u>	<u>MAY BE APPLICABLE</u> <u>(Depending Upon Funding and Exact Project Scope)</u>
U.S. ARMY CORPS OF ENGINEERS	<u> X </u>
Nationwide Permit	<u> X </u>
Individual 404 Permit	<u> X </u>
U.S. COAST GUARD	<u> X </u>
F.A.A. CLEARANCE	<u> </u>
WETLAND STUDY REPORT/COORDINATION	<u> X </u>
U.S. Army Corps of Engineers	<u> X </u>
IL Dept. of Natural Resources	<u> X </u>
U.S. Dept. of Interior/Fish & Wildlife Service	<u> X </u>
U.S. Environmental Protection Agency	<u> X </u>
BIOLOGICAL SURVEY/ASSESSMENT	<u> X </u>
PRIME FARMLAND/AGRICULTURE	<u> X </u>
U.S. Dept. of Agriculture/Soil Conservation Service	<u> X </u>
IL Dept. of Agriculture	<u> X </u>
STATE FORESTER	<u> X </u>
LOCAL AGENCY INVOLVEMENT/PARTICIPATION	<u> X </u>
IL DEPARTMENT OF TRANSPORTATION	<u> X </u>
Environmental Class of Action Determination (ECAD)	<u> X </u>
Environmental Survey Request Form	<u> X </u>

FIGURE 8.2

FHWA COORDINATION MEETING MINUTES	<u> X </u>
Historic/Architectural/Archaeological	<u> X </u>
State Historic Preservation Officer Illinois Archaeological Survey	<u> X </u>
METRO CLEARINGHOUSE	<u> X </u>
STATE CLEARINGHOUSE	<u> X </u>
PUBLIC INFORMATIONAL MEETING	<u> X </u>
PUBLIC HEARING	<u> X </u>
KANE COUNTY STORMWATER MANAGEMENT PERMIT	<u> X </u>
IDNR-OWR FLOODWAY/FLOODPLAIN CONSTRUCTION PERMIT	<u> X </u>
IDNR-OWR DAM SAFETY PERMIT	<u> </u>
IL ENVIRONMENTAL PROTECTION AGENCY	<u> X </u>
NPDES	<u> X </u>
Joint Three-Way Hydraulic Permit	<u> X </u>
Water	<u> X </u>
Sewer	<u> X </u>
SECTION 4(F) LANDS	<u> X </u>
PUBLIC AND PRIVATE UTILITY AGENCIES	<u> X </u>

FIGURE 8.2

SPECIAL ENVIRONMENTAL STUDIES, ANALYSES, AND REPORTS

- | | | |
|---|--------------------------------------|--|
| A. SECTION 4(f) EVALUATION/DETERMINATION
Required for federally-funded projects which would use land from a publicly-owned park, recreation area, wildlife and waterfowl refuge, or any land from a historic site that is on or eligible for inclusion on the National Register of Historic Places. | A
<input type="checkbox"/> | N/A
<input type="checkbox"/> |
| B. SECTION 6(f) CONVERSION REQUESTS
Required for projects which would use lands from a public outdoor recreation area which has Land and Water Conservation (LAWCON) funds involved in its purchase or development | A
<input type="checkbox"/> | N/A
<input type="checkbox"/> |
| C. OPEN SPACE LAND ACQUISITION AND DEVELOPMENT (OSLAD) CONVERSION REQUEST
Required for projects which would use lands that have OSLAD funds involved in their purchase or development. The possible involvement would be acquisition of land from parks, recreation areas, or wildlife and waterfowl refuges. | A
<input type="checkbox"/> | N/A
<input type="checkbox"/> |
| D. SECTION 106 REPORTS - HISTORIC BRIDGES, DISTRICTS AND BUILDINGS
Required for federally-funded projects requiring right-of-way or easements (temporary or permanent) from or otherwise affecting properties on or eligible for inclusion on the National Register of Historic Places, located within a historic district or designated by local ordinance. | A
<input type="checkbox"/> | N/A
<input type="checkbox"/> |
| E. TRAFFIC NOISE ANALYSIS
Required for projects which involve:
Type I - the construction of a highway on new location or the physical alteration of an existing highway which significantly changes either the horizontal or vertical alignment or increases the number of through-traffic lanes
Type II - noise abatement projects on an existing highway. | A
<input type="checkbox"/> | N/A
<input type="checkbox"/> |
| F. CONSTRUCTION NOISE ANALYSIS
Required for all projects. | A
<input type="checkbox"/> | N/A
<input type="checkbox"/> |
| G. ENERGY ANALYSIS
Required for all projects for which an ECAD, Environmental Assessment or Environmental Impact Statement is required. | A
<input type="checkbox"/> | N/A
<input type="checkbox"/> |
| H. FLOOD PLAIN STUDY
Required for federally-funded/regulated projects which entail encroachments or which would otherwise affect base flood plains. (See BDE Manual, Section 26-7). | A
<input type="checkbox"/> | N/A
<input type="checkbox"/> |

I.	WETLAND STUDY Required for federally-funded/regulated projects which entail new construction in wetlands or that otherwise would have an effect on wetlands.	A <input type="checkbox"/>	N/A <input type="checkbox"/>
J.	AIR QUALITY STUDY Required for Environmental Class of Action Determination (ECAD), Environmental Assessment (EA) or Environmental Impact Statements (EIS) projects where forecast traffic volumes are projected to be more than 16,000 ADT for federally funded projects upon completion of the project. See BDE Manual, Section 26-11.	A <input type="checkbox"/>	N/A <input type="checkbox"/>
K.	ECOLOGICAL SURVEY AND ASSESSMENT Required for <u>all</u> projects which would involve acquisition of additional right-of-way or easement (temporary or permanent), tree removal, require a drainage structure run-around or any in-stream work, require an individual 404 permit, or would involve proposed access control revisions for certain freeways on the State highway system. Initiated through Environmental Survey Request submittal to BDE.	A <input type="checkbox"/>	N/A <input type="checkbox"/>
L.	CULTURAL RESOURCE (ARCHAEOLOGICAL, ARCHITECTURAL AND HISTORICAL) SURVEY AND ASSESSMENT Required for <u>all</u> projects which would involve acquisition of additional right-of-way or easements (temporary or permanent), and/or would require work on a historic bridge, building or district. Initiated through Environmental Survey Request submittal to BDE.	A <input type="checkbox"/>	N/A <input type="checkbox"/>
M.	AGRICULTURAL STUDIES (IDOA) Required for all State highway and bridge projects which are funded in whole or in part with <u>State</u> funds and which require additional right-of-way outside any corporate limits where either or both of the following conditions exist: <ol style="list-style-type: none"> 1. The additional right-of-way exceeds 0.75 hectares per kilometers (3 acres per mile) (total acquisition divided by project length) or, 4.0 hectare (10 acres) total for a non-linear (spot) improvement including bridges, intersections, rest areas, and weigh stations. 2. The proposed improvement includes one or more alternate alignments in which the proposed right-of-way diverges from, and is not contiguous to, the existing right-of-way. <p style="text-align: center;">See BDE Manual, Section 26-10.</p>	A <input type="checkbox"/>	N/A <input type="checkbox"/>

N.	FORM AD 1006 (AGRICULTURAL – NATURAL RESOURCE CONSERVATION SERVICE) Required for all Federally funded projects which require additional right-of-way outside any corporate limits in which the proposed acquisition exceeds 0.75 hectares per kilometers (3 acres per mile) (total acquisition divided by project length) or total acquisition for spot improvements exceeds 4.0 hectares (10 acres) (includes bridges, intersections, rest areas, and weigh stations). See BDE Manual, Section 26-10.	A <input type="checkbox"/>	N/A <input type="checkbox"/>
O.	RECYCLING ANALYSIS/FEASIBILITY DISCUSSION Required for all projects.	A <input type="checkbox"/>	N/A <input type="checkbox"/>
P.	TRAFFIC MAINTENANCE REPORT Required for all projects.	A <input type="checkbox"/>	N/A <input type="checkbox"/>
Q.	BRIDGE CONDITION REPORT Required for all bridge work.	A <input type="checkbox"/>	N/A <input type="checkbox"/>
R.	STRUCTURAL INVENTORY AND APPRAISAL SHEET FOR BRIDGES Required for projects to be funded by HBRRP Funds.	A <input type="checkbox"/>	N/A <input type="checkbox"/>
S.	ACCIDENT DATA AND ANALYSIS Required for all projects. (to include wet weather cluster sites).	A <input type="checkbox"/>	N/A <input type="checkbox"/>
T.	GEOTECHNICAL REPORTS Required for projects on new alignment.	A <input type="checkbox"/>	N/A <input type="checkbox"/>
U.	SPECIAL WASTE ASSESSMENT Required for all projects. (See BDE Manual, Section 27-2, for Special Waste Procedures)	A <input type="checkbox"/>	N/A <input type="checkbox"/>
	a. SWA Screen / Survey Request Form screening criteria resulting in a finding that the project has no potential for involving sites potentially impacted with regulated substances. Include a signed copy of the SWA Screen Survey Form. <input type="checkbox"/>		
	b. The Preliminary Environmental Site Assessment (PESA) resulted in a finding that the project is “no risk” or “low risk” for involvement with sites impacted with regulated substances. Include a copy of the BDE memo documenting this finding. <input type="checkbox"/>		
	c. The PESA resulted in a finding that the project is “moderate risk” or “high risk” for involvement with sites impacted by regulated substances, and the district has <input type="checkbox"/>		

determined it can avoid the site. Include a memo from the BDE transmitting the PESA report and the district's avoidance determination, documented on the PESA Response form.

- d. The PESA resulted in a finding that the project is "moderate risk" or "high risk" for involvement with sites potentially impacted by regulated substances, and the district cannot avoid the site(s). Further investigations (Preliminary Site Investigation) or assessments (for Rick Managed Projects) have been conducted to determine the nature and extent of the involvement. (When the proposed project is on existing alignment or involves a single alignment alternative, the district may request design approval prior to receiving results of the PSI. The district may not acquire any contaminated parcel until the PSI, and other studies if needed, are completed. The district's transmittal memo must indicate the project is on existing alignment or involves only a single alignment alternative and that acquisition of any contaminated parcel will not proceed until further studies are completed.)

- e. The sites involved with the project are potentially impacted with regulated substances, Underground Storage Tanks (USTs), or Leaking Underground Storage Tanks (LUSTs) and the BDE Special Waste Unit has waived waiting for the results of further investigations prior to design approval. The waiver may be requested on the basis of the final PESA or the PSI report. (Waiver will not be granted if the district proposes to acquire the USTs/LUSTs or the entire property containing the USTs/LUSTs.) The report must include a copy of the waiver from the BDE Special Waste Unit.

V.	HANDICAP ACCESSIBILITY Required for all projects that are in an urban section.	A <input type="checkbox"/>	N/A <input type="checkbox"/>
W.	TREE PRESERVATION AND REPLACEMENT Required for all projects (See Department Policy D&E-18)	A <input type="checkbox"/>	N/A <input type="checkbox"/>

COORDINATION

- | | | |
|---|--------------------------------------|--|
| A. FHWA
Categorical Exclusion, for documentation purposes <input type="checkbox"/>
Environmental Assessment, for review, releasing for public review and adoption (FONSI) <input type="checkbox"/>
Environmental Impact Statement, for review, releasing for comment, adoption and Record of Decision <input type="checkbox"/> | A
<input type="checkbox"/> | N/A
<input type="checkbox"/> |
|
 | | |
| B. ILLINOIS DEPARTMENT OF NATURAL RESOURCES
For projects involving in-stream work, wetlands or other habitat disturbances, natural areas, Section 4(f) or 6(f) land involvement's, or impacts to State threatened or endangered species. Initial coordination handled by BDE Environment Section. (Threatened and Endangered Species Sign-off will expire after three years.) | A
<input type="checkbox"/> | N/A
<input type="checkbox"/> |
|
 | | |
| C. STATE HISTORIC PRESERVATION OFFICER
Sign-off required for all projects requiring additional right-of-way or easements (permanent or temporary), previously undisturbed existing right-of-way, work within a designated historic district, building, or bridge widening, replacement or rehabilitation. All coordination handled by BDE Environmental Section. | A
<input type="checkbox"/> | N/A
<input type="checkbox"/> |
|
 | | |
| D. ILLINOIS DEPARTMENT OF AGRICULTURE
For all State highway and bridge projects which are funded in whole or in part with <u>State</u> funds and which require additional right-of-way outside any corporate limits and which involve either or both of the following conditions:

<ol style="list-style-type: none">1. The additional right-of-way exceeds 0.75 hectares per kilometers (3 acres per mile) (total acquisition divided by project length) <u>or</u>, 4.0 hectare (10 acres) total for a non-linear (spot) improvement including bridges, intersections, rest areas, and weigh stations.2. The proposed improvement includes one or more alternate alignments in which the proposed right-of-way diverges from, and is not contiguous to the existing right-of-way. | A
<input type="checkbox"/> | N/A
<input type="checkbox"/> |
|
 | | |
| See BDE Manual, Section 26-10. | | |
|
 | | |
| E. U.S. DEPARTMENT OF AGRICULTURE, NATURAL RESOURCE CONSERVATION SERVICE
Required for all Federally funded projects which require additional right-of-way outside any corporate limits in which the proposed acquisition exceeds 0.75 hectares per kilometers (3 acres per mile) (total acquisition divided by project length) or total | A
<input type="checkbox"/> | N/A
<input type="checkbox"/> |

acquisition for spot improvements exceeds 4.0 hectares (10 acres) (includes bridges, intersections, rest areas, and weigh stations).

F. ILLINOIS ENVIRONMENTAL PROTECTION AGENCY **A** **N/A**

 For all projects in which impacts are identified by a traffic noise analysis in a separate Noise Technical Report. (Impacts occur when the predicted traffic noise levels approach or exceed the noise abatement criteria, or when the predicted traffic noise levels substantially exceed the existing noise levels.) Issues Section 401 Water Quality Certification on Section 404 Permits.

G. CLEARING HOUSE (A-95) **A** **N/A**

 Design Stage Local
State
 SAI No. _____

Design Stage submittals are required for the following federally-funded projects:

- a. When upgrading an existing facility or providing new access to an area, in effect consisting of more than rehabilitation or modernization.
- b. Change the use, scale or intensity of use of existing facilities.
- c. Requires additional right-of-way or permanent easement.

Examples:

Projects on new alignment.

Addition of through lanes.

Addition of interchanges to existing freeways.

Involvement of 4(f), 404 permits, or historic properties.

Bridge replacement, bridge pier or substructure work.

H. U.S. DEPARTMENT OF INTERIOR, OFFICE OF THE SECRETARY **A** **N/A**

 Required for all projects involving impacts to Section 4(f) or 6(f) lands.

I. U.S. DEPARTMENT OF INTERIOR, FISH AND WILDLIFE SERVICE **A** **N/A**

 Required for projects involving in-stream work, wetlands, other significant habitat disturbances, Section 4(f) or 6(f) land involvement's, or impacts to Federal threatened or endangered species.

J. U.S. DEPARTMENT OF INTERIOR, NATIONAL PARK SERVICE **A** **N/A**

 Required for projects which would affect significant free flowing rivers as identified by the nationwide inventory of potential wild and scenic, and recreational river areas within the nation or which

are components of the National Wild and Scenic Rivers System. The NPS is responsible for administering the national parks, monuments and parkways and national historic and archaeological programs.

K.	U.S. DEPARTMENT OF THE ARMY, CORPS OF ENGINEERS Required for any project involving discharges of dredged or fill material into the waters of the United States to determine what type of permit is required (i.e. individual or nationwide). Also required for any structures or work in or affecting navigable waters of the United States to determine if a Section 10 permit is required.	A <input type="checkbox"/>	N/A <input type="checkbox"/>
L.	ILLINOIS DIVISION OF AERONAUTICS Required for highway and bridge projects within 3.2 kilometers (2 miles) of public airports, 1.6 kilometers (1 mile) of privately-owned airports and 0.80 kilometers (½ mile) of restricted landing strips.	A <input type="checkbox"/>	N/A <input type="checkbox"/>
M.	FEDERAL AVIATION ADMINISTRATION Required for highway and bridge projects affecting airports that are publicly owned.	A <input type="checkbox"/>	N/A <input type="checkbox"/>
N.	RAILROAD Required for projects involving a railroad crossing.	A <input type="checkbox"/>	N/A <input type="checkbox"/>
O.	OTHER COORDINATION Village, City and County, Bureau of Bridges and Structures, Other government agencies which have jurisdiction by law, regarding a project issue.	A <input type="checkbox"/>	N/A <input type="checkbox"/>
P.	MAILBOX SUPPORTS Required for all projects.	A <input type="checkbox"/>	N/A <input type="checkbox"/>
Q.	DRAINAGE DISTRICTS INVOLVED Required for all projects involving in-stream work.	A <input type="checkbox"/>	N/A <input type="checkbox"/>
R.	ACCOMMODATIONS FOR BICYCLES Required for all projects. (See Chapter 17 of the BDE Manual)	A <input type="checkbox"/>	N/A <input type="checkbox"/>

PERMITS

- | | | | |
|--|---|--------------------------------------|--|
| A. | SECTION 402 NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) CONSTRUCTION PERMIT
Required for construction activities involving clearing, grading and excavation activities that will result in the disturbance of 1 or more acres of total land area. Accordingly, the project will require a Stormwater Pollution Prevention Plan (SWPP), a contractors certification statement and the submittal of a Notice of Intent (NOI) to the Illinois Environmental Protection Agency. | A
<input type="checkbox"/> | N/A
<input type="checkbox"/> |
| B. | SECTION 402 NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) POINT – SOURCE PERMIT
Required for all point-source discharges (other than those addressed by the 404 Permit) into the Nation's Waters (e.g. for rest areas). IEPA will make determination if question of applicability arises. (See BDE Manual Page 28-2(9).) | A
<input type="checkbox"/> | N/A
<input type="checkbox"/> |
| C. | SECTION 404 PERMIT
Required for any discharge of dredged or fill material into waters of the United States, including wetlands. To be applied for in Phase II. | A
<input type="checkbox"/> | N/A
<input type="checkbox"/> |
| <p>Type</p> <ul style="list-style-type: none">-Individual
To be obtained from the Corps of Engineers for any project that the Corps has determined applicability on and individual permit.-General (Regional or Nationwide)
To be obtained from the Corps of Engineers for any project that the Corps has determined applicability of a nationwide permit subject to conditions and management practices for the work and these conditions and management practices can be met. | | | |
| D. | SECTION 10 PERMIT
To be obtained from the Corps of Engineers authorizing certain structures or work other than bridges or causeways in or affecting navigable water of the United States. (Often handled simultaneously with the 404 permit.) | A
<input type="checkbox"/> | N/A
<input type="checkbox"/> |
| E. | SECTION 9 PERMIT
To be obtained from the U.S. Coast Guard for the construction, modification, replacement or removal of bridges or causeways affecting navigable water of the United States. Applied for by Bureau of Bridges and Structures. | A
<input type="checkbox"/> | N/A
<input type="checkbox"/> |

- | | | | |
|-----------|---|--|--|
| F. | <p>IEPA WATER QUALITY CERTIFICATION</p> <p>Required whenever a Federal license or permit is applied for to conduct any activity that may result in a discharge of a pollutant into waters of the United States. Issues Section 401 Water Quality Certification on Section 404 Permits.</p> | <p>A</p> <input type="checkbox"/> | <p>N/A</p> <input type="checkbox"/> |
| G. | <p>CONSTRUCTION IN FLOODWAYS OF RIVERS, LAKES AND STREAMS – DEPARTMENT OF NATURAL RESOURCES, OFFICE OF WATER RESOURCES</p> <p>Required for construction in the floodway of identified streams serving a tributary area of 259 hectares (640 acres) or more (urban) or 2590 hectares (6400 acres) or more (rural). Applied for by Bureau of Bridges and Structures (for bridges) or district office (for culverts, embankments, storm sewers or other construction within the floodplains of applicable streams and rivers).</p> <p style="padding-left: 40px;">-By District if no structure is involved.</p> | <p>A</p> <input type="checkbox"/> | <p>N/A</p> <input type="checkbox"/> |
| H. | <p>REGULATION OF PUBLIC WATERS, ILLINOIS DEPARTMENT OF NATURAL RESOURCES, OFFICE OF WATER RESOURCES</p> <p>Required for construction in rivers, lakes, streams and waterways considered public waters. Applied for by Bureau of Bridges and Structures (for bridges) or district office (for culverts, embankments, storm sewers or other construction affecting public waters).</p> | <p>A</p> <input type="checkbox"/> | <p>N/A</p> <input type="checkbox"/> |

EXHIBIT 1

Existing, 2015, and 2025
Projected Traffic and Growth Rates by Movement

Kane County Fabyan Parkway Manual Traffic Counts - Spring 2003

Summary of 15 minute counts for each of the 14 intersections with totals to determine peak 15 minutes

Intersection	4:30-4:45	4:45-5:00	5:00-5:15	5:15-5:30	5:30-5:45	5:45-6:00	6:00-6:15	6:15-6:30
Allen-River Rock	625	667	755	793	649	643	564	600
Carriage	519	499	622	601	551	497	513	446
Heather	621	521	796	639	615	528	514	457
IL 25	819	862	852	948	865	822	670	630
IL 31	1075	1032	1059	1133	1063	983	982	713
Kingsland	583	633	637	633	619	613	472	429
Nagel	541	612	660	672	646	580	465	439
N. Raddant	725	639	677	740	655	576	509	446
Surrey	552	574	666	573	488	488	470	467
Thoria	554	653	790	738	651	545	501	441
Van Nortwick	583	583	636	621	547	553	563	502
Dreyer	628	593	635	670	701	537	530	467
Settler's Hill	589	682	698	663	617	643	540	437
Campana	645	600	645	685	711	541	539	472
Total Traffic	9059	9150	10128	10109	9378	8549	7832	6946

Heather

PM

MOVEMENTS	4:30	4:45	5:00	5:15	5:30	5:45	6:00	6:15
AB								
AC	6	3	1	1	0	2	4	2
AD	0	1	1	0	1	0	0	0
BA								
BC								
BD								
CA	3	4	2	1	4	3	4	4
CB								
CD	234	195	261	222	215	189	158	183
DA	2	0	3	3	0	0	2	0
DB								
DC	376	318	528	412	395	334	346	268
TOTALS	621	521	796	639	615	528	514	457

PHV		MOVEMENT KEY	Growth Rate	2015	2025
AB	0	SB THRU	1.0%	0	0
AC	4	SB RIGHT	1.0%	5	5
AD	4	SB LEFT	1.0%	5	5
BA	0	NB THRU	1.0%	0	0
BC	0	NB LEFT	1.0%	0	0
BD	0	NB RIGHT	1.0%	0	0
CA	8	EB LEFT	1.0%	9	10
CB	0	EB RIGHT	1.0%	0	0
CD	1044	EB THRU	2.5%	1404	1797
DA	12	WB RIGHT	1.0%	14	15
DB	0	WB LEFT	1.0%	0	0
DC	2112	WB THRU	2.5%	2840	3636

Carriage

PM MOVEMENTS	4:30	4:45	5:00	5:15	5:30	5:45	6:00	6:15
AB								
AC								
AD								
BA								
BC	1	2	0	0	0	0	0	1
BD	5	7	1	1	3	3	5	2
CA								
CB	2	4	3	0	2	2	1	2
CD	166	221	218	206	183	183	146	170
DA								
DB	7	7	10	10	8	6	10	1
DC	338	258	390	384	355	303	351	270
TOTALS	519	499	622	601	551	497	513	446

PHV		MOVEMENT KEY	Growth Rate	2015	2025
AB	0	SB THRU	1.0%	0	0
AC	0	SB RIGHT	1.0%	0	0
AD	0	SB LEFT	1.0%	0	0
BA	0	NB THRU	1.0%	0	0
BC	0	NB LEFT	1.0%	0	0
BD	4	NB RIGHT	1.0%	5	5
CA	0	EB LEFT	1.0%	0	0
CB	12	EB RIGHT	1.0%	14	15
CD	872	EB THRU	2.5%	1173	1501
DA	0	WB RIGHT	1.0%	0	0
DB	40	WB LEFT	1.0%	45	50
DC	1560	WB THRU	2.5%	2098	2686

Van Nortwick

PM MOVEMENTS	4:30	4:45	5:00	5:15	5:30	5:45	6:00	6:15
AB								
AC								
AD								
BA								
BC	0	1	1	4	1	2	4	4
BD	7	6	7	8	6	8	11	7
CA								
CB	2	3	4	3	8	5	6	1
CD	182	191	210	222	192	198	177	217
DA								
DB	10	15	22	12	18	11	18	13
DC	382	367	392	372	322	329	347	260
TOTALS	583	583	636	621	547	553	563	502

PHV		MOVEMENT KEY	Growth Rate	2015	2025
AB	0	SB THRU	1.0%	0	0
AC	0	SB RIGHT	1.0%	0	0
AD	0	SB LEFT	1.0%	0	0
BA	0	NB THRU	1.0%	0	0
BC	4	NB LEFT	1.0%	5	5
BD	28	NB RIGHT	1.0%	32	35
CA	0	EB LEFT	1.0%	0	0
CB	16	EB RIGHT	1.0%	18	20
CD	840	EB THRU	2.5%	1130	1446
DA	0	WB RIGHT	1.0%	0	0
DB	88	WB LEFT	1.0%	99	110
DC	1568	WB THRU	2.5%	2109	2699

Allen Road - River Rock

PM

MOVEMENTS	4:30	4:45	5:00	5:15	5:30	5:45	6:00	6:15
AB	0	0	0	0	0	0	0	0
AC	0	4	0	1	1	0	1	0
AD	6	3	2	5	4	3	3	3
BA	0	0	0	0	0	0	0	0
BC	4	6	4	3	3	1	2	1
BD	5	3	3	0	0	0	0	0
CA	1	0	1	0	0	1	0	1
CB	5	1	0	3	5	2	1	0
CD	205	224	255	259	232	217	186	237
DA	4	0	1	8	3	5	7	4
DB	3	0	2	1	1	0	1	0
DC	392	426	487	513	400	414	363	354
TOTALS	625	667	755	793	649	643	564	600

PHV		MOVEMENT KEY	Growth Rate	2015	2025
AB	0	SB THRU	1.0%	0	0
AC	0	SB RIGHT	1.0%	0	0
AD	8	SB LEFT	1.0%	9	10
BA	0	NB THRU	1.0%	0	0
BC	16	NB LEFT	1.0%	18	20
BD	12	NB RIGHT	1.0%	14	15
CA	4	EB LEFT	1.0%	5	5
CB	0	EB RIGHT	1.0%	0	0
CD	1020	EB THRU	2.5%	1372	1756
DA	4	WB RIGHT	1.0%	5	5
DB	8	WB LEFT	1.0%	9	10
DC	1948	WB THRU	2.5%	2620	3354

Dreyer Medical

PM

MOVEMENTS	4:30	4:45	5:00	5:15	5:30	5:45	6:00	6:15
AB								
AC	1	0	2	1	3	0	0	0
AD	0	1	2	2	2	0	0	0
BA								
BC								
BD								
CA	0	1	3	0	0	0	0	0
CB								
CD	200	211	227	239	236	198	186	201
DA	0	3	1	1	1	1	0	4
DB								
DC	427	377	400	427	459	338	344	262
TOTALS	628	593	635	670	701	537	530	467

PHV		MOVEMENT KEY	Growth Rate	2015	2025
AB	0	SB THRU	1.0%	0	0
AC	8	SB RIGHT	1.0%	9	10
AD	8	SB LEFT	1.0%	9	10
BA	0	NB THRU	1.0%	0	0
BC	0	NB LEFT	1.0%	0	0
BD	0	NB RIGHT	1.0%	0	0
CA	12	EB LEFT	1.0%	14	15
CB	0	EB RIGHT	1.0%	0	0
CD	908	EB THRU	2.5%	1221	1563
DA	4	WB RIGHT	1.0%	5	5
DB	0	WB LEFT	1.0%	0	0
DC	1600	WB THRU	2.5%	2152	2755

Campana & Retirement Community

PM

MOVEMENTS	4:30	4:45	5:00	5:15	5:30	5:45	6:00	6:15
AB	0	0	0	0	0	0	0	0
AC	4	4	5	5	6	1	2	2
AD	1	3	7	3	5	2	2	1
BA	0	0	0	0	0	0	0	0
BC	1	0	0	1	1	0	0	1
BD	1	2	1	2	1	0	1	2
CA	1	3	2	3	2	1	2	0
CB	0	0	1	1	0	0	1	2
CD	200	211	227	239	236	198	186	201
DA	10	0	2	2	1	1	1	0
DB	0	0	0	2	0	0	0	1
DC	427	377	400	427	459	338	344	262
TOTALS	645	600	645	685	711	541	539	472

PHV		MOVEMENT KEY	Growth Rate	2015	2025
AB	0	SB THRU	1.0%	0	0
AC	20	SB RIGHT	1.0%	23	25
AD	28	SB LEFT	1.0%	32	35
BA	0	NB THRU	1.0%	0	0
BC	0	NB LEFT	1.0%	0	0
BD	4	NB RIGHT	1.0%	5	5
CA	8	EB LEFT	1.0%	9	10
CB	4	EB RIGHT	1.0%	5	5
CD	908	EB THRU	2.5%	1221	1563
DA	8	WB RIGHT	1.0%	9	10
DB	0	WB LEFT	1.0%	0	0
DC	1600	WB THRU	2.5%	2152	2755

Illinois Route 31

PM

MOVEMENTS	4:30	4:45	5:00	5:15	5:30	5:45	6:00	6:15
AB	167	131	151	140	151	71	129	64
AC	76	35	56	51	45	34	76	35
AD	61	37	43	38	43	24	46	20
BA	83	81	82	90	77	84	66	74
BC	38	28	34	25	30	25	36	29
BD	43	32	42	47	55	48	47	31
CA	24	27	18	15	18	28	15	20
CB	31	39	42	31	19	26	25	16
CD	164	191	181	228	184	176	138	144
DA	34	36	34	31	46	45	36	37
DB	62	72	74	94	91	82	82	60
DC	292	323	302	343	304	340	286	183
TOTALS	1075	1032	1059	1133	1063	983	982	713

PHV		MOVEMENT KEY	Growth Rate	2015	2025
AB	604	SB THRU	2.5%	812	1040
AC	224	SB RIGHT	2.5%	301	386
AD	172	SB LEFT	2.5%	231	296
BA	328	NB THRU	2.5%	441	565
BC	136	NB LEFT	2.5%	183	234
BD	168	NB RIGHT	2.5%	226	289
CA	72	EB LEFT	2.5%	97	124
CB	168	EB RIGHT	2.5%	226	289
CD	724	EB THRU	2.5%	974	1246
DA	136	WB RIGHT	2.5%	183	234
DB	296	WB LEFT	2.5%	398	510
DC	1208	WB THRU	2.5%	1625	2080

Illinois Route 25

PM

MOVEMENTS	4:30	4:45	5:00	5:15	5:30	5:45	6:00	6:15
AB	38	54	56	56	62	58	46	23
AC	45	50	48	60	68	53	51	33
AD	23	14	17	26	19	20	12	14
BA	47	39	41	37	39	39	29	29
BC	36	53	50	44	46	42	31	5
BD	12	14	15	14	11	9	11	36
CA	31	27	34	49	46	59	29	45
CB	44	46	46	49	46	41	43	40
CD	167	158	158	196	140	157	145	133
DA	31	29	39	32	31	24	27	23
DB	24	29	20	16	13	9	17	22
DC	321	349	328	369	344	311	229	227
TOTALS	819	862	852	948	865	822	670	630

PHV		MOVEMENT KEY	Growth Rate	2015	2025
AB	224	SB THRU	2.5%	301	386
AC	192	SB RIGHT	2.5%	258	331
AD	68	SB LEFT	2.5%	91	117
BA	164	NB THRU	2.5%	221	282
BC	200	NB LEFT	2.5%	269	344
BD	60	NB RIGHT	2.5%	81	103
CA	136	EB LEFT	2.5%	183	234
CB	184	EB RIGHT	2.5%	247	317
CD	632	EB THRU	2.5%	850	1088
DA	156	WB RIGHT	2.5%	210	269
DB	80	WB LEFT	2.5%	108	138
DC	1312	WB THRU	2.5%	1764	2259

Thoria

PM MOVEMENTS	4:30	4:45	5:00	5:15	5:30	5:45	6:00	6:15
AB								
AC								
AD								
BA								
BC	0	2	2	3	0	1	0	1
BD	0	3	2	0	0	0	0	1
CA								
CB	17	10	10	9	18	9	3	4
CD	198	211	221	232	157	159	150	155
DA								
DB	3	4	2	0	4	6	2	2
DC	336	423	553	494	472	370	346	278
TOTALS	554	653	790	738	651	545	501	441

PHV		MOVEMENT KEY	Growth Rate	2015	2025
AB	0	SB THRU	1.5%	0	0
AC	0	SB RIGHT	1.0%	0	0
AD	0	SB LEFT	1.0%	0	0
BA	0	NB THRU	1.0%	0	0
BC	8	NB LEFT	1.0%	9	10
BD	8	NB RIGHT	1.0%	9	10
CA	0	EB LEFT	1.0%	0	0
CB	40	EB RIGHT	1.0%	45	50
CD	884	EB THRU	2.5%	1189	1522
DA	0	WB RIGHT	1.0%	0	0
DB	8	WB LEFT	1.0%	9	10
DC	2212	WB THRU	2.5%	2975	3808

Surrey

PM MOVEMENTS	4:30	4:45	5:00	5:15	5:30	5:45	6:00	6:15
AB								
AC								
AD								
BA								
BC	1	2	0	1	2	0	0	3
BD	4	5	6	3	3	4	2	8
CA								
CB	1	0	4	4	0	1	3	2
CD	188	181	205	167	189	170	170	176
DA								
DB	5	6	6	4	6	10	3	7
DC	353	380	445	394	288	303	292	271
TOTALS	552	574	666	573	488	488	470	467

PHV		MOVEMENT KEY	Growth Rate	2015	2025
AB	0	SB THRU	1.0%	0	0
AC	0	SB RIGHT	1.0%	0	0
AD	0	SB LEFT	1.0%	0	0
BA	0	NB THRU	1.0%	0	0
BC	0	NB LEFT	1.0%	0	0
BD	24	NB RIGHT	1.0%	27	30
CA	0	EB LEFT	1.0%	0	0
CB	16	EB RIGHT	1.0%	18	20
CD	820	EB THRU	2.5%	1103	1412
DA	0	WB RIGHT	1.0%	0	0
DB	24	WB LEFT	1.0%	27	30
DC	1780	WB THRU	2.5%	2394	3064

Nagel

PM MOVEMENTS	4:30	4:45	5:00	5:15	5:30	5:45	6:00	6:15
AB								
AC								
AD								
BA								
BC	3	7	9	16	12	8	6	4
BD	5	13	16	13	20	16	9	10
CA								
CB	5	4	6	7	9	4	2	3
CD	148	164	189	198	177	184	166	152
DA								
DB	16	19	21	24	21	16	11	4
DC	364	405	419	414	407	352	271	266
TOTALS	541	612	660	672	646	580	465	439

PHV		MOVEMENT KEY	Growth Rate	2015	2025
AB	0	SB THRU	3.0%	0	0
AC	0	SB RIGHT	3.0%	0	0
AD	0	SB LEFT	3.0%	0	0
BA	0	NB THRU	3.0%	0	0
BC	36	NB LEFT	3.0%	51	69
BD	64	NB RIGHT	3.0%	91	123
CA	0	EB LEFT	3.0%	0	0
CB	24	EB RIGHT	3.0%	34	46
CD	756	EB THRU	2.5%	1017	1302
DA	0	WB RIGHT	3.0%	0	0
DB	84	WB LEFT	3.0%	120	161
DC	1676	WB THRU	2.5%	2254	2885

Settler's Hill

PM MOVEMENTS	4:30	4:45	5:00	5:15	5:30	5:45	6:00	6:15
AB								
AC	6	7	2	2	4	3	2	5
AD	1	5	9	5	1	4	10	7
BA								
BC								
BD								
CA	3	0	1	1	0	0	0	0
CB								
CD	230	248	230	219	184	242	196	142
DA	3	2	3	0	0	2	0	0
DB								
DC	346	420	453	436	428	392	332	283
TOTALS	589	682	698	663	617	643	540	437

PHV		MOVEMENT KEY	Growth Rate	2015	2025
AB	0	SB THRU	1.0%	0	0
AC	8	SB RIGHT	1.0%	9	10
AD	36	SB LEFT	1.0%	41	45
BA	0	NB THRU	1.0%	0	0
BC	0	NB LEFT	1.0%	0	0
BD	0	NB RIGHT	1.0%	0	0
CA	4	EB LEFT	1.0%	5	5
CB	0	EB RIGHT	1.0%	0	0
CD	920	EB THRU	2.5%	1237	1584
DA	12	WB RIGHT	1.0%	14	15
DB	0	WB LEFT	1.0%	0	0
DC	1812	WB THRU	2.5%	2437	3119

North Raddant

PM

MOVEMENTS	4:30	4:45	5:00	5:15	5:30	5:45	6:00	6:15
AB	0	0	1	0	0	0	1	0
AC	8	7	4	8	6	3	6	3
AD	0	4	4	2	2	1	2	2
BA	1	0	0	0	0	0	0	0
BC	125	63	87	87	51	37	30	29
BD	66	24	34	32	18	10	12	7
CA	4	5	5	5	5	5	2	1
CB	20	25	27	24	26	30	31	20
CD	139	167	150	150	169	148	130	126
DA	0	2	6	0	0	0	1	1
DB	33	31	7	24	15	11	9	10
DC	329	311	352	408	363	331	285	247
TOTALS	725	639	677	740	655	576	509	446

PHV		MOVEMENT KEY	Growth Rate	2015	2025
AB	4	SB THRU	1.5%	5	6
AC	16	SB RIGHT	1.5%	19	22
AD	16	SB LEFT	1.5%	19	22
BA	0	NB THRU	1.5%	0	0
BC	348	NB LEFT	1.5%	416	483
BD	136	NB RIGHT	1.5%	163	189
CA	20	EB LEFT	1.5%	24	28
CB	108	EB RIGHT	1.5%	129	150
CD	600	EB THRU	2.5%	807	1033
DA	24	WB RIGHT	1.5%	29	33
DB	28	WB LEFT	1.5%	33	39
DC	1408	WB THRU	2.5%	1894	2424

Kingsland

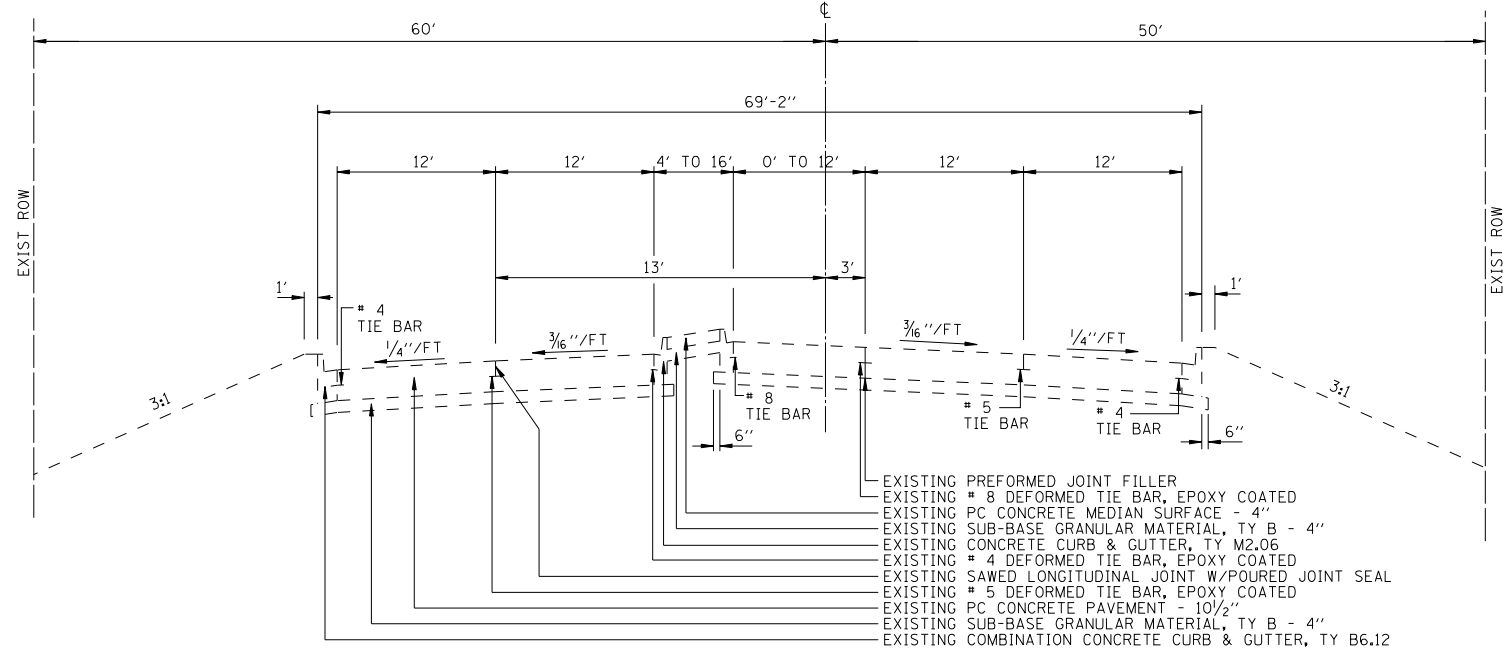
PM MOVEMENTS	4:30	4:45	5:00	5:15	5:30	5:45	6:00	6:15
AB								
AC								
AD								
BA								
BC	16	11	5	11	4	9	4	6
BD	32	21	15	20	12	11	18	10
CA	0	1	0	0	0	1	0	0
CB	3	5	6	6	8	10	1	2
CD	216	221	207	211	175	215	155	148
DA								
DB	5	2	4	7	3	6	1	4
DC	311	372	400	378	417	361	293	259
TOTALS	583	633	637	633	619	613	472	429

PHV		MOVEMENT KEY	Growth Rate	2015	2025
AB	0	SB THRU	1.5%	0	0
AC	0	SB RIGHT	1.5%	0	0
AD	0	SB LEFT	1.5%	0	0
BA	0	NB THRU	1.5%	0	0
BC	20	NB LEFT	1.5%	24	28
BD	60	NB RIGHT	1.5%	72	83
CA	0	EB LEFT	1.5%	0	0
CB	24	EB RIGHT	1.5%	29	33
CD	828	EB THRU	2.5%	1114	1425
DA	0	WB RIGHT	1.5%	0	0
DB	16	WB LEFT	1.5%	19	22
DC	1600	WB THRU	2.5%	2152	2755

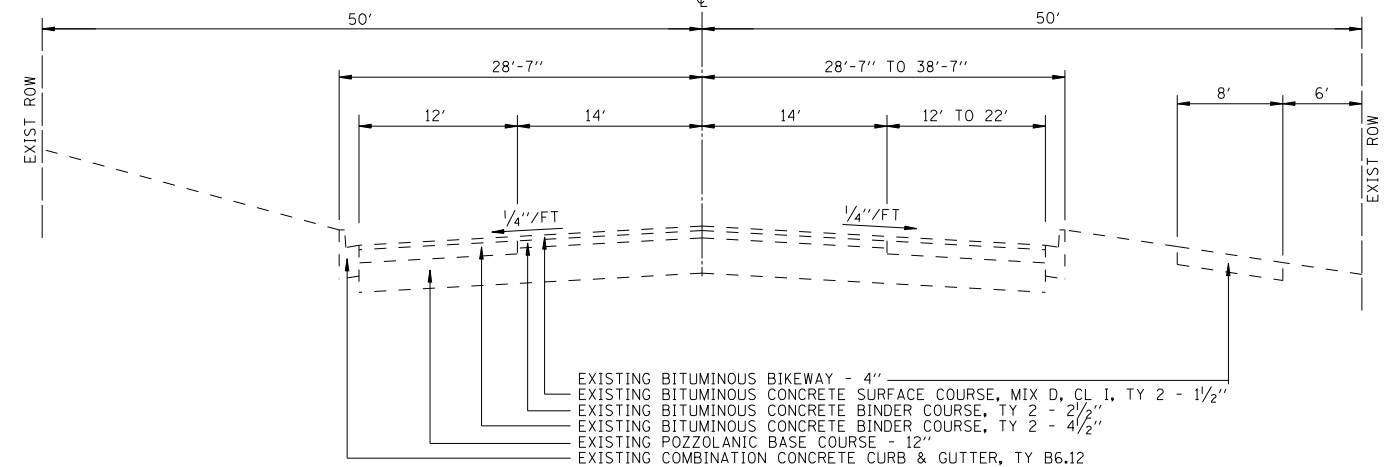
EXHIBIT 2

Existing Roadway Typical Sections

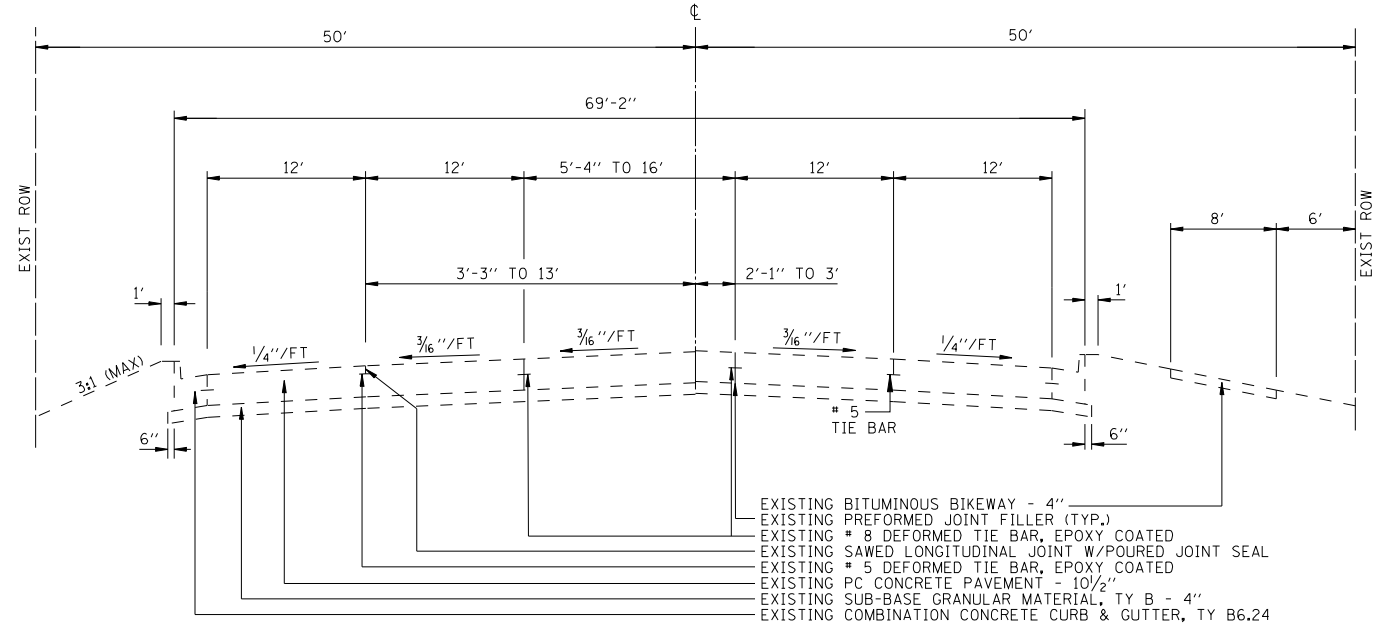
S.A.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		KANE		
	ILLINOIS	FABYAN PARKWAY		



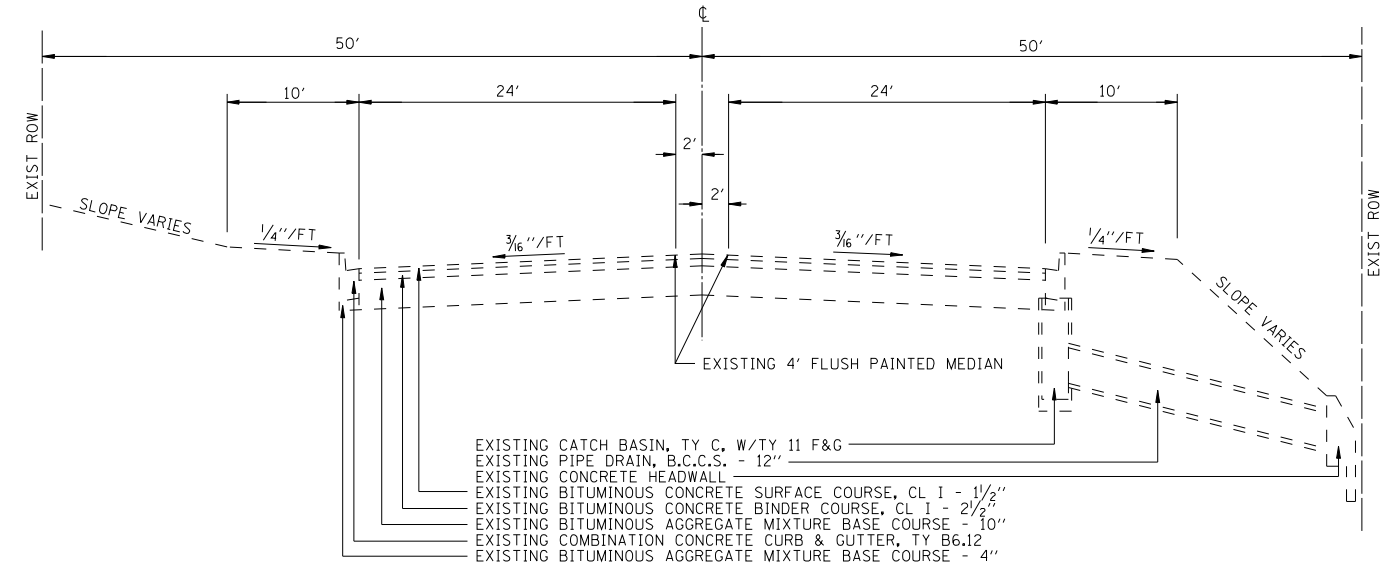
EXISTING TYPICAL SECTION
STA 23+53 TO STA 28+16



EXISTING TYPICAL SECTION
STA 33+00 TO STA 61+50



EXISTING TYPICAL SECTION
STA 21+52 TO STA 23+53
STA 28+16 TO STA 33+00



EXISTING TYPICAL SECTION
STA 61+50 TO STA 66+53.03
STA 79+61.37 TO STA 83+05.68

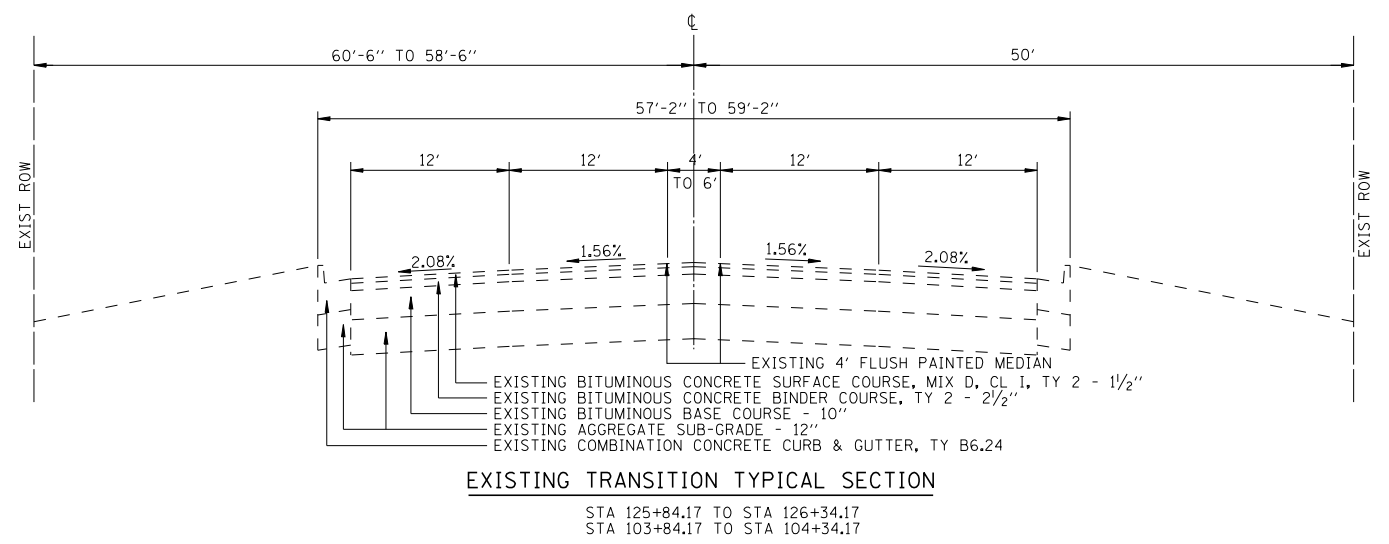
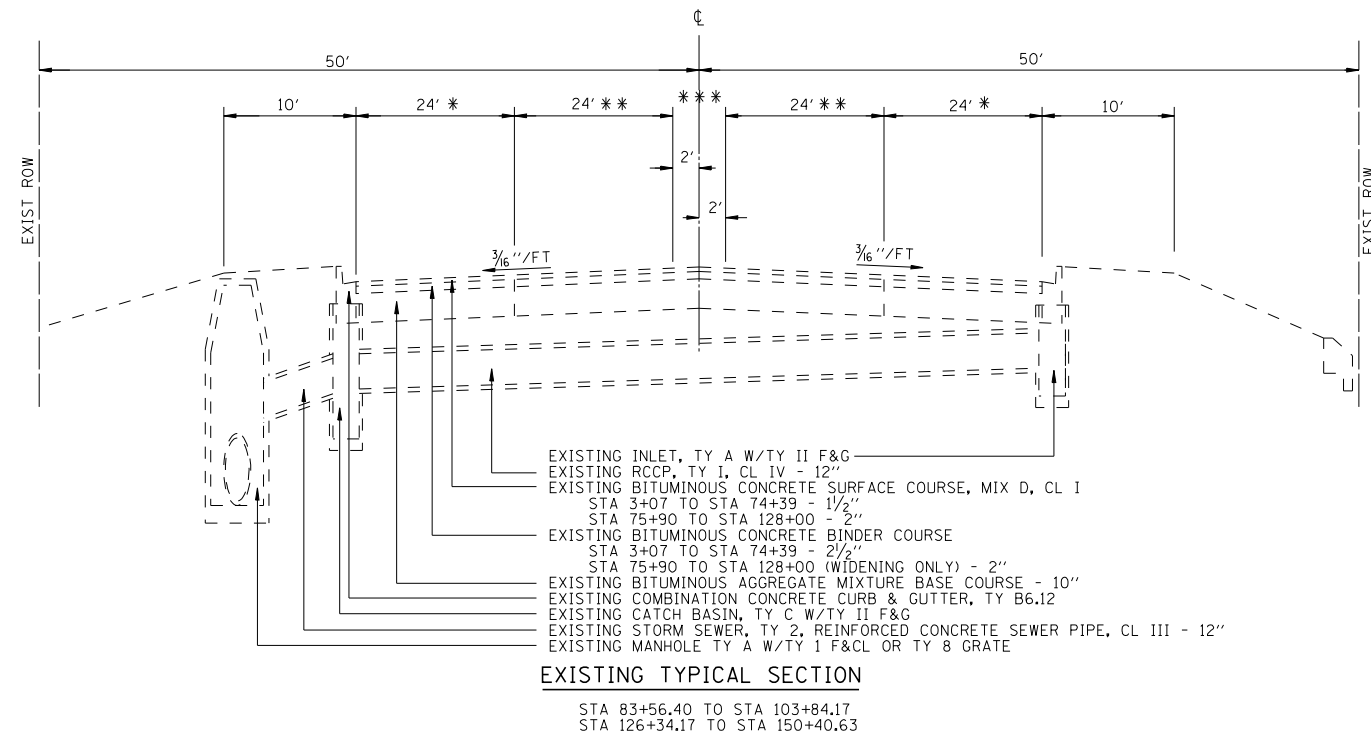
BRIDGE OMISSION
STA 66+53.03 TO STA 79+61.37

KANE COUNTY
DIVISION OF TRANSPORTATION
FABYAN PARKWAY

EXISTING TYPICAL SECTIONS

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CHECKED BY KNB		SHEET NO. OF

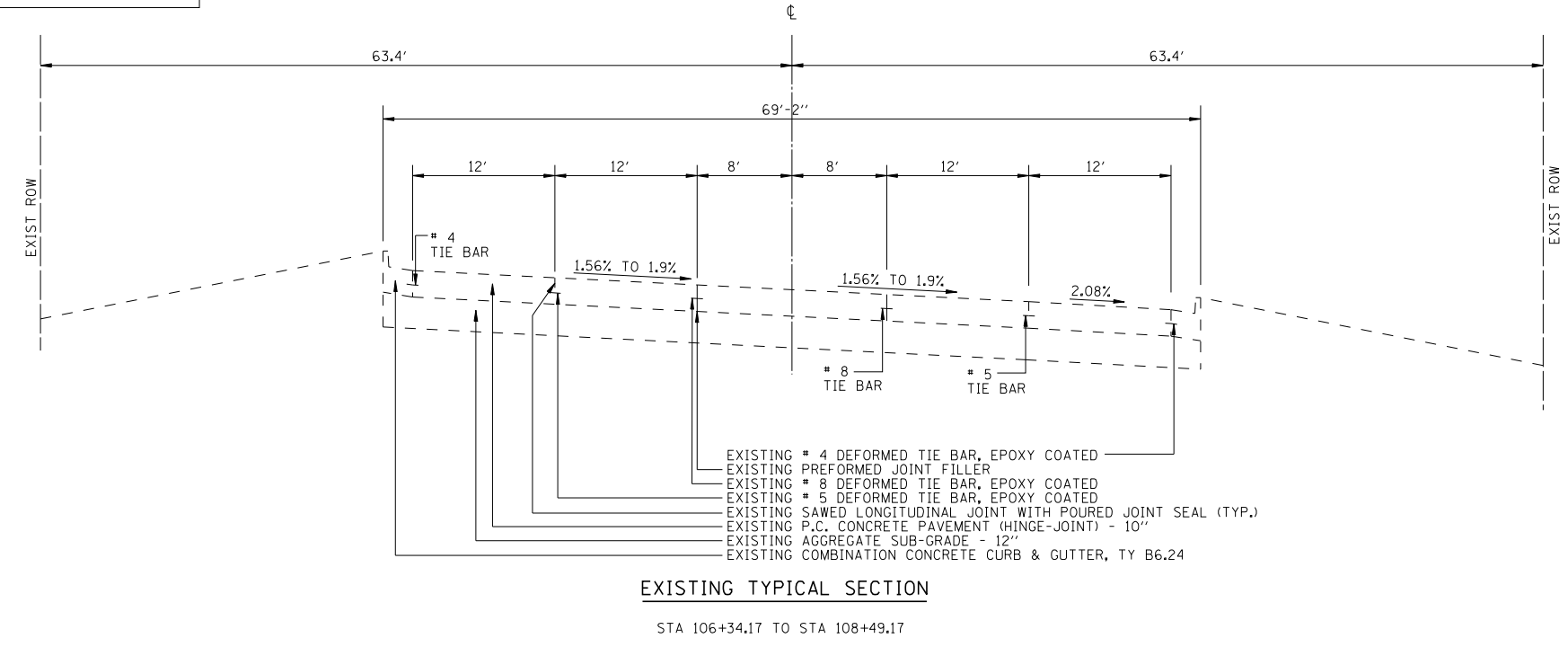
S.A.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		KANE		
	ILLINOIS	FABYAN PARKWAY		



* VARIES STA 3+07 TO STA 37+29.18
 12' @ STA 37+29.18 TO STA 122+39.10

** STA 3+07 TO STA 10+07 (52' TO 28')
 EXISTING BITUMINOUS AGGREGATE MIX BASE COURSE - 8"
 EXISTING BITUMINOUS CONCRETE BINDER & SURFACE, CL I - 3"
 STA 10+07 TO STA 74+39 (22')
 EXISTING AGGREGATE, TY B - 7"
 EXISTING BITUMINOUS ROAD MIX, CL C - 2"
 EXISTING BITUMINOUS PLANT MIX, CL B - 1 1/2"
 EXISTING BITUMINOUS CONCRETE, CL I - 3"
 STA 10+07 TO STA 74+39 (2 @ 3')
 EXISTING AGGREGATE, TY A - 12"
 EXISTING BITUMINOUS CONCRETE, CL I - 3"
 STA 75+90 TO STA 122+39 (28')
 EXISTING BITUMINOUS AGGREGATE MIXTURE BASE COURSE - 10"
 EXISTING BITUMINOUS CONCRETE BINDER & SURFACE, CL I - 4"

*** 4' FLUSH PAINTED MEDIAN

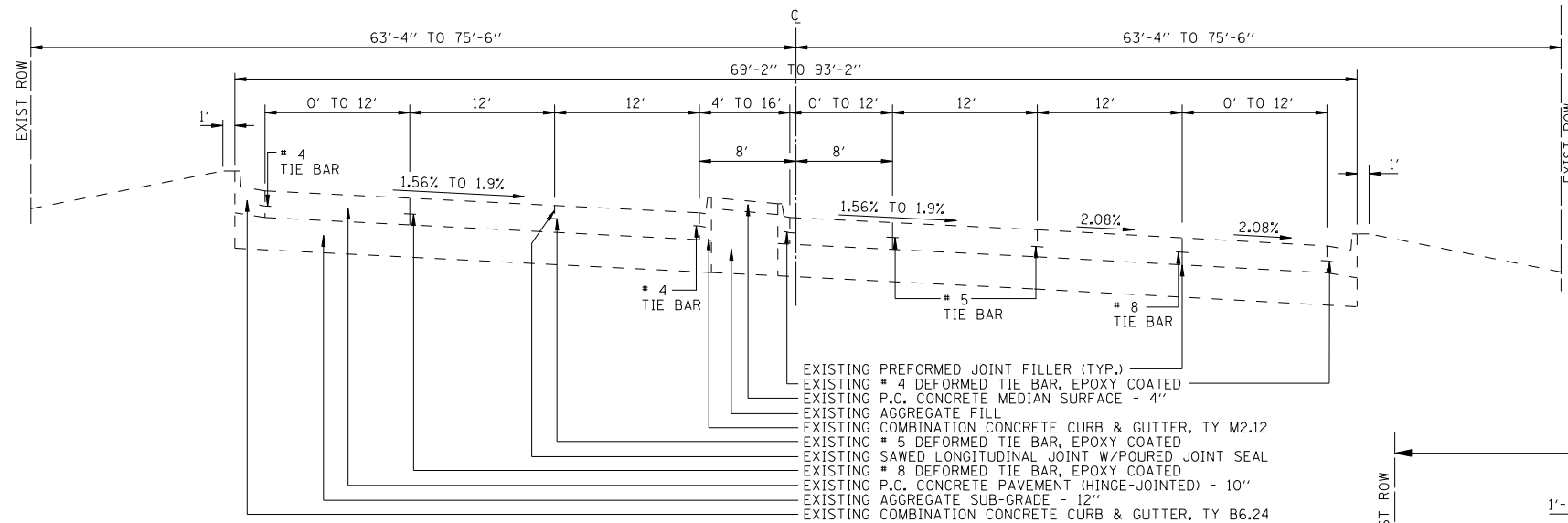


KANE COUNTY
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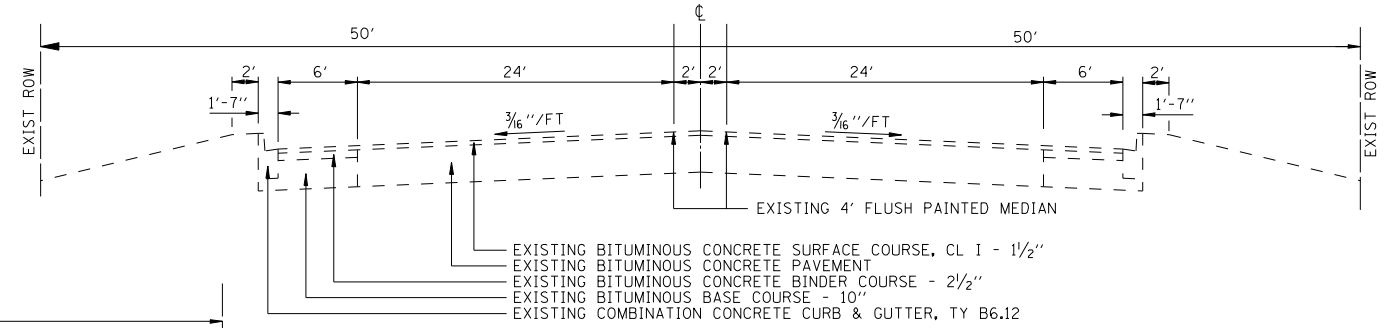
EXISTING TYPICAL SECTIONS

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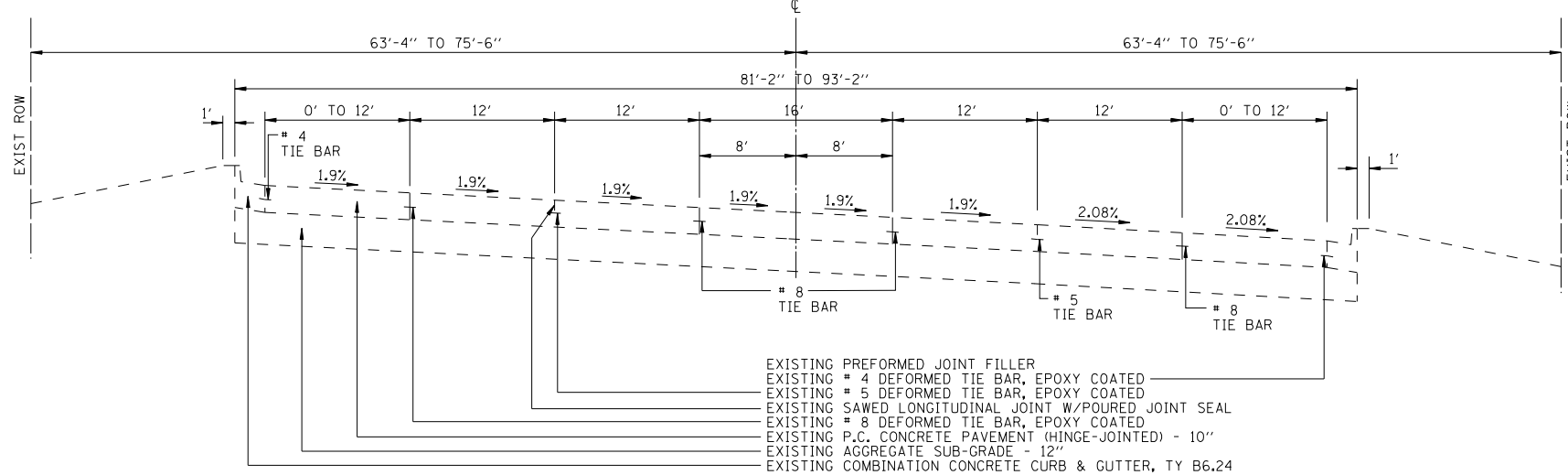
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		KANE		
	ILLINOIS	FABYAN PARKWAY		



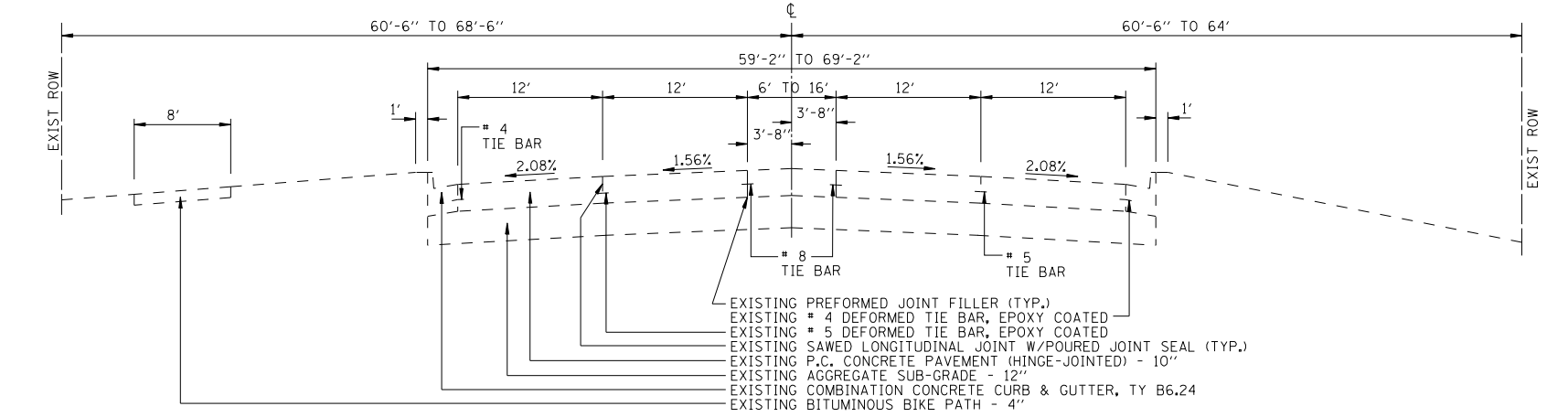
EXISTING TYPICAL SECTION
 STA 108+49.17 TO STA 117+63.17
 STA 118+96.17 TO STA 123+34.17



EXISTING TYPICAL SECTION
 STA 150+40.63 TO STA 158+45.63



EXISTING TYPICAL SECTION
 STA 117+63.17 TO STA 118+96.17



EXISTING TRANSITION TYPICAL SECTION
 STA 123+34.17 TO STA 125+84.17
 STA 104+34.17 TO STA 106+34.17

KANE COUNTY
 DIVISION OF TRANSPORTATION
 FABYAN PARKWAY

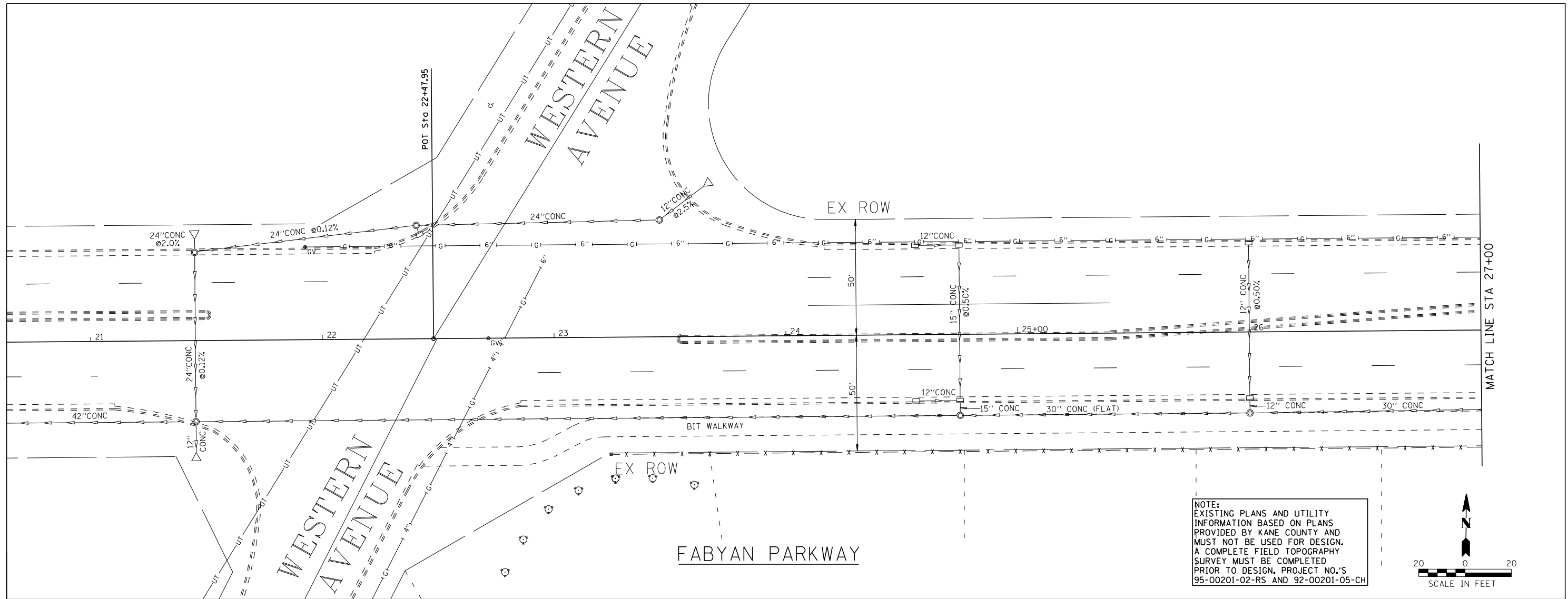
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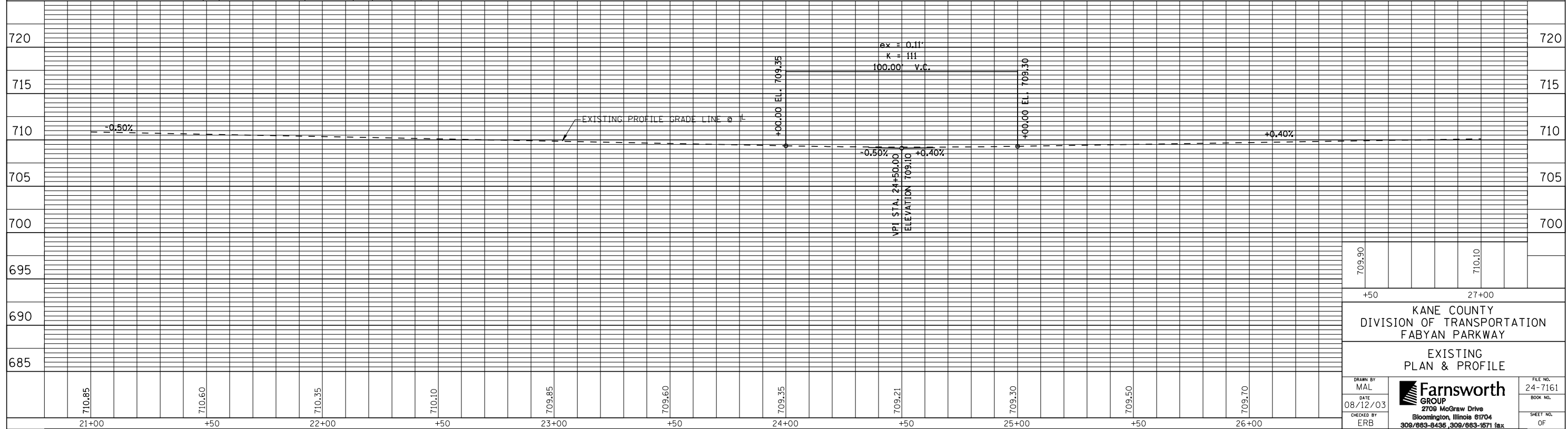
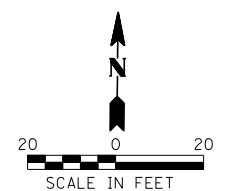
EXHIBIT 3

Existing Plan Geometrics and Profile

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DATE: 8-Dec-96 12:10



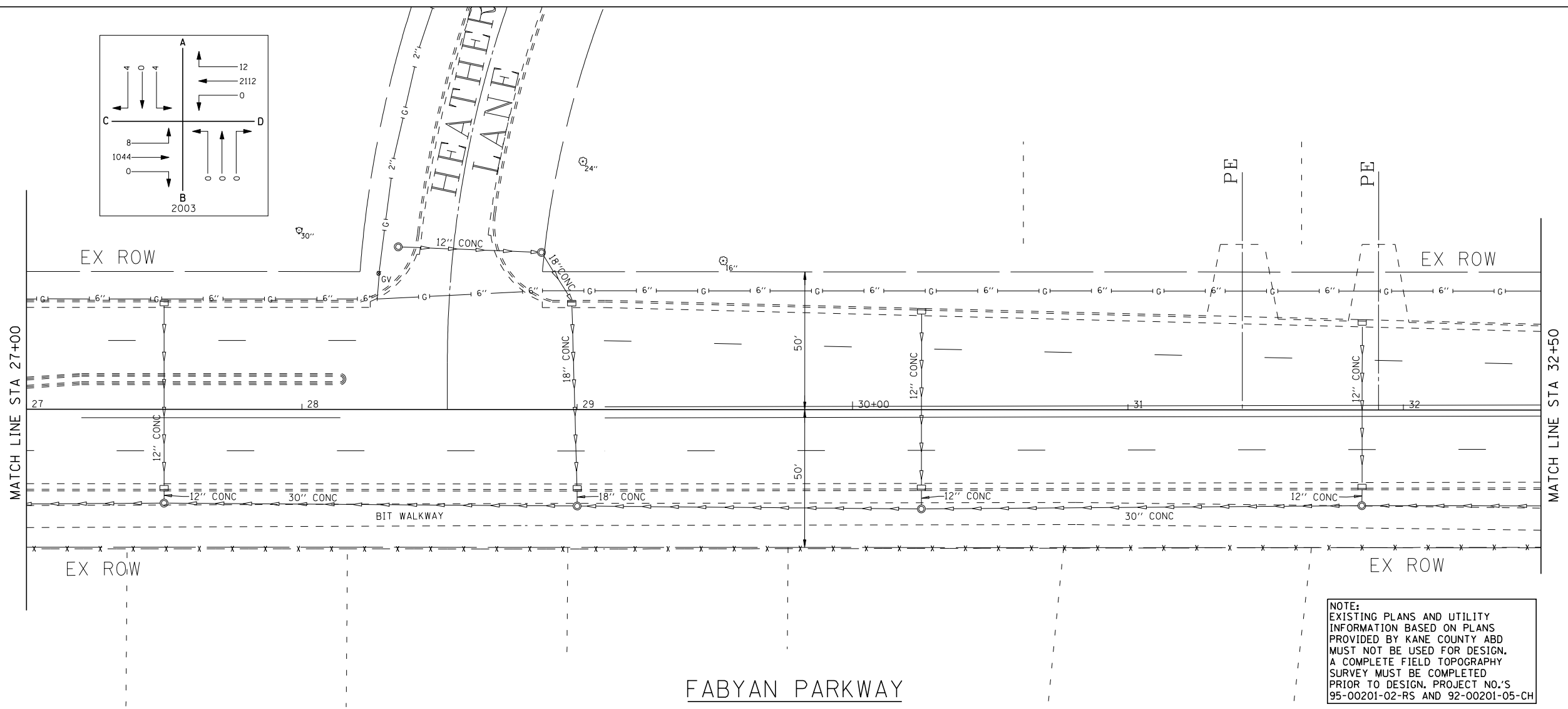
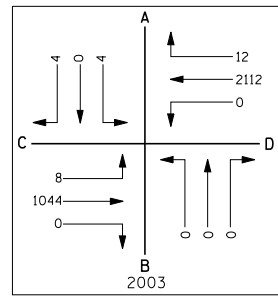
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95-00201-02-RS AND 92-00201-05-CH



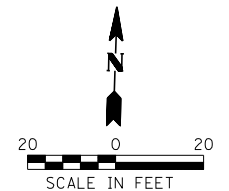
KANE COUNTY
DIVISION OF TRANSPORTATION
FABYAN PARKWAY

EXISTING
PLAN & PROFILE

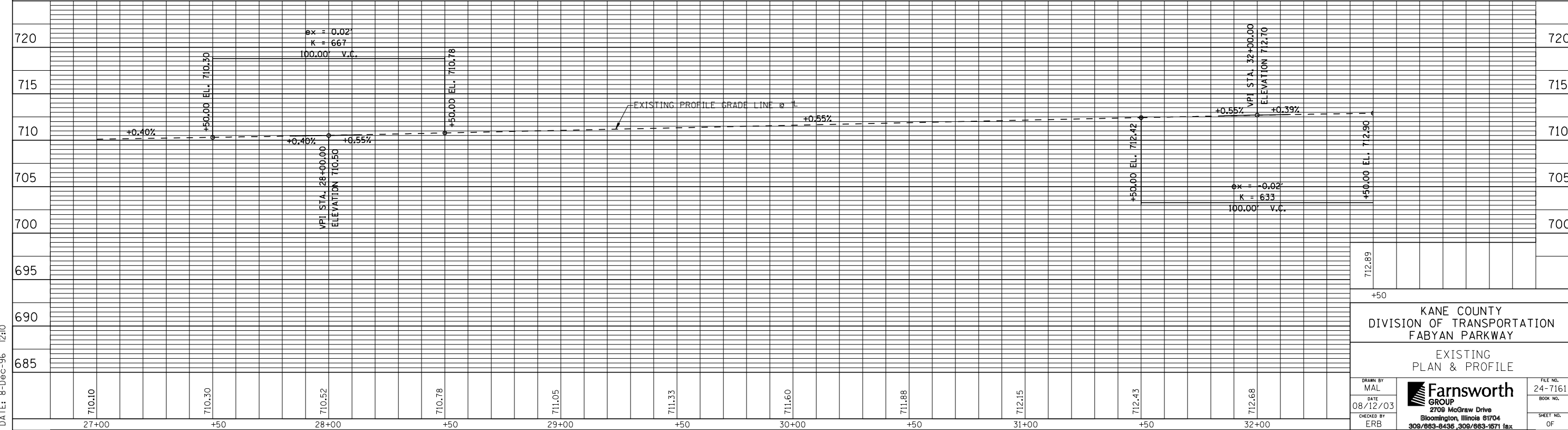
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DATE 08/12/03		BOOK NO.
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 95-00201-02-RS AND 92-00201-05-CH



FABYAN PARKWAY

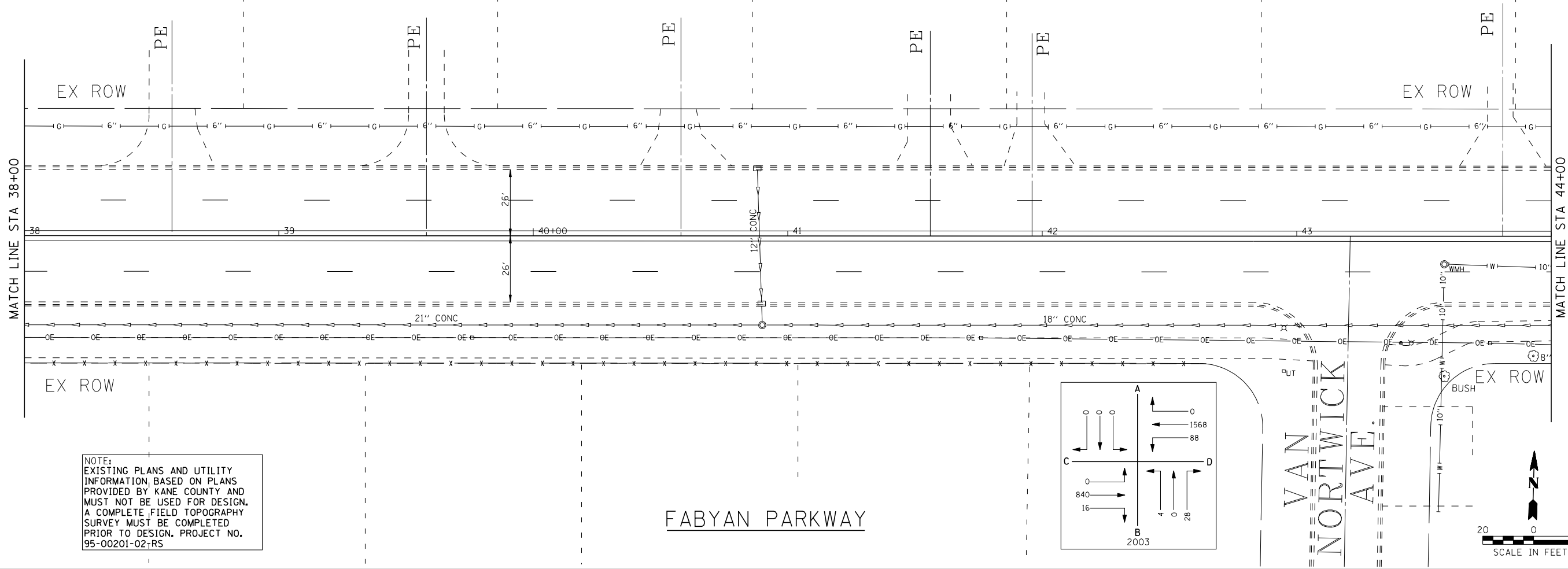


KANE COUNTY
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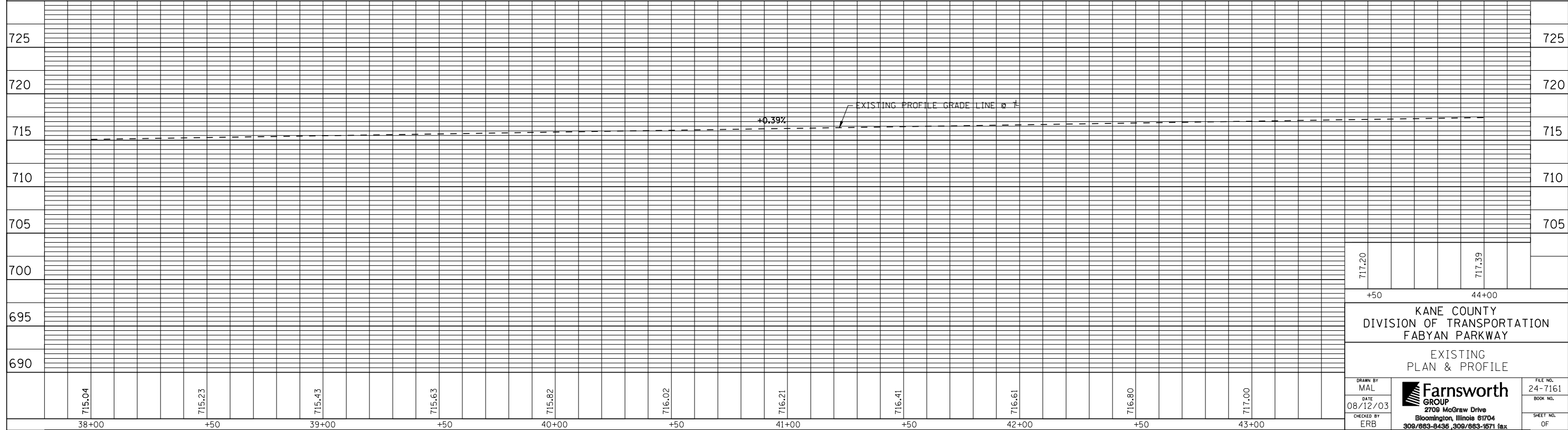
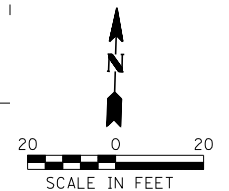
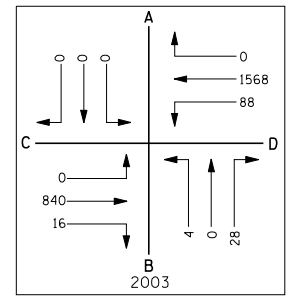
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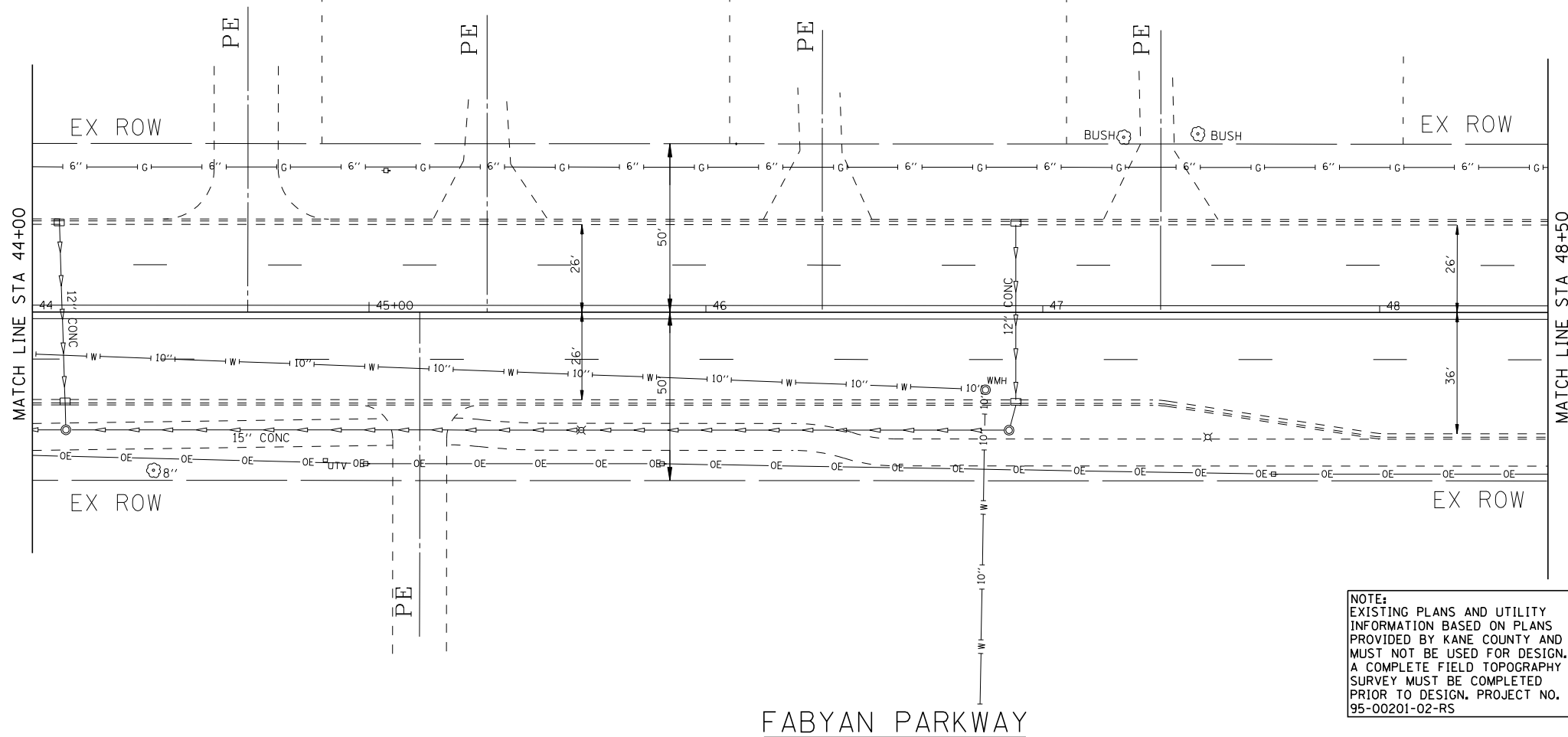


KANE COUNTY
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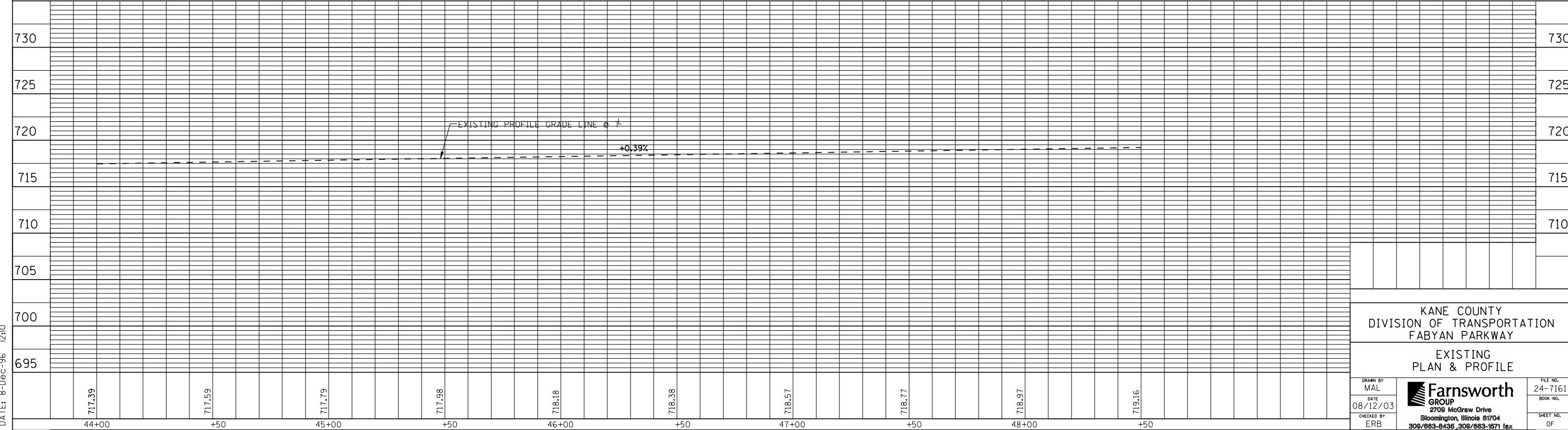
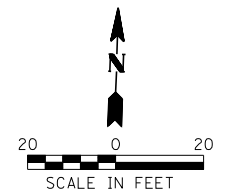
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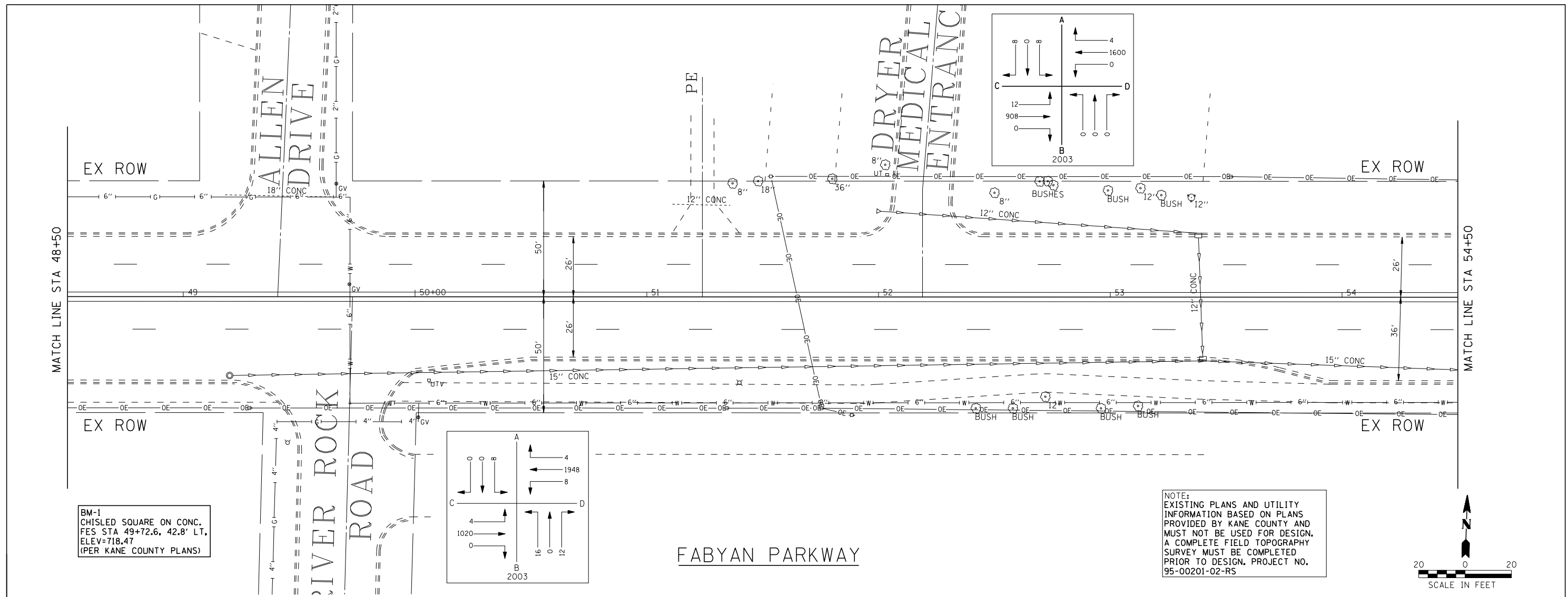
KANE COUNTY
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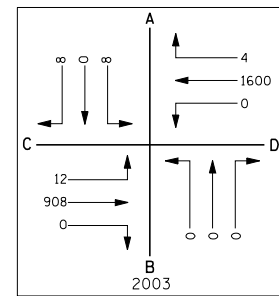
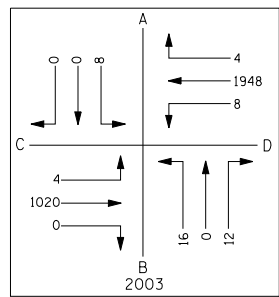
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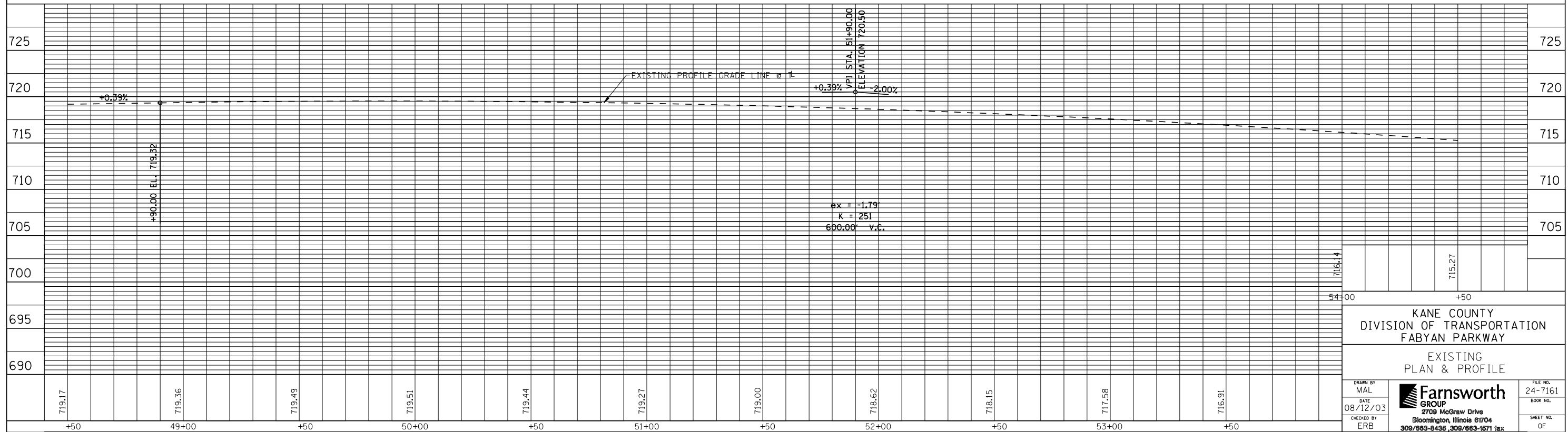
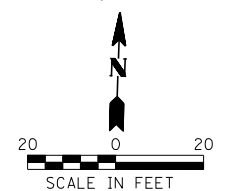
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BM-1
CHISLED SQUARE ON CONC.
FES STA 49+72.6, 42.8' LT.
ELEV=718.47
(PER KANE COUNTY PLANS)



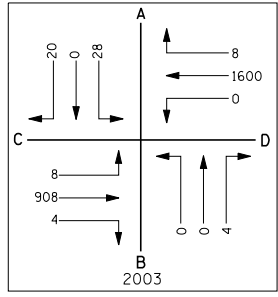
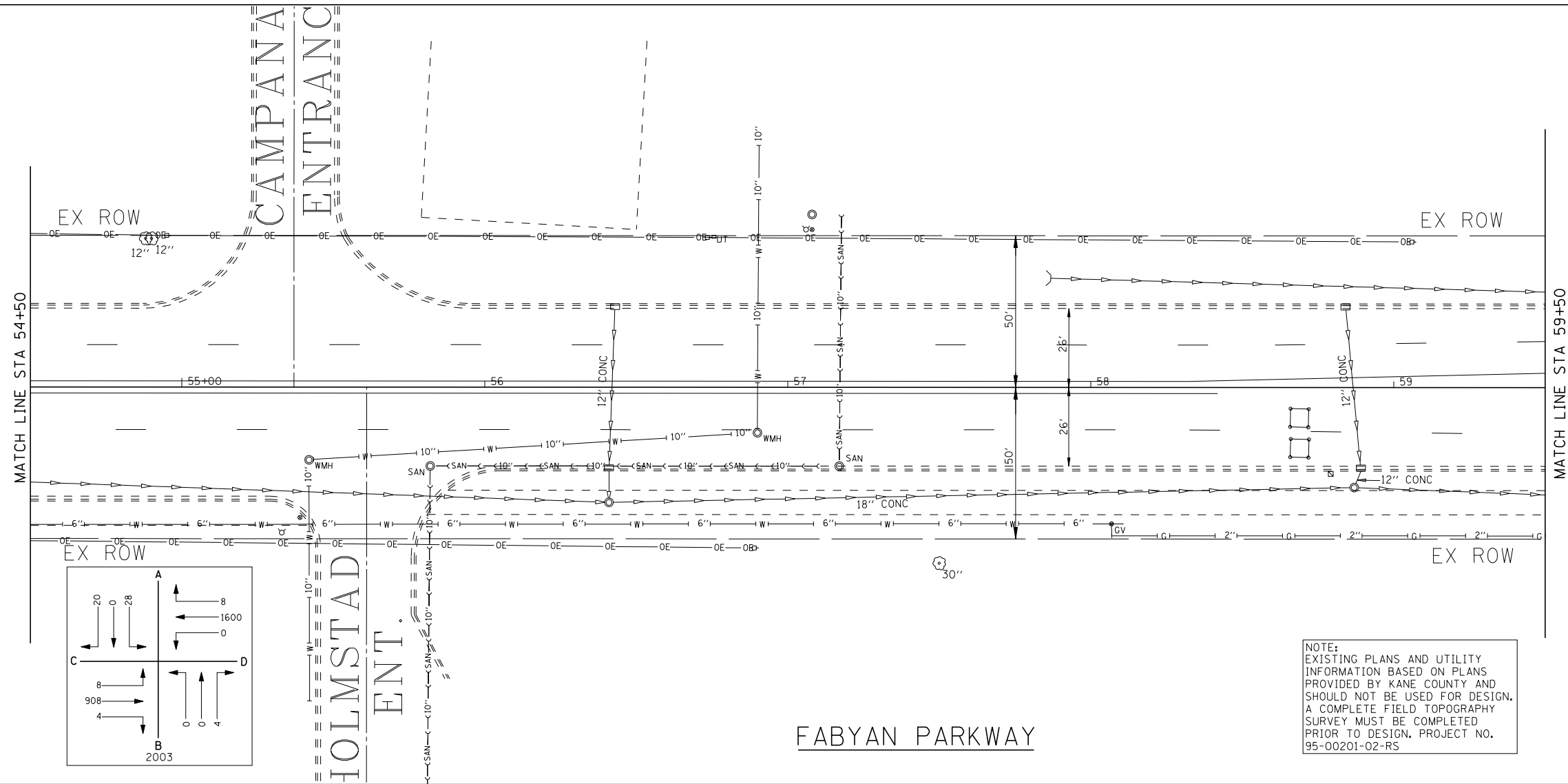
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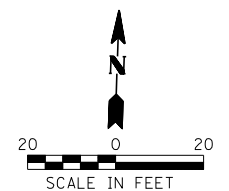
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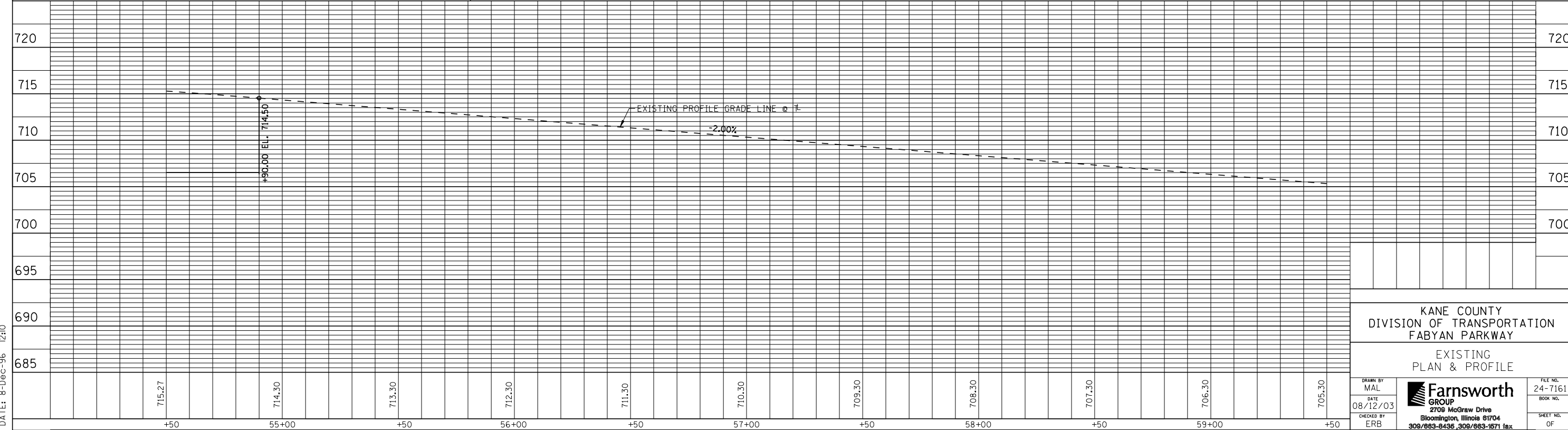
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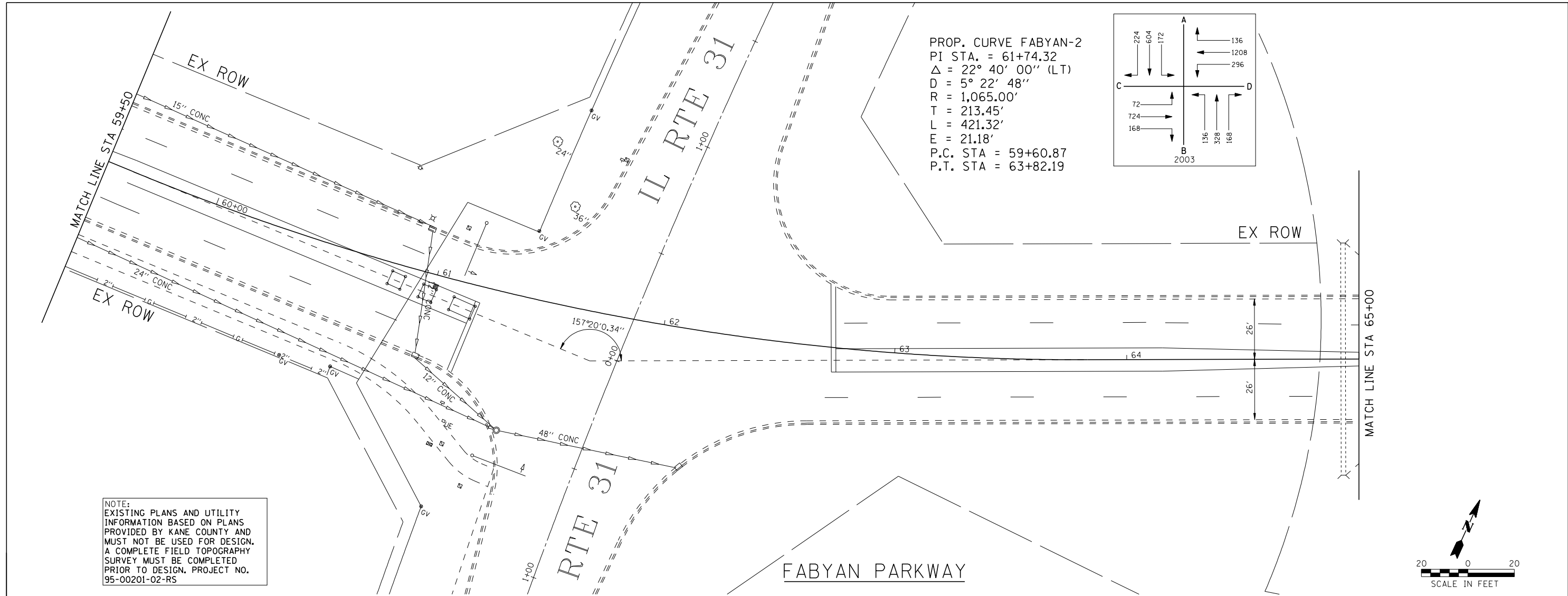


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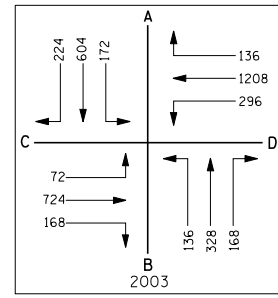
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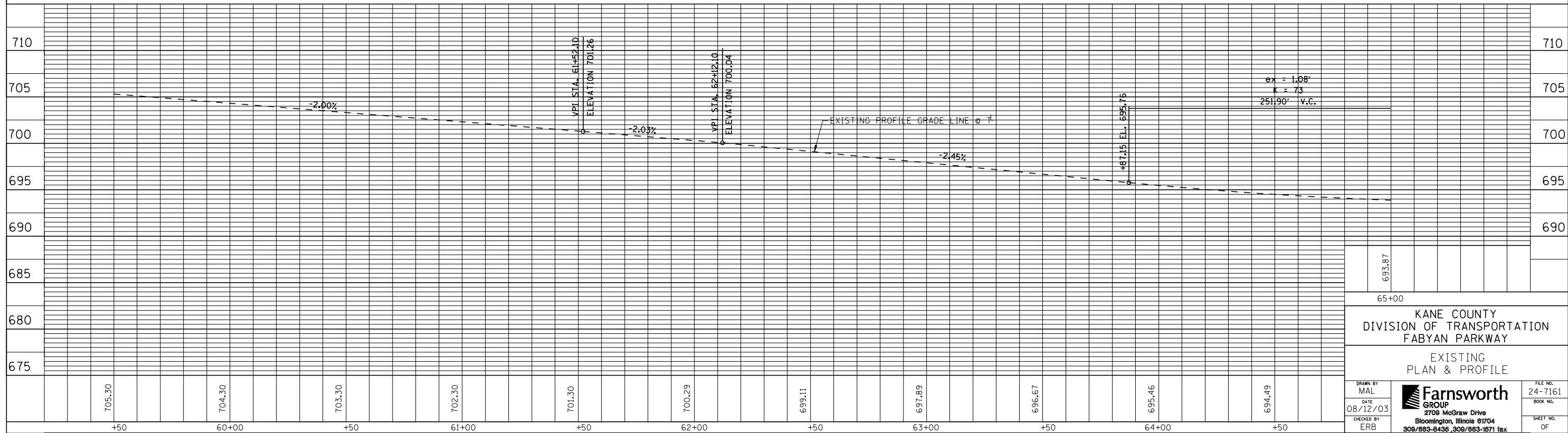
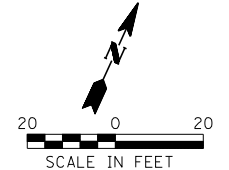
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PROP. CURVE FABYAN-2
 PI STA. = 61+74.32
 $\Delta = 22^\circ 40' 00''$ (LT)
 $D = 5^\circ 22' 48''$
 $R = 1,065.00'$
 $T = 213.45'$
 $L = 421.32'$
 $E = 21.18'$
 P.C. STA = 59+60.87
 P.T. STA = 63+82.19



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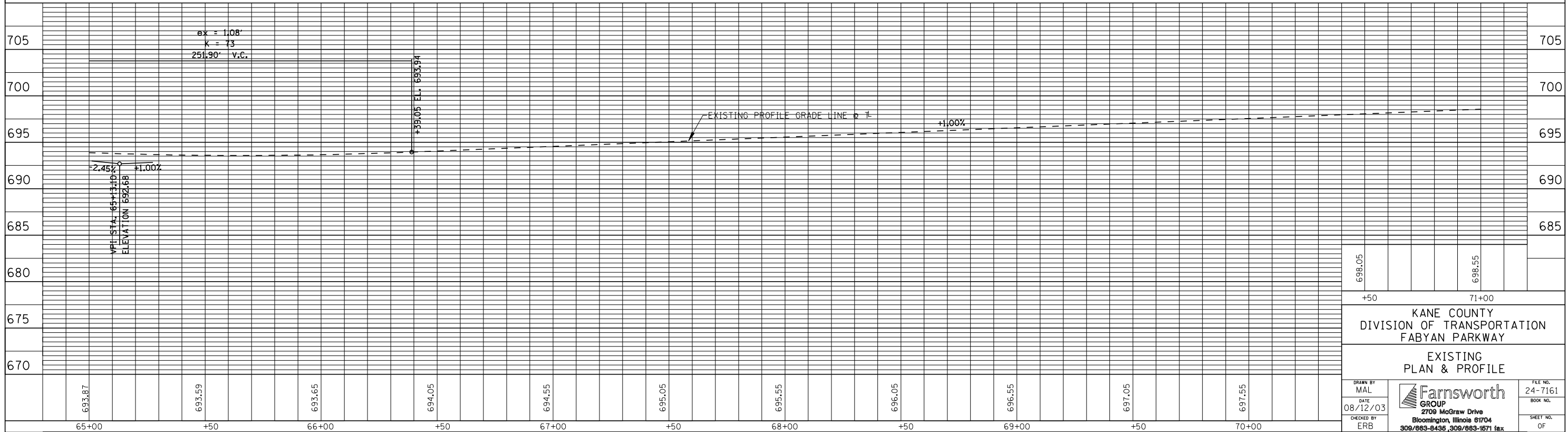
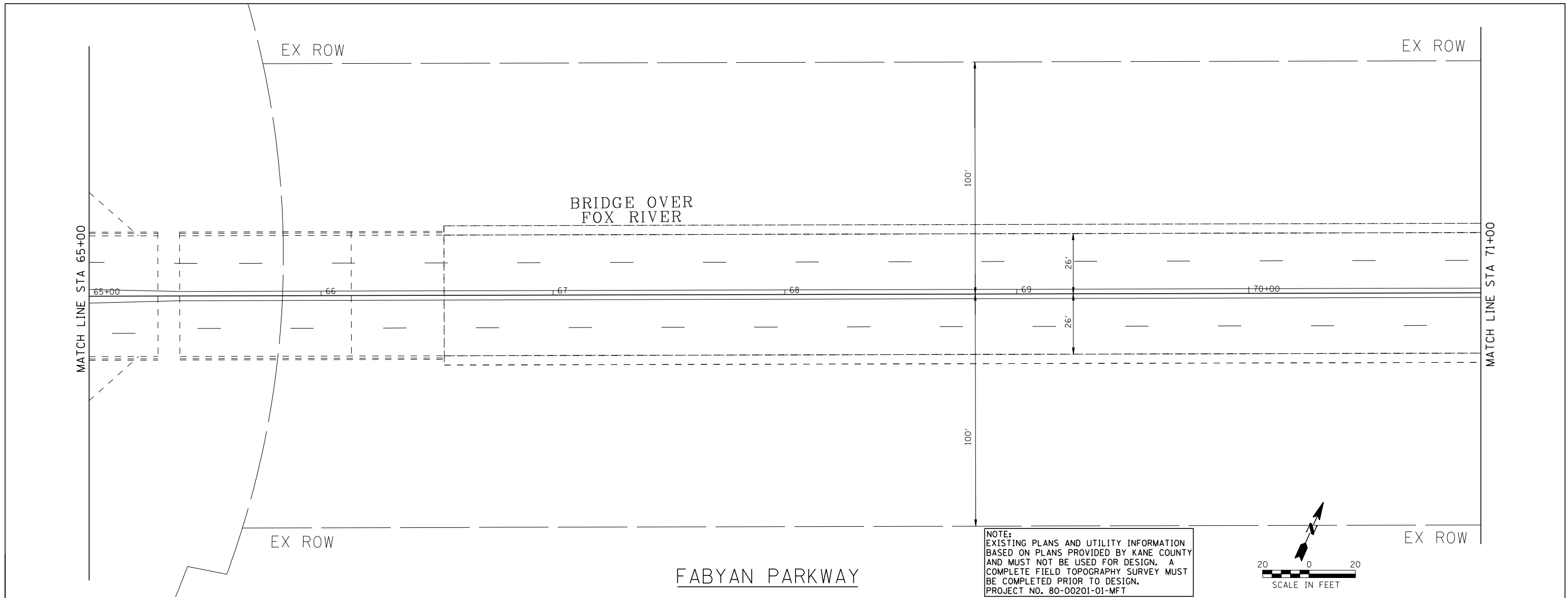


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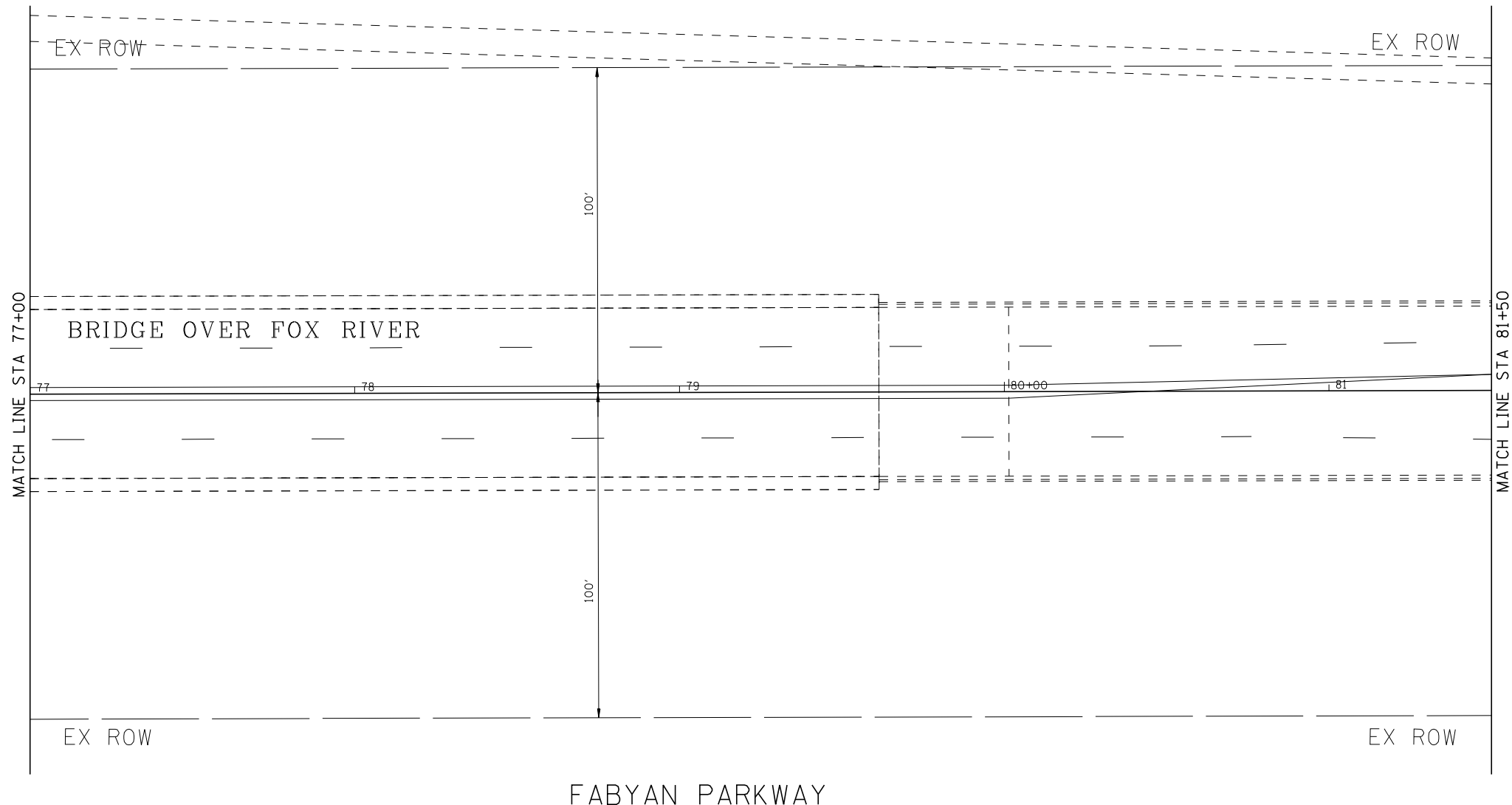
KANE COUNTY
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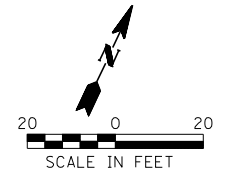
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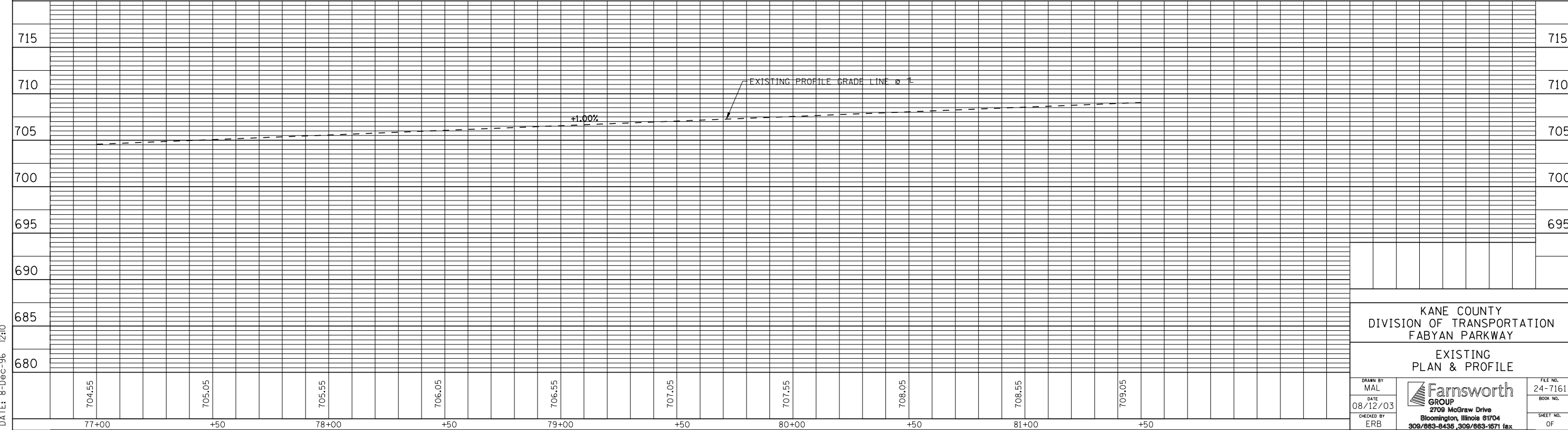
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 PROJECT NO. 86-00201-04-SW



FABYAN PARKWAY



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 DIVISION OF TRANSPORTATION
 FABYAN PARKWAY

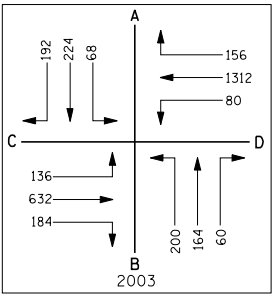
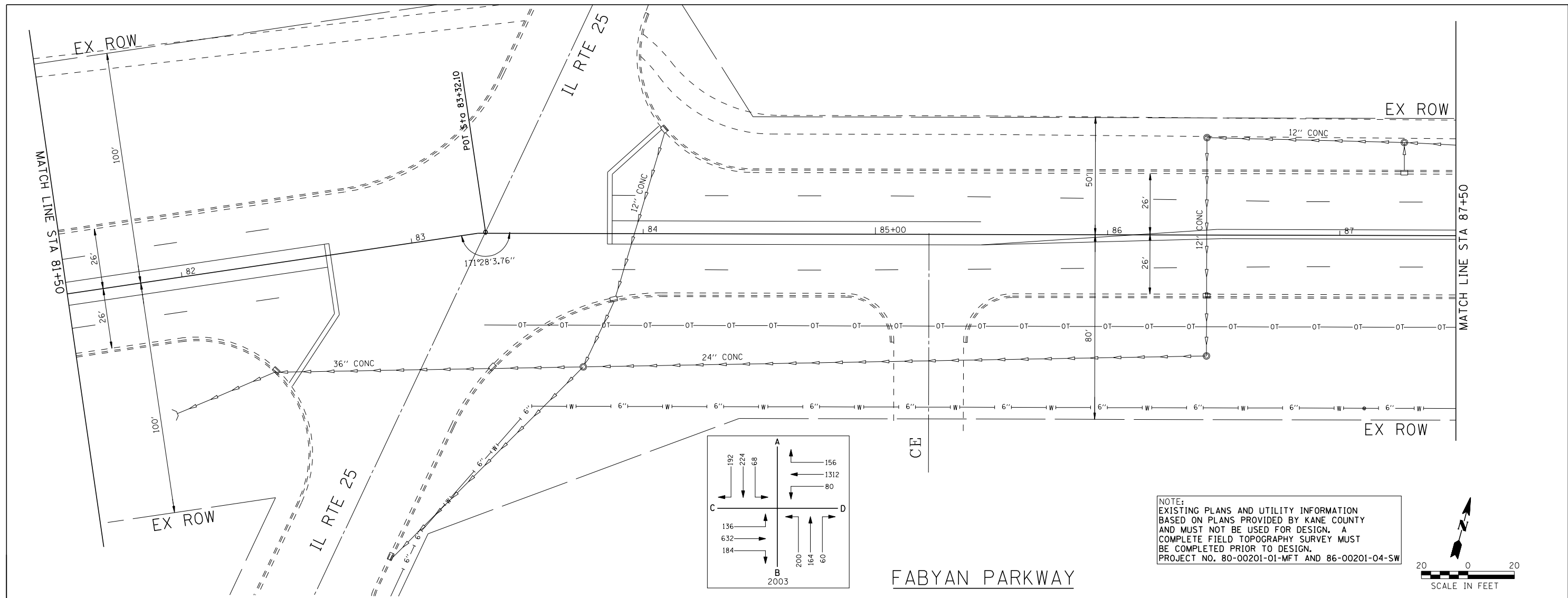
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 PLAN & PROFILE

DRAWN BY
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08/12/03
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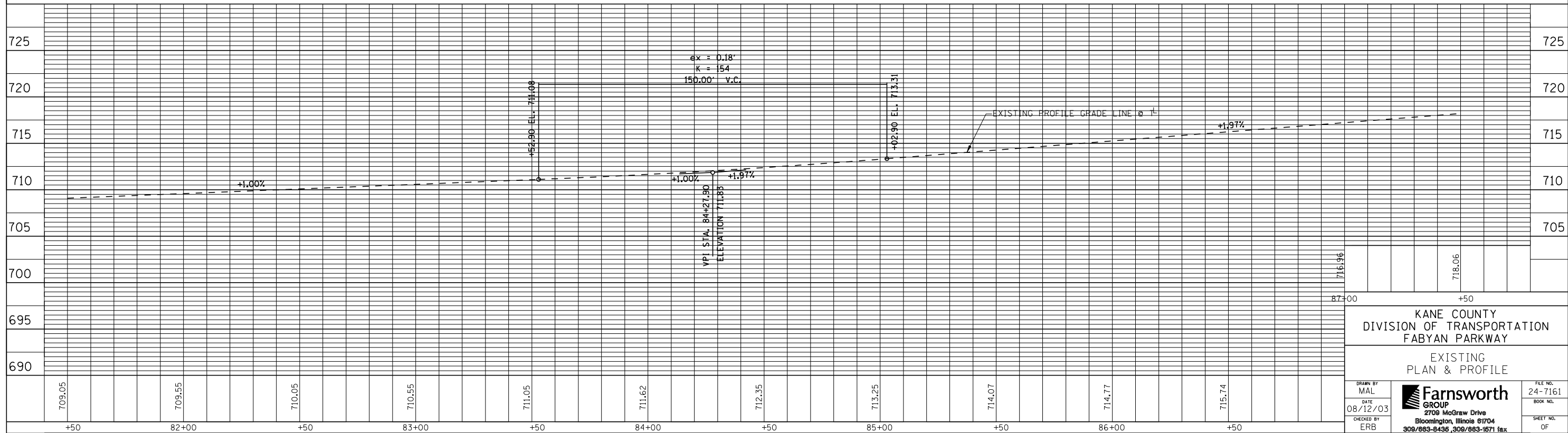
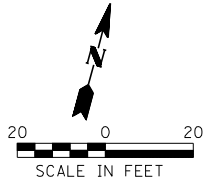
Farnsworth
 GROUP
 2709 McGraw Drive
 Bloomington, Illinois 61704
 309/883-8436, 309/883-1671 fax

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24-7161
 BOOK NO.
 SHEET NO.
OF

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 PROJECT NO. 80-00201-01-MFT AND 86-00201-04-SW

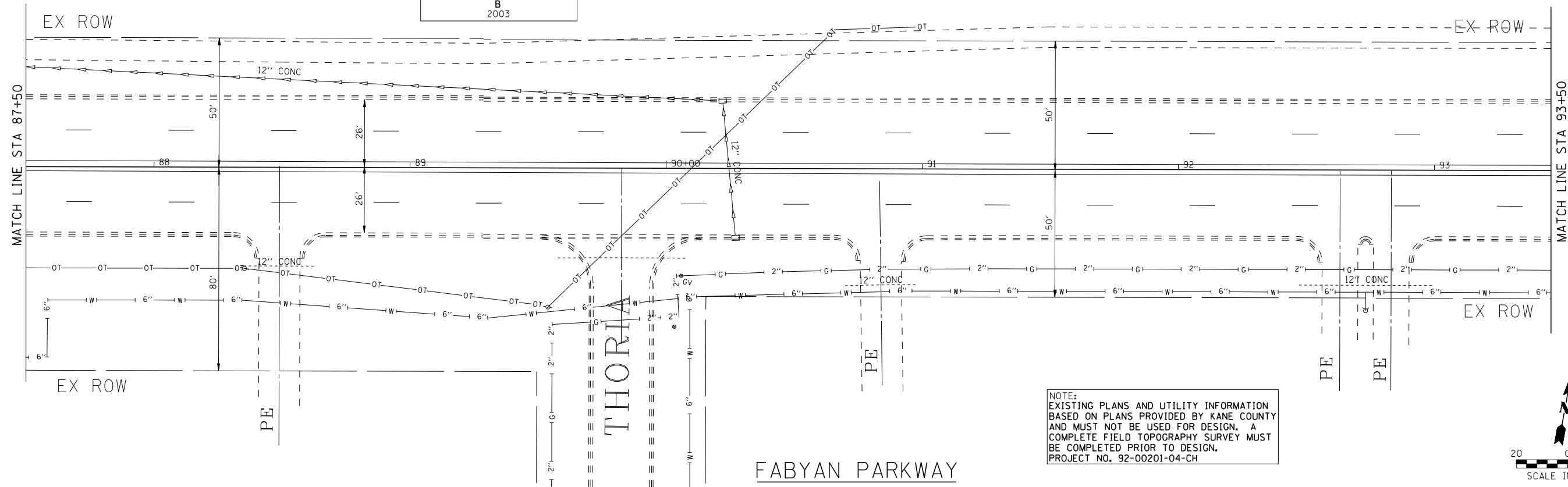
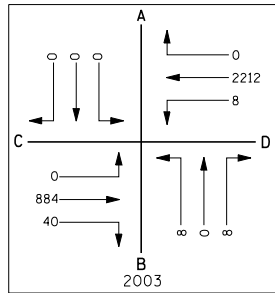


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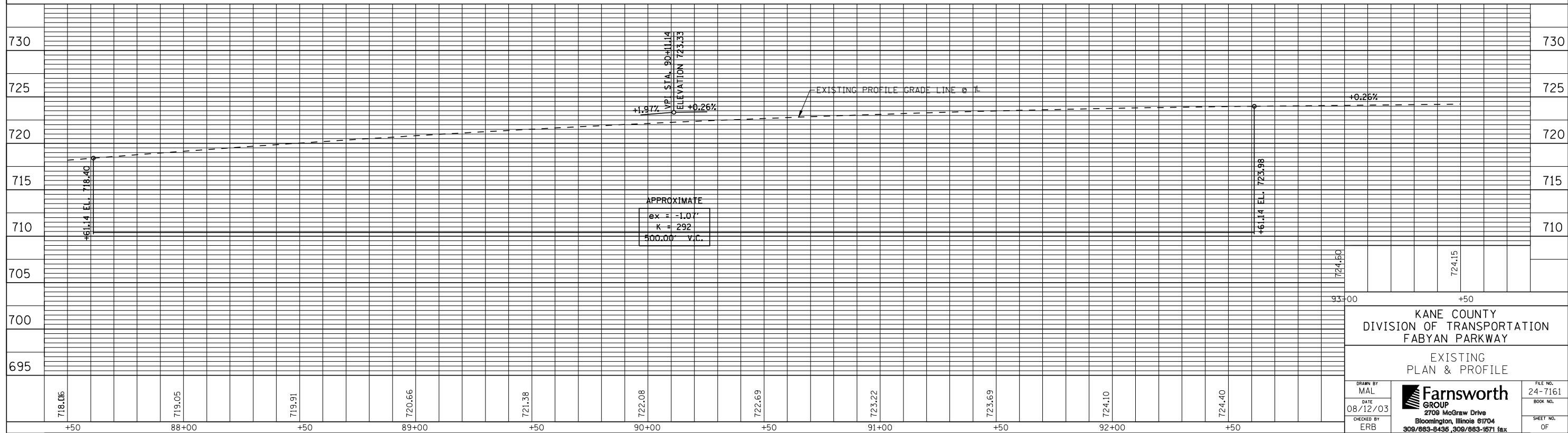
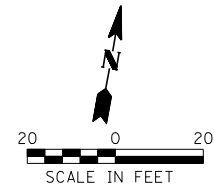
KANE COUNTY
 DIVISION OF TRANSPORTATION
 FABYAN PARKWAY

EXISTING
 PLAN & PROFILE

DRAWN BY MAL	 2709 McGraw Drive Bloomington, Illinois 61704 309/883-8436, 309/883-1671 fax	FILE NO. 24-7161
DATE 08/12/03		BOOK NO.
CHECKED BY ERB		SHEET NO. OF



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 PROJECT NO. 92-00201-04-CH



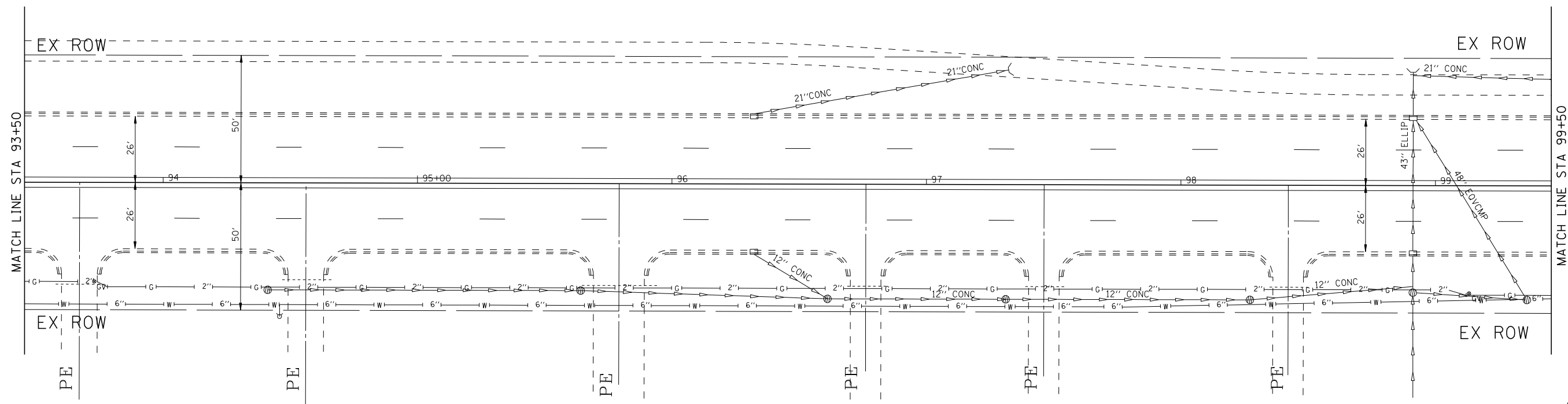
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KANE COUNTY
 DIVISION OF TRANSPORTATION
 FABYAN PARKWAY

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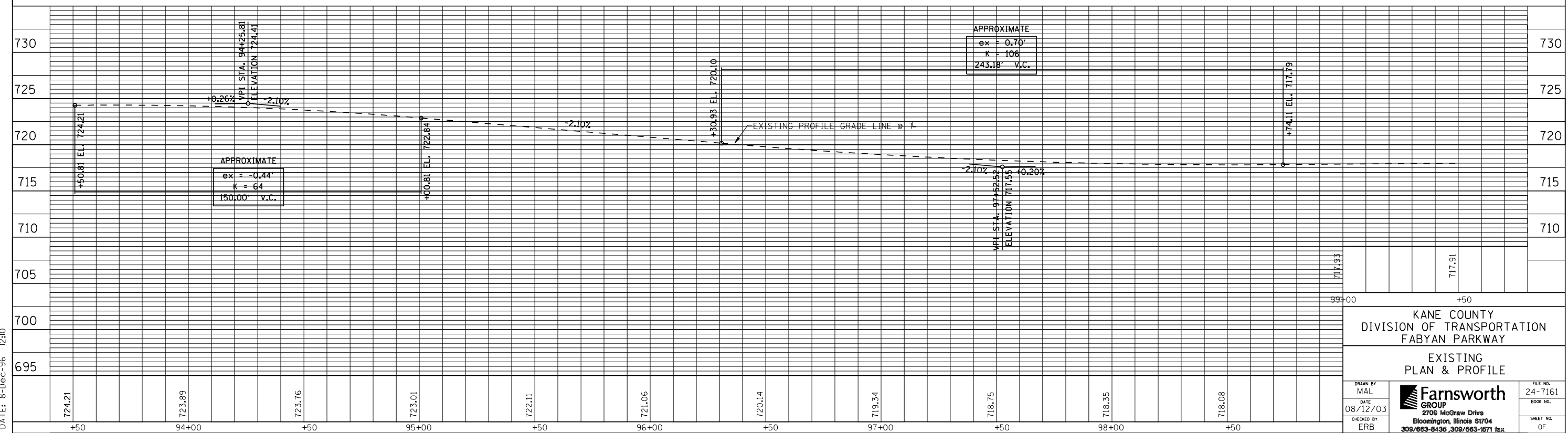
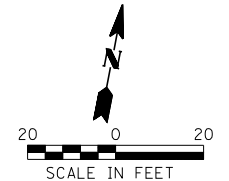
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DATE 08/12/03	BOOK NO.
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Farnsworth GROUP
 2709 McGraw Drive
 Bloomington, Illinois 61704
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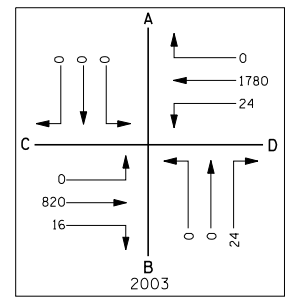
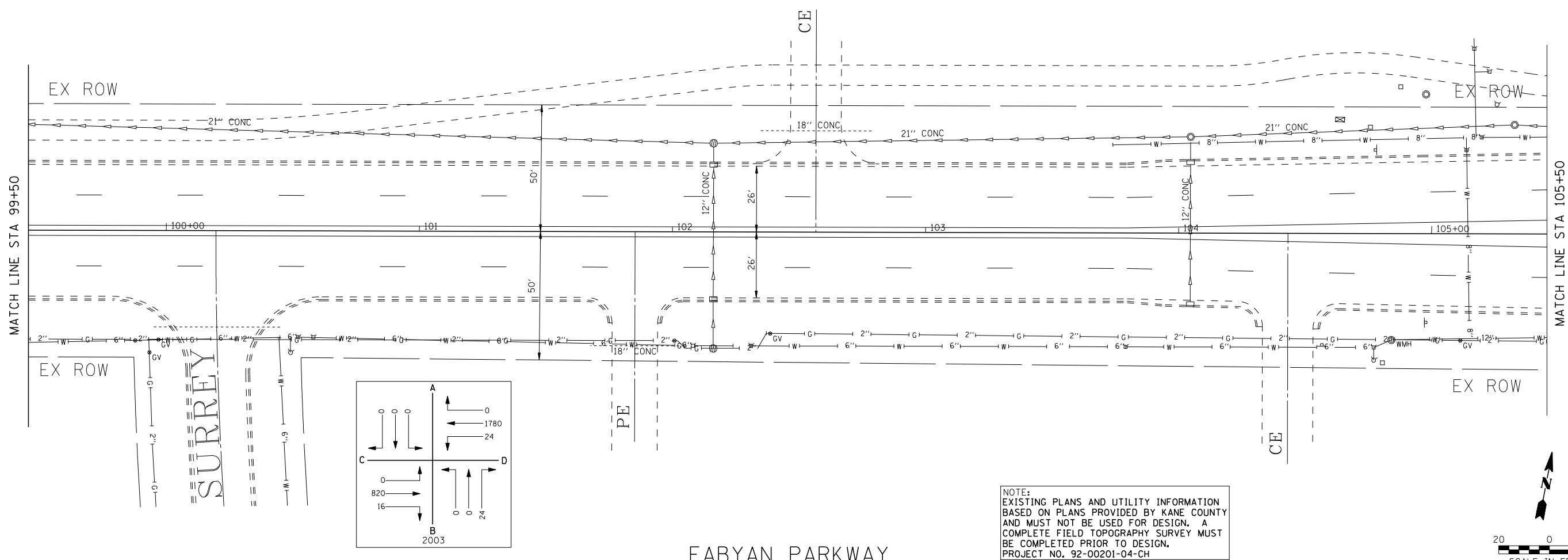
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KANE COUNTY
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 FABYAN PARKWAY

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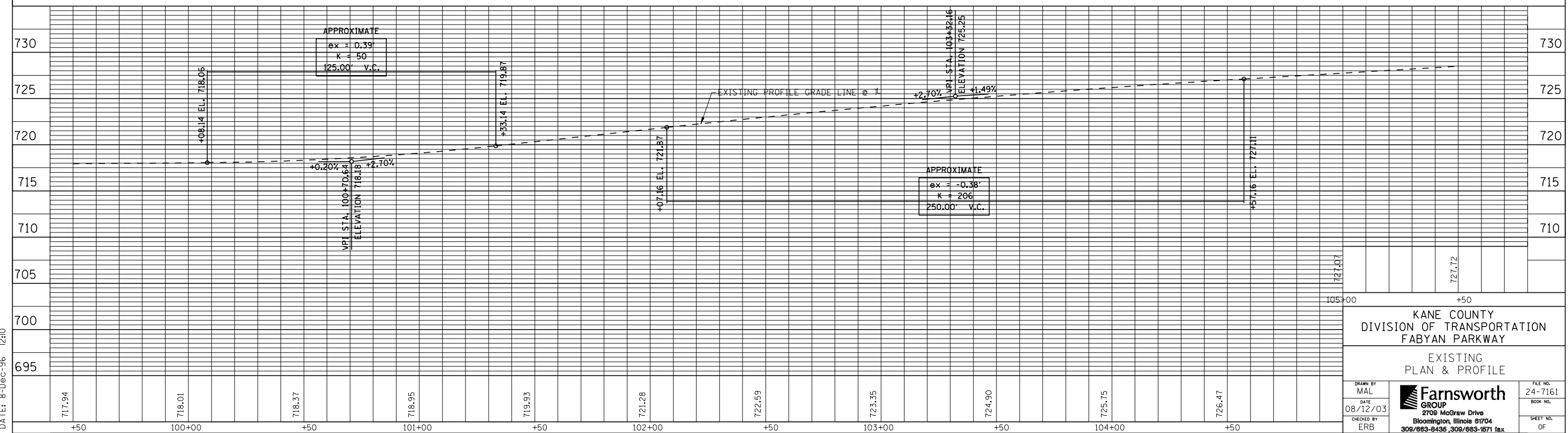
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FABYAN PARKWAY



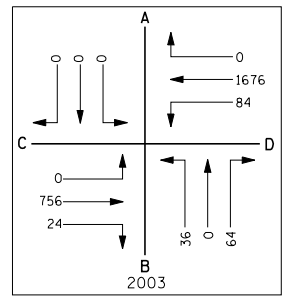
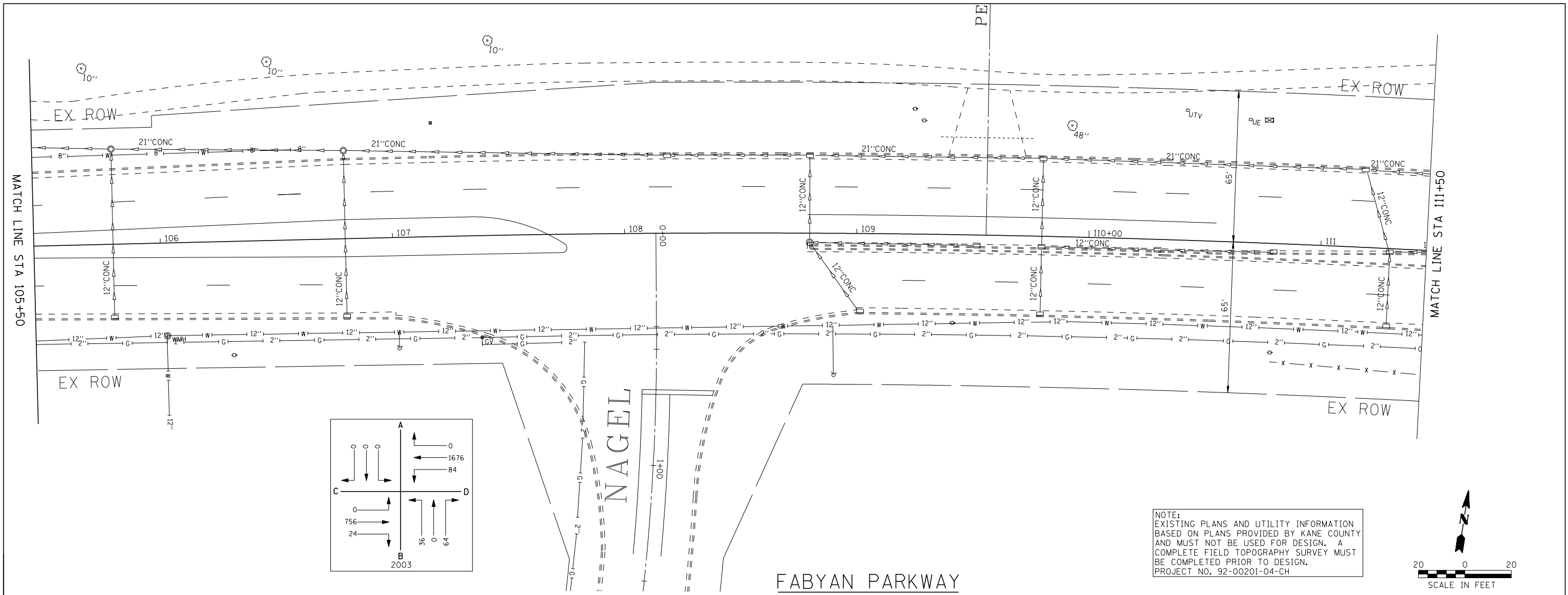
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KANE COUNTY
 DIVISION OF TRANSPORTATION
 FABYAN PARKWAY

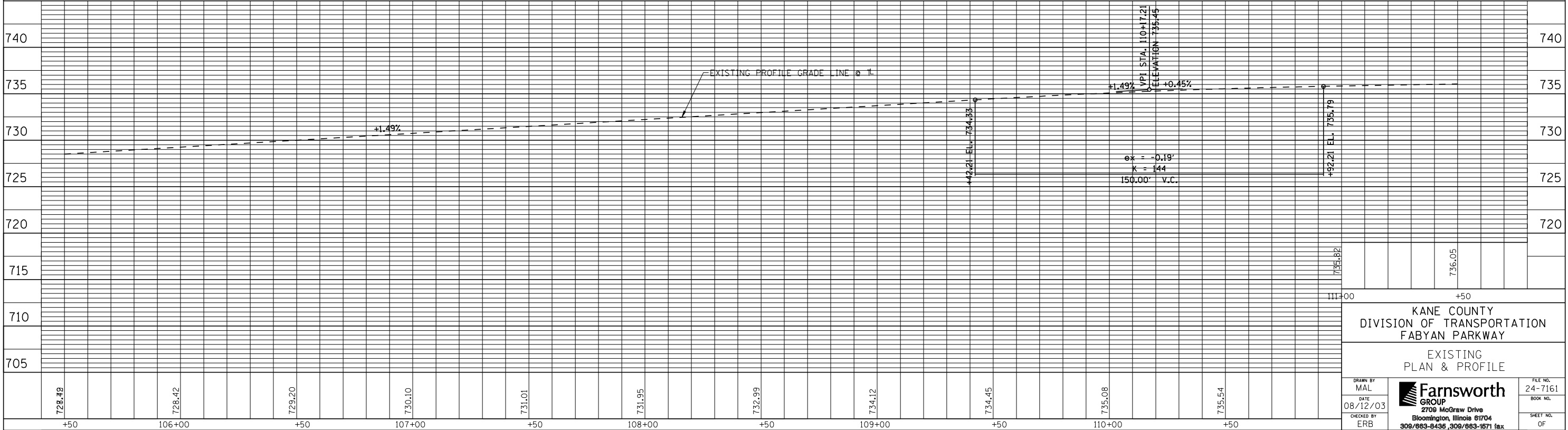
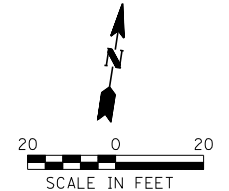
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DATE 08/12/03	BOOK NO.
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Farnsworth GROUP
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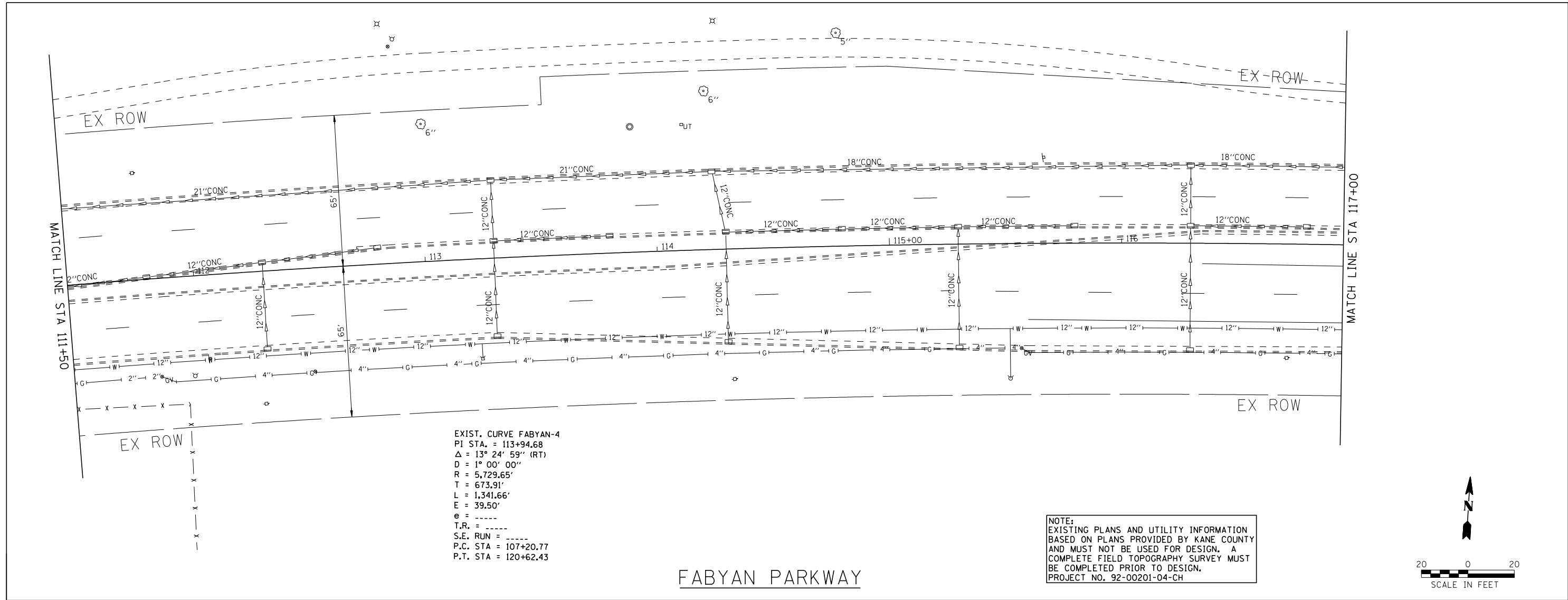
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 ERB

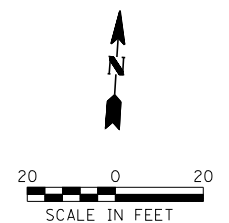
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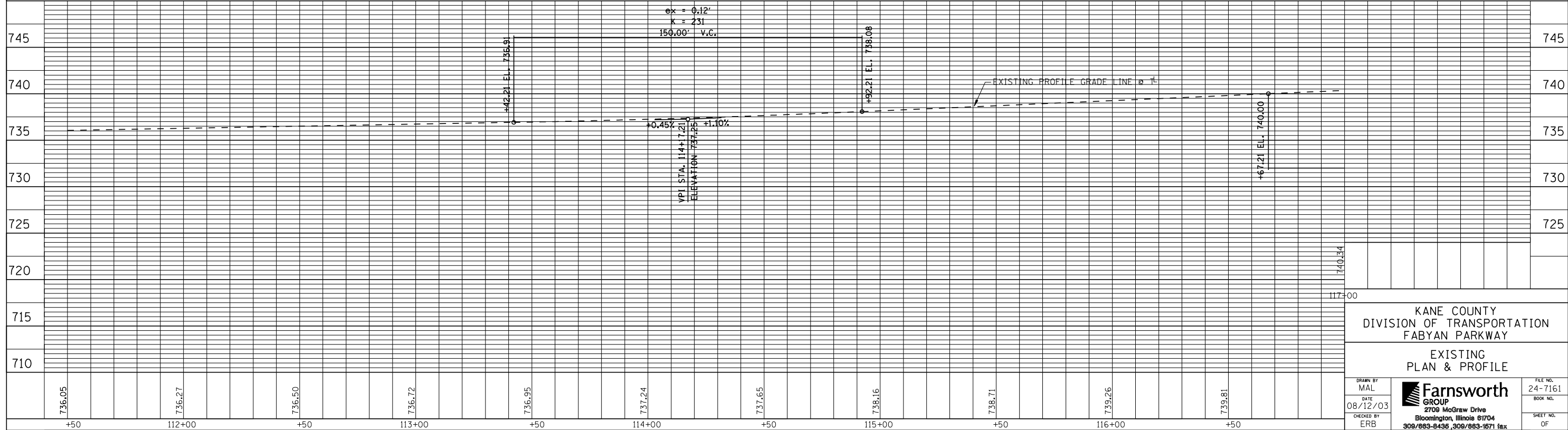
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FABYAN PARKWAY

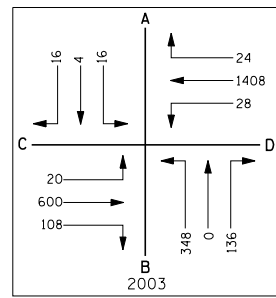
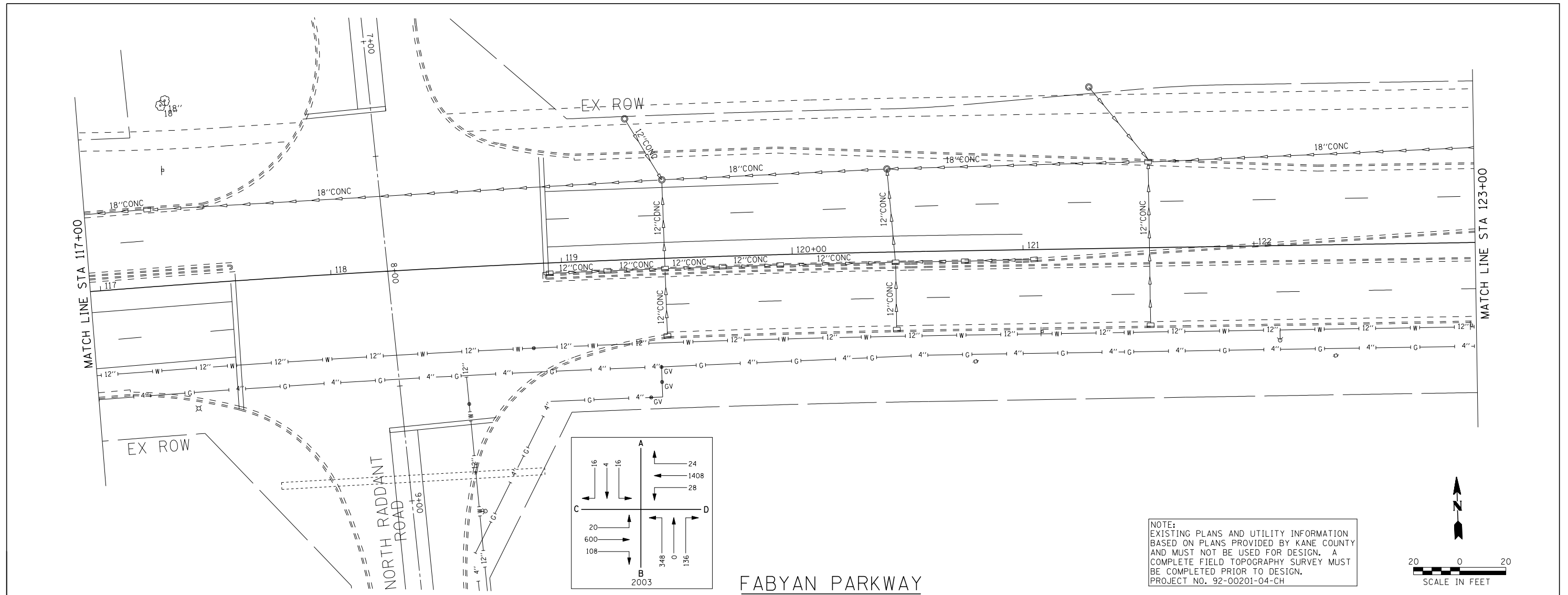


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KANE COUNTY
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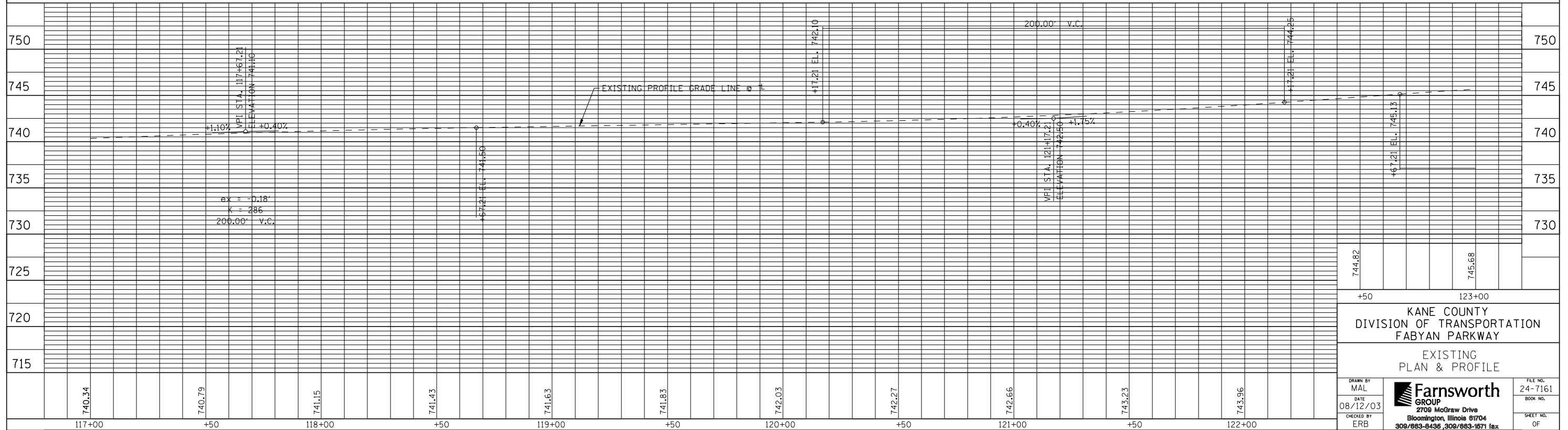
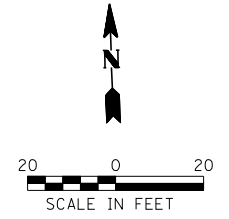
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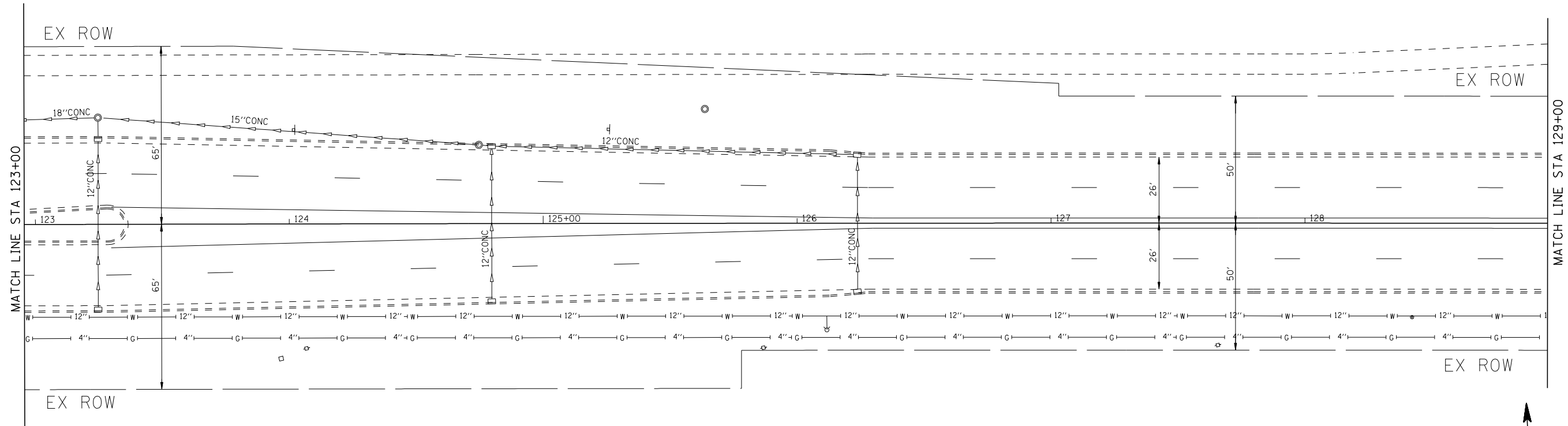
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KANE COUNTY
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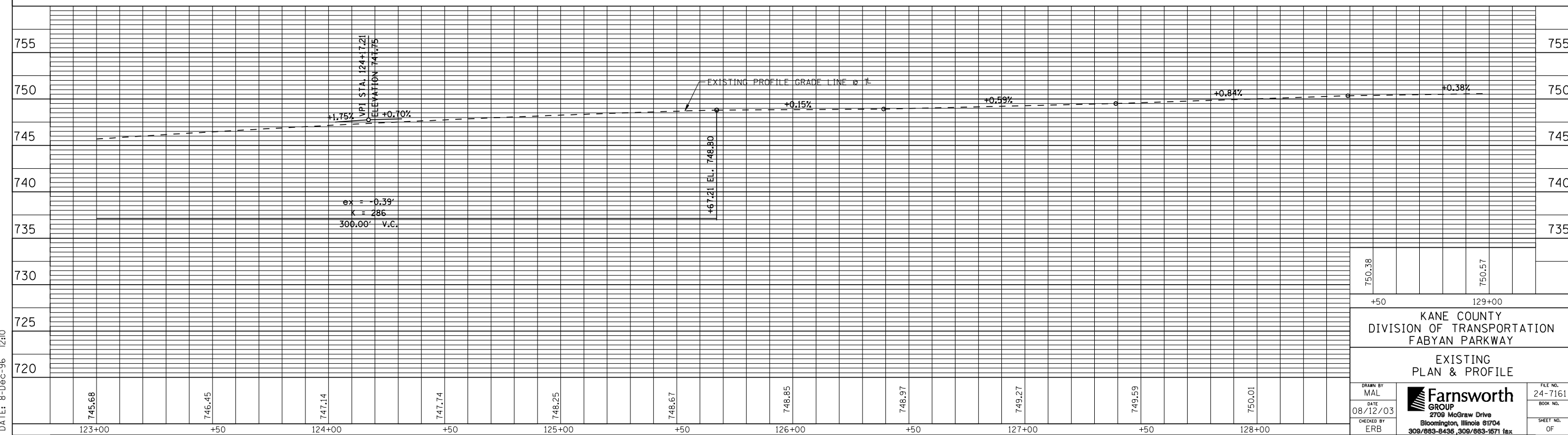
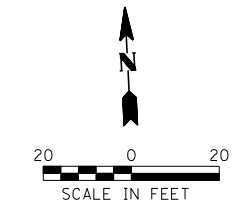
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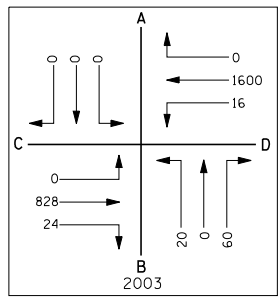
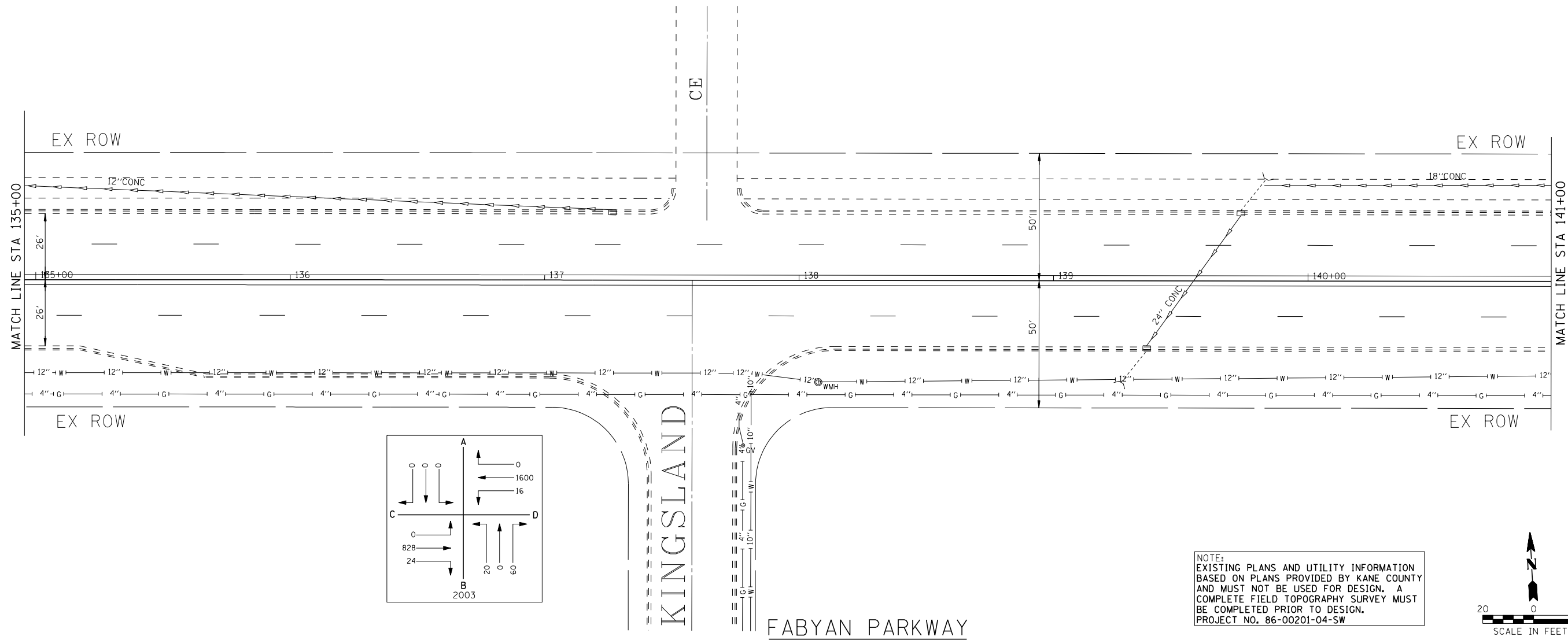
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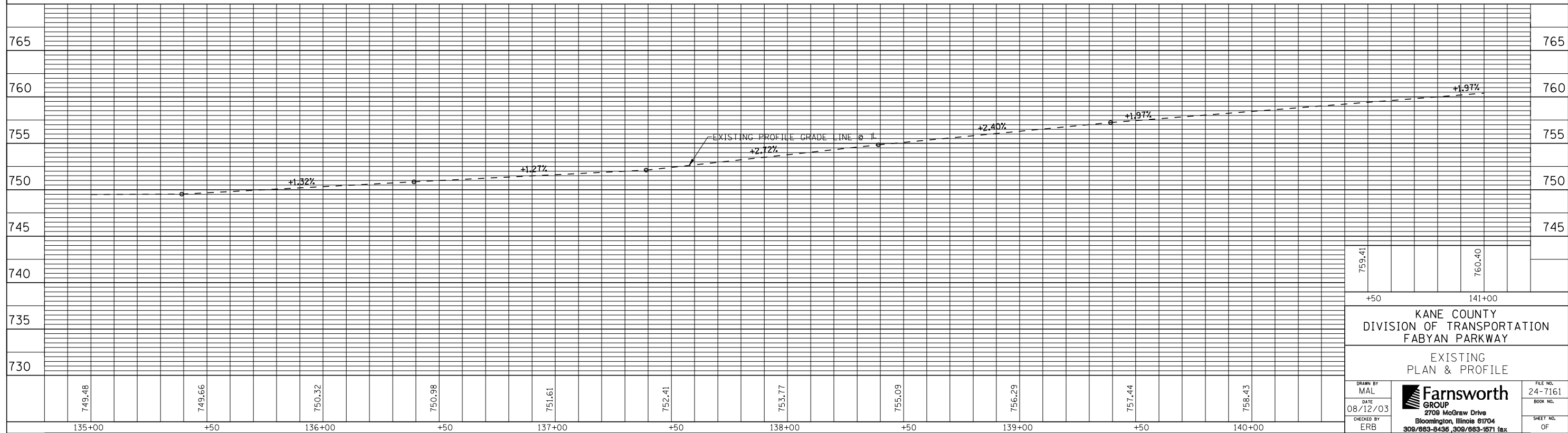
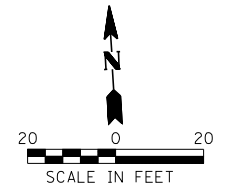


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+50	129+00
KANE COUNTY DIVISION OF TRANSPORTATION FABYAN PARKWAY	
EXISTING PLAN & PROFILE	
DRAWN BY MAL DATE 08/12/03 CHECKED BY ERB	 2709 McGraw Drive Bloomington, Illinois 61704 309/883-8436, 309/883-1671 fax
FILE NO. 24-7161 BOOK NO. OF SHEET NO. OF	



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 PROJECT NO. 86-00201-04-SW



KANE COUNTY
 DIVISION OF TRANSPORTATION
 FABYAN PARKWAY

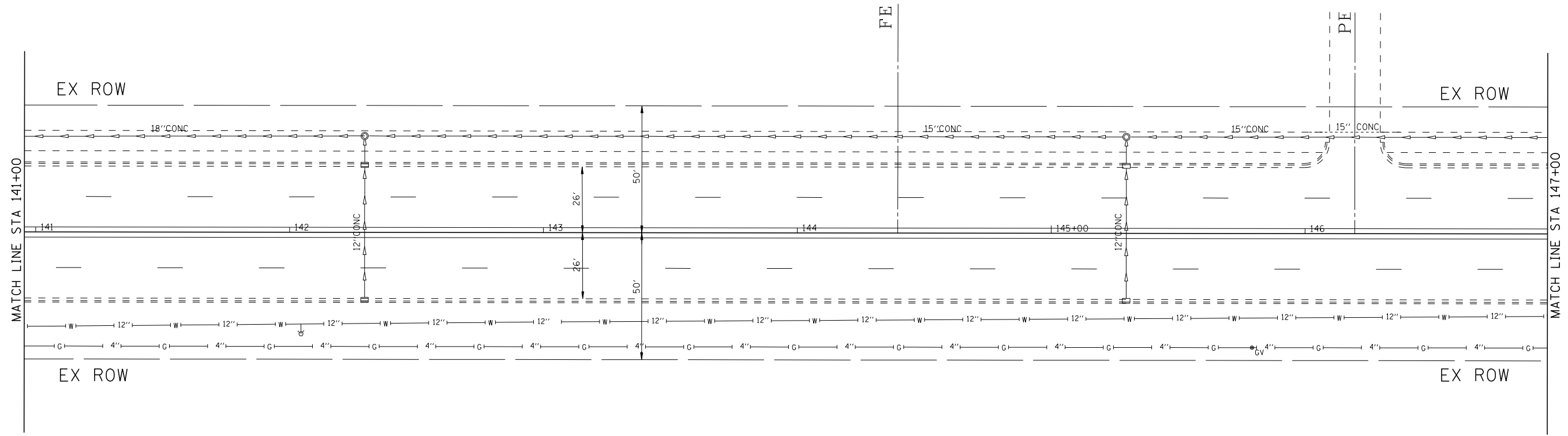
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ERB

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 Bloomington, Illinois 61704
 309/883-8436, 309/883-1671 fax

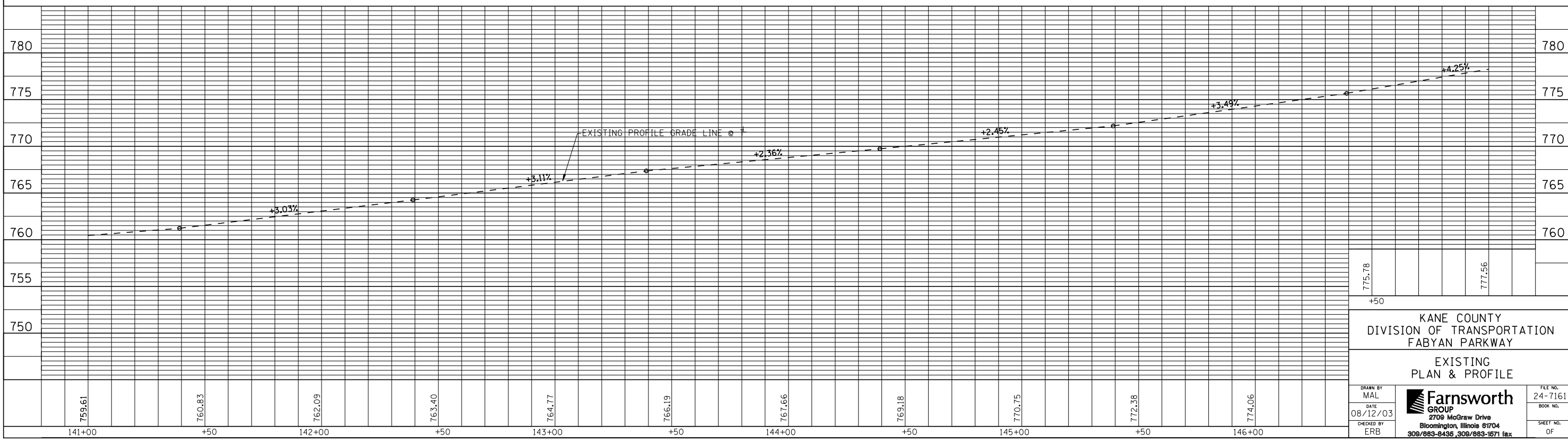
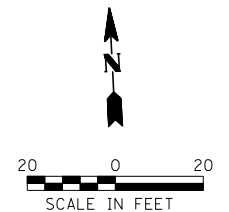
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KANE COUNTY
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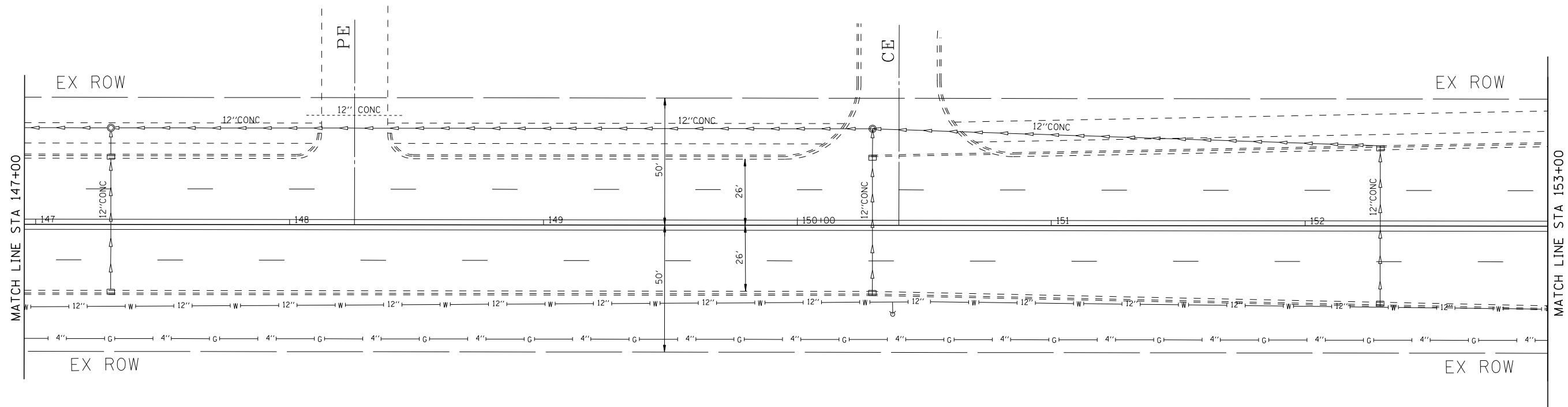
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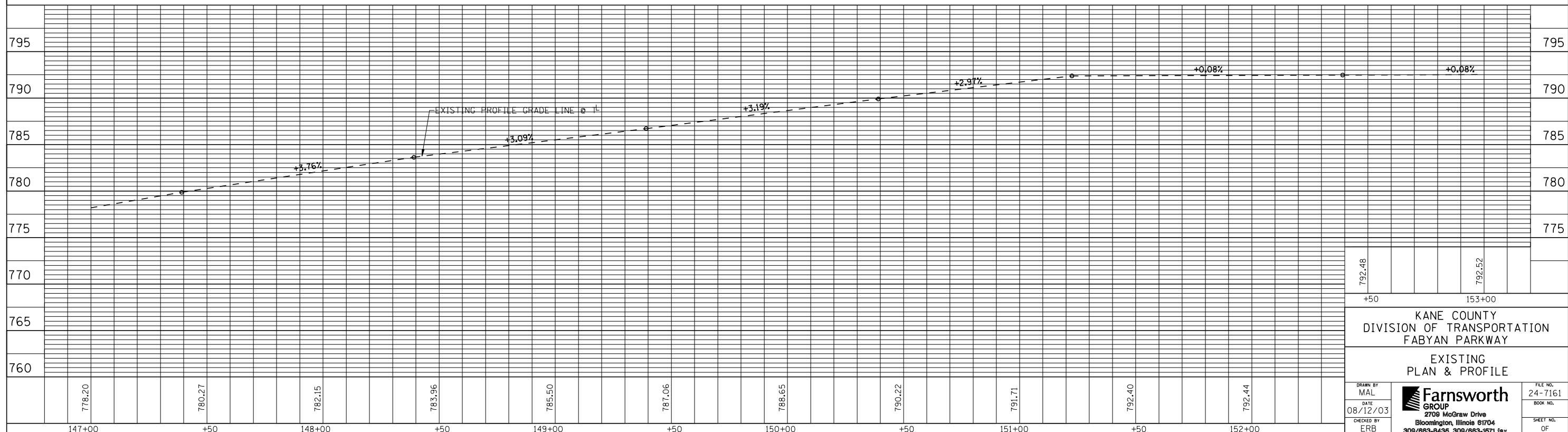
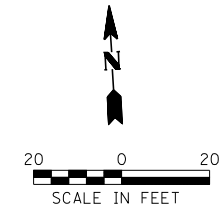
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SECTION 80-00201-04-CH BEGINS
AT STA 150+40.68



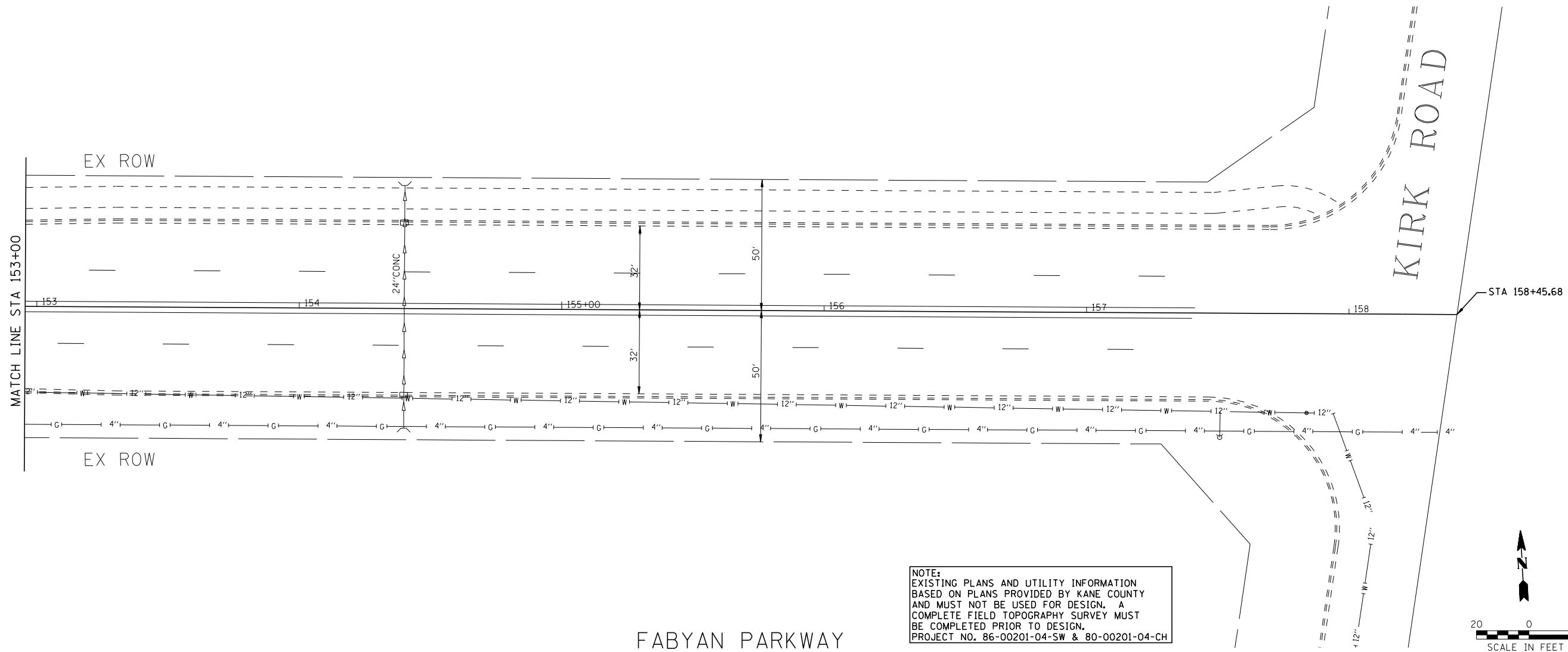
FABYAN PARKWAY

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PROJECT NO. 86-00201-04-SW & 80-00201-04-CH



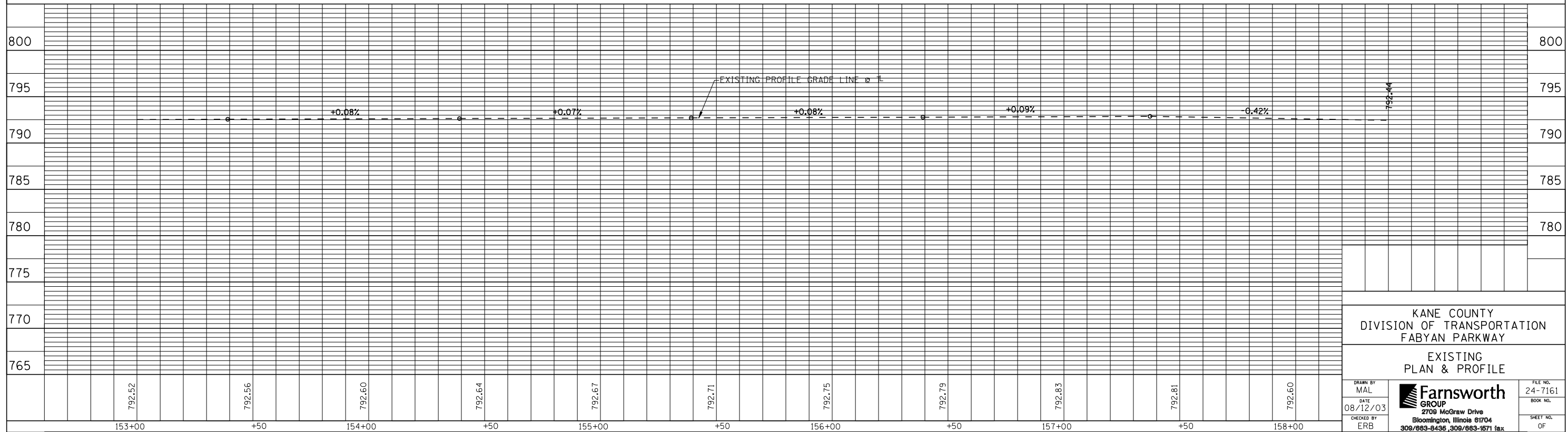
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KANE COUNTY DIVISION OF TRANSPORTATION FABYAN PARKWAY	
EXISTING PLAN & PROFILE	
DRAWN BY: MAL DATE: 08/12/03 CHECKED BY: ERB	FILE NO.: 24-7161 BOOK NO.: SHEET NO.: OF
Farnsworth GROUP 2709 McGraw Drive Bloomington, Illinois 61704 309/883-8436, 309/883-1671 fax	



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FABYAN PARKWAY



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KANE COUNTY
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 FABYAN PARKWAY

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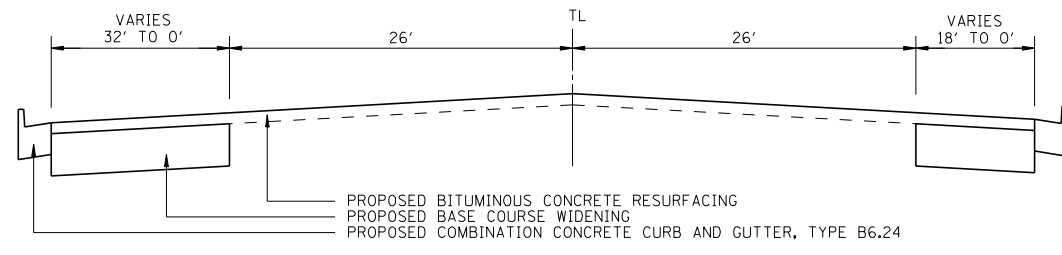
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DATE 08/12/03	BOOK NO.
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Farnsworth GROUP
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 Bloomington, Illinois 61704
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EXHIBIT 4

Proposed Intermediate and Long Range Typical Sections

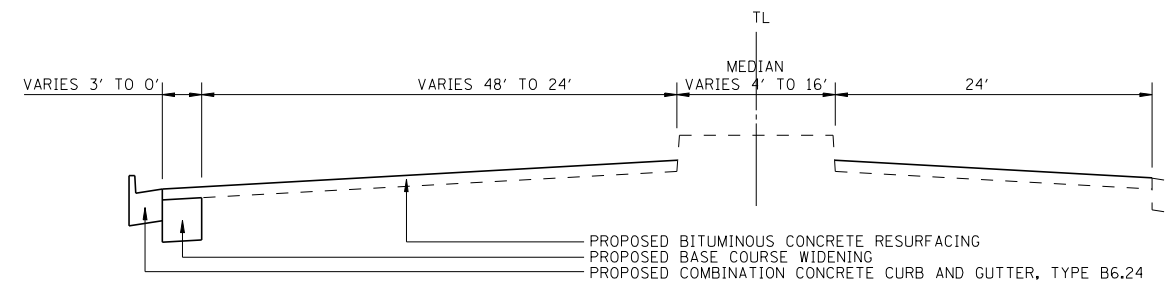
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		KANE		
		ILLINOIS		



PROPOSED TYPICAL SECTION

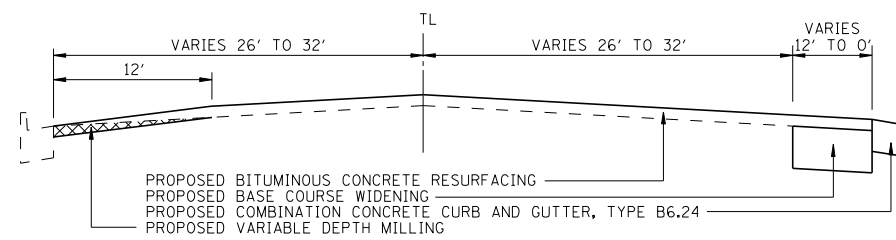
STA 39+64 TO STA 91+16
STA 132+90 TO STA 144+76

5' BARRIER MEDIAN FROM
STA 55+90 TO STA 70+43



PROPOSED TYPICAL SECTION

STA 119+14 TO STA 124+76

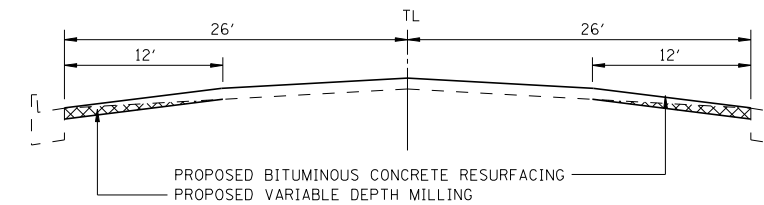


PROPOSED TYPICAL SECTION

STA 103+32 TO STA 119+14

BRIDGE OMISSION

STA 66+53.03 TO STA 79+61.37



PROPOSED TYPICAL SECTION

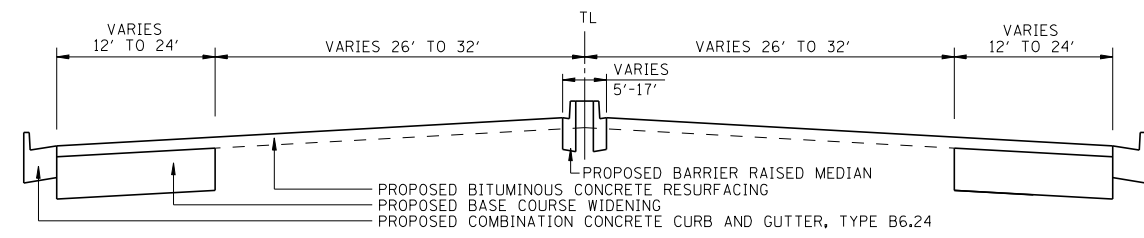
STA 33+60 TO STA 39+64
STA 91+16 TO STA 103+32
STA 124+76 TO STA 132+90
STA 144+76 TO STA 158+00

KANE COUNTY
DIVISION OF TRANSPORTATION
FABYAN PARKWAY

INTERMEDIATE RANGE
TYPICAL SECTIONS

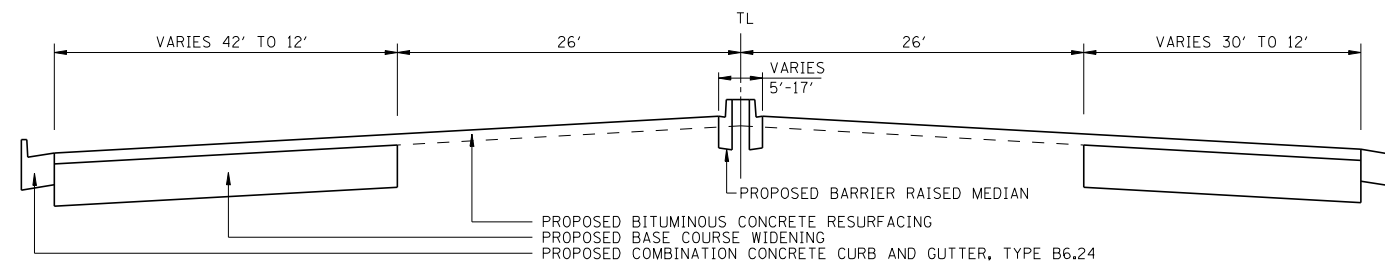
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DATE 8/20/03		BOOK NO.
CHECKED BY KNB		SHEET NO. OF

S.A.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		KANE		1
ILLINOIS				



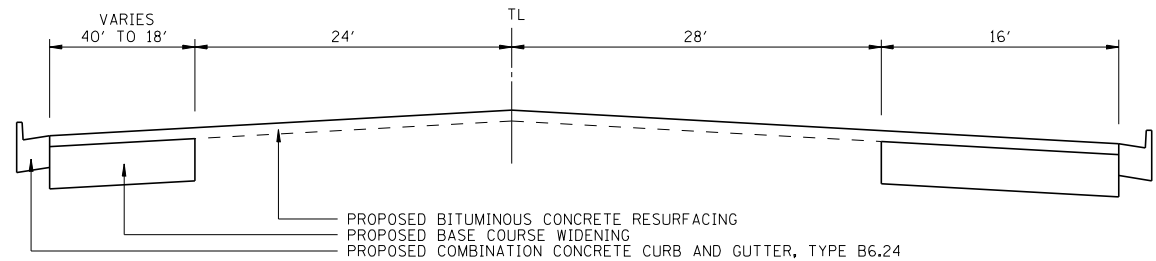
PROPOSED TYPICAL SECTION

STA 22+47.95 TO STA 39+35
 STA 103+32 TO STA 126+25
 STA 132+90 TO STA 142+67



PROPOSED TYPICAL SECTION

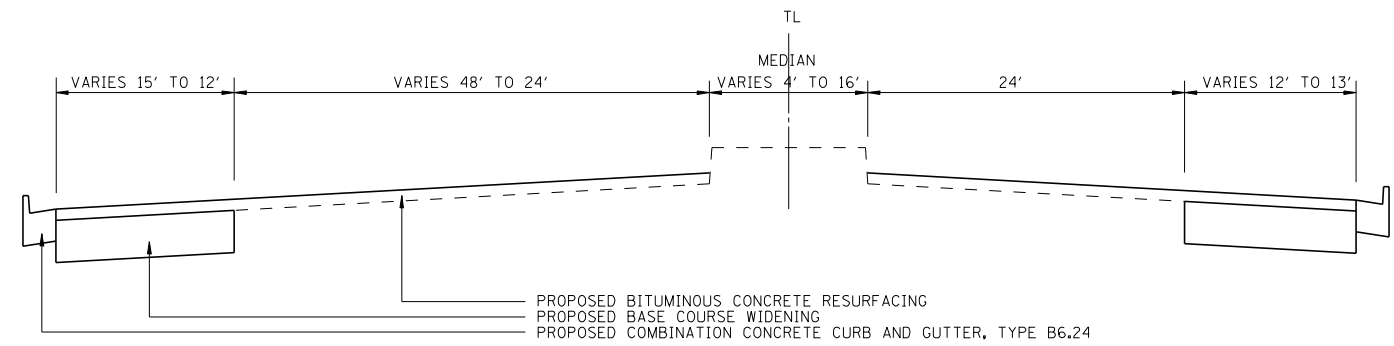
STA 39+35 TO STA 91+47
 STA 67+00 TO STA 84+10
 STA 86+42 TO STA 103+44
 STA 126+28 TO STA 154+00



PROPOSED TYPICAL SECTION

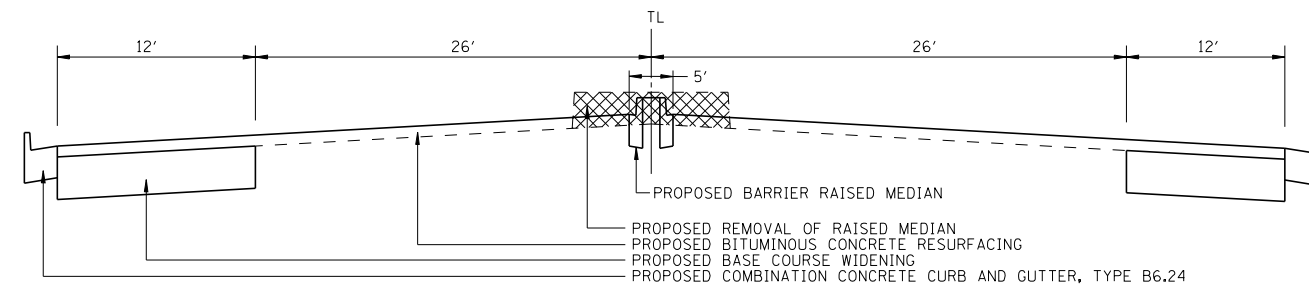
STA 62+71 TO STA 67+00
 STA 84+10 TO STA 86+42

BRIDGE OMISSION
 STA 66+53.03 TO 79+61.37



PROPOSED TYPICAL SECTION

STA 108+17.92 TO STA 123+36



PROPOSED TYPICAL SECTION

STA 91+47 TO STA 103+32
 STA 126+25 TO STA 132+90
 STA 142+67 TO STA 158+00

KANE COUNTY
 DIVISION OF TRANSPORTATION
 FABYAN PARKWAY

LONG RANGE
 TYPICAL SECTIONS

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DATE 8/20/03		BOOK NO.
CHECKED BY KNB		SHEET NO. OF

EXHIBIT 5

Proposed Intermediate and Long Range Geometrics

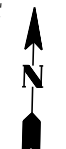
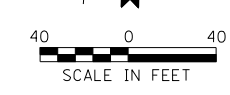
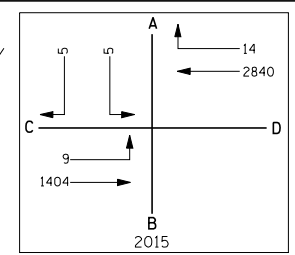
FABYAN PARKWAY

INTERMEDIATE IMPROVEMENTS

NOTE:
WESTERN AVENUE IS BEING STUDIED
SEPARATE FROM THIS FEASIBILITY STUDY.

NOTE:
HEATHER LANE IS BEING
EVALUATED FOR CLOSURE.
SEE SECTION III OF STUDY.

AUXILIARY LANES SHOWN ARE FOR LOCATION ONLY. THE
ACTUAL TAPER RATES SHOULD BE DETERMINED IN A
PHASE 1 STUDY BASED ON PROJECTED QUEUE LENGTH
AND/OR DECELERATION LANE REQUIREMENTS. INTERSECTION
ISLANDS ARE NOT SHOWN FOR CLARITY PURPOSES. PROVIDE
A DETAILED IDS DURING PHASE 1.

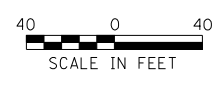
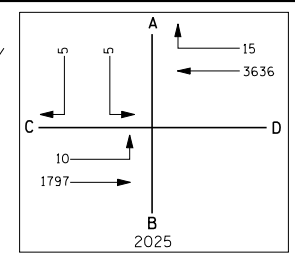


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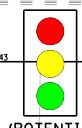
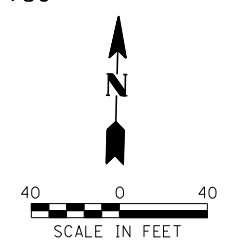
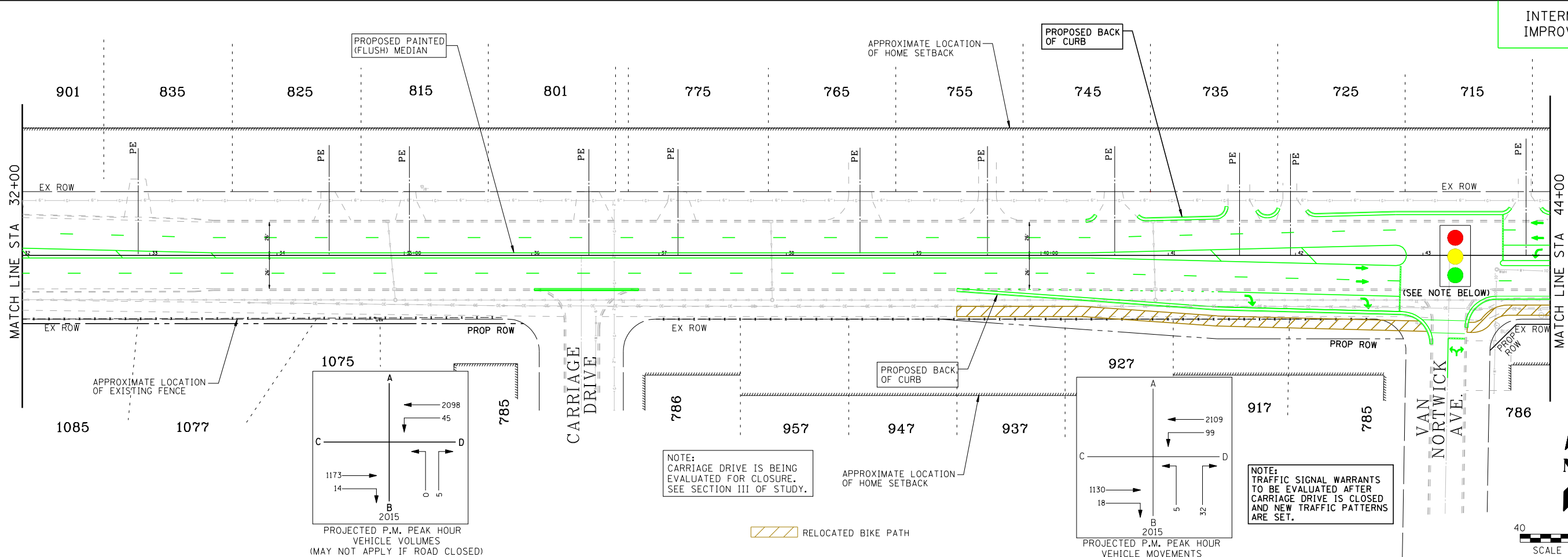
RELOCATED BIKE PATH

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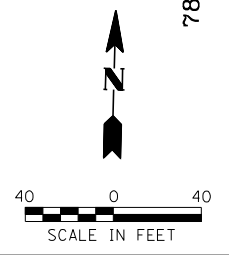
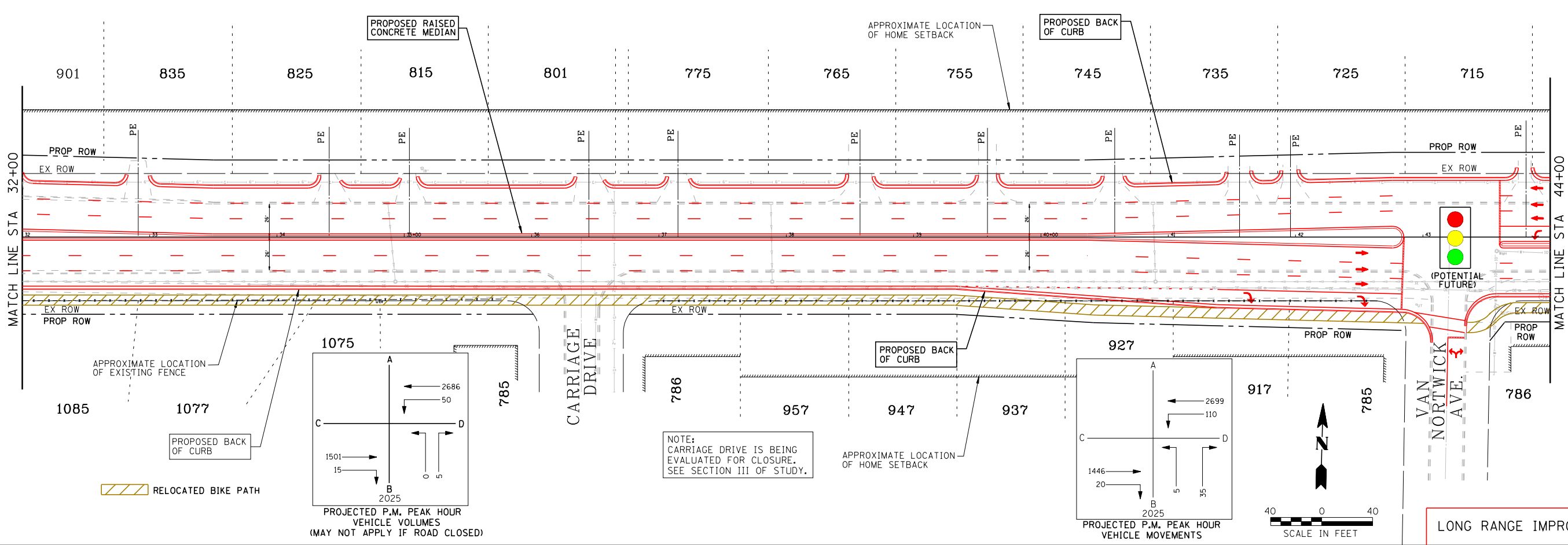
LONG RANGE IMPROVEMENTS

FABYAN PARKWAY

INTERMEDIATE IMPROVEMENTS

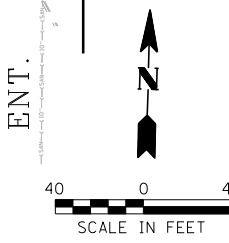
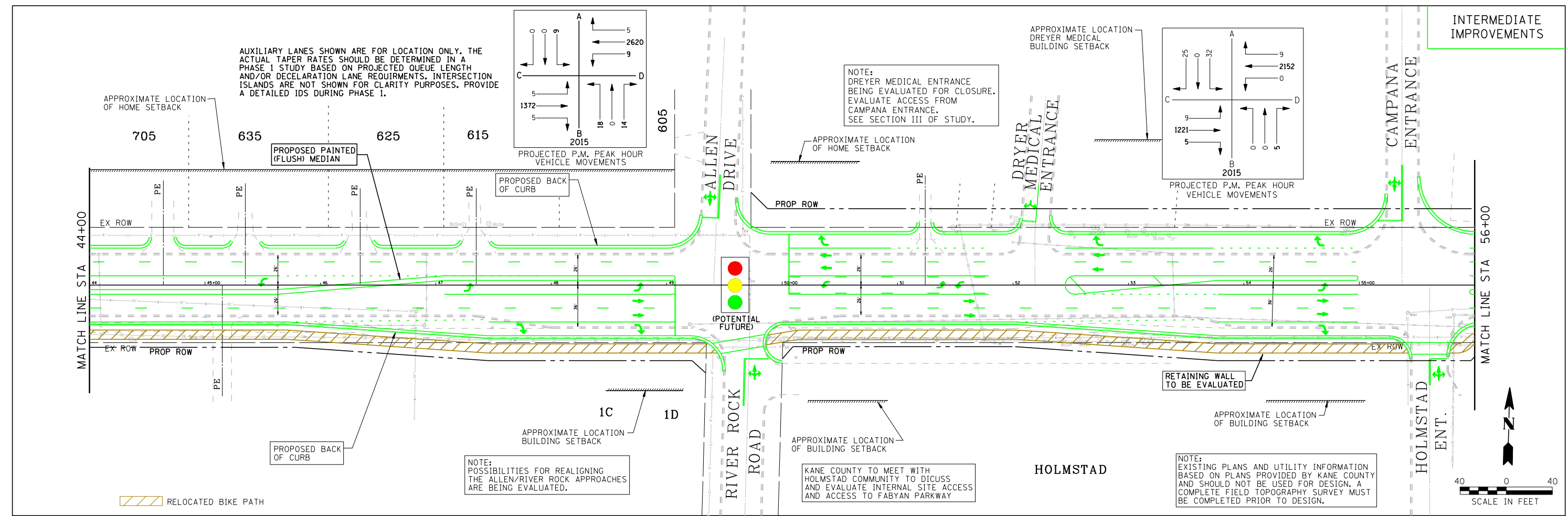


LONG RANGE IMPROVEMENTS

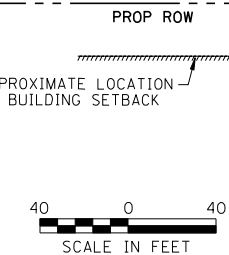
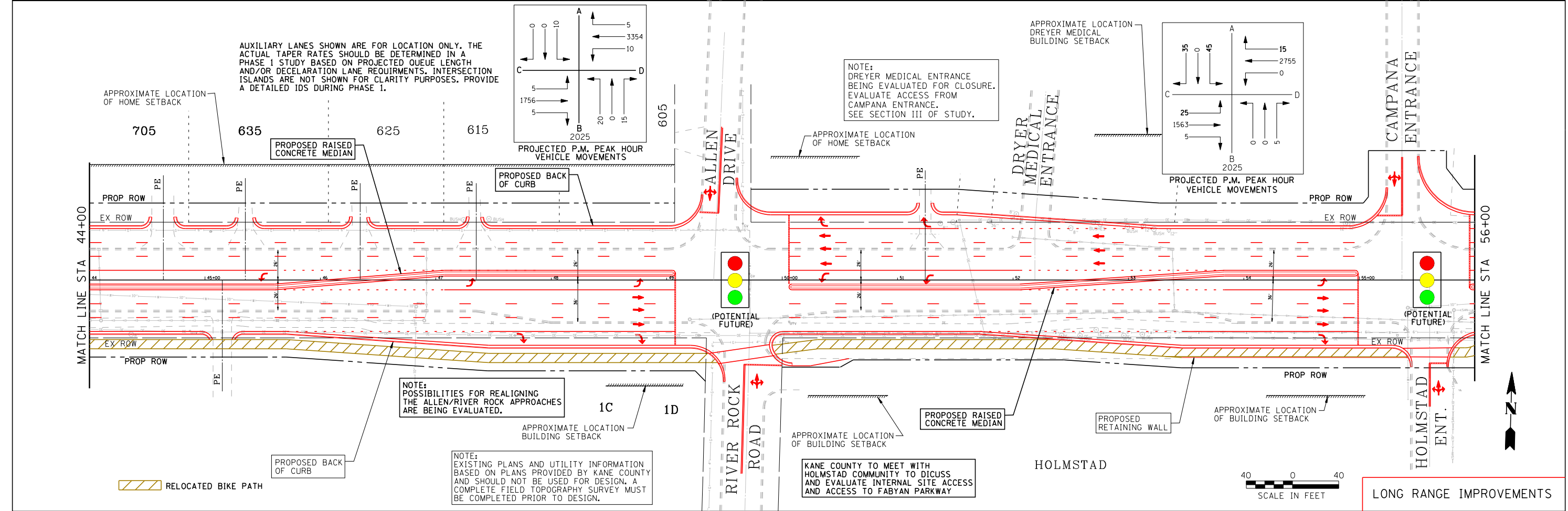


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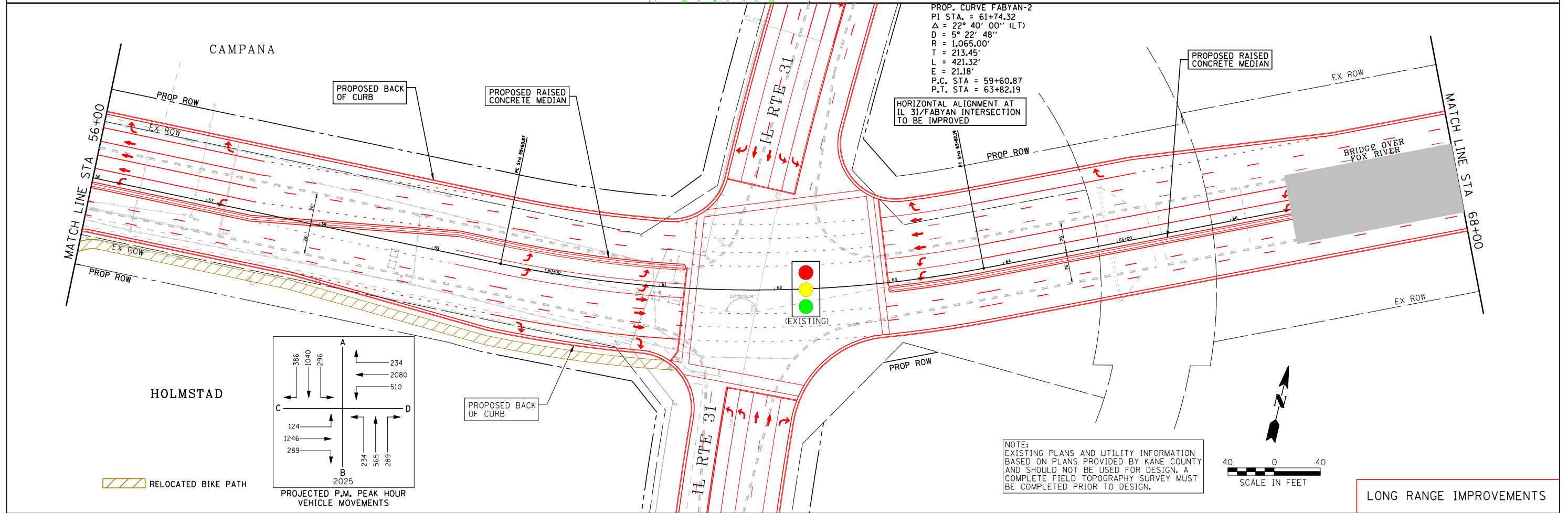
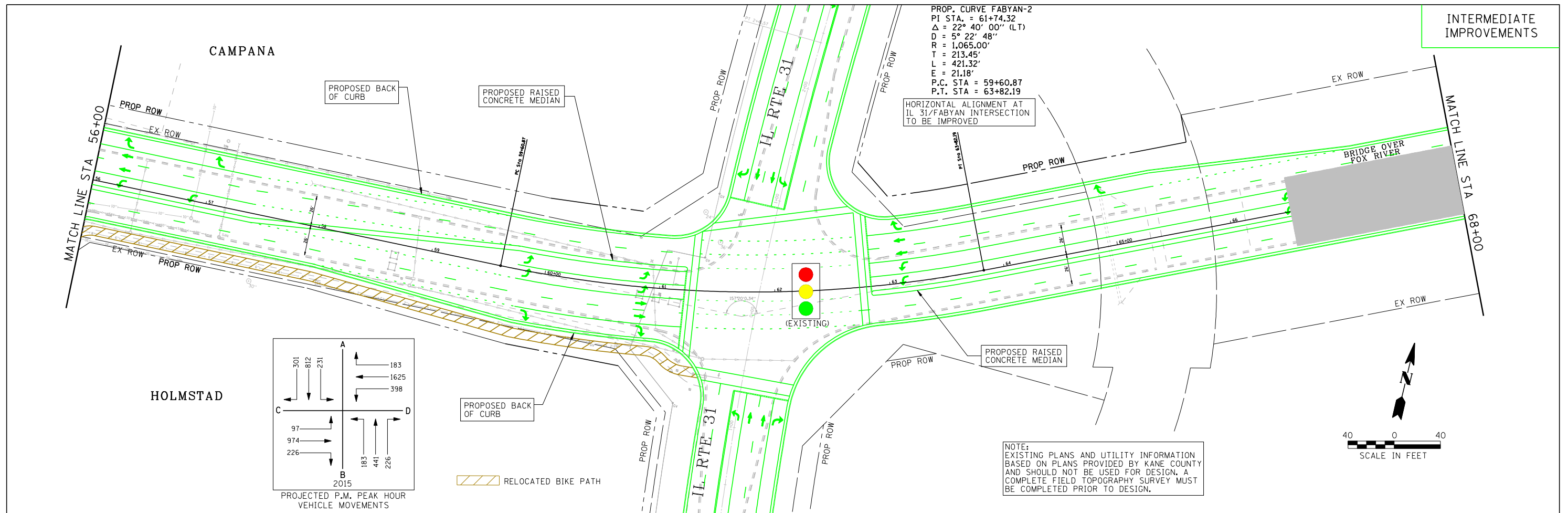
INTERMEDIATE IMPROVEMENTS



LONG RANGE IMPROVEMENTS



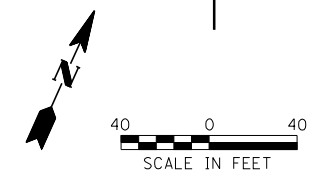
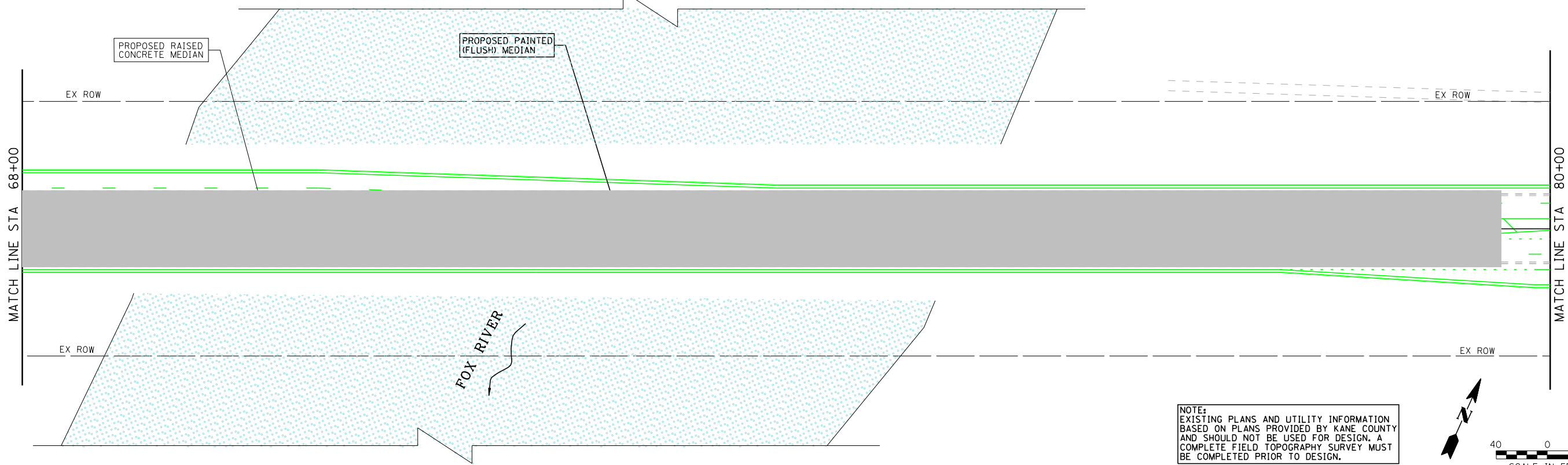
FABYAN PARKWAY



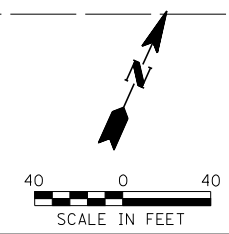
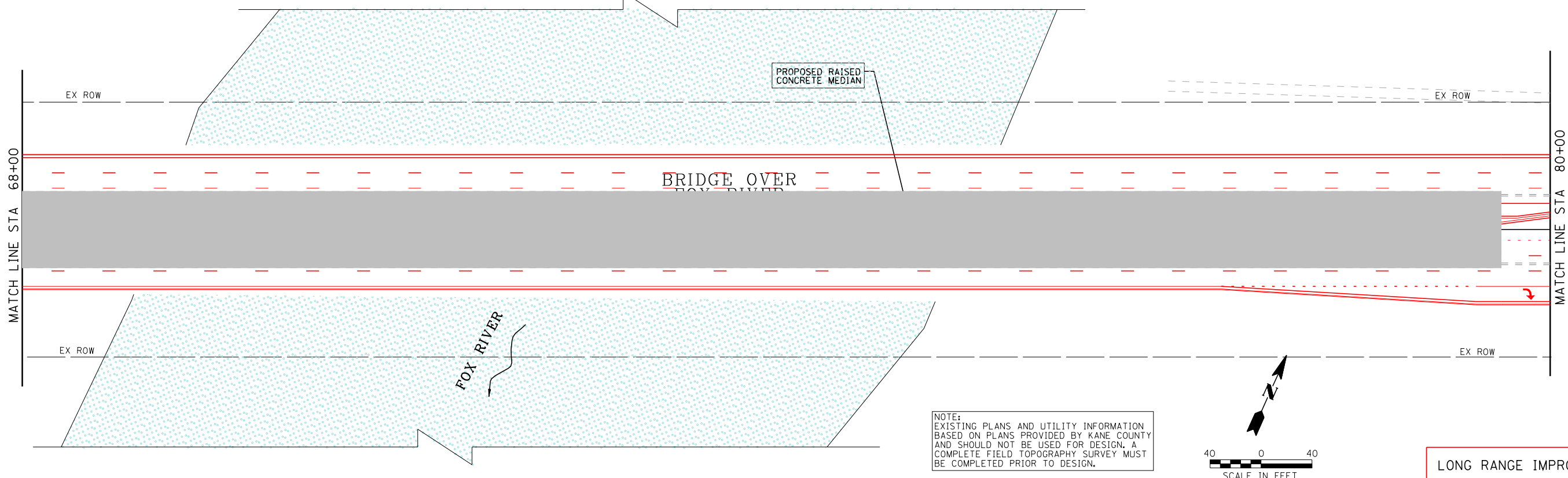
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INTERMEDIATE IMPROVEMENTS

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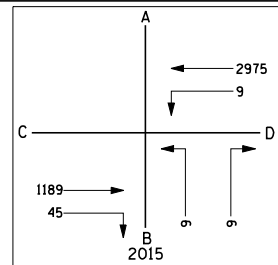
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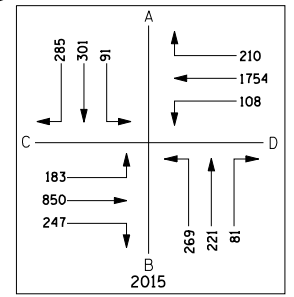
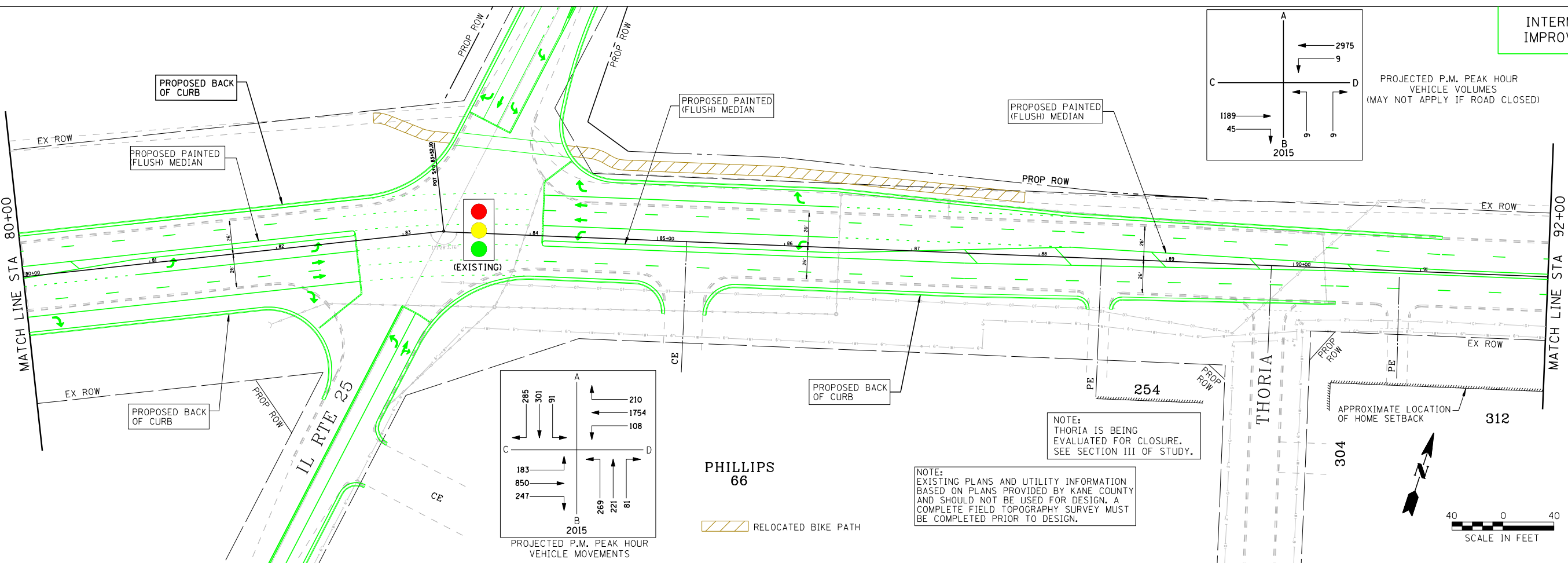
LONG RANGE IMPROVEMENTS

FABYAN PARKWAY

INTERMEDIATE IMPROVEMENTS



PROJECTED P.M. PEAK HOUR VEHICLE VOLUMES (MAY NOT APPLY IF ROAD CLOSED)



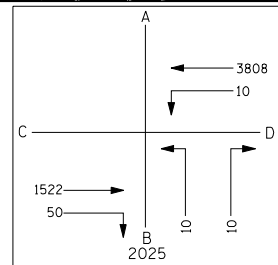
PROJECTED P.M. PEAK HOUR VEHICLE MOVEMENTS

RELOCATED BIKE PATH

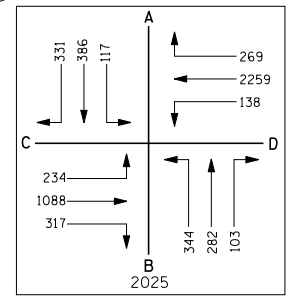
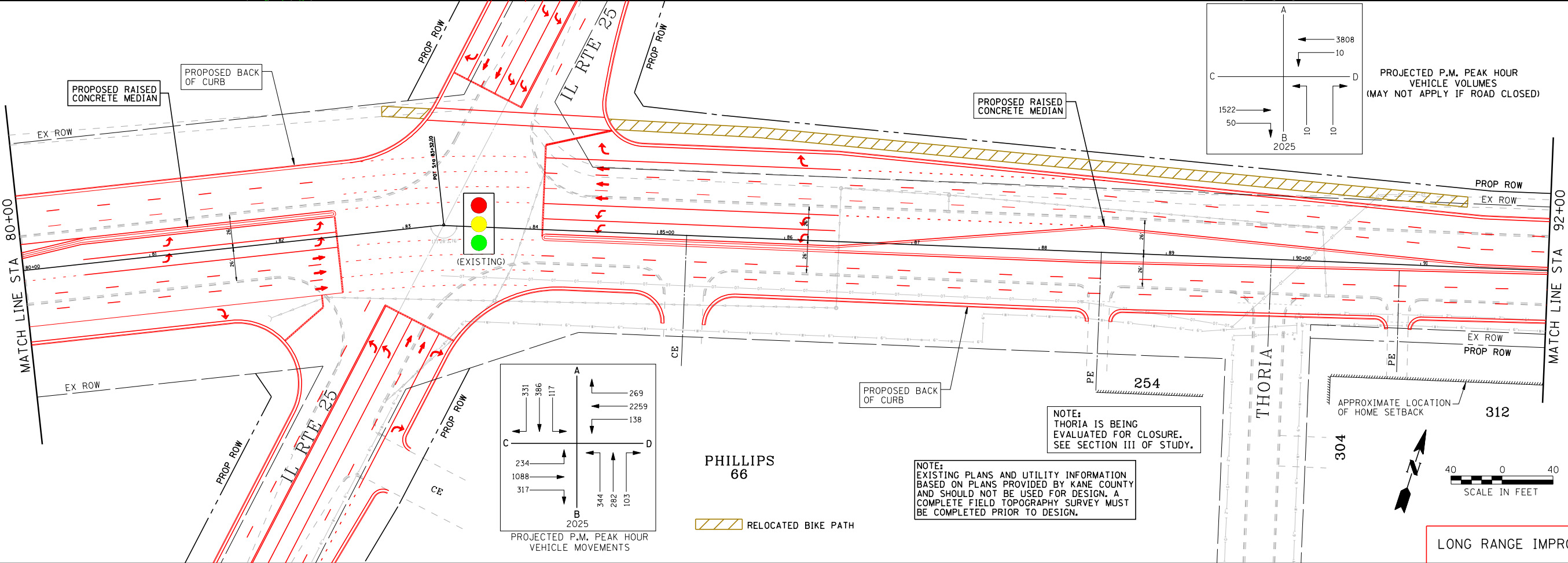
NOTE: THORIA IS BEING EVALUATED FOR CLOSURE. SEE SECTION III OF STUDY.



LONG RANGE IMPROVEMENTS



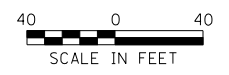
PROJECTED P.M. PEAK HOUR VEHICLE VOLUMES (MAY NOT APPLY IF ROAD CLOSED)



PROJECTED P.M. PEAK HOUR VEHICLE MOVEMENTS

RELOCATED BIKE PATH

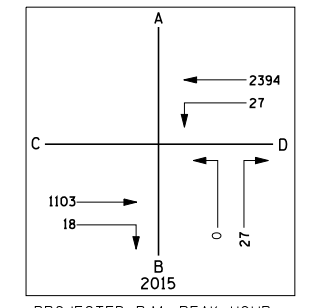
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FABYAN PARKWAY

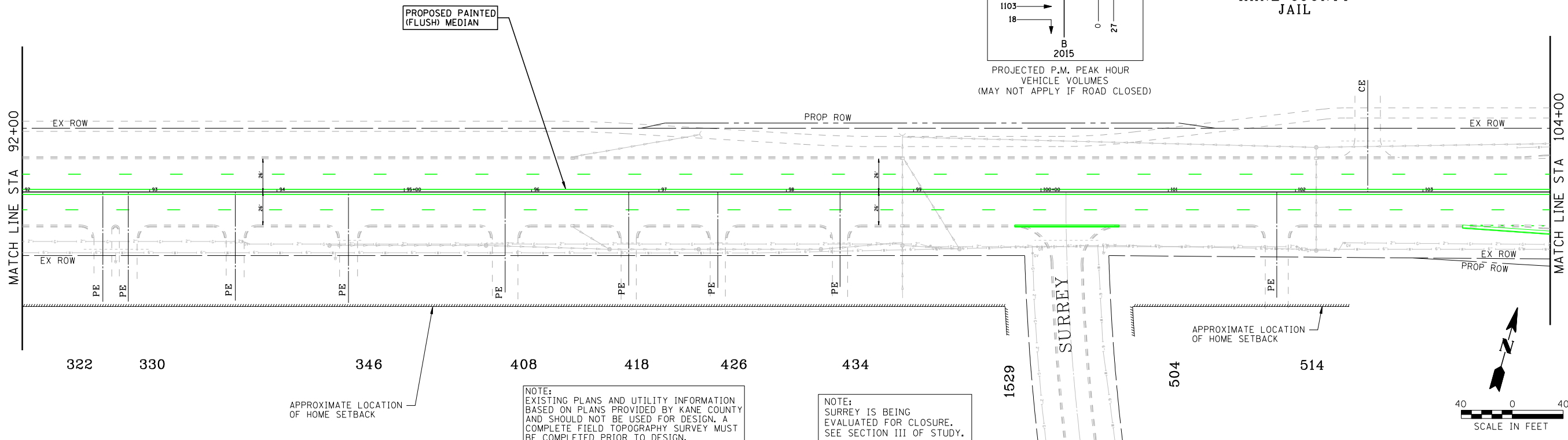
INTERMEDIATE IMPROVEMENTS

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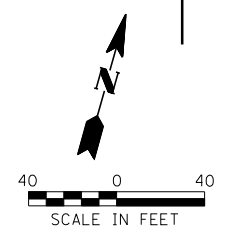
PROJECTED P.M. PEAK HOUR VEHICLE VOLUMES (MAY NOT APPLY IF ROAD CLOSED)

KANE COUNTY JAIL

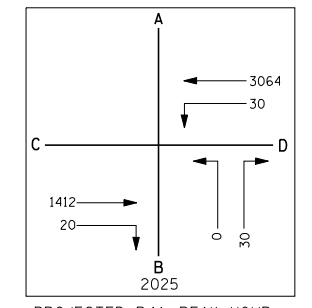


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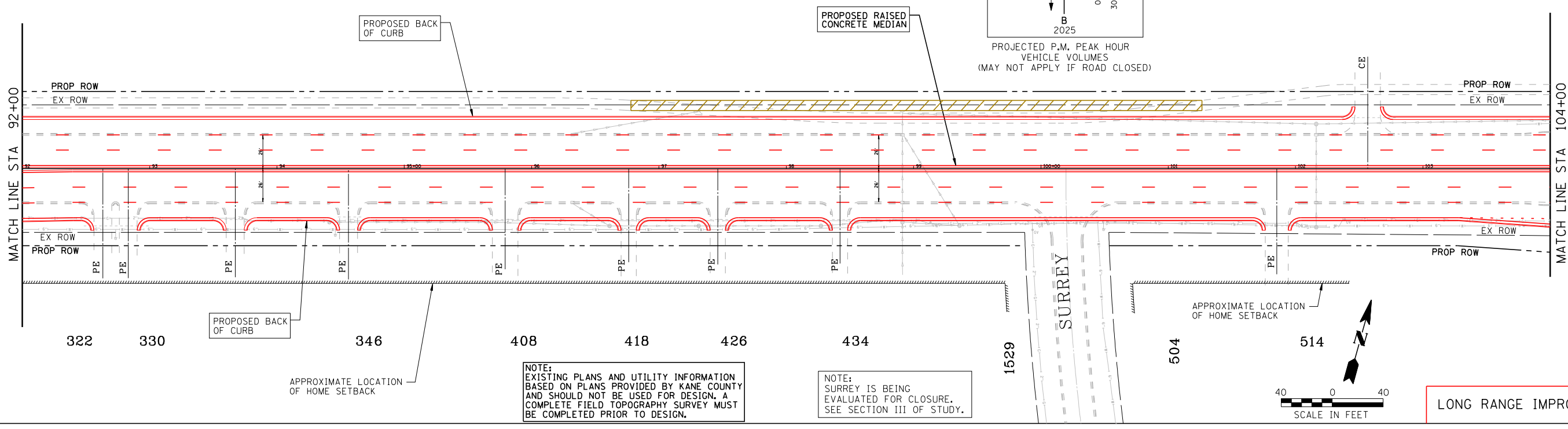


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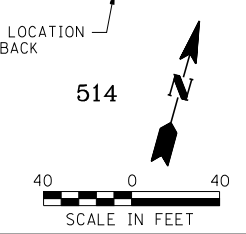
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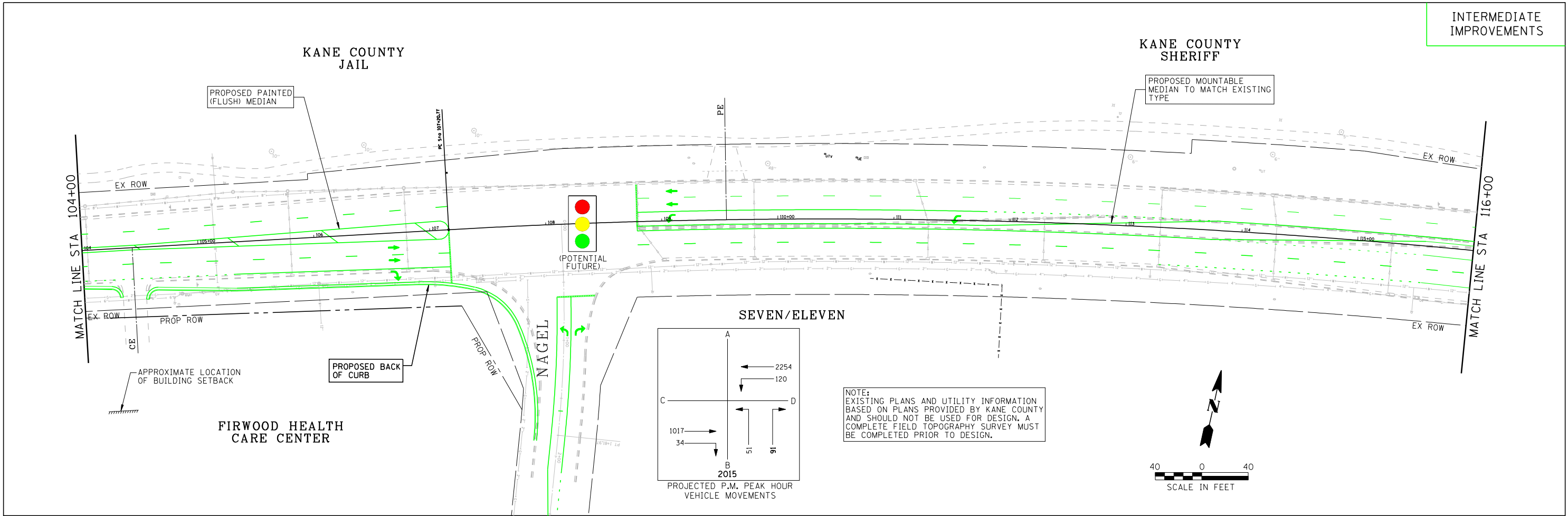
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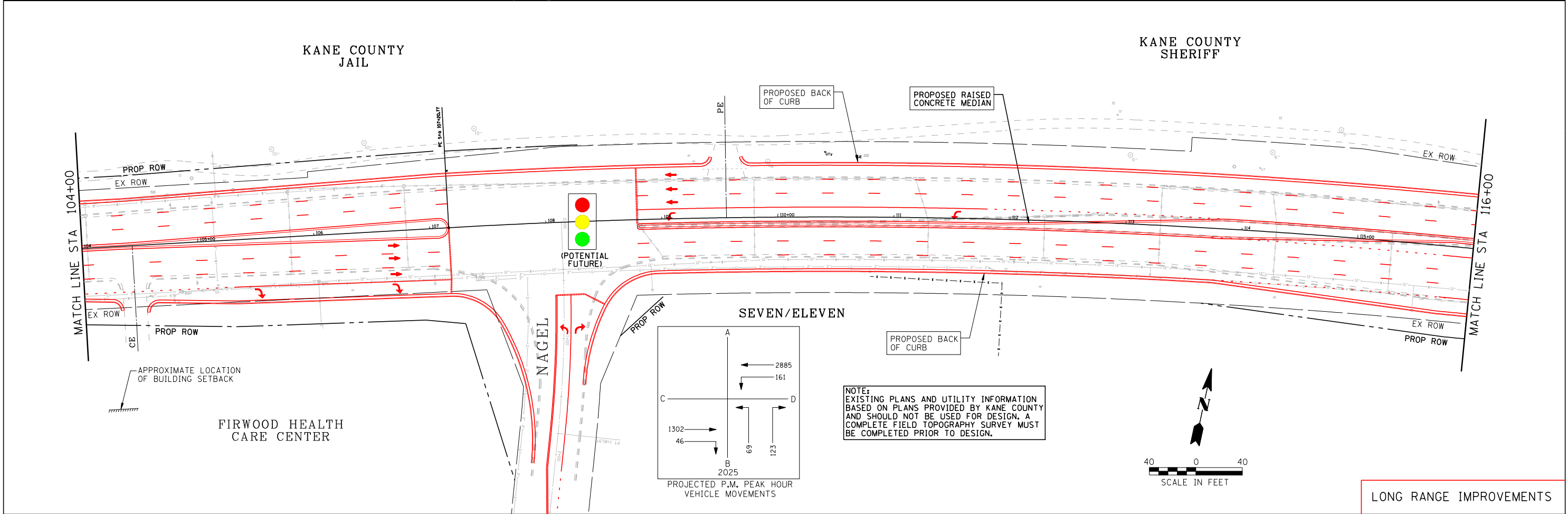
LONG RANGE IMPROVEMENTS

FABYAN PARKWAY

INTERMEDIATE IMPROVEMENTS



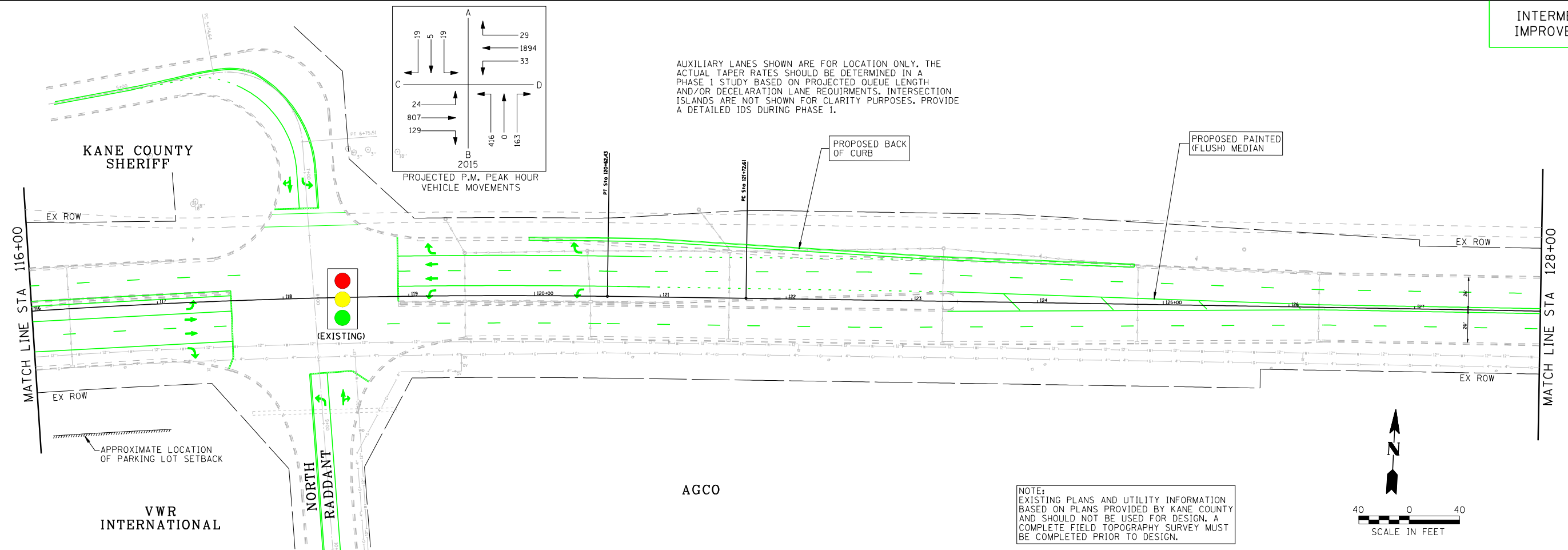
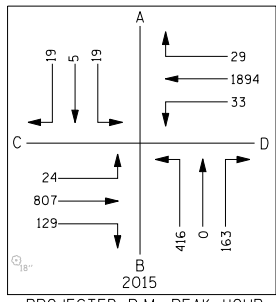
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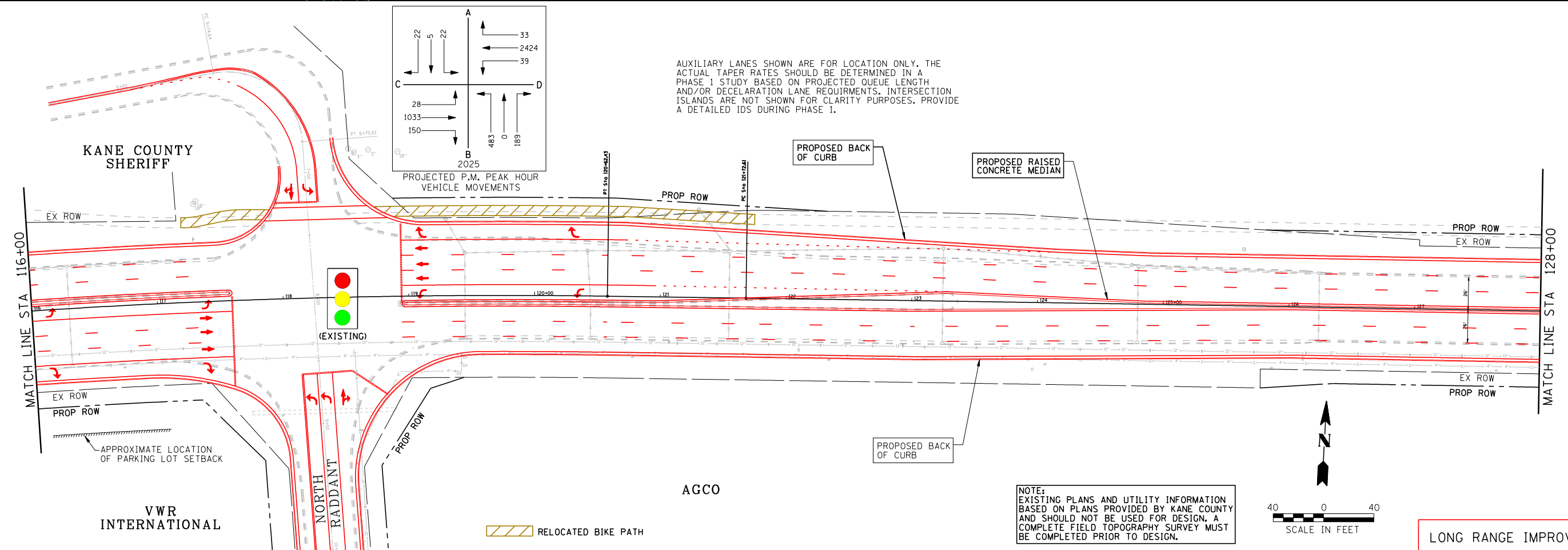
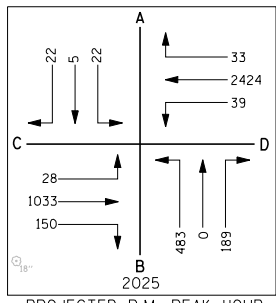
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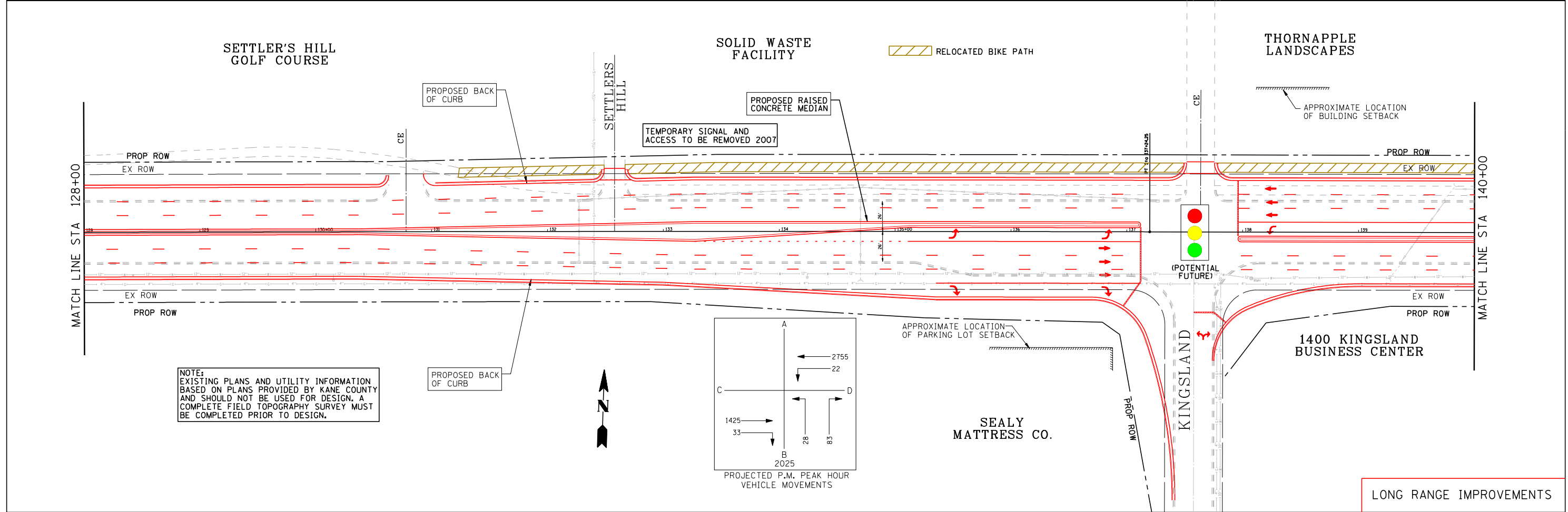
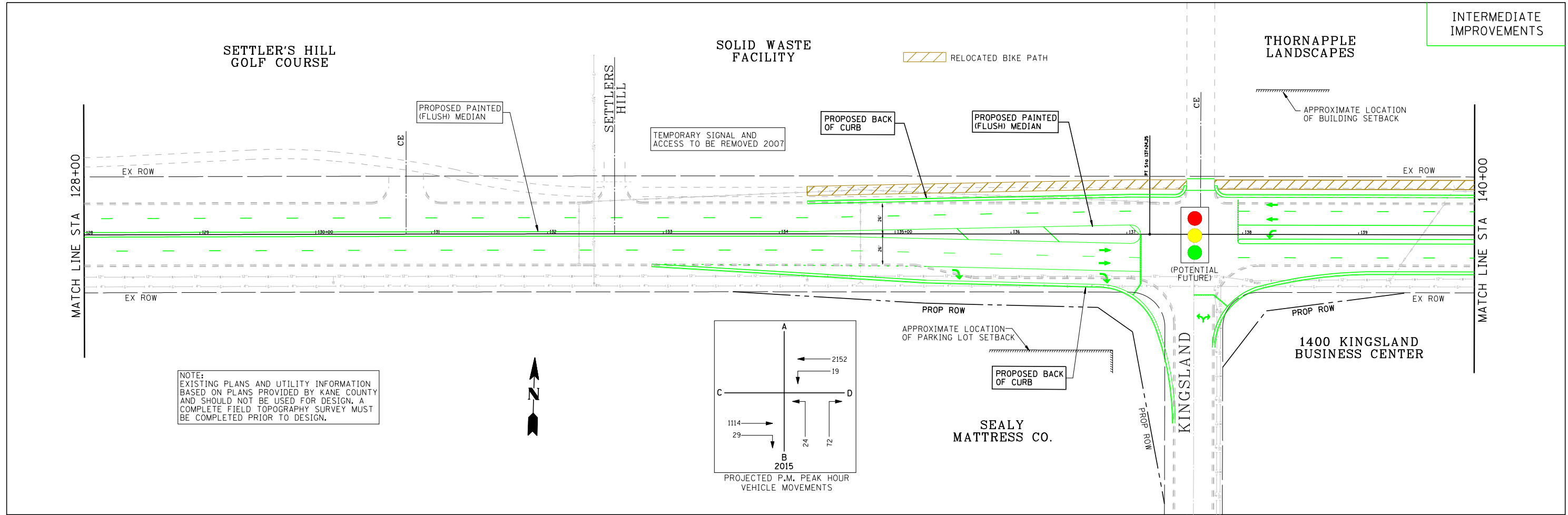
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INTERMEDIATE IMPROVEMENTS



LONG RANGE IMPROVEMENTS

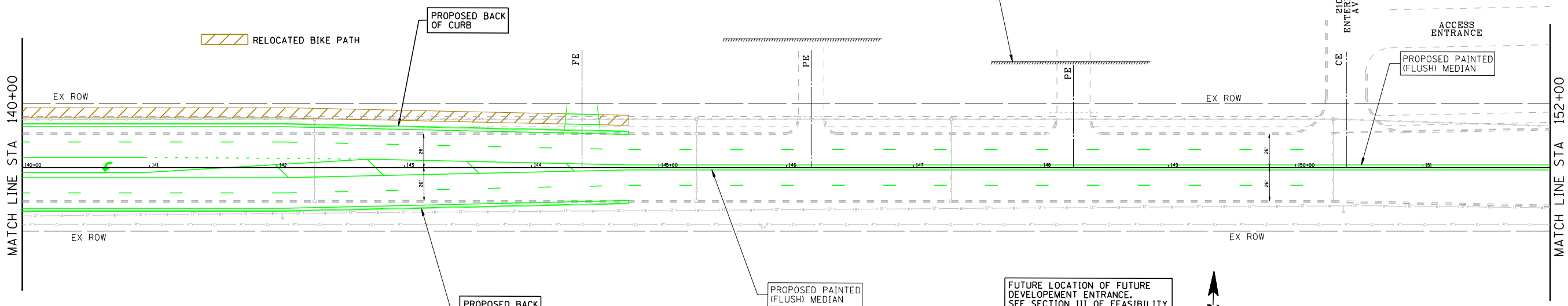
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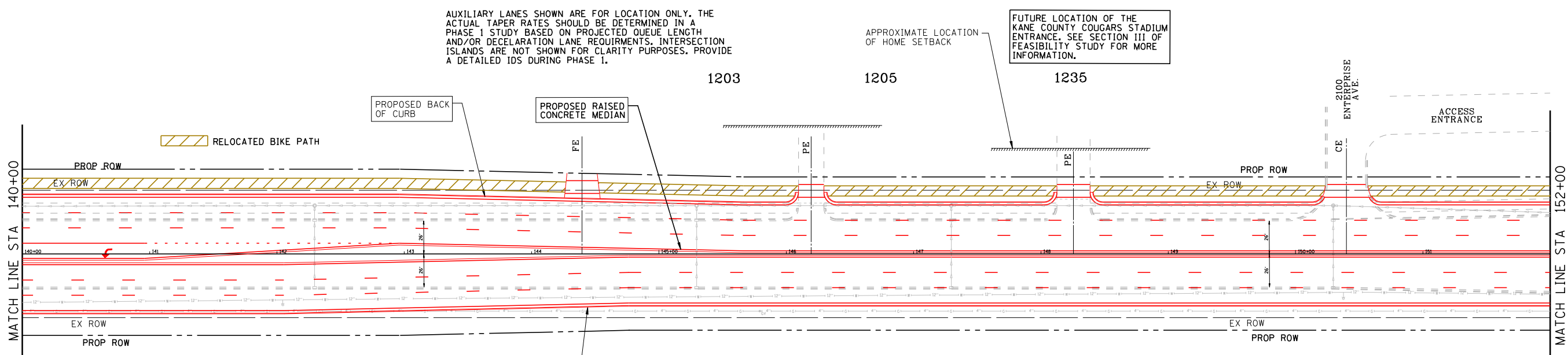
FUTURE LOCATION OF THE KANE COUNTY COUGARS STADIUM ENTRANCE. SEE SECTION III OF FEASIBILITY STUDY FOR MORE INFORMATION.

APPROXIMATE LOCATION OF HOME SETBACK



NOTE:
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FUTURE LOCATION OF FUTURE DEVELOPEMENT ENTRANCE. SEE SECTION III OF FEASIBILITY STUDY FOR MORE INFORMATION.



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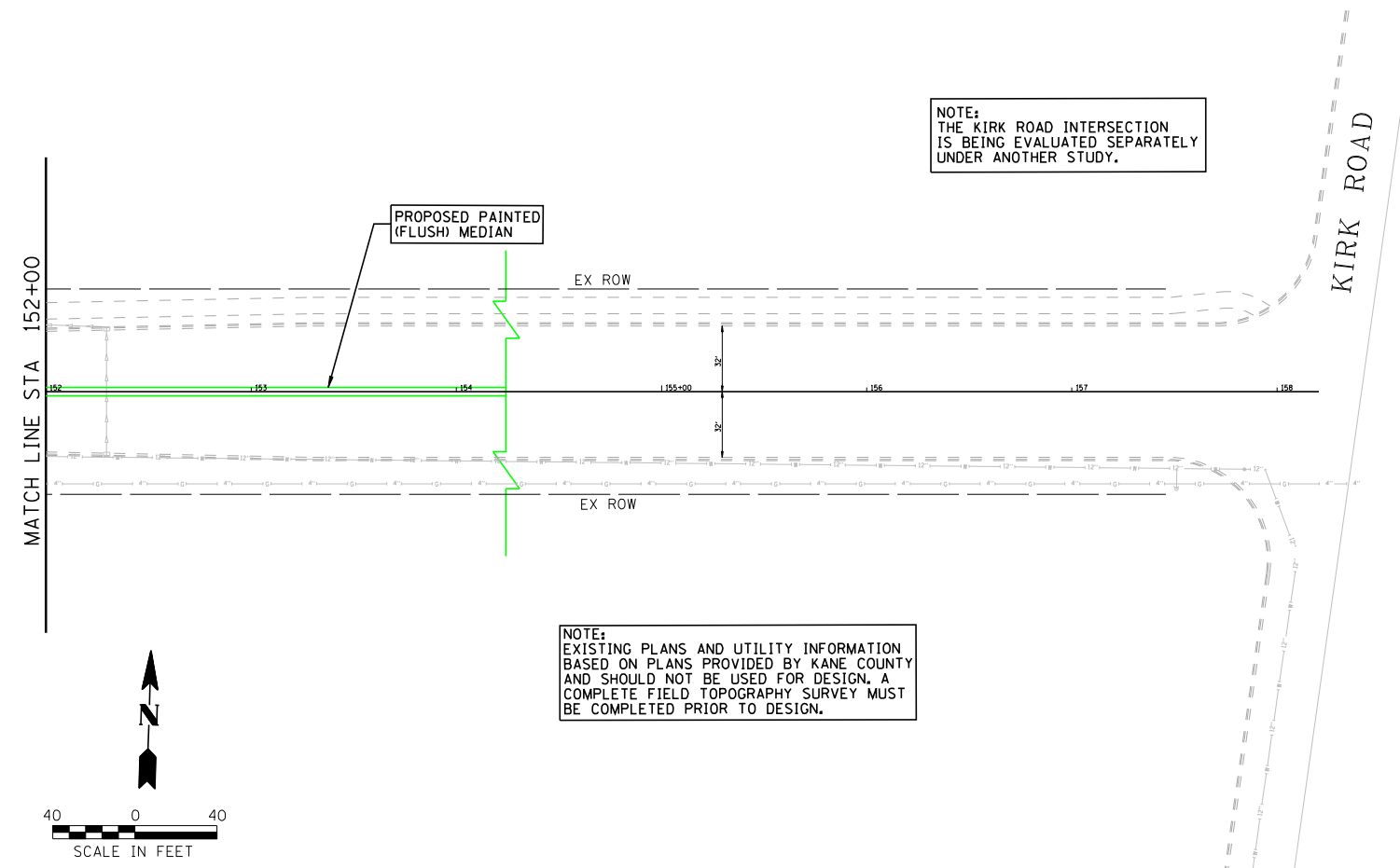
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LONG RANGE IMPROVEMENTS

FABYAN PARKWAY

INTERMEDIATE IMPROVEMENTS



LONG RANGE IMPROVEMENTS

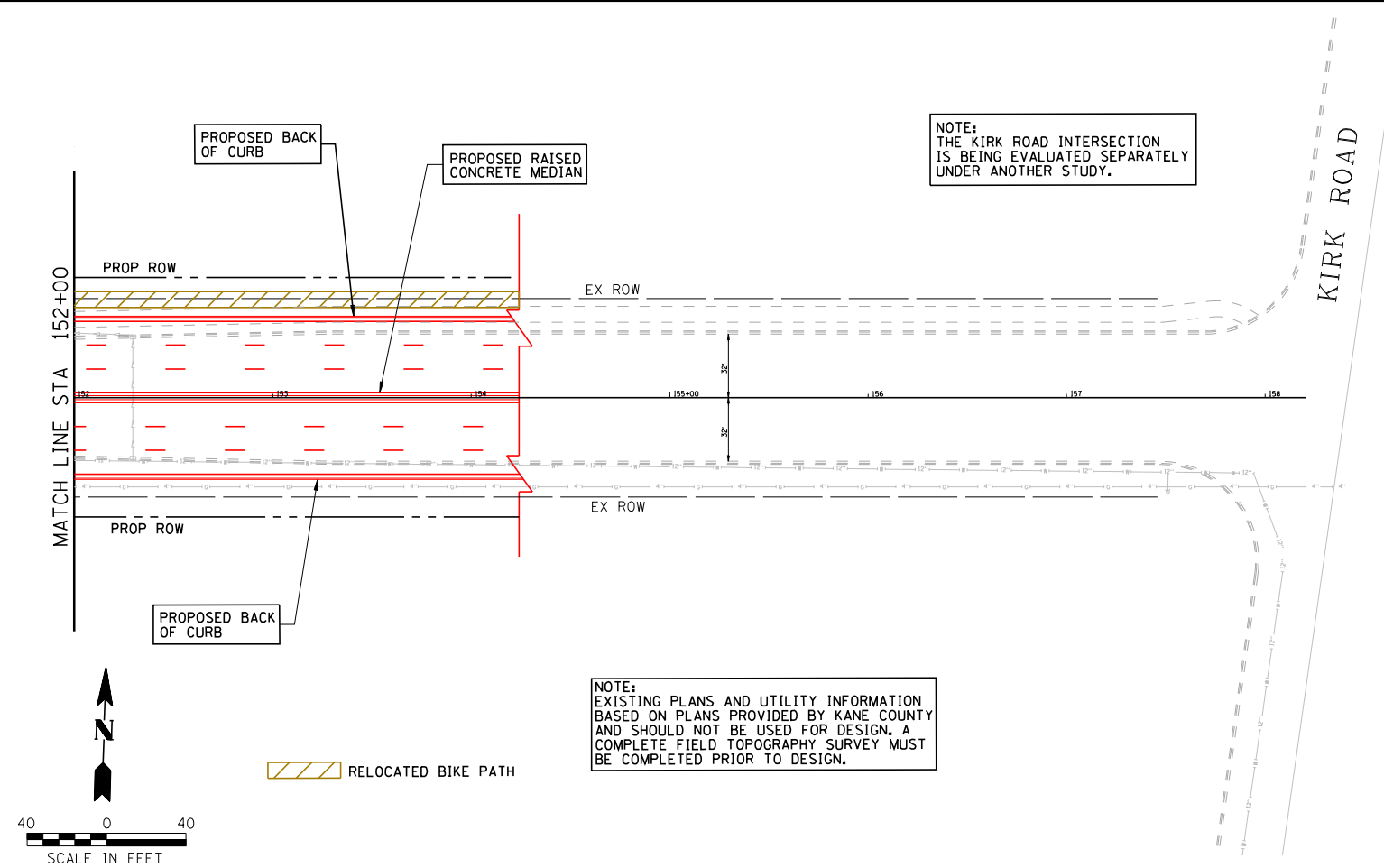
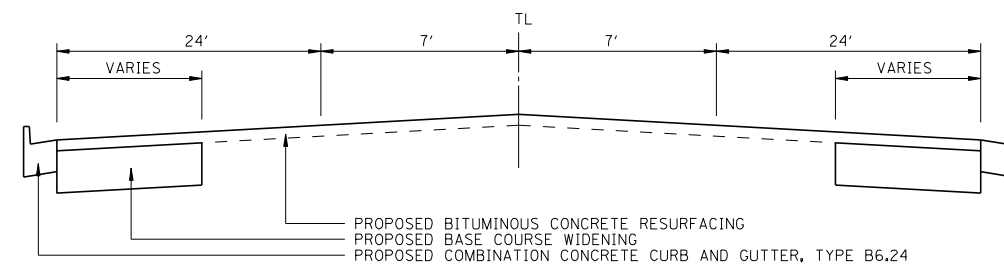


EXHIBIT 6

Intermediate Alternatives Typical Sections

S.A.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		KANE		1
		ILLINOIS		



PROPOSED TYPICAL SECTION

SHOWN FOR CONCEPTUAL
INFORMATION ONLY


KANE COUNTY DIVISION OF TRANSPORTATION FABYAN PARKWAY		
CONCEPT ALTERNATIVE TYPICAL SECTION		
DRAWN BY JJO DATE 8/20/03 CHECKED BY KNB	 2700 McGraw Drive Bloomington, Illinois 61704 308/883-8438, 308/883-1871 fax	FILE NO. 24-7161 BOOK NO. SHEET NO. OF

EXHIBIT 7

Intermediate Alternatives Plan Geometrics

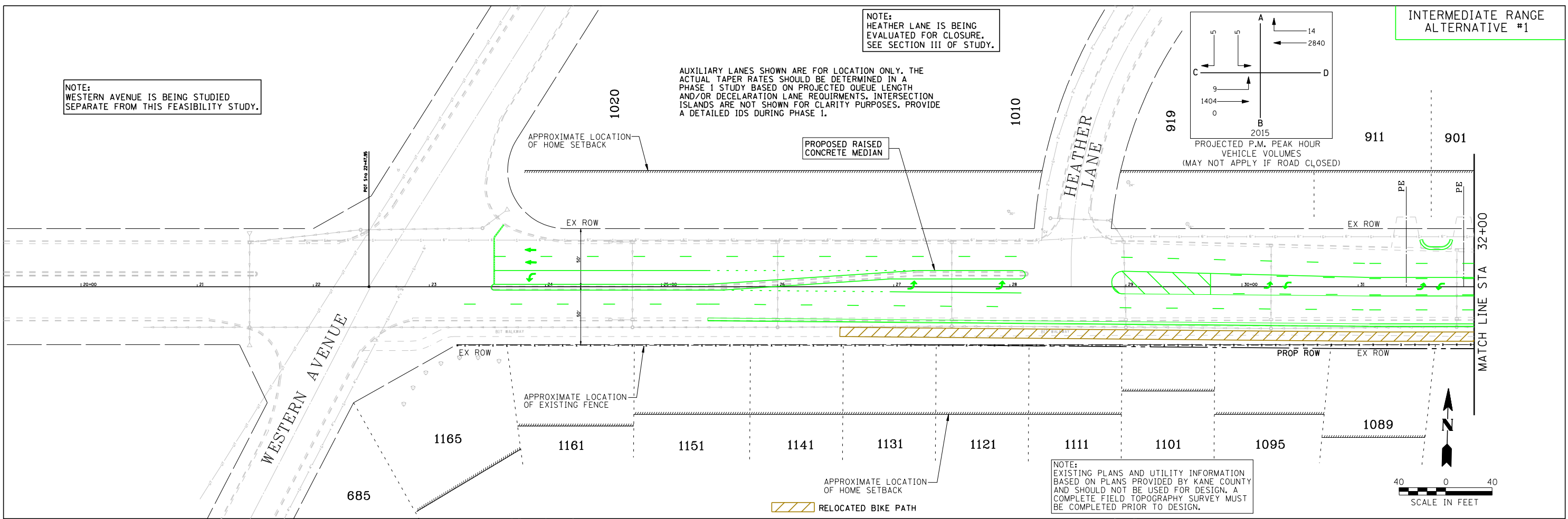
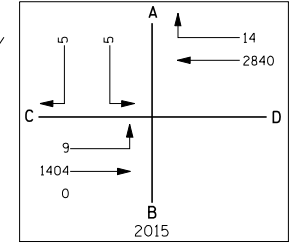
FABYAN PARKWAY

INTERMEDIATE RANGE
ALTERNATIVE #1

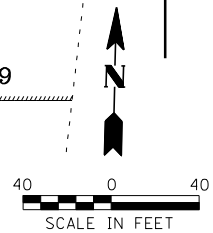
NOTE:
WESTERN AVENUE IS BEING STUDIED
SEPARATE FROM THIS FEASIBILITY STUDY.

NOTE:
HEATHER LANE IS BEING
EVALUATED FOR CLOSURE.
SEE SECTION III OF STUDY.

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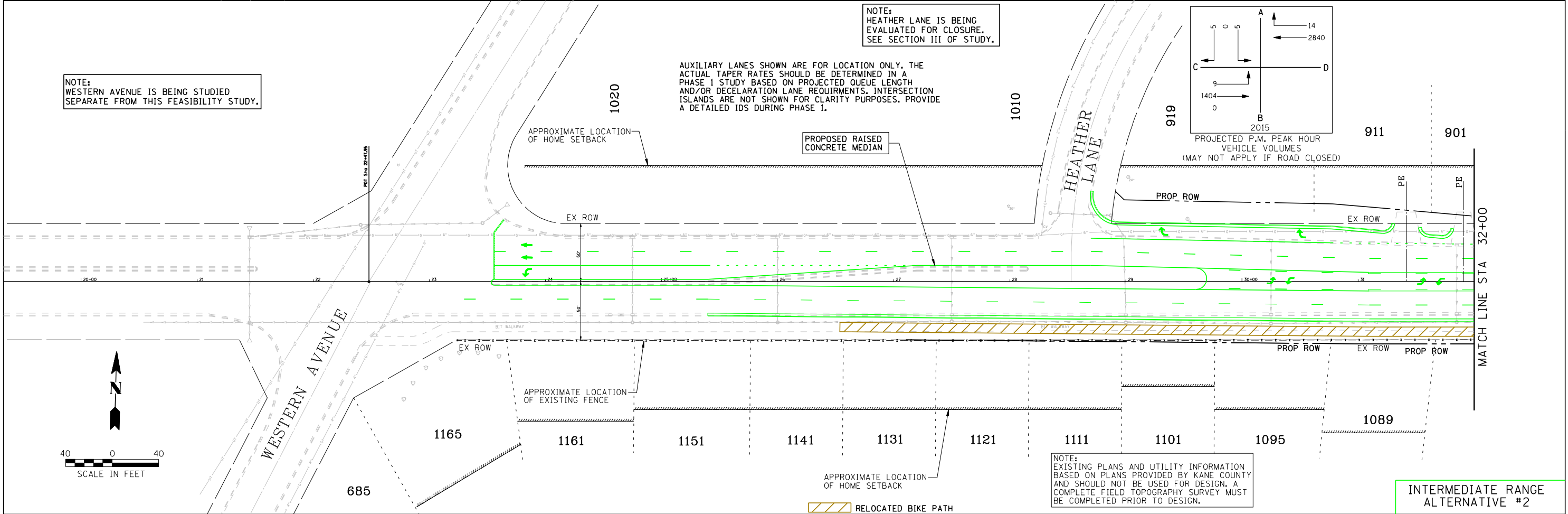
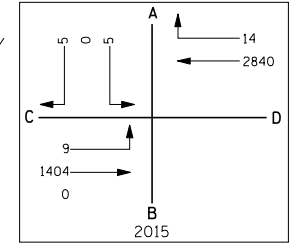


INTERMEDIATE RANGE
ALTERNATIVE #2

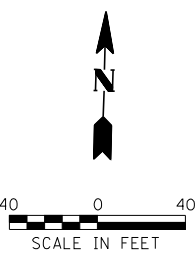
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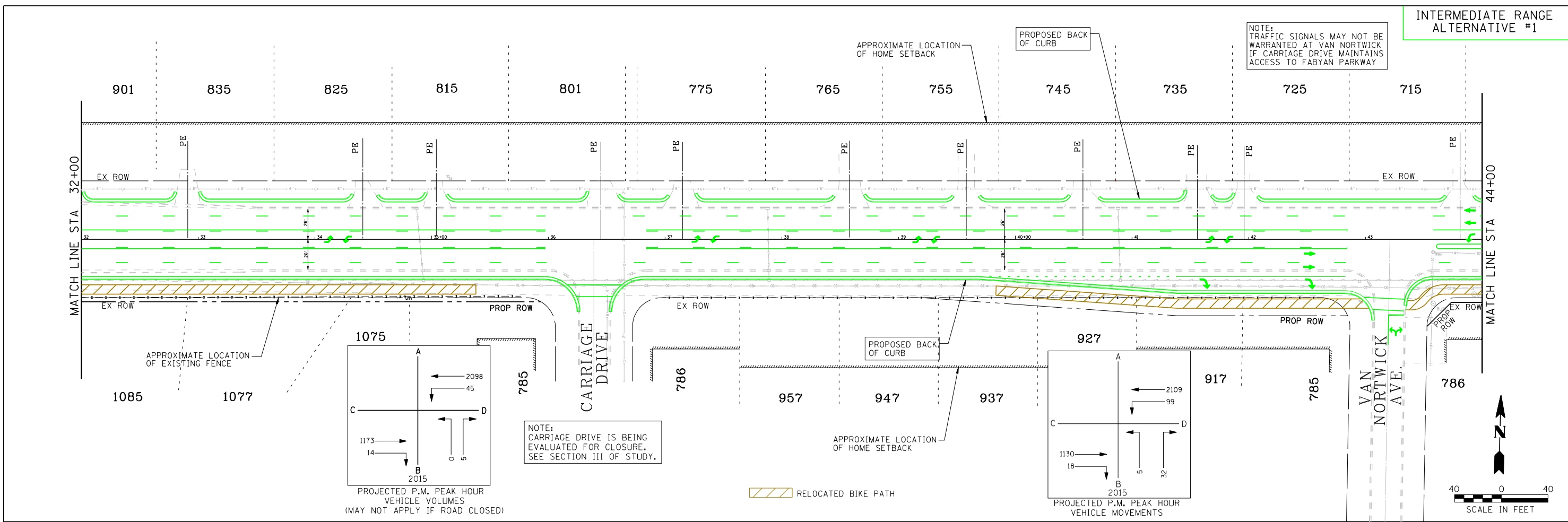


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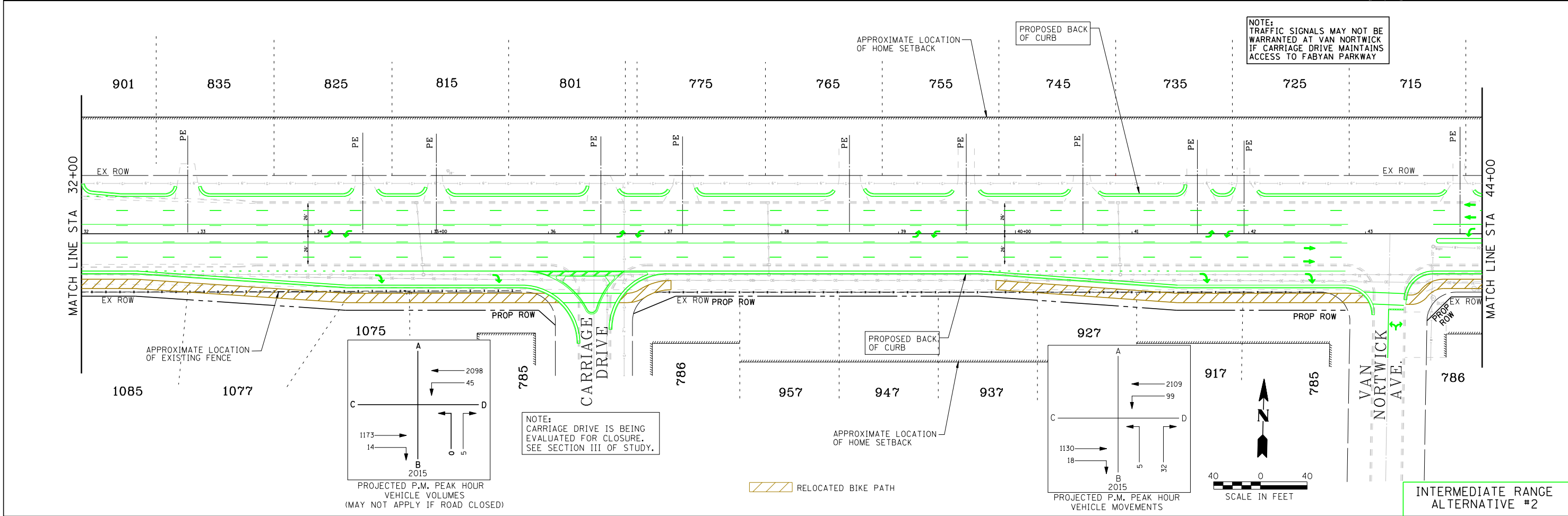


FABYAN PARKWAY

INTERMEDIATE RANGE ALTERNATIVE #1

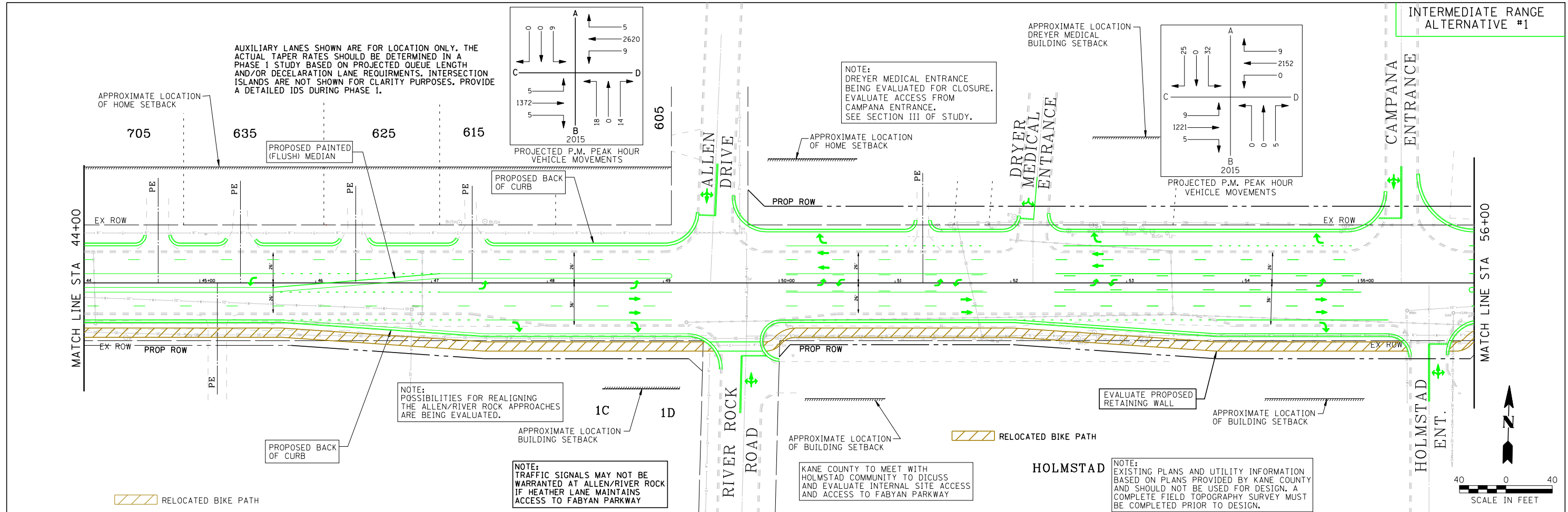


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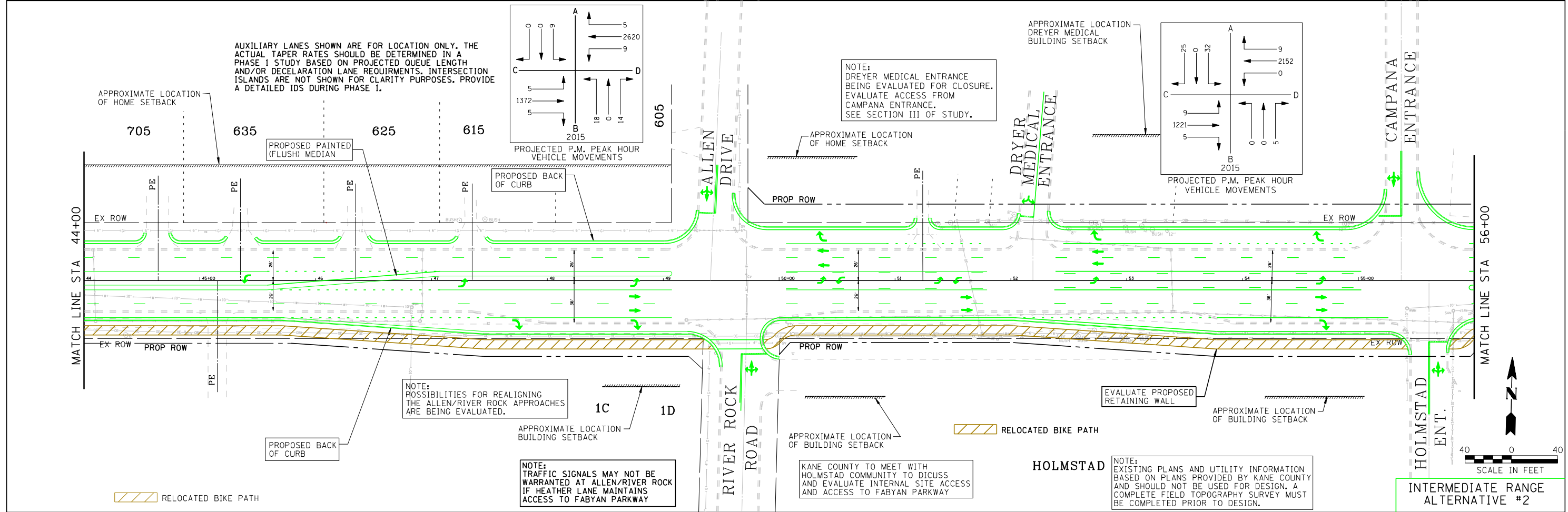


FABYAN PARKWAY

INTERMEDIATE RANGE ALTERNATIVE #1

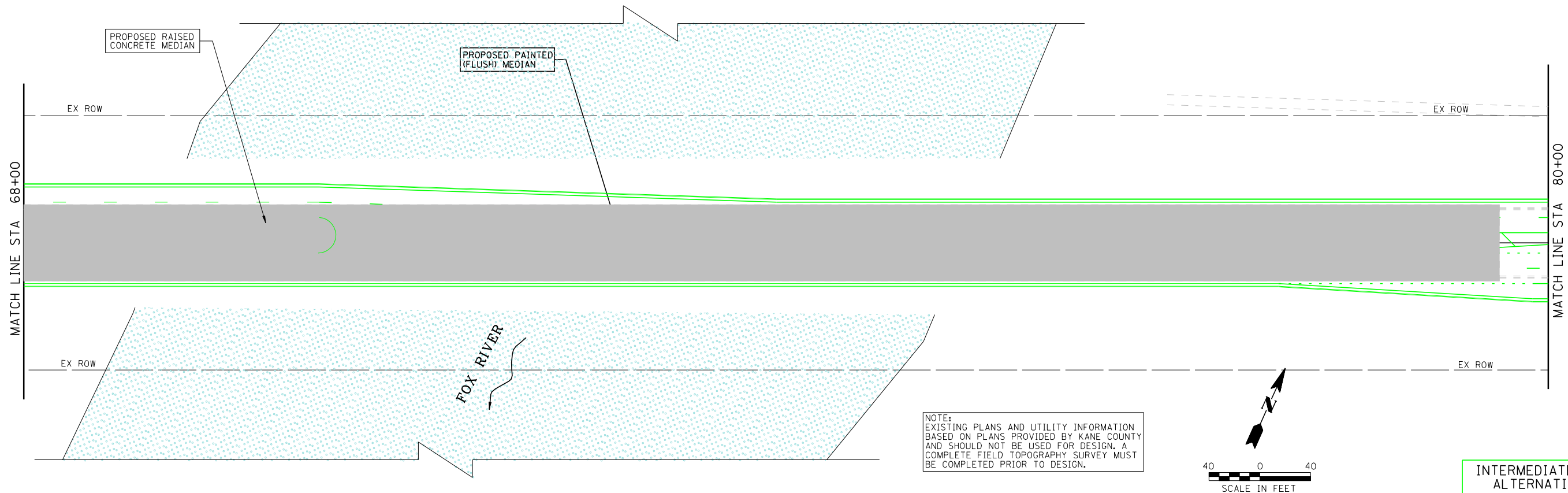
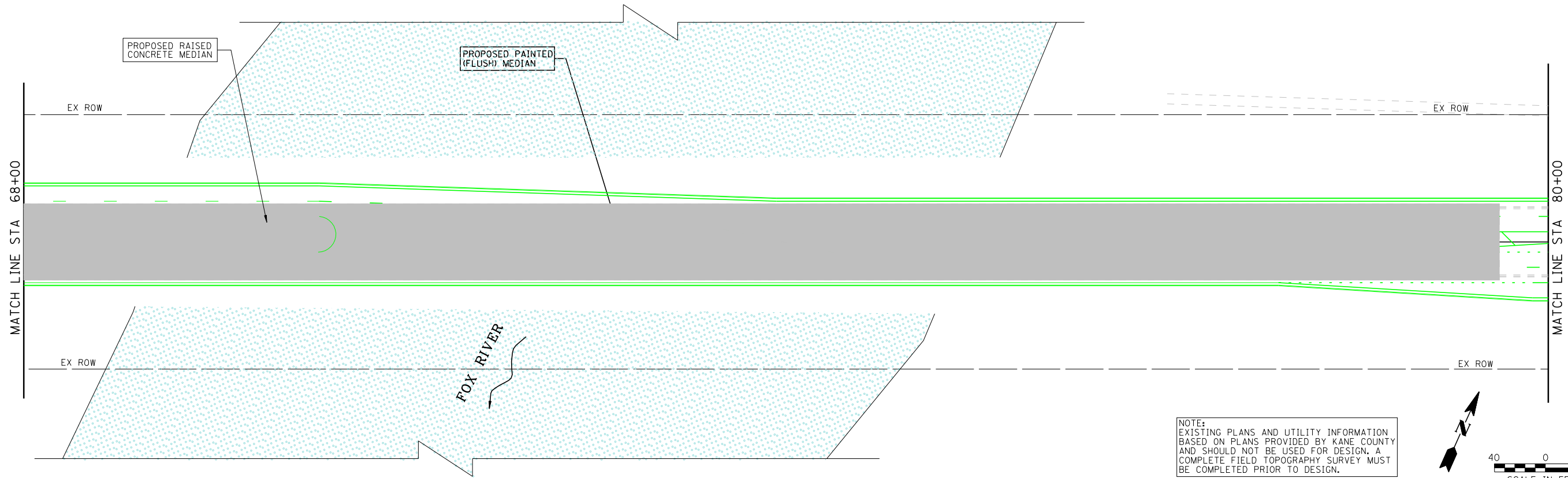


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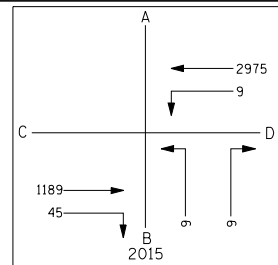
FABYAN PARKWAY

INTERMEDIATE RANGE
ALTERNATIVE #1

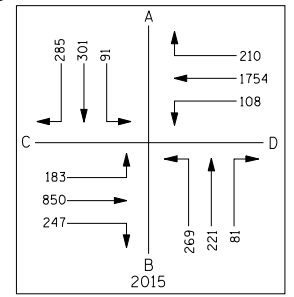
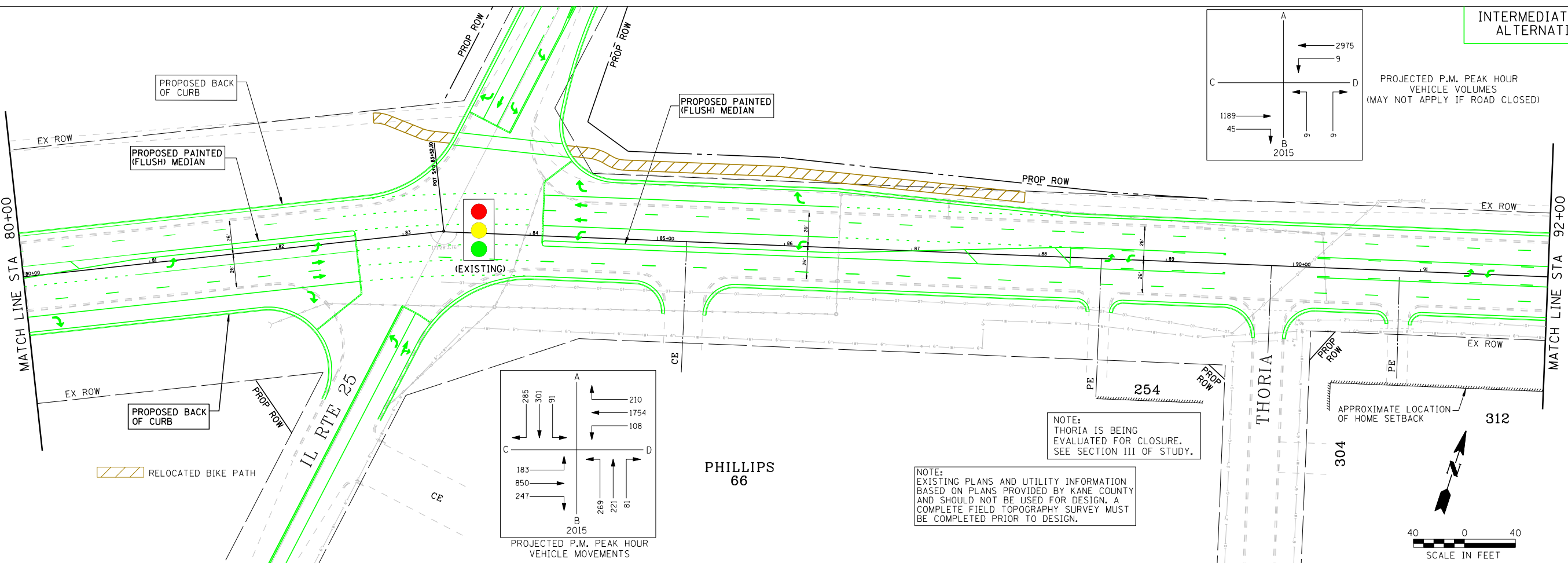


FABYAN PARKWAY

INTERMEDIATE RANGE
ALTERNATIVE #1



PROJECTED P.M. PEAK HOUR
VEHICLE VOLUMES
(MAY NOT APPLY IF ROAD CLOSED)



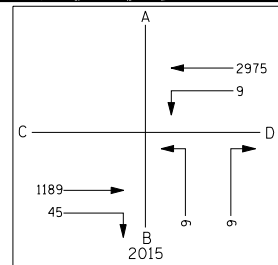
PROJECTED P.M. PEAK HOUR
VEHICLE MOVEMENTS

NOTE:
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SEE SECTION III OF STUDY.

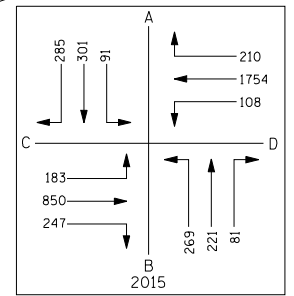
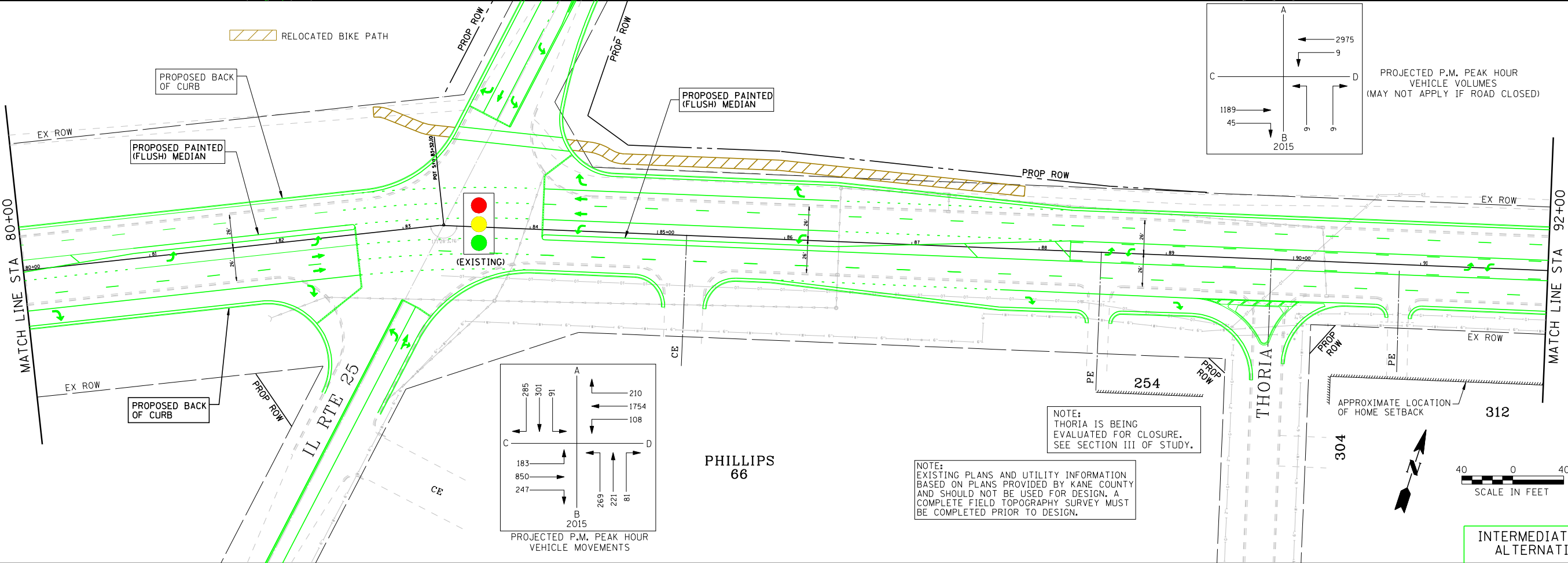
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INTERMEDIATE RANGE
ALTERNATIVE #2



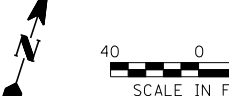
PROJECTED P.M. PEAK HOUR
VEHICLE VOLUMES
(MAY NOT APPLY IF ROAD CLOSED)



PROJECTED P.M. PEAK HOUR
VEHICLE MOVEMENTS

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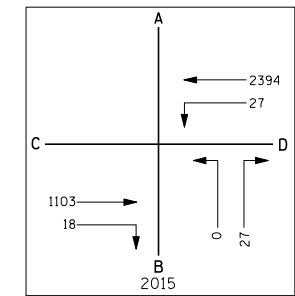
NOTE:
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COMPLETE FIELD TOPOGRAPHY SURVEY MUST
BE COMPLETED PRIOR TO DESIGN.



FABYAN PARKWAY

INTERMEDIATE RANGE
ALTERNATIVE #1

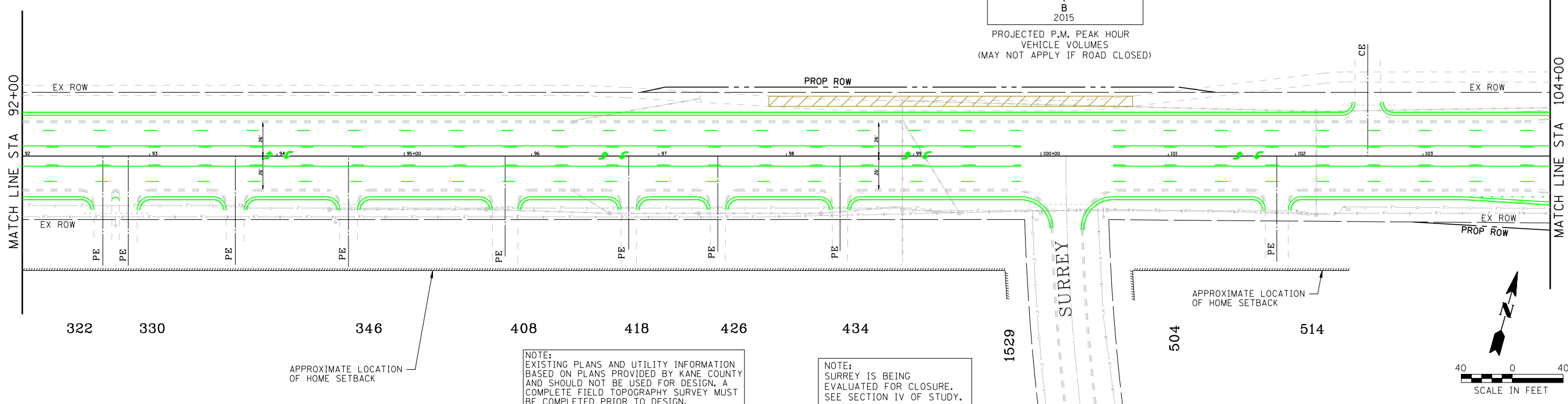
AUXILIARY LANES SHOWN ARE FOR LOCATION ONLY. THE ACTUAL TAPER RATES SHOULD BE DETERMINED IN A PHASE 1 STUDY BASED ON PROJECTED QUEUE LENGTH AND/OR DECELERATION LANE REQUIREMENTS. INTERSECTION ISLANDS ARE NOT SHOWN FOR CLARITY PURPOSES. PROVIDE A DETAILED IDS DURING PHASE 1.



PROJECTED P.M. PEAK HOUR
VEHICLE VOLUMES
(MAY NOT APPLY IF ROAD CLOSED)

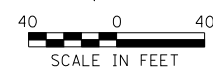
RELOCATED BIKE PATH

KANE COUNTY
JAIL

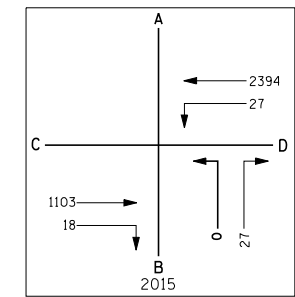


NOTE:
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NOTE:
SURREY IS BEING
EVALUATED FOR CLOSURE.
SEE SECTION IV OF STUDY.



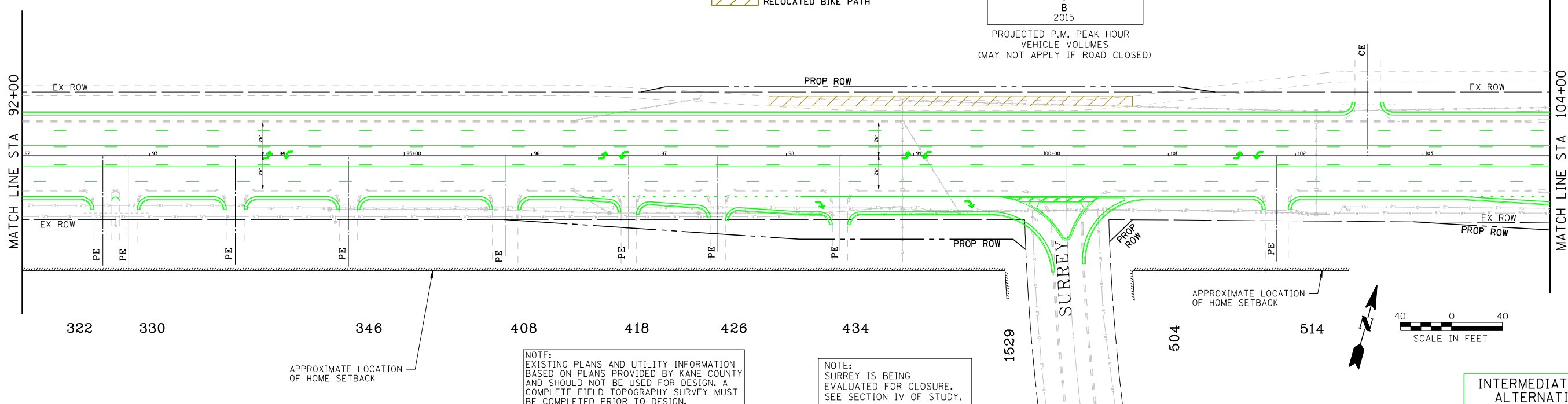
AUXILIARY LANES SHOWN ARE FOR LOCATION ONLY. THE ACTUAL TAPER RATES SHOULD BE DETERMINED IN A PHASE 1 STUDY BASED ON PROJECTED QUEUE LENGTH AND/OR DECELERATION LANE REQUIREMENTS. INTERSECTION ISLANDS ARE NOT SHOWN FOR CLARITY PURPOSES. PROVIDE A DETAILED IDS DURING PHASE 1.



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VEHICLE VOLUMES
(MAY NOT APPLY IF ROAD CLOSED)

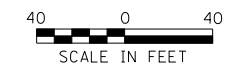
RELOCATED BIKE PATH

KANE COUNTY
JAIL



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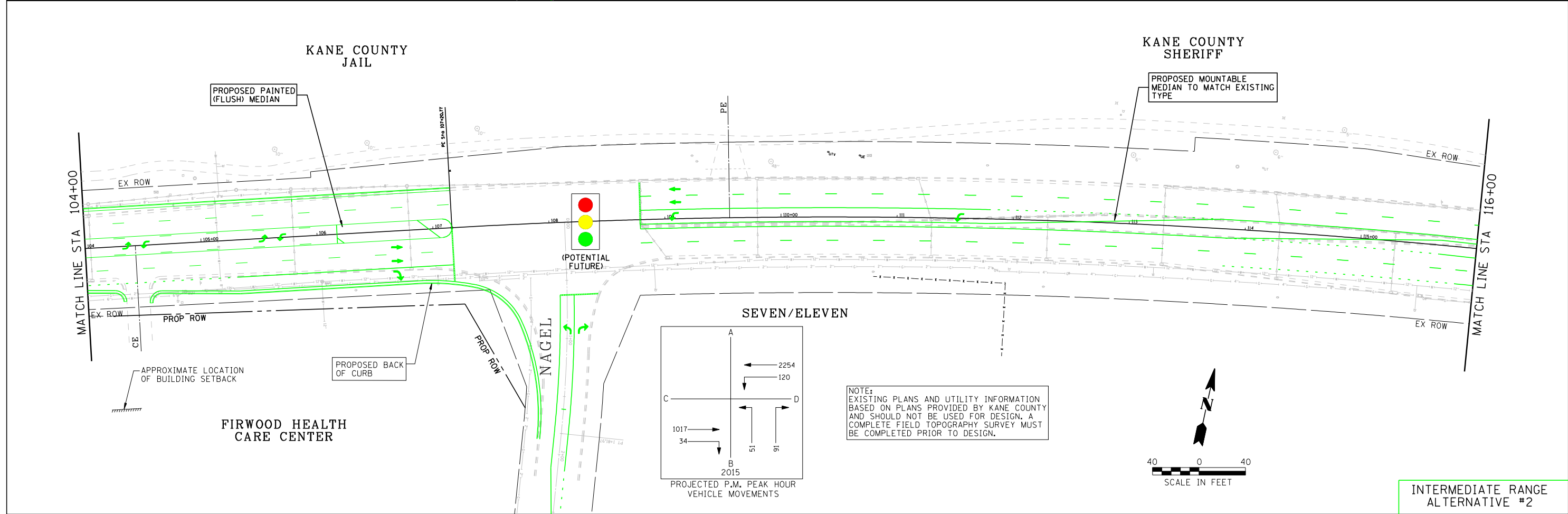
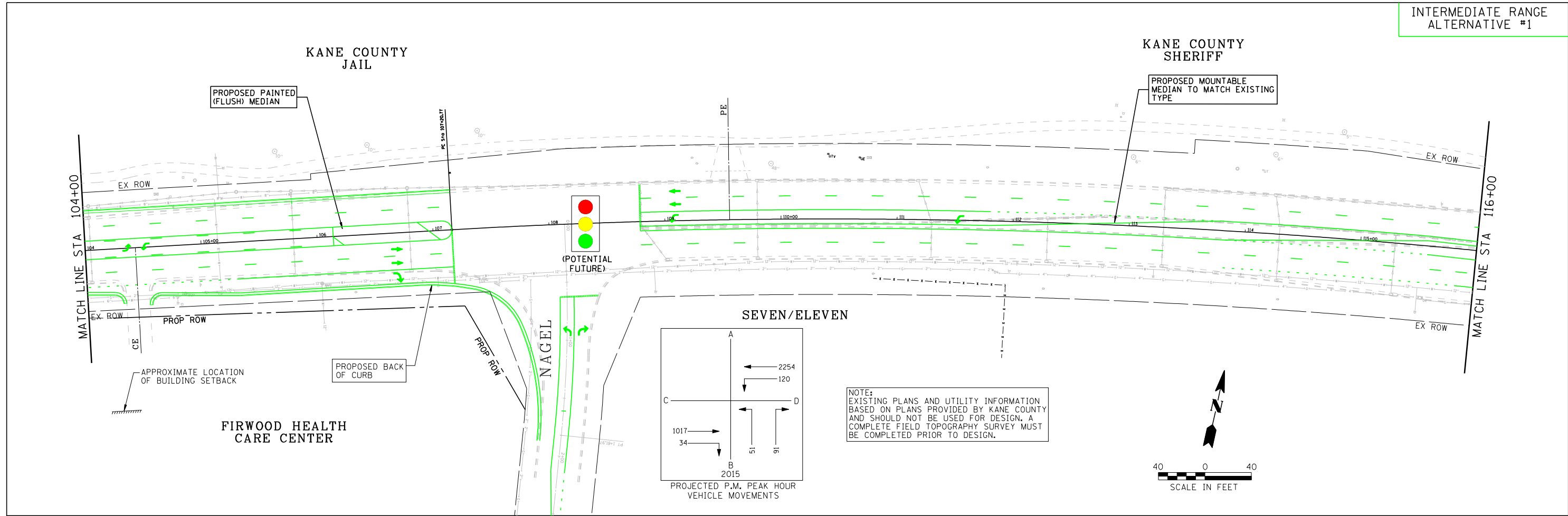
NOTE:
SURREY IS BEING
EVALUATED FOR CLOSURE.
SEE SECTION IV OF STUDY.



INTERMEDIATE RANGE
ALTERNATIVE #2

FABYAN PARKWAY

INTERMEDIATE RANGE
ALTERNATIVE #1

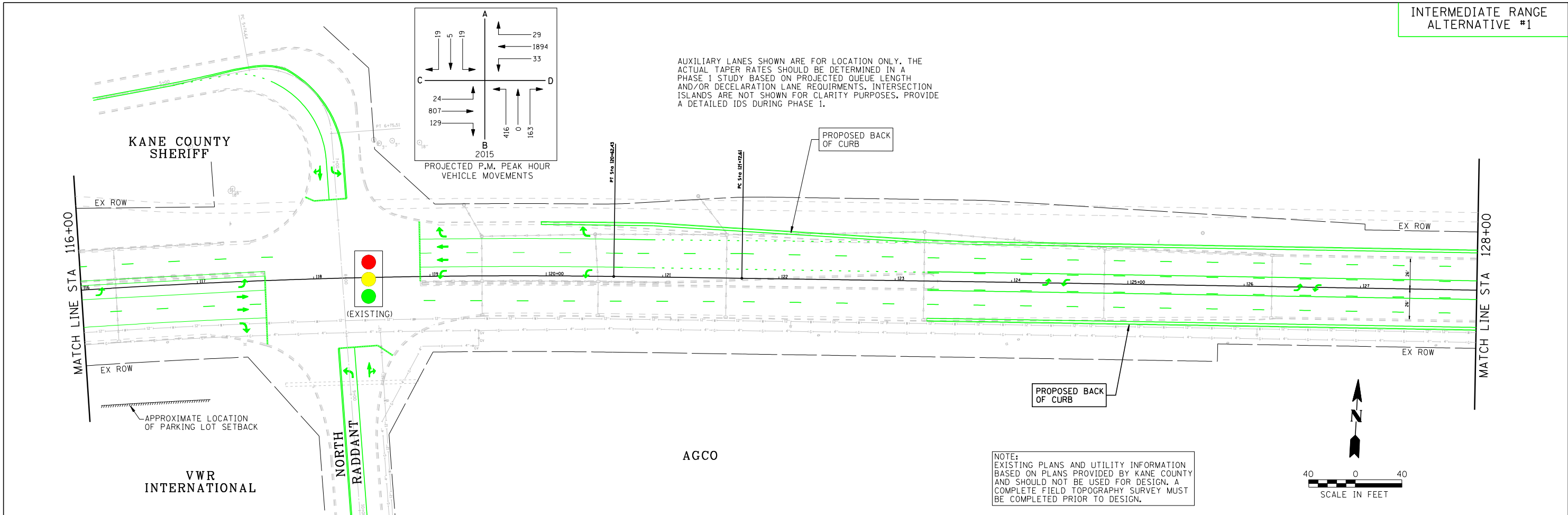
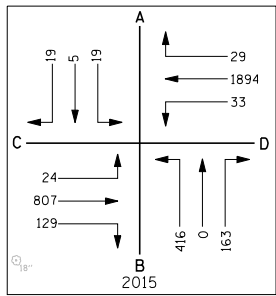


INTERMEDIATE RANGE
ALTERNATIVE #2

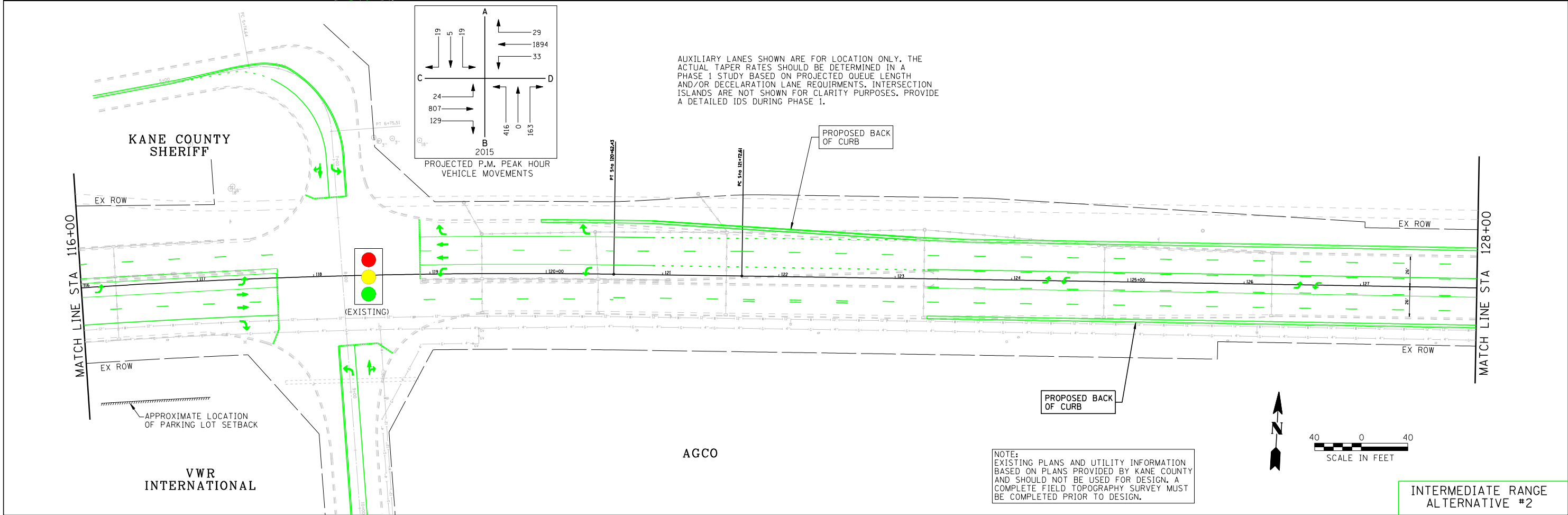
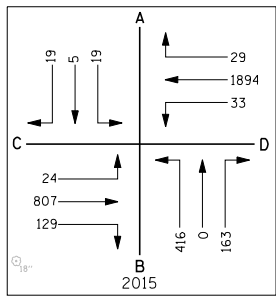
FABYAN PARKWAY

INTERMEDIATE RANGE
ALTERNATIVE #1

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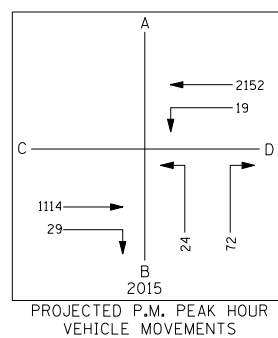
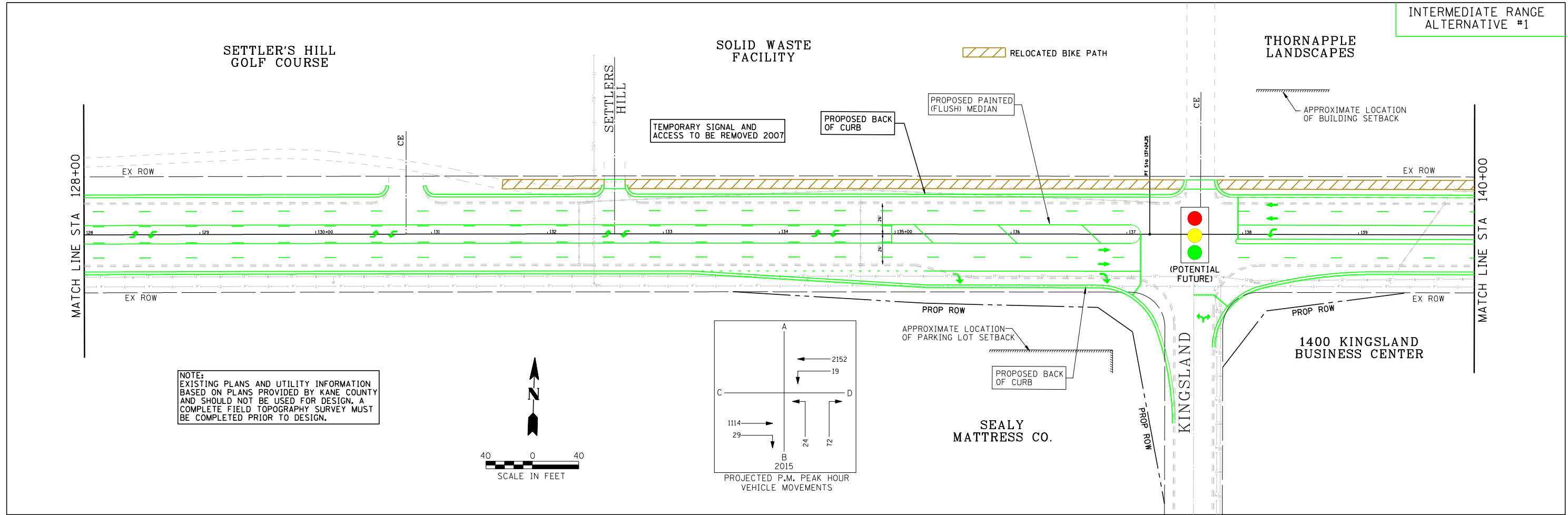
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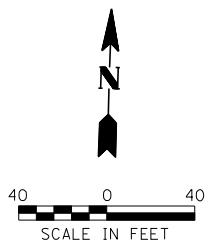
INTERMEDIATE RANGE
ALTERNATIVE #2

FABYAN PARKWAY

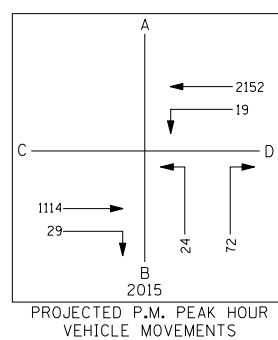
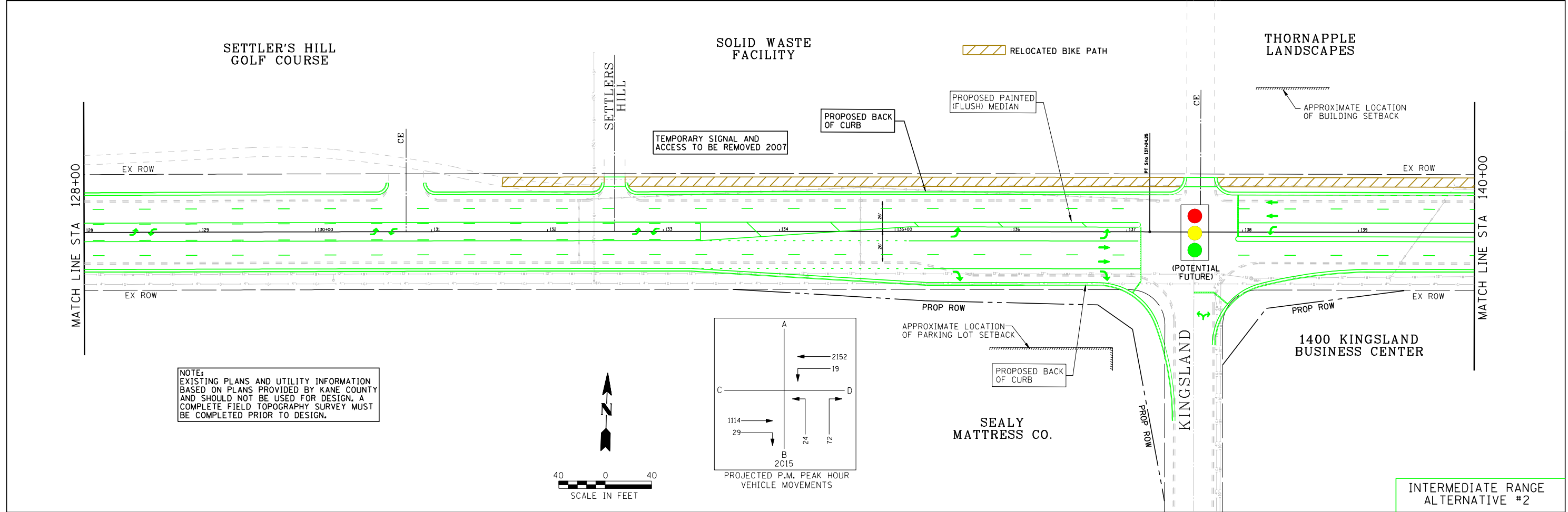
INTERMEDIATE RANGE
ALTERNATIVE #1



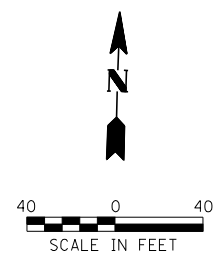
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INTERMEDIATE RANGE
ALTERNATIVE #2



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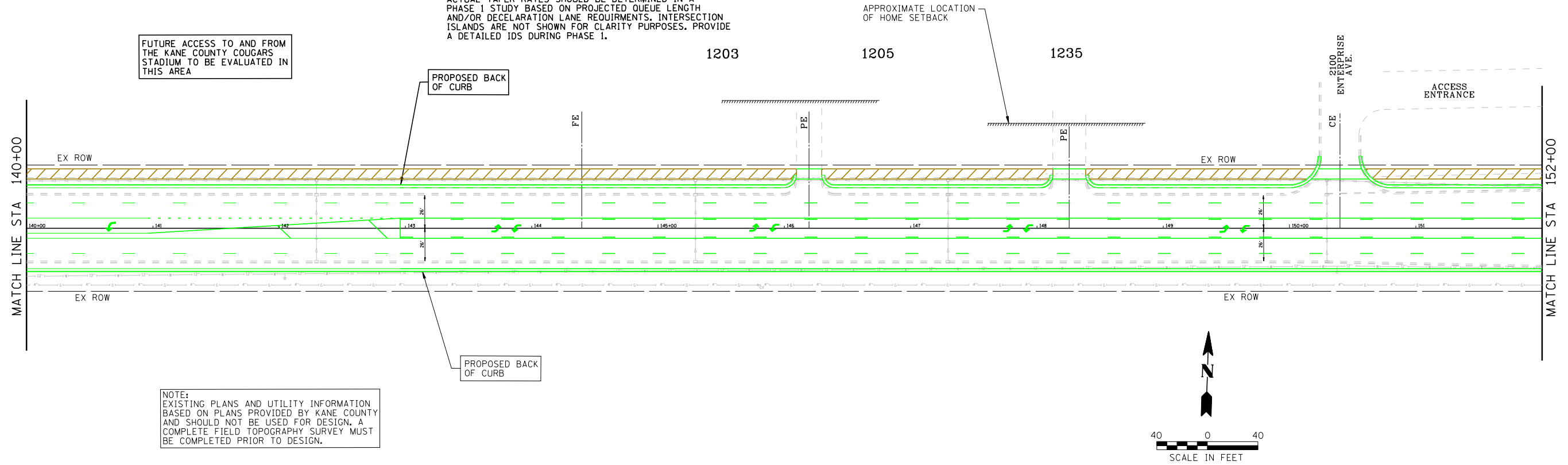


FABYAN PARKWAY

INTERMEDIATE RANGE
ALTERNATIVE #1

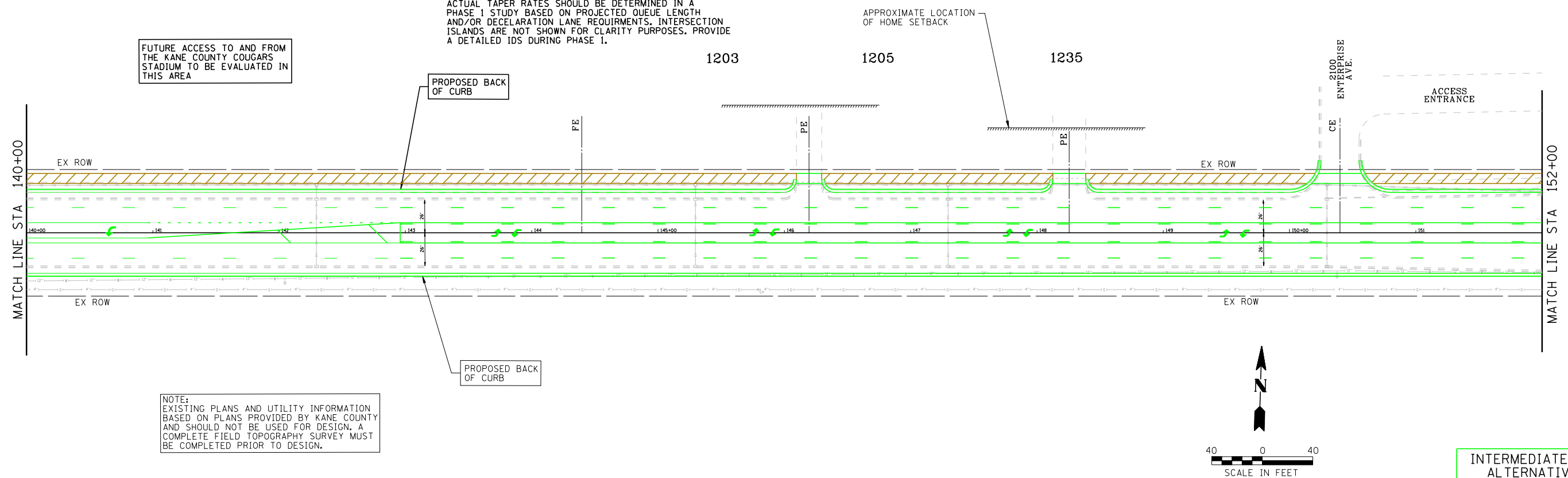
AUXILIARY LANES SHOWN ARE FOR LOCATION ONLY. THE ACTUAL TAPER RATES SHOULD BE DETERMINED IN A PHASE 1 STUDY BASED ON PROJECTED QUEUE LENGTH AND/OR DECELERATION LANE REQUIREMENTS. INTERSECTION ISLANDS ARE NOT SHOWN FOR CLARITY PURPOSES. PROVIDE A DETAILED IDS DURING PHASE 1.

FUTURE ACCESS TO AND FROM THE KANE COUNTY COUGARS STADIUM TO BE EVALUATED IN THIS AREA



AUXILIARY LANES SHOWN ARE FOR LOCATION ONLY. THE ACTUAL TAPER RATES SHOULD BE DETERMINED IN A PHASE 1 STUDY BASED ON PROJECTED QUEUE LENGTH AND/OR DECELERATION LANE REQUIREMENTS. INTERSECTION ISLANDS ARE NOT SHOWN FOR CLARITY PURPOSES. PROVIDE A DETAILED IDS DURING PHASE 1.

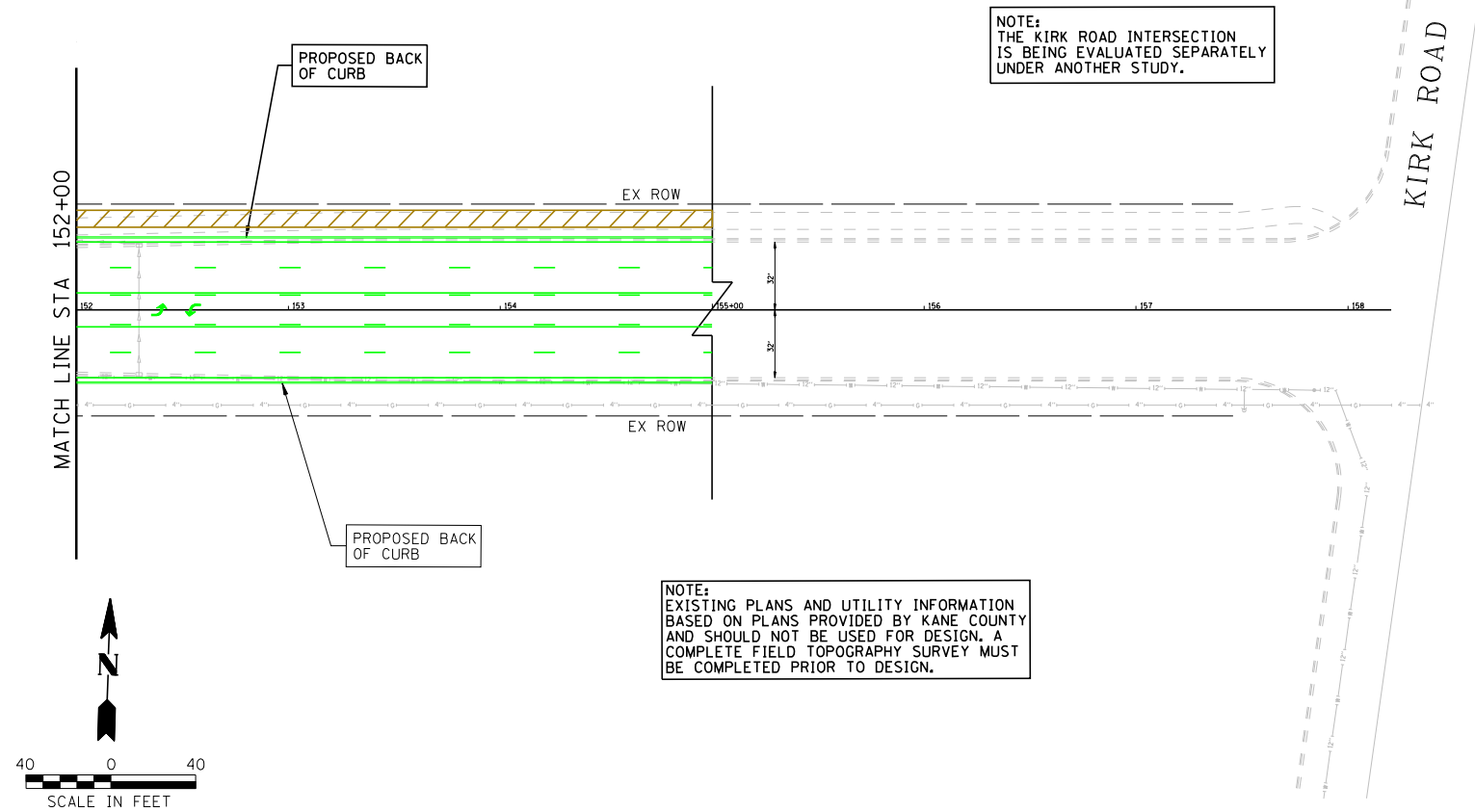
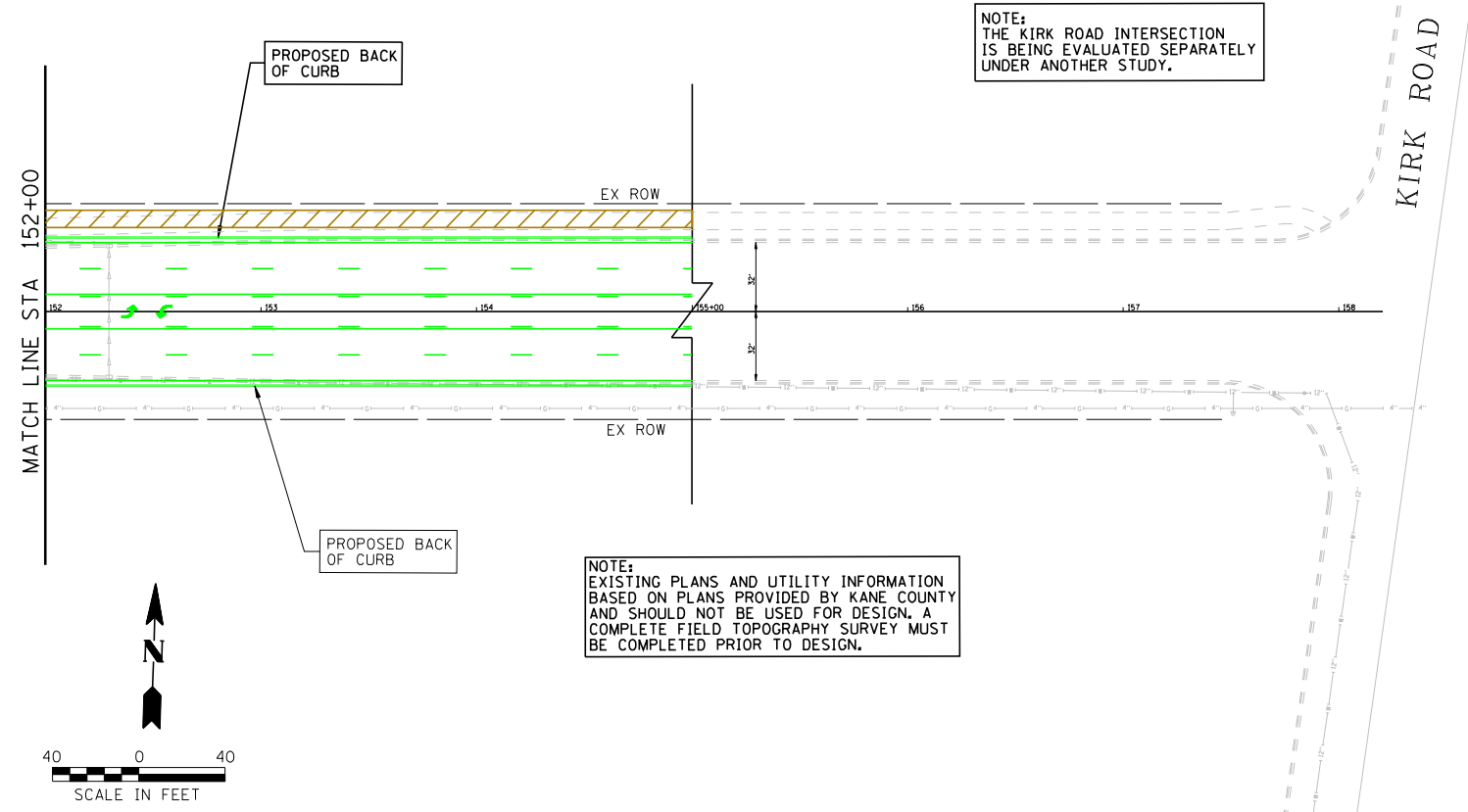
FUTURE ACCESS TO AND FROM THE KANE COUNTY COUGARS STADIUM TO BE EVALUATED IN THIS AREA



INTERMEDIATE RANGE
ALTERNATIVE #2

FABYAN PARKWAY

INTERMEDIATE RANGE
ALTERNATIVE #1



INTERMEDIATE RANGE
ALTERNATIVE #2

EXHIBIT 8

Summary of Intermediate and Long Range Improvements
and Geometrics

INTERSECTION	2015 GEOMETRICS & IMPROVEMENTS	2025 GEOMETRICS & IMPROVEMENTS
Heather Lane	Closed; All Traffic to Allen Road (Worst Case)	Closed; All Traffic to Allen Road (Worst Case)
Carriage Drive	Closed; All Traffic to Van Nortwick	Closed; All Traffic to Van Nortwick
Van Nortwick Avenue	(2) Eastbound Through (1) Eastbound Right (1) Westbound Left (2) Westbound Through (1) Northbound Combination Left and Right Traffic Signal Optimized Timings, LOS A 3.8 seconds delay	(3) Eastbound Through (1) Eastbound Right (1) Westbound Left (3) Westbound Through (1) Northbound Combination Left and Right Optimized Timings, LOS A, 3.9 seconds delay
Allen Road/River Rock	(1) Eastbound Left (2) Eastbound Through (1) Eastbound Right (1) Westbound Left (2) Westbound Through (1) Westbound Right (1) Northbound Combination Through, Right & Left (1) Southbound Combination Through, Right & Left Traffic Signal Optimized Timings, LOS B, 13.1 seconds delay	(1) Eastbound Left (3) Eastbound Through (1) Eastbound Right (1) Westbound Left (3) Westbound Through (1) Westbound Right (1) Northbound Combination Through, Right & Left (1) Southbound Combination Through, Right & Left Optimized Timings, LOS A, 5.5 seconds delay
Dreyer Medical	Closed or Share with Campana or: (1) Eastbound Left (2) Eastbound Through (2) Westbound Through (1) Westbound Right (1) Southbound Combination Left and Right Stop Controlled	Closed - Share with Campana Traffic Added to Campana
Campana/Holmstad	(1) Eastbound Left (2) Eastbound Through (1) Eastbound Right (1) Westbound Left (2) Westbound Through (1) Westbound Right (1) Northbound Combination Through, Right & Left (1) Southbound Combination Through, Right & Left Stop Controlled	(1) Eastbound Left (3) Eastbound Through (1) Eastbound Right (1) Westbound Left (3) Westbound Through (1) Westbound Right (1) Northbound Combination Through, Right & Left (1) Southbound Combination Through, Right & Left Traffic Signal Optimized Timings, LOS A, 6.8 seconds delay
IL 31	(2) Eastbound Left (2) Eastbound Through (1) Eastbound Right (2) Westbound Left (2) Westbound Through (1) Westbound Right (1) Northbound Left (2) Northbound Through (1) Northbound Right (1) Southbound Left (2) Southbound Through (1) Southbound Right Optimized Timings, LOS D, 35.7 seconds delay	(2) Eastbound Left (3) Eastbound Through (1) Eastbound Right (2) Westbound Left (3) Westbound Through (1) Westbound Right (2) Northbound Left (2) Northbound Through (1) Northbound Right (2) Southbound Left (2) Southbound Through (1) Southbound Right Optimized Timings, LOS D, 42.9 seconds delay

INTERSECTION	2015 GEOMETRICS & IMPROVEMENTS	2025 GEOMETRICS & IMPROVEMENTS
IL 25	(1) Eastbound Left (2) Eastbound Through (1) Eastbound Right (1) Westbound Left (2) Westbound Through (1) Westbound Right (1) Northbound Left (1) Northbound Combination Through and Right (1) Southbound Left (1) Southbound Through (1) Southbound Right Optimized Timings, LOS D, 39.3 seconds delay	(2) Eastbound Left (3) Eastbound Through (1) Eastbound Right (2) Westbound Left (3) Westbound Through (1) Westbound Right (2) Northbound Left (2) Northbound Through (1) Northbound Right (2) Southbound Left (2) Southbound Through (1) Southbound Right Optimized Timings, LOS C, 34.7seconds delay
Thoria Road	Closed; All Traffic to Nagel	Closed; All Traffic to Nagel
Surrey Road	Closed; All Traffic to Nagel	Closed; All Traffic to Nagel
Nagel Boulevard	(2) Eastbound Through (1) Eastbound Right (1) Westbound Left (2) Westbound Through (1) Northbound Left (1) Northbound Right Traffic Signal Optimized Timings, LOS A, 6.2 seconds delay	(3) Eastbound Through (1) Eastbound Right (1) Westbound Left (3) Westbound Through (1) Northbound Left (1) Northbound Right Optimized Timings, LOS A, 6.0 seconds delay
North Raddant Road	(1) Eastbound Left (2) Eastbound Through (1) Eastbound Right (1) Westbound Left (2) Westbound Through (1) Westbound Right (1) Northbound Left (1) Northbound Combination Through and Right (1) Southbound Left (1) Southbound Combination Through and Right Optimized Timings, LOS B, 16.3 seconds delay	(1) Eastbound Left (3) Eastbound Through (1) Eastbound Right (1) Westbound Left (3) Westbound Through (1) Westbound Right (2) Northbound Left (1) Northbound Combination Through and Right (1) Southbound Left (1) Southbound Combination Through and Right Optimized Timings, LOS B, 16.3 seconds delay
Settler's Hill	Closed	Closed
Kingsland	(2) Eastbound Through (1) Eastbound Right (1) Westbound Left (2) Westbound Through (1) Northbound Combination Left and Right Traffic Signal Optimized Timings, LOS A, 4.4 seconds delay	(3) Eastbound Through (1) Eastbound Right (1) Westbound Left (3) Westbound Through (1) Northbound Combination Left and Right Optimized Timings, LOS A, 3.9 seconds delay

EXHIBIT 9

2015 Traffic Signal Timings

2: Fabyan Parkway & Van Nortwick Drive

5:00 pm Baseline

6/7/2004

Timings

Lane Group	→	↘	↙	←	↖
	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>NBL</u>
Lane Configurations	↑↑	↑	↑	↑↑	↑↑
Volume (vph)	1130	32	144	2109	5
Turn Type		Prot Pm+Pt			
Protected Phases	2	2	1	6	8
Permitted Phases			6		
Detector Phases	2	2	1	6	8
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	20.0	20.0	8.0	20.0	20.0
Total Split (s)	40.0	40.0	15.0	40.0	20.0
Total Split (%)	53%	53%	20%	53%	27%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes		
Recall Mode	Min	Min	None	Min	None
Act Effct Green (s)	40.6	40.6	54.0	53.9	8.3
Actuated g/C Ratio	0.68	0.68	0.85	0.90	0.13
v/c Ratio	0.45	0.03	0.36	0.63	0.19
Uniform Delay, d1	5.3	0.0	0.9	1.9	3.2
Percentile Delay	6.0	3.0	3.3	2.5	9.9
Percentile LOS	A	A	A	A	A

Cycle Length: 75

Actuated Cycle Length: 60.1

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Total Lost Time: 6

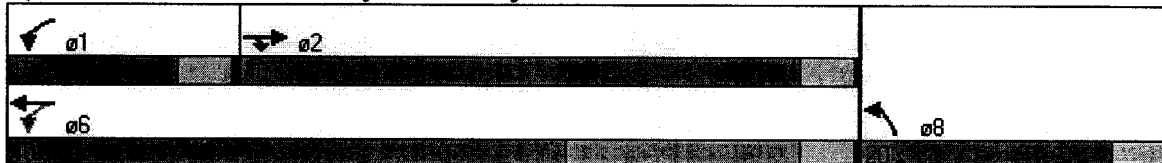
Sum of Critical v/s Ratios: 0.59

Intersection v/c Ratio: 0.64

Intersection Percentile Signal Delay: 3.8

Intersection Percentile LOS: A

Splits and Phases: 2: Fabyan Parkway & Van Nortwick Drive

















9: Fabyan Parkway & Allen Drive

5:00 pm Baseline

6/7/2004

Timings

							
<u>Lane Group</u>	<u>EBL</u>	<u>EBT</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>NBT</u>	<u>SBT</u>
Lane Configurations							
Volume (vph)	5	1372	9	2620	19	0	0
Turn Type	Pm+Pt		Pm+Pt		Prot		
Protected Phases	5	2	1	6	6	3	4
Permitted Phases	2		6				
Detector Phases	5	2	1	6	6	3	4
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	8.0	20.0	20.0	8.0	8.0
Total Split (s)	25.0	75.0	25.0	75.0	75.0	25.0	25.0
Total Split (%)	17%	50%	17%	50%	50%	17%	17%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	Min	None	None
Act Effct Green (s)	106.1	98.6	106.3	98.6	98.6	8.2	7.8
Actuated g/C Ratio	0.81	0.86	0.82	0.86	0.86	0.07	0.06
v/c Ratio	0.03	0.43	0.05	0.82	0.01	0.27	0.18
Uniform Delay, d1	1.6	3.9	1.6	8.3	1.6	31.4	42.2
Percentile Delay	4.2	4.3	4.2	17.5	3.7	29.2	36.5
Percentile LOS	A	A	A	B	A	C	D

Cycle Length: 150

Actuated Cycle Length: 115

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Total Lost Time: 12







Sum of Critical v/s Ratios: 0.73

Intersection v/c Ratio: 0.80

Intersection Percentile Signal Delay: 13.1

Intersection Percentile LOS: B

Splits and Phases: 9: Fabyan Parkway & Allen Drive

























 ø1	 ø2	 ø3	 ø4
 ø5	 ø6		

8: Fabyan Parkway & Illinois Route 31

5:00 pm Baseline

6/7/2004

Timings

												
<u>Lane Group</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>
Lane Configurations												
Volume (vph)	97	974	226	398	1625	183	183	441	226	231	812	301
Turn Type	Custom		Pt+Ov	Custom		Pt+Ov	Pm+Pt		Pt+Ov	Pm+Pt		Pt+Ov
Protected Phases	5	2	2 3	1	6	6 7	3	8	8 1	7	4	4 5
Permitted Phases	1			5			8			4		
Detector Phases	5	2	2 3	1	6	6 7	3	8	8 1	7	4	4 5
Minimum Initial (s)	3.0	14.0		3.0	14.0		3.0	14.0		3.0	14.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		8.0	20.0		8.0	20.0	
Total Split (s)	50.0	50.0	65.0	50.0	50.0	65.0	15.0	35.0	85.0	15.0	35.0	85.0
Total Split (%)	33%	33%	43%	33%	33%	43%	10%	23%	57%	10%	23%	57%
Yellow Time (s)	3.0	3.5		3.0	3.5		3.0	3.5		3.0	3.5	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0		0.0	2.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	Min		None	Min		None	Min		None	Min	
Act Effct Green (s)	18.1	42.6	57.7	18.1	53.4	68.5	42.2	31.1	53.3	42.2	31.1	42.5
Actuated g/C Ratio	0.15	0.36	0.48	0.15	0.45	0.58	0.35	0.26	0.45	0.35	0.26	0.36
v/c Ratio	0.40	0.73	0.27	0.76	0.97	0.20	0.81	0.45	0.31	0.77	0.83	0.52
Uniform Delay, d1	43.9	33.2	7.7	48.3	32.0	7.7	25.1	36.8	17.9	25.7	41.5	26.9
Percentile Delay	44.0	33.9	8.5	48.5	35.8	7.9	45.5	38.2	18.3	38.8	47.1	28.4
Percentile LOS	D	C	A	D	D	A	D	D	B	D	D	C

Cycle Length: 150

Actuated Cycle Length: 119

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Total Lost Time: 16

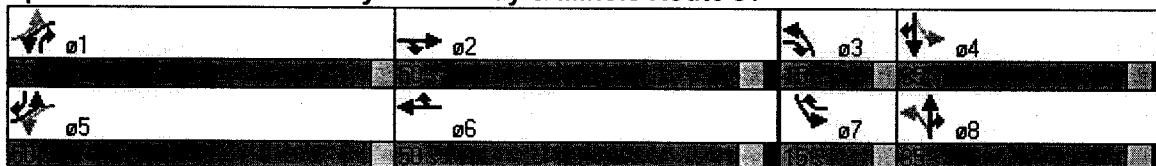
Sum of Critical v/s Ratios: 0.79

Intersection v/c Ratio: 0.88

Intersection Percentile Signal Delay: 35.7

Intersection Percentile LOS: D

Splits and Phases: 8: Fabyan Parkway & Illinois Route 31



15: Fabyan Parkway & Illinois Route 25

5:00 pm Baseline

6/7/2004

Timings

<u>Lane Group</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>NBL</u>	<u>NBT</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>
Lane Configurations											
Volume (vph)	183	850	247	108	1764	210	269	221	91	301	258
Turn Type	Pm+Pt		Pt+Ov	Pm+Pt		Pt+Ov	Pm+Pt		Pm+Pt		Pt+Ov
Protected Phases	5	2	2 3	1	6	6 7	3	8	7	4	4 5
Permitted Phases	2			6			8		4		
Detector Phases	5	2	2 3	1	6	6 7	3	8	7	4	4 5
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	15.0	3.0	15.0	
Minimum Split (s)	8.0	22.5		8.0	22.5		8.0	22.5	8.0	22.5	
Total Split (s)	17.5	74.5	94.0	17.5	74.5	94.0	19.5	38.5	19.5	38.5	56.0
Total Split (%)	12%	50%	63%	12%	50%	63%	13%	26%	13%	26%	37%
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	3.0	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0	0.0	2.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	
Recall Mode	None	Min		None	Min		None	Min	None	Min	
Act Effct Green (s)	87.5	75.4	94.9	79.9	71.1	84.7	50.9	37.6	41.7	31.7	48.3
Actuated g/C Ratio	0.60	0.52	0.65	0.55	0.49	0.58	0.35	0.26	0.29	0.22	0.33
v/c Ratio	0.87	0.44	0.23	0.35	0.97	0.22	0.88	0.61	0.41	0.71	0.48
Uniform Delay, d1	35.9	22.1	2.8	12.6	36.4	5.6	36.3	45.8	32.8	52.8	35.2
Percentile Delay	52.2	22.9	3.6	13.3	51.7	6.1	52.2	47.0	32.9	53.3	35.3
Percentile LOS	D	C	A	B	D	A	D	D	C	D	D

Cycle Length: 150

Actuated Cycle Length: 145.9

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Total Lost Time: 10.5

Sum of Critical v/s Ratios: 0.85

Intersection v/c Ratio: 0.92

Intersection Percentile Signal Delay: 39.3

Intersection Percentile LOS: D

Splits and Phases: 15: Fabyan Parkway & Illinois Route 25

17.5 s	74.5 s	19.5 s	38.5 s
17.5 s	74.5 s	19.5 s	38.5 s

34: Fabyan Parkway & Nagel

5:00 pm Baseline

6/7/2004

Timings

	→	↘	↙	←	↖	↗
<u>Lane Group</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>NBL</u>	<u>NBR</u>
Lane Configurations	↑↑	↑	↓	↑↑	↓	↑
Volume (vph)	1017	97	156	2254	60	127
Turn Type		Prot Pm+Pt				Prot
Protected Phases	2	2	1	6	8	8
Permitted Phases			6			
Detector Phases	2	2	1	6	8	8
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	20.0	20.0	8.0	20.0	8.0	8.0
Total Split (s)	40.0	40.0	20.0	40.0	15.0	15.0
Total Split (%)	53%	53%	27%	53%	20%	20%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	Min	Min	None	Min	None	None
Act Effct Green (s)	34.1	34.1	45.1	43.9	8.6	8.6
Actuated g/C Ratio	0.61	0.61	0.75	0.78	0.15	0.15
v/c Ratio	0.45	0.10	0.40	0.78	0.23	0.37
Uniform Delay, d1	6.8	0.0	1.7	4.0	22.5	0.0
Percentile Delay	8.3	2.3	3.8	5.2	20.4	5.3
Percentile LOS	A	A	A	A	C	A

Cycle Length: 75

Actuated Cycle Length: 56.3

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Total Lost Time: 6

Sum of Critical v/s Ratios: 0.66

Intersection v/c Ratio: 0.72

Intersection Percentile Signal Delay: 6.2

Intersection Percentile LOS: A

Splits and Phases: 34: Fabyan Parkway & Nagel

↙ ø1 20 s	→ ø2 40 s	
← ø6 40 s		↗ ø8 15 s

25: Fabyan Parkway & North Raddant Road

5:00 pm Baseline

6/7/2004

Timings

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Volume (vph)	24	807	129	33	1894	29	416	0	19	5
Turn Type	Pm+Pt		Pt+Ov	Pm+Pt		Pt+Ov	Pm+Pt		Pm+Pt	
Protected Phases	5	2	2 3	1	6	6 7	3	8	7	4
Permitted Phases	2			6			8		4	
Detector Phases	5	2	2 3	1	6	6 7	3	8	7	4
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	22.5		8.0	22.5		8.0	22.5	8.0	22.5
Total Split (s)	20.0	60.0	80.0	20.0	60.0	80.0	20.0	50.0	20.0	50.0
Total Split (%)	13%	40%	53%	13%	40%	53%	13%	33%	13%	33%
Yellow Time (s)	3.0	4.5		3.0	4.5		3.0	4.5	3.0	4.5
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	1.5	0.0	1.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	Min		None	Min		None	None	None	None
Act Effct Green (s)	60.7	54.8	76.7	62.0	56.9	65.9	20.7	15.1	13.6	8.2
Actuated g/C Ratio	0.62	0.62	0.86	0.65	0.64	0.71	0.23	0.17	0.14	0.09
v/c Ratio	0.14	0.35	0.09	0.11	0.80	0.03	1.06	0.26	0.10	0.15
Uniform Delay, d1	5.7	10.4	0.2	5.7	15.4	3.3	31.7	0.0	27.4	9.0
Percentile Delay	6.6	10.2	0.9	6.4	17.3	4.9	36.0	0.0	27.0	21.8
Percentile LOS	A	B	A	A	B	A	D	A	C	C

Cycle Length: 150

Actuated Cycle Length: 89

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Total Lost Time: 12

Sum of Critical v/s Ratios: 0.75

Intersection v/c Ratio: 0.82

Intersection Percentile Signal Delay: 16.3

Intersection Percentile LOS: B

Splits and Phases: 25: Fabyan Parkway & North Raddant Road

ø1	ø2	ø3	ø4
20 s	60 s	20 s	50 s
ø5	ø6	ø7	ø8
20 s	60 s	20 s	50 s

30: Fabyan Parkway & Kingsland Drive

5:00 pm Baseline

6/7/2004

Timings

	→ <u>EBT</u>	↘ <u>EBR</u>	↙ <u>WBL</u>	← <u>WBT</u>	↖ <u>NBL</u>
Lane Configurations	↑↑	↑	↑	↑↑	↑
Volume (vph)	1114	29	19	2152	24
Turn Type		Prot Pm+Pt			
Protected Phases	2	2	1	6	8
Permitted Phases			6		
Detector Phases	2	2	1	6	8
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	22.5	22.5	8.0	22.5	8.0
Total Split (s)	40.0	40.0	15.0	40.0	20.0
Total Split (%)	53%	53%	20%	53%	27%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes		
Recall Mode	Min	Min	None	Min	None
Act Effct Green (s)	57.2	57.2	67.4	59.7	9.1
Actuated g/C Ratio	0.76	0.76	0.74	0.79	0.12
v/c Ratio	0.39	0.02	0.07	0.73	0.40
Uniform Delay, d1	3.9	0.0	1.5	3.4	7.7
Percentile Delay	4.1	2.3	3.4	4.4	8.2
Percentile LOS	A	A	A	A	A

Cycle Length: 75

Actuated Cycle Length: 75.3

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Total Lost Time: 6

Sum of Critical v/s Ratios: 0.63

Intersection v/c Ratio: 0.68

Intersection Percentile Signal Delay: 4.4

Intersection Percentile LOS: A

Splits and Phases: 30: Fabyan Parkway & Kingsland Drive

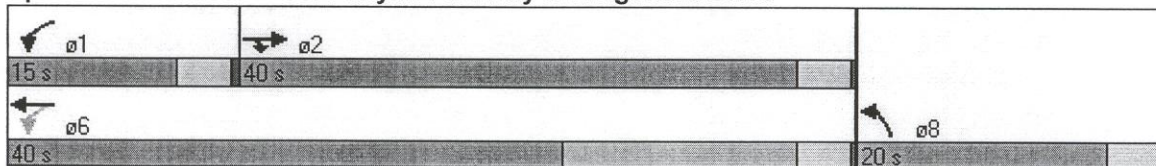


EXHIBIT 10

2025 Traffic Signal Timings

2: Fabyan Parkway & Van Nortwick Drive

5:00 pm Baseline

6/7/2004

Timings

	→	↘	↙	←	↖
<u>Lane Group</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>NBL</u>
Lane Configurations	↑↑↑	↑	↑	↑↑↑	↑
Volume (vph)	1446	35	160	2699	5
Turn Type		Pt+Ov	Pm+Pt		
Protected Phases	2	2 8	1	6	8
Permitted Phases			6		
Detector Phases	2	2 8	1	6	8
Minimum Initial (s)	4.0		4.0	4.0	4.0
Minimum Split (s)	20.0		8.0	20.0	8.0
Total Split (s)	45.0	60.0	15.0	45.0	15.0
Total Split (%)	60%	80%	20%	60%	20%
Yellow Time (s)	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5		0.5	0.5	0.5
Lead/Lag	Lag		Lead		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	Min		None	Min	None
Act Effct Green (s)	41.1	51.6	53.3	52.4	7.7
Actuated g/C Ratio	0.67	0.79	0.82	0.86	0.12
v/c Ratio	0.40	0.03	0.43	0.59	0.22
Uniform Delay, d1	5.4	0.0	1.1	2.0	2.9
Percentile Delay	6.4	1.0	5.1	2.5	10.2
Percentile LOS	A	A	A	A	B

Cycle Length: 75

Actuated Cycle Length: 61.2

Natural Cycle: 40

Control Type: Actuated-Uncoordinated

Total Lost Time: 6

Sum of Critical v/s Ratios: 0.53

Intersection v/c Ratio: 0.57

Intersection Percentile Signal Delay: 3.9

Intersection Percentile LOS: A

Splits and Phases: 2: Fabyan Parkway & Van Nortwick Drive

















↙ ø1 15 s	→ ø2 45 s	
← ø6 45 s		↖ ø8 15 s

9: Fabyan Parkway & Allen Drive

5:00 pm Baseline















6/7/2004

Timings

								
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	SBT
Lane Configurations								
Volume (vph)	15	1756	1	10	2727	20	1	1
Turn Type	Pm+Pt		Prot	Pm+Pt		Prot		
Protected Phases	5	2	2	1	6	6	3	4
Permitted Phases	2			6				
Detector Phases	5	2	2	1	6	6	3	4
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	8.0	8.0
Total Split (s)	10.0	110.0	110.0	10.0	110.0	110.0	15.0	15.0
Total Split (%)	7%	73%	73%	7%	73%	73%	10%	10%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	None
Act Effct Green (s)	107.0	102.0	102.0	106.4	100.0	100.0	8.5	7.9
Actuated g/C Ratio	0.83	0.87	0.87	0.81	0.85	0.85	0.07	0.06
v/c Ratio	0.10	0.38	0.00	0.04	0.60	0.01	0.29	0.20
Uniform Delay, d1	1.5	3.5	0.0	1.5	5.2	0.2	33.4	45.0
Percentile Delay	3.2	3.5	4.0	3.3	6.1	2.5	34.6	43.6
Percentile LOS	A	A	A	A	A	A	C	D

Cycle Length: 150
 Actuated Cycle Length: 117.8
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Total Lost Time: 15
 Sum of Critical v/s Ratios: 0.58
 Intersection v/c Ratio: 0.65
 Intersection Percentile Signal Delay: 5.5
 Intersection Percentile LOS: A

Splits and Phases: 9: Fabyan Parkway & Allen Drive

















							
10 s	110 s					15 s	15 s
							
10 s	110 s						

12: Fabyan Parkway & Campana Entrance

5:00 pm Baseline

6/7/2004

Timings

								
<u>Lane Group</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>NBT</u>	<u>SBT</u>
Lane Configurations								
Volume (vph)	25	1563	5	1	2755	15	1	1
Turn Type	Pm+Pt		Prot	Prot		Prot		
Protected Phases	5	2	2	1	6	6	8	4
Permitted Phases	2							
Detector Phases	5	2	2	1	6	6	8	4
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	20.0	20.0
Total Split (s)	15.0	65.0	65.0	15.0	65.0	65.0	35.0	35.0
Total Split (%)	10%	43%	43%	10%	43%	43%	23%	23%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	Min	Min	None	Min	Min	None	None
Act Effct Green (s)	90.3	84.0	84.0	6.7	81.6	81.6	7.0	10.6
Actuated g/C Ratio	0.79	0.82	0.82	0.06	0.80	0.80	0.06	0.10
v/c Ratio	0.12	0.36	0.00	0.01	0.65	0.01	0.07	0.46
Uniform Delay, d1	2.0	4.4	1.8	53.0	7.1	1.9	15.0	34.0
Percentile Delay	3.6	4.2	4.8	44.0	7.6	4.7	30.7	27.0
Percentile LOS	A	A	A	D	A	A	C	C

Cycle Length: 150

Actuated Cycle Length: 102.5

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Total Lost Time: 15







Sum of Critical v/s Ratios: 0.60

Intersection v/c Ratio: 0.67

Intersection Percentile Signal Delay: 6.8

Intersection Percentile LOS: A

Splits and Phases: 12: Fabyan Parkway & Campana Entrance

























 ø1	 ø2	 ø4	 ø8
15 s	65 s	35 s	35 s
 ø5	 ø6		
15 s	65 s		

8: Fabyan Parkway & Illinois Route 31

5:00 pm Baseline

6/7/2004

Timings

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	124	1246	289	510	2080	234	234	565	289	296	1040	386
Turn Type	Custom		Pt+Ov	Custom		Pt+Ov	Custom		Pt+Ov	Custom		Pt+Ov
Protected Phases	5	2	2 3	1	6	6 7	3	8	8 1	7	4	4 5
Permitted Phases	1			5			7			3		
Detector Phases	5	2	2 3	1	6	6 7	3	8	8 1	7	4	4 5
Minimum Initial (s)	3.0	14.0		3.0	14.0		3.0	14.0		3.0	14.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		8.0	20.0		8.0	20.0	
Total Split (s)	33.0	40.0	73.0	33.0	40.0	73.0	33.0	44.0	77.0	33.0	44.0	77.0
Total Split (%)	22%	27%	49%	22%	27%	49%	22%	29%	51%	22%	29%	51%
Yellow Time (s)	3.0	3.5		3.0	3.5		3.0	3.5		3.0	3.5	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0		0.0	2.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	Min		None	Min		None	Min		None	Min	
Act Effct Green (s)	23.9	36.7	53.5	23.9	51.5	71.0	15.9	38.6	66.0	15.9	41.2	53.8
Actuated g/C Ratio	0.18	0.28	0.41	0.18	0.40	0.55	0.12	0.30	0.51	0.12	0.32	0.42
v/c Ratio	0.42	0.82	0.43	0.80	0.97	0.26	0.64	0.51	0.34	0.70	0.88	0.54
Uniform Delay, d1	44.5	43.1	25.2	50.3	38.0	8.5	53.2	37.4	13.7	54.3	41.5	19.6
Percentile Delay	44.9	46.8	26.4	50.7	49.1	8.8	53.8	38.9	14.3	54.8	46.9	20.8
Percentile LOS	D	D	C	D	D	A	D	D	B	D	D	C

Cycle Length: 150

Actuated Cycle Length: 129.2

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Total Lost Time: 14









Sum of Critical v/s Ratios: 0.81

Intersection v/c Ratio: 0.89

Intersection Percentile Signal Delay: 42.9

Intersection Percentile LOS: D

Splits and Phases: 8: Fabyan Parkway & Illinois Route 31

























 ø1	 ø2	 ø3	 ø4
33 s	40 s	33 s	44 s
 ø5	 ø6	 ø7	 ø8
33 s	40 s	33 s	44 s

15: Fabyan Parkway & Illinois Route 25

5:00 pm Baseline

6/7/2004

Timings

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	234	1088	317	138	2259	269	344	288	103	117	386	331
Turn Type	Custom		Pt+Ov	Custom		Pt+Ov	Custom		Pt+Ov	Custom		Pt+Ov
Protected Phases	5	2	2 3	1	6	6 7	3	8	8 1	7	4	4 5
Permitted Phases	1			5			7			3		
Detector Phases	5	2	2 3	1	6	6 7	3	8	8 1	7	4	4 5
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	8.0	22.5		8.0	22.5		8.0	22.5		8.0	22.5	
Total Split (s)	38.0	60.0	85.0	38.0	60.0	85.0	25.0	27.0	65.0	25.0	27.0	65.0
Total Split (%)	25%	40%	57%	25%	40%	57%	17%	18%	43%	17%	18%	43%
Yellow Time (s)	3.0	3.5		3.0	3.5		3.0	3.5		3.0	3.5	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0		0.0	2.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	Min		None	Min		None	Min		None	Min	
Act Effct Green (s)	13.6	60.8	81.4	13.6	56.7	68.9	17.2	32.1	45.1	17.2	23.6	40.7
Actuated g/C Ratio	0.11	0.49	0.65	0.11	0.45	0.55	0.14	0.26	0.36	0.14	0.19	0.33
v/c Ratio	0.63	0.42	0.29	0.50	0.93	0.29	0.73	0.30	0.16	0.41	0.55	0.63
Uniform Delay, d1	53.3	20.8	2.6	51.7	32.3	5.9	51.7	37.4	0.0	48.2	45.9	34.3
Percentile Delay	53.6	21.4	2.9	52.1	41.2	6.6	52.1	38.4	5.1	48.6	47.3	35.3
Percentile LOS	D	C	A	D	D	A	D	D	A	D	D	D

Cycle Length: 150

Actuated Cycle Length: 125.1

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Total Lost Time: 10.5









Sum of Critical v/s Ratios: 0.73

Intersection v/c Ratio: 0.78

Intersection Percentile Signal Delay: 34.7

Intersection Percentile LOS: C

Splits and Phases: 15: Fabyan Parkway & Illinois Route 25

 ø1	 ø2	 ø3	 ø4
38 s	60 s	25 s	27 s
 ø5	 ø6	 ø7	 ø8
38 s	60 s	25 s	27 s

34: Fabyan Parkway & Nagel

5:00 pm Baseline

6/7/2004

Timings

	→	↘	↙	←	↖	↗
<u>Lane Group</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>NBL</u>	<u>NBR</u>
Lane Configurations	↑↑↑	↗	↙	↑↑↑	↖	↗
Volume (vph)	1302	116	201	2885	79	163
Turn Type		Pt+Ov	Pm+Pt			Pt+Ov
Protected Phases	2	2 8	1	6	8	8 1
Permitted Phases			6			
Detector Phases	2	2 8	1	6	8	8 1
Minimum Initial (s)	4.0		4.0	4.0	4.0	
Minimum Split (s)	20.0		8.0	20.0	8.0	
Total Split (s)	45.0	60.0	15.0	45.0	15.0	30.0
Total Split (%)	60%	80%	20%	60%	20%	40%
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	0.5		0.5	0.5	0.5	
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	Min		None	Min	None	
Act Effct Green (s)	32.4	44.4	44.4	45.0	9.3	21.5
Actuated g/C Ratio	0.56	0.75	0.77	0.78	0.16	0.35
v/c Ratio	0.43	0.10	0.49	0.69	0.29	0.28
Uniform Delay, d1	7.6	0.0	1.9	3.6	22.7	9.6
Percentile Delay	8.7	0.7	6.0	4.4	21.9	8.7
Percentile LOS	A	A	A	A	C	A

Cycle Length: 75

Actuated Cycle Length: 57.5

Natural Cycle: 40

Control Type: Actuated-Uncoordinated

Total Lost Time: 6

Sum of Critical v/s Ratios: 0.58

Intersection v/c Ratio: 0.63

Intersection Percentile Signal Delay: 6.0

Intersection Percentile LOS: A

Splits and Phases: 34: Fabyan Parkway & Nagel



























↗ ø1 15 s	→ ø2 45 s	
↙ ø6 45 s		↗ ø8 15 s

25: Fabyan Parkway & North Raddant Road

5:00 pm Baseline

6/7/2004

Timings

										
<u>Lane Group</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>NBL</u>	<u>NBT</u>	<u>SBL</u>	<u>SBT</u>
Lane Configurations		  			  		 		 	
Volume (vph)	28	1033	150	39	2424	33	483	1	22	6
Turn Type	Pm+Pt		Pt+Ov	Pm+Pt		Pt+Ov	Custom		Custom	
Protected Phases	5	2	2 3	1	6	6 7	3	8	7	4
Permitted Phases	2			6			7		4 3	
Detector Phases	5	2	2 3	1	6	6 7	3	8	7	4
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	2.0	4.0	2.0
Minimum Split (s)	8.0	22.5		8.0	22.5		8.0	8.0	8.0	8.0
Total Split (s)	10.0	86.0	130.0	10.0	86.0	130.0	44.0	10.0	44.0	10.0
Total Split (%)	7%	57%	87%	7%	57%	87%	29%	7%	29%	7%
Yellow Time (s)	3.0	4.5		3.0	4.5		3.0	4.5	3.0	4.5
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	1.5	0.0	1.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	Min		None	Min		None	None	None	None
Act Effct Green (s)	66.4	61.1	87.7	66.6	61.1	74.7	20.7	18.5	30.0	7.7
Actuated g/C Ratio	0.63	0.62	0.89	0.63	0.62	0.75	0.21	0.18	0.28	0.08
v/c Ratio	0.18	0.31	0.10	0.12	0.73	0.03	0.73	0.43	0.14	0.19
Uniform Delay, d1	6.0	9.9	0.0	6.0	14.6	1.2	38.1	0.2	27.1	9.9
Percentile Delay	7.8	10.6	0.3	7.6	15.4	3.7	41.9	6.8	34.2	30.1
Percentile LOS	A	B	A	A	B	A	D	A	C	C

Cycle Length: 150

Actuated Cycle Length: 98.2

Natural Cycle: 70

Control Type: Actuated-Uncoordinated

Total Lost Time: 10.5























Sum of Critical v/s Ratios: 0.63

Intersection v/c Ratio: 0.68

Intersection Percentile Signal Delay: 16.3

Intersection Percentile LOS: B

Splits and Phases: 25: Fabyan Parkway & North Raddant Road

										
10 s	86 s					44 s				10 s
										
10 s	86 s					44 s				10 s

30: Fabyan Parkway & Kingsland Drive

5:00 pm Baseline

6/7/2004

Timings

	→	↘	↙	←	↗
<u>Lane Group</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>NBL</u>
Lane Configurations	↑↑↑	↑	↑	↑↑↑	↑
Volume (vph)	1425	33	22	2755	28
Turn Type		Prot Pm+Pt			
Protected Phases	2	2	1	6	8
Permitted Phases			6		
Detector Phases	2	2	1	6	8
Minimum Initial (s)	4.0	4.0	3.5	4.0	3.5
Minimum Split (s)	22.5	22.5	8.0	22.5	8.0
Total Split (s)	40.0	40.0	15.0	40.0	20.0
Total Split (%)	53%	53%	20%	53%	27%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes		
Recall Mode	Min	Min	None	Min	None
Act Effct Green (s)	55.5	55.5	65.7	58.0	9.3
Actuated g/C Ratio	0.75	0.75	0.74	0.79	0.13
v/c Ratio	0.35	0.03	0.09	0.65	0.43
Uniform Delay, d1	3.8	0.0	1.5	3.1	7.6
Percentile Delay	3.9	2.3	3.7	3.8	7.9
Percentile LOS	A	A	A	A	A

Cycle Length: 75

Actuated Cycle Length: 73.8

Natural Cycle: 40

Control Type: Actuated-Uncoordinated

Total Lost Time: 6

Sum of Critical v/s Ratios: 0.57

Intersection v/c Ratio: 0.62

Intersection Percentile Signal Delay: 3.9

Intersection Percentile LOS: A

Splits and Phases: 30: Fabyan Parkway & Kingsland Drive

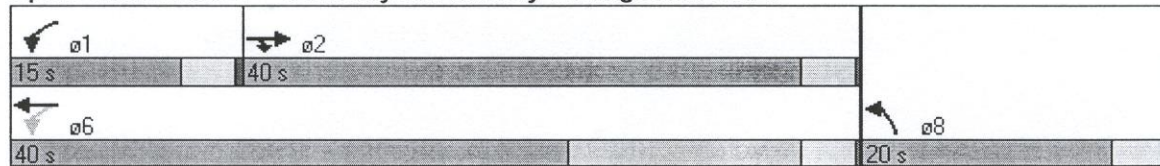


EXHIBIT 11

Accident Analysis

EXISTING ACCIDENT REPORT SUMMARY

The Traffic Accident study period is from 2000 to 2002.

The accident trends that occur within the corridor show that approximately 92% of all accidents happen at or near only five of the fourteen intersections. These five intersections are IL31, IL25, Surrey Road, North Raddant Road, and Kingsland Drive. Of these five intersections, only Kingsland Drive had an accident rate that qualified it as a high accident location during the 2000 study period according to IDOT District #1 accident rate criteria. In 2001, Kingsland Drive and Surrey Road both were identified as high accident locations due to their accident rates. If the IDOT District 1 EPDO criterion is used to acknowledge high accident locations in lieu of the accident rate criteria, then Thoria Road during 2000 is the only high accident location within the corridor.

Further analysis of the accident reports show that approximately 19% of all the accidents that take place near the intersection of Fabyan Parkway and IL 31 are accident types associated with the skew at the intersection. The majority of these accidents take place when two cars, traveling the same direction, hit each other because there is not a defined area showing the driver where the lane line exists.

At Kingsland Drive the short taper and tight turning radius for the eastbound right turning movement both contribute to vehicles, especially truck traffic, not properly using the deceleration lane. These vehicles tend to block the eastbound through traffic causing confusion and a possible traffic hazard.

At every side road that services a residential area off of Fabyan Parkway accidents occur when drivers are trying to make a left turn into the side street. Left turning traffic must wait for a gap in the opposing through movement, which causes the left through lane on Fabyan Parkway to be blocked. Consequently, accidents happen when an approaching vehicle rear ends the left turning vehicles. If this problem can be alleviated, some of the accidents caused by multiple access points along Fabyan Parkway may decrease. The data shows only three (one near Van Norwick Avenue and two near Surrey Road) accidents of this type took place along the corridor where vehicles were entering private driveways along Fabyan Parkway.

Two fatal accidents have taken place during our study period and within our project limits. The intersection of Van Nortwick Road and Fabyan Parkway had a fatality on May 24, 2001, and the intersection of Kingsland Drive and Fabyan Parkway had a fatality on October 23, 2001.

The following tables provide additional data and information regarding accidents within the corridor.

INTERSECTION	CLEAR	RAIN	SNOW	SLEET/HAIL	OTHER
HEATHER LANE	67%	0%	33%	0%	0%
CARRIAGE DRIVE	67%	33%	0%	0%	0%
VAN NORTWICK AVENUE	75%	25%	0%	0%	0%
ALLEN DRIVE	100%	0%	0%	0%	0%
IL 31	75%	11%	9%	1%	4%
IL 25	77%	10%	10%	0%	2%
THORIA ROAD	100%	0%	0%	0%	0%
SURREY ROAD	84%	8%	8%	0%	0%
NORTH RADDANT ROAD	75%	10%	15%	0%	0%
KINGSLAND DRIVE	68%	12%	9%	6%	6%

TABLE 1: WEATHER CONDITIONS AT ACCIDENT LOCATIONS

INTERSECTION	TOTAL ACCIDENTS IN 3 YEAR PERIOD	PERCENT OF TOTAL
HEATHER LANE	3	1%
CARRIAGE DRIVE	3	1%
VAN NORTWICK AVENUE	8	4%
ALLEN DRIVE	2	1%
IL 31	81	36%
IL 25	48	21%
THORIA ROAD	1	0%
SURREY ROAD	25	11%
NORTH RADDANT ROAD	20	9%
KINGSLAND DRIVE	34	15%
TOTAL	225	100%

TABLE 2: TOTAL ACCIDENTS DURING STUDY PERIOD (2000-2002)

INTERSECTION	2000	2001	2002
HEATHER LANE	0	1	2
CARRIAGE DRIVE	1	2	0
VAN NORTWICK AVENUE	4	4	0
ALLEN DRIVE	0	1	1
IL 31	25	29	27
IL 25	24	10	14
THORIA ROAD	1	0	0
SURREY ROAD	5	13	7
NORTH RADDANT ROAD	4	8	8
KINGSLAND DRIVE	14	10	14

TABLE 3: ACCIDENTS PER YEAR (2000-2002)

INTERSECTION	TOTAL VEHICLES ENTERING	ACCIDENTS 2000	ACCIDENTS PER MILLION	HIGH ACCIDENT LOCATION
HEATHER ROAD	9886755	0	0.0000	N
CARRIAGE ROAD	9872155	1	0.1013	N
VAN NORTWICK ROAD	9974355	4	0.4010	N
ALLEN DRIVE	9988955	0	0.0000	N
IL 31	17205005	25	1.4531	N
IL 25	16365505	24	1.4665	N
THORIA ROAD	12153405	1	0.0823	N
SURREY ROAD	12182605	5	0.4104	N
NORTH RADDANT ROAD	13993005	4	0.2859	N
KINGSLAND DRIVE	12387005	14	1.1302	Y

*THE HIGH ACCIDENT RATE WAS DETERMINED INFORMATION OBTAINED BY IDOT DISTRICT 1 FOR 2000 AND 2001

**THE HIGH ACCIDENT RATE FOR SIGNALIZED INTERSECTIONS IS 1.857 CRASHES PER MILLION VEHICLES

***THE HIGH ACCIDENT RATE FOR UNSIGNALIZED INTERSECTIONS IS 0.597 CRASHES PER MILLION VEHICLES

INTERSECTION	TOTAL VEHICLES ENTERING	ACCIDENTS 2001	ACCIDENTS PER MILLION	HIGH ACCIDENT LOCATION
HEATHER ROAD	10133194	1	0.0987	N
CARRIAGE ROAD	10118594	2	0.1977	N
VAN NORTWICK ROAD	10220794	4	0.3914	N
ALLEN DRIVE	10235394	1	0.0977	N
IL 31	17507380.13	29	1.6564	N
IL 25	16667880.13	10	0.6000	N
THORIA ROAD	12455780.13	0	0.0000	N
SURREY ROAD	12484980.13	13	1.0413	Y
NORTH RADDANT ROAD	14295380.13	8	0.5596	N
KINGSLAND DRIVE	12689380.13	10	0.7881	Y

TABLE 4: HIGH ACCIDENT LOCATIONS CLASSIFIED BY THE ACCIDENT RATE

INTERSECTION	TOTAL ACCIDENTS 2000	FATALITIES	ACCIDNETS (A)	ACCIDENTS (B)	ACCIDENTS (C)	EPDO VALUE	HIGH ACCIDENT LOCATION
HEATHER ROAD	0	0	0	0	0	0.000	N
CARRIAGE ROAD	1	0	0	0	0	1.000	N
VAN NORTWICK ROAD	4	0	0	1	1	2.750	N
ALLEN DRIVE	0	0	0	0	0	0.000	N
IL 31	25	0	0	4	2	1.960	N
IL 25	24	0	2	1	2	2.125	N
THORIA ROAD	2	0	0	0	0	1.000	Y
SURREY ROAD	5	0	0	1	0	2.000	N
NORTH RADDANT ROAD	6	0	0	0	1	1.333	N
KINGSLAND DRIVE	14	0	0	1	2	1.643	N

*THE HIGH ACCIDENT RATE WAS DETERMINED INFORMATION OBTAINED BY IDOT DISTRICT 1 FOR 2000 AND 2001

**FOR A SIGNALIZED INTERSECTION TO BE CLASSIFIED AS A HIGH ACCIDENT LOCATION IT MUST HAVE AN EPDO GREATER THAN 3.689

***FOR AN UNSIGNALIZED INTERSECTION TO BE CLASSIFIED AS A HIGH ACCIDENT LOCATION IT MUST HAVE AN EPDO GREATER THAN 3.839

INTERSECTION	TOTAL ACCIDENTS 2001	FATALITIES	ACCIDNETS (A)	ACCIDENTS (B)	ACCIDENTS (C)	EPDO VALUE	HIGH ACCIDENT LOCATION
HEATHER ROAD	1	0	0	0	1	3.000	N
CARRIAGE ROAD	2	0	0	0	0	1.000	N
VAN NORTWICK ROAD	4	1	0	0	0	3.500	N
ALLEN DRIVE	1	0	0	0	1	3.000	N
IL 31	29	0	2	3	1	2.207	N
IL 25	10	0	0	1	1	1.700	N
THORIA ROAD	1	0	0	0	0	1.000	N
SURREY ROAD	13	0	0	0	0	1.000	N
NORTH RADDANT ROAD	8	0	0	1	0	1.625	N
KINGSLAND DRIVE	10	1	0	0	2	2.400	N

TABLE 5: HIGH ACCIDENT LOCATIONS CLASSIFIED BY EPDO VALUE

EXHIBIT 12

Analysis of Existing Traffic Control Devices

ANALYSIS OF EXISTING TRAFFIC CONTROL DEVICES

A. INTRODUCTION

The Millennium Edition of the Manual on Uniform Traffic Control Devices (MUTCD) contains the following definitions:

Traffic control devices shall be defined as all signs, signals, markings, and other devices used to regulate, warn, or guide traffic, placed on, over, or adjacent to a street, highway, pedestrian facility, or bikeway by authority of a public agency having jurisdiction. (MUTCD, I-1).

Traffic control devices notify road users of regulations and provide warning and guidance needed for the safe, uniform, and efficient operation of all elements of the traffic stream. (MUTCD 1A-1).

To be effective, a traffic control device should meet five basic requirements (MUTCD, 1A-1):

1. *Fulfill a need*
2. *Command attention*
3. *Convey a clear, simple meaning*
4. *Command respect from road users*
5. *Give adequate time for proper response*

In order to keep the information in this section pertinent and organized, traffic control deficiencies and any appropriate regulations and/or immediate spot improvements will be listed on an intersection-by-intersection basis. A traffic control deficiency, as discussed in this section of the report, will be defined as any sign, signal, pavement marking, or geometric issue that was observed not to be in accordance with the following Manuals:

1. Millennium Edition - Manual on Uniform Traffic Control Devices (MUTCD)
2. Illinois Manual on Uniform Traffic Control Devices (MUTCD) Supplement
3. IDOT Administrative Policies Manual

Existing conditions meeting the above standards that were observed in the field to cause significant access, capacity or safety problems are also listed.

B. INTERSECTION ANALYSIS FOR TRAFFIC CONTROL DEVICES

The MUTCD classifies an Expressway as follows:

Expressway – a divided highway with partial control of access (MUTCD, 1A-16).

Fabyan Parkway is not a divided highway but is referred to by the Kane County Division of Transportation as an “Expressway”. All the discrepancies between the standards given by the MUTCD for an “Expressway” and the existing conditions on Fabyan Parkway are given in the following text.

Heather Lane (Southbound Lane)

1. An existing stop bar is not visible.
2. The existing stop sign is mounted at a height of 67 inches (5.6 feet). MUTCD states that expressways shall have signs with a mounting height not less than 7 feet. While Fabyan

Parkway is not an Expressway as defined by the MUTCD, it is recommended that the stop sign mounting height implemented on Fabyan Parkway be 7 feet.

3. Limited sight distance exists at the current stop sign location. The stop sign and proposed stop bar should be located closer to the through lane edge of Fabyan Parkway.
4. There are no advance warning signs along Fabyan Parkway for the intersection of Heather Lane and Fabyan Parkway.

Carriage Drive (Northbound Lane)

1. An existing stop bar and an existing crosswalk are not visible.
2. Limited sight distance exists at the current stop sign location. The County should consider placing a stop bar after the crosswalk (refer to MUTCD for guidance).
3. There are no advance warning signs along Fabyan Parkway for the intersection of Carriage Drive and Fabyan Parkway.

Van Nortwick Avenue (Northbound Lane)

1. An existing stop bar and an existing crosswalk are not visible.
2. Limited sight distance exists at the current stop sign location. The County should consider placing stop bar after the crosswalk (refer to MUTCD for guidance).
3. There are no advance warning signs along Fabyan Parkway for the intersection of Van Nortwick Avenue and Fabyan Parkway.

Allen Road & River Rock Road

1. On the southbound approach, a stop bar is not present, and poor sight distance exists in both directions. The stop sign could be moved closer to Fabyan Parkway by 6 to 8 feet. A stop bar should be placed at that location, and the existing trees should be regularly trimmed to improve and maintain sight distance.
2. An existing stop bar and an existing crosswalk are not visible. An ADA compliant accessible ramp is lacking, however asphalt ramps with no surface pattern are present.
3. The existing stop sign for northbound vehicles is too short. MUTCD states that expressways shall have signs with a mounting height not less than 7 feet. While Fabyan Parkway is not an Expressway as defined by MUTCD, it is recommended that the stop sign mounting height implemented on Fabyan Parkway be 7 feet.
4. For eastbound vehicles on Fabyan Parkway, the right turn deceleration taper is too short by MUTCD and IDOT standards and should be improved to meet current design policy.
5. It is difficult to make a left turn from the Dreyer Medical building entrance onto Fabyan Parkway during the peak hour. The intersection of Allen Drive & River Rock Road is frequently used as a "turn around" to go east from the Dreyer Medical building.

Dreyer Medical Clinic (Southbound Lanes)

1. The existing stop sign is mounted at a height of 48 inches (4 feet). MUTCD states that expressways shall have signs with a mounting height not less than 7 feet. While Fabyan Parkway is not an Expressway as defined by MUTCD, it is recommended that the stop sign mounting height implemented on Fabyan Parkway be 7 feet.
2. The trees in the northwest corner should be regularly trimmed to improve and maintain sight distance for southbound traffic and prevent overhanging along Fabyan Parkway.

Holmstad Retirement Community – Campana

1. The existing stop sign is mounted at a height of 51 inches (4.3 feet). While Fabyan Parkway is not an Expressway as defined by MUTCD, it is recommended that the stop sign mounting height implemented on Fabyan Parkway be 7 feet.

2. An existing stop bar and an existing crosswalk are not visible. An ADA compliant accessible ramp is lacking, however asphalt ramps with no surface pattern are present. Placing both a proposed stop bar and crosswalk may be difficult because of MUTCD's requirement that the stop bar precedes the crosswalk. A stop bar is more critical in this location and should be placed if there is insufficient room or sight distance for both items.
3. The eastbound right turn taper does not meet deceleration length requirements set forth by the IDOT BDE Manual for 40 mph. The entrance is used primarily by passenger cars, which has limited the operational problems consistent with this type of deficiency.
4. The mast arm to the east showing lane use signs does not have a handhole cover as typically required by the original shop drawings for the structure.

Illinois Route 31 (Batavia Avenue)

1. Many of the secondary traffic signal indications have 8 inch diameter lenses. MUTCD states that 12 inch diameter lenses should be used for running speeds greater than 40 mph.
2. Both eastbound and westbound through lanes have severe pavement surface rutting. This results in a dangerous situation which negatively effects intersection operation.
3. Many stop bars exceed the 30 feet maximum from the edge-of-pavement as recommended in MUTCD (3B-34). This results from the extreme angle of intersection.
4. The westbound mast arm does not have a street name sign (IDOT Type 2 "Batavia Ave").
5. We suggest making the eastbound and westbound left turns "protected only" to avoid dilemma zone problems. Motorists are currently required to make a quick decision in a congested area under a "protected and permitted" condition rather than waiting for a left turn arrow. This may eventually necessitate lengthening the left turn lane or providing dual left turn lanes depending on left turn volume. The dilemma zone is very dangerous due to a combination of skew and volume.
6. Due to the large skew at this intersection, MUTCD suggests that 2 foot stripe and a 6 foot gap be placed for the Fabyan Parkway through movements (See MUTCD 3B-22). This will help move traffic safely and more efficiently through the intersection.
7. Many of the pavement markings are heavily faded causing confusion for motorists.
8. There are overhead warning signs in the eastbound lanes showing the presence of the skew in the intersection ahead. A "Traffic Signal Ahead" sign should also be added.

Illinois Route 25

1. Many of the secondary traffic signal indications have 8 inch diameter lenses. MUTCD states that 12 inch diameter lenses should be used for running speeds greater than 40 mph.
2. Both eastbound and westbound through lanes have severe pavement surface rutting. This results in a dangerous situation which negatively effects intersection operation.
3. Many stop bars exceed the 30' maximum from the edge-of-pavement as recommended in MUTCD (3B-34). This results from the extreme angle of intersection.
4. The westbound right turning movement has trucks tracking behind the curb by 3 to 4 feet. Widening the corner radius will help prevent this situation and lead to improved operations.
5. Intersection delay would be improved by eastbound and westbound advanced detection.
6. Northbound and southbound may exceed the 150-foot maximum (MUTCD) from stop bar to signal indications (pavement markings are not completed so it was difficult to determine). This would require all lenses to be 12 inches in diameter in accordance with MUTCD policy.
7. We suggest making the eastbound and westbound left turns "protected only" to avoid dilemma zone problems. Motorists are currently required to make a quick decision in a congested area under a "protected and permitted" condition rather than waiting for left turn arrow. This may eventually necessitate lengthening the left turn lane or providing dual left turn lanes depending on left turn volume. The dilemma zone is very dangerous due to a combination of skew and volume.

8. Due to the large skew at this intersection, MUTCD suggests that 2 foot stripe and a 6 foot gap be placed for the Fabyan Parkway through movements (See MUTCD 3B-22). This will help move traffic safely and more efficiently through the intersection.
9. Many of the pavement markings are heavily faded causing confusion for motorists.
10. There is a lack of a traffic signal ahead signing for eastbound traffic.

Thoria Road (Northbound)

1. The northbound stop sign is 35 feet from the through edge of Fabyan Parkway (MUTCD recommends a maximum of 30 feet).
2. An existing stop bar is not visible.
3. The southeast intersection corner has a section of concrete curb and gutter that has cracked and settled nearly 2 inches for about 10 feet.
4. There are no advance warning signs along Fabyan Parkway for the intersection of Thoria Road and Fabyan Parkway.

Surrey Road (Northbound)

1. An existing stop bar is not visible.
2. It is possible to move the stop bar forward to improve sight distance. The distance from the stop sign to the through edge of Surrey Road must be 12 feet or less at its new location.
3. There are no advance warning signs along Fabyan Parkway for the intersection of Surrey Road and Fabyan Parkway.

Nagel Boulevard (Northbound)

1. The northbound approach does not have pavement markings approximately 150' south of Fabyan Parkway. It is assumed that the developer will place the pavement markings in the near future or temporary pavement markings should be placed.
2. The stop sign for northbound traffic is 15 feet from the edge of the right turn lane. The MUTCD recommends this distance to be 12 feet or less.
3. The southeast intersection quadrant sidewalk terminates at the back of curb on Fabyan Parkway with no laydown, ADA ramp, crosswalk, or any destination to walk to on the north side of Fabyan Parkway.
4. Many large trucks (WB-50 to 65) park along Nagel Boulevard to use the 7-Eleven store. It appears this happens because the 7-Eleven entrance and parking lot is not designed for this vehicle type.
5. The light pole on the southeast intersection quadrant is missing the handhole cover.
6. There are no advance warning signs along Fabyan Parkway for the intersection of Nagel Boulevard and Fabyan Parkway.

North Raddant Road

1. The northbound approach goes from one lane to one left turn lane and one through lane with no striping tapers. We suggest using 2 foot stripe and a 6 foot gap striping to delineate the need for through and right turn traffic to move over.
2. There seems to be advance detection in place at this intersection, but it does not seem to be functioning correctly. It should be checked and maintained if necessary. The overall intersection delay could be greatly improved by adjusting the existing advance detection on Fabyan Parkway. The eastbound and westbound movements currently remain green for 90-100 seconds, sometimes with no traffic for 20-30 seconds at a time while northbound and southbound traffic waits for a green light.
3. Existing signal actuation appears only to determine if and how long left turn indications are needed and don't effect the length of through indications. Because of this observation, the through movements seem to be operating as a pretimed (non-actuated) phase.

Settler's Hill (Entrance to Waste Management's Landfill)

1. The existing stop bars on Fabyan Parkway are faded and need to be maintained.
2. The westbound right movement occasionally backs up on to Fabyan Parkway due to traffic queuing at the entrance to the landfill and at the landfill scale house.
3. Both of the intersection turning radii are slightly damaged by trucks tracking over the concrete curb and gutter.
4. This intersection would benefit from an eastbound left turn lane and a westbound right turn lane for the truck movements. However, due to the 2006 Waste Management Landfill closure date, this improvement would not be very cost effective.

Kingsland Drive (Northbound)

1. The southeast intersection quadrant has approximately 5 to 7 feet of truck tracking over the concrete curb and gutter. This radius needs to be improved.
2. The southwest intersection quadrant also has severe truck tracking over the concrete curb and gutter. This radius needs to be improved.
3. The eastbound right turn taper and storage is not sufficient for deceleration lane requirements and should be improved.
4. The trucks using this intersection do not use the right turn deceleration lane due to deficient geometry. The trucks currently turn south from the right eastbound through lane causing operational problems.
5. The northbound movement's stop sign is greater than 30 ft. from the through edge of Fabyan Parkway. An existing stop bar is not visible
6. A westbound left turn lane would prevent through lane blockage and improve safety.
7. This is the entrance to the Batavia Industrial Center and should be designed for a WB-65 design vehicle for all movements to or from the south.
8. There are no advance warning signs along Fabyan Parkway for the intersection of Kingsland Drive and Fabyan Parkway.

The existing speed limit signs on Fabyan Parkway are 30 inches by 30 inches. MUTCD requires 36 inch by 48 inch speed limit signs for an expressway. The existing stop signs on Fabyan Parkway are 30 inches by 30 inches. The MUTCD requires 36 inch by 48 inch stop signs for an expressway. It is recommended that the signs be upgraded for increased visibility.

EXHIBIT 13

Budget Concept Planning Cost Estimates for Recommended
Immediate Spot Improvements

**BUDGET COST ESTIMATE FOR RECOMMENDED IMMEDIATE SPOT IMPROVEMENTS
(2004 Dollars)**

FABYAN PARKWAY

PAVEMENT RUTTING AT IL 31 AND IL 25 INTERSECTIONS				
OPTION # 1 MILL AND RESURFACE (Assumes 6 Inch Depth) *				
* Pavement and Soils Report Must be Completed to Verify)				
PAY ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
BITUMINOUS SURFACE REMOVAL	SQ YD	9225	\$8.00	\$73,800.00
BITUMINOUS BINDER COURSE	TON	2475	\$52.00	\$128,700.00
BITUMINOUS SURFACE COURSE	TON	825	\$52.00	\$42,900.00
TEMPORARY RAMP	SQ YD	3200	\$1.50	\$4,800.00
PAVEMENT MARKING VARIOUS WIDTH	FOOT	7600	\$1.25	\$9,500.00
TRAFFIC CONTROL COMPLETE	L SUM	1	\$30,000.00	\$30,000.00
DETECTOR LOOP	FOOT	480	\$15.00	\$3,600.00
MISCELLANEOUS AND CONTINGENCY				\$43,700.00
ENG. DESIGN AND CONSTRUCTION, TESTING				\$68,000.00
TOTAL PRICE				\$405,000.00

FABYAN PARKWAY

PAVEMENT RUTTING AT IL 31 AND IL 25 INTERSECTIONS				
OPTION # 2 FULL DEPTH REMOVAL AND REPLACEMENT (Assumes 16.5 Inch Depth)*				
* Pavement and Soils Report Must be Completed to Verify)				
PAY ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
PAVEMENT REMOVAL	SQ YD	9225	\$10.00	\$92,250.00
AGGREGATE BASE REPAIR	SQ YD	9225	\$20.00	\$184,500.00
BITUMINOUS BASE COURSE	SQ YD	9225	\$25.00	\$230,625.00
BITUMINOUS BINDER COURSE	TON	2150	\$52.00	\$111,800.00
BITUMINOUS SURFACE COURSE	TON	825	\$52.00	\$42,900.00
PAVEMENT MARKING LINE VARIOUS WIDTHS	FOOT	7600	\$1.25	\$9,500.00
TEMPORARY RAMP	SQ YD	100	\$4.00	\$400.00
TRAFFIC CONTROL COMPLETE	L SUM	1	\$50,000.00	\$50,000.00
VEHICLE VIDEO DETECTION	L SUM	1	\$60,000.00	\$60,000.00
MISCELLANEOUS AND CONTINGENCY				\$65,025.00
ENG. DESIGN AND CONSTRUCTION, TESTING				\$163,000.00
TOTAL PRICE				\$1,010,000.00

**BUDGET COST ESTIMATE FOR RECOMMENDED IMMEDIATE SPOT IMPROVEMENTS
(2004 Dollars)**

FABYAN PARKWAY

LANE DELINEATION MARKINGS AT IL 31 AND IL 25 INTERSECTIONS				
PAY ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
INLAY POLYUREA PAVEMENT MARKING	FOOT	600	\$15.00	\$9,000.00
TRAFFIC CONTROL COMPLETE	L SUM	1	\$5,000.00	\$5,000.00
MISCELLANEOUS AND CONTINGENCY				\$2,500.00
ENG. DESIGN AND CONSTRUCTION				\$8,500.00
TOTAL PRICE				\$25,000.00

FABYAN PARKWAY

IL 25 INTERSECTION PAVEMENT WIDENING IN NE AND SW QUADRANTS				
PAY ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
COMBINATION CURB & GUTTER REMOVAL	FOOT	300	\$10.00	\$3,000.00
COMBINATION CONCRETE CURB & GUTTER TB 6.24	FOOT	300	\$50.00	\$15,000.00
AGGREGATE BASE COURSE	SQ YD	200	\$30.00	\$6,000.00
BASE COURSE WIDENING	SQ YD	100	\$50.00	\$5,000.00
EARTH EXCAVATION WIDENING	CU YD	100	\$25.00	\$2,500.00
BITUMINOUS CONCRETE SURFACE COURSE	TON	20	\$150.00	\$3,000.00
TRAFFIC CONTROL COMPLETE	L SUM	1	\$20,000.00	\$20,000.00
MISCELLANEOUS AND CONTINGENCY				\$15,500.00
ENG. DESIGN AND CONSTRUCTION, TESTING				\$40,000.00
ROW SURVEY, PLAT, APPRAISAL, PURCHASE				\$5,000.00
TOTAL PRICE				\$115,000.00

**BUDGET COST ESTIMATE FOR RECOMMENDED IMMEDIATE SPOT IMPROVEMENTS
(2004 Dollars)**

FABYAN PARKWAY

INTERSECTION IMPROVEMENT AT KINGSLAND DRIVE NEW RIGHT TURN LANE AND WIDENING IN SW QUADRANT				
PAY ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
COMBINATION CURB & GUTTER REMOVAL	FOOT	530	\$10.00	\$5,300.00
COMBINATION CONCRETE CURB & GUTTER TB 6.24	FOOT	500	\$25.00	\$12,500.00
AGGREGATE BASE COURSE	SQ YD	500	\$20.00	\$10,000.00
BITUMINOUS SURFACE REMOVAL	SQ YD	200	\$10.00	\$2,000.00
EARTH EXCAVATION WIDENING	CU YD	200	\$20.00	\$4,000.00
BASE COURSE WIDENING	SQ YD	400	\$45.00	\$18,000.00
BITUMINOUS CONCRETE SURFACE COURSE	TON	55	\$125.00	\$6,875.00
PAVEMENT MARKING VARIOUS WIDTH	FOOT	270	\$3.00	\$810.00
PAVEMENT MARKING LETTERS & SYMBOLS	SQ FT	31	\$5.00	\$155.00
TRAFFIC CONTROL COMPLETE	L SUM	1	\$15,000.00	\$15,000.00
MISCELLANEOUS AND CONTINGENCY				\$6,600.00
ENG. DESIGN AND CONSTRUCTION, TESTING				\$22,000.00
ROW SURVEY, PLAT, APPRAISAL, PURCHASE				\$6,760.00
TOTAL PRICE				\$110,000.00

FABYAN PARKWAY

INTERSECTION IMPROVEMENT AT KINGSLAND DRIVE INTERSECTION PAVEMENT WIDENING IN SE QUADRANT				
PAY ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
COMBINATION CURB & GUTTER REMOVAL	FOOT	280	\$10.00	\$2,800.00
COMBINATION CONCRETE CURB & GUTTER TB 6.24	FOOT	255	\$25.00	\$6,375.00
AGGREGATE BASE COURSE	SQ YD	475	\$20.00	\$9,500.00
BASE COURSE WIDENING	SQ YD	425	\$45.00	\$19,125.00
BITUMINOUS CONCRETE SURFACE COURSE	TON	40	\$125.00	\$5,000.00
EARTH EXCAVATION WIDENING	CU YD	180	\$20.00	\$3,600.00
TRAFFIC CONTROL COMPLETE	L SUM	1	\$10,000.00	\$10,000.00
MISCELLANEOUS AND CONTINGENCY				\$6,350.00
ENG. DESIGN AND CONSTRUCTION, TESTING				\$12,000.00
ROW SURVEY, PLAT, APPRAISAL, PURCHASE				\$5,250.00
TOTAL PRICE				\$80,000.00

EXHIBIT 14

Budget Concept Planning Cost Estimates for Intermediate
and Long Range Improvements

THE FOLLOWING ESTIMATES SHOULD BE USED FOR CONCEPT BUDGET PLANNING ONLY. THEY ARE BASED ON APPROXIMATE LAYOUTS AND ASSUMPTIONS SINCE DETAILED GEOMETRICS AND DESIGN ARE NOT KNOWN

THE ESTIMATES DO NOT INCLUDE ANY BRIDGE WORK OR WORK ACROSS OR ON THE BRIDGE. THEY ALSO DO NOT INCLUDE THE NORTH OR SOUTH LEGS OF THE IL 31 AND IL 25 INTERSECTIONS UNDER IDOT JURISDICTION.

THE ESTIMATED UNIT PRICES ARE BASED ON YEAR 2004 DOLLARS.

				2015 Preferred Improvement With Side Road Closures and Auxiliary Lanes		2015 Center Two Way Left Turn Lane		2015 Center Two Way Left Turn Lane With Right In-Right Out		2025 Long Range Improvement with Raised Median and Six Through Lanes	
AMOUNTS SHOWN IN YEAR 2004 DOLLARS											
	Unit	Unit Price	Est. Qty	Total	Est. Qty	Total	Est. Qty	Total	Est. Qty	Total	
TREE REMOVAL	EACH	\$ 500.00	20	\$ 10,000.00	20	\$ 10,000.00	20	\$ 10,000.00	30	\$ 15,000.00	
EARTH EXCAVATION (WIDENING)	CU YD	\$ 20.00	10,000	\$ 200,000.00	14,000	\$ 280,000.00	15,000	\$ 300,000.00	37,000	\$ 740,000.00	
REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	\$ 8.00	1,000	\$ 8,000.00	1,400	\$ 11,200.00	1,500	\$ 12,000.00	3,700	\$ 29,600.00	
SUB-BASE GRANULAR MATERIAL	TON	\$ 18.00	400	\$ 7,200.00	250	\$ 4,500.00	250	\$ 4,500.00	1,200	\$ 21,600.00	
FURNISHED EXCAVATION	CU YD	\$ 10.00	2,000	\$ 20,000.00	2,800	\$ 28,000.00	3,000	\$ 30,000.00	8,000	\$ 80,000.00	
TRENCH BACKFILL	FOOT	\$ 7.00	600	\$ 4,200.00	700	\$ 4,900.00	700	\$ 4,900.00	9,000	\$ 63,000.00	
GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	\$ 2.00	13,000	\$ 26,000.00	16,800	\$ 33,600.00	18,500	\$ 37,000.00	47,000	\$ 94,000.00	
TOPSOIL	ACRE	\$ 17,000.00	4	\$ 68,000.00	8	\$ 136,000.00	8	\$ 136,000.00	12	\$ 204,000.00	
SEEDING	ACRE	\$ 2,000.00	4	\$ 8,000.00	8	\$ 16,000.00	8	\$ 16,000.00	12	\$ 24,000.00	
TEMPORARY SEEDING	ACRE	\$ 2,000.00	4	\$ 8,000.00	8	\$ 16,000.00	8	\$ 16,000.00	12	\$ 24,000.00	
MULCH	ACRE	\$ 2,000.00	4	\$ 8,000.00	8	\$ 16,000.00	8	\$ 16,000.00	12	\$ 24,000.00	
TEMPORARY DITCH CHECKS	EACH	\$ 150.00	30	\$ 4,500.00	30	\$ 4,500.00	30	\$ 4,500.00	100	\$ 15,000.00	
PERIMETER EROSION BARRIER	FOOT	\$ 3.00	6,000	\$ 18,000.00	11,000	\$ 33,000.00	11,000	\$ 33,000.00	13,000	\$ 39,000.00	
INLET AND PIPE PROTECTION	EACH	\$ 100.00	60	\$ 6,000.00	100	\$ 10,000.00	100	\$ 10,000.00	175	\$ 17,500.00	
STONE DUMPED RIPRAP WITH FILTER FABRIC	TON	\$ 40.00	200	\$ 8,000.00	200	\$ 8,000.00	200	\$ 8,000.00	400	\$ 16,000.00	
AGGREGATE BASE COURSE	TON	\$ 18.00	12,000	\$ 216,000.00	17,000	\$ 306,000.00	18,500	\$ 333,000.00	44,000	\$ 792,000.00	
AGGREGATE (PRIME COAT)	TON	\$ 20.00	200	\$ 4,000.00	225	\$ 4,500.00	225	\$ 4,500.00	600	\$ 12,000.00	
INCIDENTAL BITUMINOUS SURFACING	TON	\$ 120.00	250	\$ 30,000.00	400	\$ 48,000.00	400	\$ 48,000.00	400	\$ 48,000.00	
BITUMINOUS MATERIALS (PRIME COAT)	GAL	\$ 2.00	11,000	\$ 22,000.00	11,000	\$ 22,000.00	11,500	\$ 23,000.00	30,000	\$ 60,000.00	
PORTLAND CEMENT CONCRETE BASE COURSE WIDENING	SQ YD	\$ 40.00	12,750	\$ 510,000.00	16,800	\$ 672,000.00	18,500	\$ 740,000.00	47,000	\$ 1,880,000.00	
PROTECTIVE COAT	SQ YD	\$ 0.25	6,600	\$ 1,650.00	9,000	\$ 2,250.00	9,500	\$ 2,375.00	22,000	\$ 5,500.00	
PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT	SQ YD	\$ 40.00	500	\$ 20,000.00	1,200	\$ 48,000.00	1,200	\$ 48,000.00	1,200	\$ 48,000.00	
PORTLAND CEMENT CONCRETE SIDEWALK	SQ FT	\$ 4.50	1,500	\$ 6,750.00	1,500	\$ 6,750.00	1,500	\$ 6,750.00	3,000	\$ 13,500.00	
BITUMINOUS SURFACE REMOVAL	SQ YD	\$ 2.00	87,000	\$ 174,000.00	6,000	\$ 12,000.00	6,000	\$ 12,000.00	6,000	\$ 12,000.00	
TEMPORARY RAMPS	EACH	\$ 400.00	20	\$ 8,000.00	20	\$ 8,000.00	20	\$ 8,000.00	20	\$ 8,000.00	
DRIVEWAY PAVEMENT REMOVAL	SQ YD	\$ 7.00	500	\$ 3,500.00	1,200	\$ 8,400.00	1,200	\$ 8,400.00	1,200	\$ 8,400.00	
COMBINATION CURB AND GUTTER REMOVAL	FOOT	\$ 7.00	12,000	\$ 84,000.00	22,000	\$ 154,000.00	22,000	\$ 154,000.00	26,000	\$ 182,000.00	
SIDEWALK REMOVAL	SQ FT	\$ 2.00	1,500	\$ 3,000.00	1,500	\$ 3,000.00	1,500	\$ 3,000.00	3,000	\$ 6,000.00	
MEDIAN REMOVAL	SQ YD	\$ 13.00	400	\$ 5,200.00	600	\$ 7,800.00	800	\$ 10,400.00	1,100	\$ 14,300.00	
PAVEMENT PATCHES	SQ YD	\$ 45.00	2,000	\$ 90,000.00	2,000	\$ 90,000.00	2,000	\$ 90,000.00	6,000	\$ 270,000.00	
PRECAST REINFORCED CONCRETE FLARED END SECTIONS	EACH	\$ 600.00	12	\$ 7,200.00	15	\$ 9,000.00	15	\$ 9,000.00	20	\$ 12,000.00	
GRATING FOR CONCRETE FLARED END SECTION	EACH	\$ 300.00	12	\$ 3,600.00	15	\$ 4,500.00	15	\$ 4,500.00	20	\$ 6,000.00	
PIPE CULVERTS	FOOT	\$ 35.00	200	\$ 7,000.00	300	\$ 10,500.00	300	\$ 10,500.00	300	\$ 10,500.00	
STORM SEWERS	FOOT	\$ 35.00	500	\$ 17,500.00	800	\$ 28,000.00	800	\$ 28,000.00	15,000	\$ 525,000.00	
CONCRETE COLLARS	EACH	\$ 200.00	10	\$ 2,000.00	15	\$ 3,000.00	15	\$ 3,000.00	20	\$ 4,000.00	
MANHOLES AND LIDS	EACH	\$ 2,000.00	15	\$ 30,000.00	20	\$ 40,000.00	20	\$ 40,000.00	45	\$ 90,000.00	
INLETS AND FRAMES/GRATES	EACH	\$ 850.00	45	\$ 38,250.00	80	\$ 68,000.00	80	\$ 68,000.00	130	\$ 110,500.00	
STORM SEWER REMOVAL	FOOT	\$ 8.00	400	\$ 3,200.00	700	\$ 5,600.00	700	\$ 5,600.00	13,500	\$ 108,000.00	
DRAINAGE STRUCTURE REMOVAL	EACH	\$ 400.00	60	\$ 24,000.00	100	\$ 40,000.00	100	\$ 40,000.00	150	\$ 60,000.00	
STORM WATER DETENTION	LSUM	\$ 20,000.00	1	\$ 20,000.00	1	\$ 20,000.00	1	\$ 20,000.00	2	\$ 40,000.00	
COMBINATION CONCRETE CURB AND GUTTER	FOOT	\$ 19.00	14,900	\$ 283,100.00	23,300	\$ 442,700.00	25,100	\$ 476,900.00	49,000	\$ 931,000.00	
CONCRETE MEDIAN	SQ FT	\$ 6.00	14,500	\$ 87,000.00	10,000	\$ 60,000.00	14,500	\$ 87,000.00	47,000	\$ 282,000.00	
ISLAND PAVEMENT	SQ YD	\$ 45.00	200	\$ 9,000.00	200	\$ 9,000.00	400	\$ 18,000.00	500	\$ 22,500.00	
EXPLORATION TRENCH	FOOT	\$ 4.00	1,000	\$ 4,000.00	1,500	\$ 6,000.00	1,500	\$ 6,000.00	3,000	\$ 12,000.00	
MISCELLANEOUS CONCRETE	CU YD	\$ 400.00	30	\$ 12,000.00	30	\$ 12,000.00	30	\$ 12,000.00	60	\$ 24,000.00	
PERMANENT SURVEY MARKERS	EACH	\$ 200.00	10	\$ 2,000.00	10	\$ 2,000.00	10	\$ 2,000.00	20	\$ 4,000.00	

				2015 Preferred Improvement With Side Road Closures and Auxiliary Lanes		2015 Center Two Way Left Turn Lane		2015 Center Two Way Left Turn Lane With Right In-Right Out		2025 Long Range Improvement with Raised Median and Six Through Lanes	
AMOUNTS SHOWN IN YEAR 2004 DOLLARS											
		Unit	Unit Price	Est. Qty	Total	Est. Qty	Total	Est. Qty	Total	Est. Qty	Total
	FIELD TILE JUNCTION VAULTS.	EACH	\$ 700.00	10	\$ 7,000.00	10	\$ 7,000.00	10	\$ 7,000.00	20	\$ 14,000.00
	ENGINEER'S FIELD OFFICE	CMON	\$ 1,000.00	18	\$ 18,000.00	18	\$ 18,000.00	18	\$ 18,000.00	24	\$ 24,000.00
	STORM SEWERS, SPECIAL	FOOT	\$ 14.00	300	\$ 4,200.00	300	\$ 4,200.00	300	\$ 4,200.00	1,000	\$ 14,000.00
	TRAFFIC CONTROL COMPLETE	L SUM	\$ 75,000.00	1	\$ 75,000.00	1	\$ 75,000.00	1	\$ 75,000.00	1	\$ 75,000.00
	TEMPORARY PAVEMENT MARKING	FOOT	\$ 0.50	50,000	\$ 25,000.00	50,000	\$ 25,000.00	50,000	\$ 25,000.00	75,000	\$ 37,500.00
	WORK ZONE PAVEMENT MARKING REMOVAL	FOOT	\$ 1.00	5,000	\$ 5,000.00	5,000	\$ 5,000.00	5,000	\$ 5,000.00	10,000	\$ 10,000.00
	PAVEMENT MARKINGS	FOOT	\$ 1.00	50,000	\$ 50,000.00	50,000	\$ 50,000.00	50,000	\$ 50,000.00	75,000	\$ 75,000.00
	FENCE REMOVAL AND NEW FENCE REPLACEMENT	FOOT	\$ 20.00	850	\$ 17,000.00	1,300	\$ 26,000.00	1,300	\$ 26,000.00	2,000	\$ 40,000.00
	TEMPORARY AGGREGATE BASE COURSE	TON	\$ 22.00	500	\$ 11,000.00	600	\$ 13,200.00	600	\$ 13,200.00	1,000	\$ 22,000.00
	TEMPORARY PAVEMENT	SQ YD	\$ 40.00	800	\$ 32,000.00	800	\$ 32,000.00	800	\$ 32,000.00	2,000	\$ 80,000.00
	CONSTRUCTION TEST STRIP	EACH	\$ 2,500.00	2	\$ 5,000.00	2	\$ 5,000.00	2	\$ 5,000.00	2	\$ 5,000.00
	BITUMINOUS CONCRETE BINDER COURSE 2.25"	TON	\$ 45.00	12,700	\$ 571,500.00	14,200	\$ 639,000.00	14,300	\$ 643,500.00	19,000	\$ 855,000.00
	BITUMINOUS CONCRETE SURFACE COURSE 2"	TON	\$ 50.00	11,300	\$ 565,000.00	12,600	\$ 630,000.00	12,700	\$ 635,000.00	17,000	\$ 850,000.00
	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	\$ 35,000.00	6	\$ 210,000.00	5	\$ 175,000.00	5	\$ 175,000.00	8	\$ 280,000.00
	TRAFFIC SIGNAL INSTALLATION	EACH	\$ 150,000.00	6	\$ 900,000.00	5	\$ 750,000.00	5	\$ 750,000.00	8	\$ 1,200,000.00
	TREE REPLACEMENTS	EACH	\$ 600.00	20	\$ 12,000.00	20	\$ 12,000.00	20	\$ 12,000.00	30	\$ 18,000.00
	RETAINING WALL	FOOT	\$ 200.00	350	\$ 70,000.00	350	\$ 70,000.00	350	\$ 70,000.00	550	\$ 110,000.00
	BIKE PATH REMOVAL AND REPLACEMENT	FOOT	\$ 30.00	3,600	\$ 108,000.00	6,350	\$ 190,500.00	6,500	\$ 195,000.00	8,500	\$ 255,000.00
	PAVEMENT REMOVAL	SQ YD	\$ 10.00	700	\$ 7,000.00	200	\$ 2,000.00	400	\$ 4,000.00	1,000	\$ 10,000.00
					\$ -						\$ -
	UTILITY RELOCATIONS	LSUM	\$ 250,000.00	1	\$ 250,000.00	1	\$ 250,000.00	1	\$ 250,000.00	2	\$ 500,000.00
					\$ -						\$ -
	SUBTOTAL OF ITEMS ABOVE				\$ 5,074,550.00		\$ 5,743,600.00		\$ 5,954,725.00		\$ 11,482,400.00
					\$ -						\$ -
	CONSTRUCTION CONTINGENCY, MISC. AND UNKNOWNNS (EST. 20%)	LSUM		1	\$ 1,014,910.00	1	\$ 1,148,720.00	1	\$ 1,190,945.00	1	\$ 2,296,480.00
	CONSTRUCTION LAYOUT (ESTIMATE 2%)	LSUM		1	\$ 121,789.20	1	\$ 137,846.40	1	\$ 142,913.40	1	\$ 275,577.60
					\$ -						\$ -
	SUBTOTAL (ESTIMATED CONSTRUCTION FOR CONCEPT PLANNING)				\$ 6,211,249.20		\$ 7,030,166.40		\$ 7,288,583.40		\$ 14,054,457.60
					\$ -						\$ -
	PHASE 1 ENGINEERING (ESTIMATE 8%)				\$ 496,899.94		\$ 562,413.31		\$ 583,086.67		\$ 1,124,356.61
	PHASE 2 ENGINEERING AND ROW (ESTIMATE 9%)				\$ 559,012.43		\$ 632,714.98		\$ 655,972.51		\$ 1,264,901.18
	PHASE 3 ENGINEERING (ESTIMATE 10%)				\$ 621,124.92		\$ 703,016.64		\$ 728,858.34		\$ 1,405,445.76
	RIGHT OF WAY AND EASEMENT PURCHASE	ACRE	\$ 50,000.00	2	\$ 100,000.00	2	\$ 100,000.00	2	\$ 100,000.00	8	\$ 400,000.00
	SUBTOTAL (ESTIMATED PROJECT FOR CONCEPT PLANNING)				\$ 7,988,286.48		\$ 9,028,311.33		\$ 9,356,500.92		\$ 18,249,161.15
	TOTAL (ESTIMATED PROJECT FOR CONCEPT PLANNING)				\$ 8.0 Million		\$ 9.1 Million		\$ 9.4 Million		\$ 18.3 Million

Remarks: BRIDGE WORK, NORTH AND SOUTH LEGS OF RTE. 31 AND RTE. 25 WORK NOT INCLUDED - TOTALS FOR CONCEPT PURPOSES ONLY SINCE GEOMETRICS AND DESIGN NOT KNOWN.

EXHIBIT 15

Project Stationing Reference Table

APPROXIMATE STATIONING REFERENCE TABLE

Past Project Section Number	2004 Feasibility Study Stationing	Original Design Plan Stationing
95-00201-02-RS	33 + 00 to 61 + 54	33 + 00 to 61 + 54
92-00201-05-CH	12 + 86 to 33 + 50	12 + 86 to 33 + 50
92-00201-04-CH	103 + 84.17 to 126 + 34.17	5 + 50 to 28 + 00
88-00201-02-SW	22 + 47.95 to 61 + 31.95	33 + 66 to 72 + 50
86-00201-04-SW	83 + 32.10 to 158 + 45.68	0 + 04 to 75 + 17.58
80-00201-04-CH	150 + 40.68 to 158 + 45.68	67 + 09 to 75 + 14 (Kirk Road)
76-00201-04-WR	86 + 38.68 to 158 + 45.68	3 + 07 to 75 + 14 (Kirk Road)
201-1 MFT	59 + 18.10 to 86 + 28.10	70 + 40 to 97 + 50

EXHIBIT 16

Public Informational Meeting Summary and Agency
Coordination

KANE COUNTY

DIVISION of TRANSPORTATION

Paul Rogowski,
Director of Transportation

Carl Schoedel, P.E.
County Engineer



41W011 Burlington Rd
St. Charles, IL 60175
Ph: (630) 584-1171
Fax: (630) 584-5239
Permit Dept.

February 2, 2004

Subject: PUBLIC INFORMATIONAL MEETING
FABYAN PARKWAY FEASIBILITY STUDY ROADWAY IMPROVEMENTS
FROM WESTERN AVENUE TO KIRK ROAD
KANE COUNTY DIVISION OF TRANSPORTATION

Dear Resident or Property Owner:

You are invited to attend a Public Informational Meeting on Thursday February 26, 2004 at the City of Batavia Council Chambers. This meeting will allow the public the opportunity to review and comment on the preliminary Feasibility Study improvement exhibits for Fabyan Parkway from Western Avenue to Kirk Road.

The meeting is scheduled in the council chambers from 5:30 to 7:00 PM for the subdivision area residents located west of the Fox River and from 7:30 to 9:00 PM for the subdivision area residents located east of the Fox River. Residents and property owners may arrive at any time during their respective meeting blocks to review the exhibits and discuss the project informally with staff. Due to the amount of exhibits required, viewing and discussion of improvement locations will be limited to the location areas associated with the respective time frames above. Staff members from the Kane County Division of Transportation and their Consulting Engineering firm will be available to answer questions.

Stations will be set up for residents and property owners to review exhibits and ask questions. Forms will also be made available for public comments to be submitted to the County for consideration. A computer traffic simulation model will also be demonstrated to illustrate current traffic conditions, traffic conditions in 2015, and traffic conditions in 2025 with existing and proposed roadway geometrics.

The Feasibility Study is the first step in the process to analyze and develop proposed future roadway improvements for Fabyan Parkway. Traffic Growth projections have been estimated for the years 2015 and 2025 and associated improvements are being evaluated to safely accommodate commuters along this section.

Proposed improvements are based on improving safety and mobility on Fabyan Parkway. The Feasibility Study investigated three different time scenarios; immediate, near future (2005-2015), and future (2025 and beyond) in order to estimate projected cost/benefit ratios. The following summaries roadway improvements for the three scenarios evaluated as part of this initial Study.

PROPOSED POSSIBLE IMMEDIATE SPOT IMPROVEMENTS:

- Roadway Grinding and Resurfacing work adjacent to the intersections of IL 31 and IL 25 to eliminate pavement rutting and provide a smoother and safer pavement.
- Improved pavement markings and striping along this section of roadway.
- Isolated intersection widening improvements at Kingsland Drive and IL 25 to allow safer turning movements for cars and trucks.

PROPOSED POSSIBLE NEAR FUTURE ROADWAY IMPROVEMENTS (2005 to 2015)

1. Preferred Improvements Proposed In Study

- Provide new auxiliary intersection turning lanes at all intersections except Carriage Drive, Thoria Road, Surrey Road, and Heather Lane.
- Propose new traffic signals at Van Nortwick Avenue, Allen Drive, Nagel Boulevard, and Kingsland Drive based on current traffic data collected and projected traffic estimates. Traffic signals may be interconnected by fiber optics or radio to improve traffic operations along this section.

- To allow the proposal for installation of traffic signals at the above intersections and to improve safety and mobility by reducing points of vehicle conflicts, the following intersections with Fabyan are proposed to be closed to public access: Carriage Drive, Thoria Road, Surrey Road, and Heather Lane. Although they would be closed to public access, grassy pavers and curbing would be proposed so that Emergency Vehicles could still access at these points in the event of a vital emergency.
- Areas of additional Right – of – way and Easements would be necessary.

2. Other Alternatives Evaluated In Study

- Widen Fabyan to provide a center bi-directional, two way left turn lane along Fabyan Parkway.
- Restrict access to right-in and right-out only turning movements at the intersections with Carriage, Thoria, Surrey, and Heather.

Note 1: Areas of permanent Right-of-way as well as temporary easements would be necessary.

Note 2: Traffic Signals will most likely not be warranted at any intersection except where they currently exist if Carriage, Thoria, Surrey, and Heather remain open for access.

PROPOSED POSSIBLE FUTURE IMPROVEMENTS (YEAR 2025 +)

- Widen to provide 6 through traffic lanes (3 in each direction) with a raised median on Fabyan with auxiliary turning lanes at intersections.

- Propose traffic signals at intersections with Van Nortwick, Allen, Nagel, and Kingsland. Traffic signals may be interconnected by fiber optics or radio to improve traffic operations along this section.

Note 1: This level of improvement would likely require elimination of public access at intersections with Carriage, Thoria, Surrey, and Heather. Emergency access would be proposed at these locations for Emergency Service vehicles.

Note 2: Areas of permanent Right-of-way as well as temporary easements would be necessary.

A form is attached to this letter for you to provide your name, address, telephone number, and other comments that you may have regarding the Fabyan Parkway Feasibility Study and future possible improvements. If you are unable to attend the Public Informational meeting, please mail any comments you may have to the address below. If you have any questions regarding this feasibility study, please contact Paul Holcomb, Chief of Design, at 630-584-1170.

Kane County Division of Transportation
41W011 Burlington Road
St. Charles, IL 60175

Thank you in advance for your comments regarding this Feasibility Study. Your comments will be considered by Kane County during the completion of this initial report. We look forward to the opportunity to hear from you at the meeting.

Sincerely,

Kane County Division of Transportation

**FABYAN PARKWAY FEASIBILITY STUDY
PUBLIC INFORMATIONAL MEETING – FEBRUARY 26, 2004**

SUMMARY OF PUBLIC COMMENTS RECEIVED

A Public Informational Meeting was held on Thursday February 26, 2004 for the Fabyan Parkway Feasibility Study Project. The meeting was held at the City of Batavia council chambers. A summary of the public comments received from this meeting are outlined below. A total of 600 meeting notices were sent out to residents and business owners in the City of Batavia. A total of 200 meeting notices were sent out to residents and business owners in the City of Geneva and Geneva Township.

- A total of 70 people signed the meeting Attendance Sheets (approximately 8.8 % representation from the notices sent out).
- A total of 37 public comment response forms were received from 33 different households or businesses (approximately 52.9 % of people who attended meeting).
- A total of 150 comments were received from the 37 public comment forms.

COMMENT SUMMARY	IN FAVOR	NOT IN FAVOR
1. The center two way left turn lane	8	3
2. Right in/right out at Van Nortwick	4	-
3. Right in/right out at Carriage	5	1
4. Right in/right out at Thoria	5	-
5. Right in/right out at Surrey	6	-
4. Fabyan left turn lane at Van Nortwick	6	-
5. Street Closure at Heather	3	3
6. Street Closure at Carriage	9	4
7. Street Closure at Thoria	2	1
8. Street Closure at Surrey	3	1
9. Street Closure at Van Nortwick	2	1
10. Expressed concern with Noise Levels	6	-
11. Expressed concern with speed limit/enforce	9	-

COMMENT SUMMARY	IN FAVOR	NOT IN FAVOR
12. Expressed concern with pedestrian safety	8	-
13. Expressed issues with signal coordination	7	-
14. Traffic signal at Van Nortwick intersection	4	3
15. Traffic signal at Allen/River Rock intersection	4	2
16. Auxillary turn lanes along Fabyan	6	-
17. Expressed concern with # of signals	4	-
18. Right turn lane at Van Nortwick intersection	3	-
19. Eliminate proposed left turn at Van Nortwick	1	-
20. Provide a frontage road/lane north side of Fabyan	1	-
21. Traffic signal at Nagel intersection	1	1
22. Traffic signal at Surrey intersection	1	-
23. Proposed future widening to 6 through lanes	1	4
24. Left turn lane at Holmstad intersections	2	-
25. Right turn lane at IL 31 intersection	1	-
26. Right turn lane at IL 25 intersection	1	-
27. Provide low cost solutions now	1	-
28. Expressed concern over property values/taxes	7	-
29. Expressed concern over Britta increased traffic	1	-
30. Expressed comment regarding future access	1	-
31. Requested a new bridge location across river	1	-
32. Requested better street lighting at Heather	1	-
33. Requested a daytime meeting in future	1	-

Kurt Bialobreski

From: Eric Bachman [ebachman@f-w.com]
Sent: Friday, March 11, 2005 3:57 PM
To: kbialo@f-w.com
Subject: FW: Fabyan Parkway Feasibility Study

-----Original Message-----

From: Holcomb, Paul [mailto:holcombpaul@co.kane.il.us]
Sent: Thursday, July 22, 2004 11:09 AM
To: Harbaugh, Tim
Cc: Meyers, Monica
Subject: RE: Fabyan Parkway Feasibility Study

Tim and Monica:

My goal is to finish up the Fabyan Feasibility study in August. Your comments/information have been helpful. If there is anything else please let me know. If we need to meet that's fine too.

thanks again

> -----Original Message-----

> From: Harbaugh, Tim
> Sent: Thursday, July 22, 2004 11:03 AM
> To: Holcomb, Paul
> Cc: Meyers, Monica
> Subject: RE: Fabyan Parkway Feasibility Study

>
> Paul- I spoke to Monica Meyers at the FPD this morning on this.

>
> We are working closely with them on end uses at Settler's Hill.

>
> At this time we anticipate one of the entrances will be eliminated, most likely the current golf course entrance.

>
> This is a work in progress, and I will not have a final decision on this until after the landfill closes in 2.5 years.

>
> With respect to an access of the Events Center parking lot onto Fabyan (via a new access road from the parking lot behind the ice arena and onto Fabyan), with the new parking lot the Cougars are able to use the ice arena entrance as an access point.

> I would doubt if the FPD is interested in pursuing access onto Fabyan in the near future. The county is not.

>
> Monica, please expand if you have other thoughts.

>
> I hope this helps.

> -----Original Message-----

> From: Holcomb, Paul
> Sent: Thursday, July 15, 2004 1:43 PM
> To: Harbaugh, Tim
> Subject: RE: Fabyan Parkway Feasibility Study

>
> Hi Tim : Any word or recollection on this?

>
> thanks

>
> -----Original Message-----
> From: Harbaugh, Tim
> Sent: Wednesday, July 07, 2004 10:07 AM
> To: Holcomb, Paul
> Subject: RE: Fabyan Parkway Feasibility Study

> Paul- Let me check into this and I will get back to you.

> -----Original Message-----
> From: Holcomb, Paul
> Sent: Wednesday, July 07, 2004 8:48 AM
> To: Harbaugh, Tim
> Subject: Fabyan Parkway Feasibility Study

> Tim: We are about 85% complete with a study of Fabyan Parkway from
Western Ave to Kirk Road. The purpose of the study is to determine the
feasibility and impacts for providing additional auxiliary lanes at
intersections while maintaining 4 thru lanes to accommodate 2015 and 2025
traffic with the possibility of 6 lanes. The study also looks at Limiting
points of local access, restricting curb cuts, consolidating access points,
and to restrict left turns into points of access. One of our concerns was
the future of the landfill and the Kane Events Center and how that might
relate to future requests for points of access on Fabyan. To complete the
study we would like your thoughts on this or would it be better to meet?

>
>
> thanks

NAME	ADDRESS	Two Way Left Turn Lane		Right-In/Right-Out @ Van Nortwick		Right-In/Right-Out @ Carriage	
		For	Against	For	Against	For	Against
Bill Coon - VWR International	800 E. Fabyan Parkway, Batavia						
Ed & Jennifer Leman	1095 Winnebago Trail, Batavia						
*Robert E. Byrnes - Brynes & Co.	200 S. Batavia Ave.						
Karen Maladra	2004 Allen Drive, Geneva						
Dale Grischow	2016 Heather Road, Geneva						
Gerald Sternberg	785 Carriage Drive, Batavia					X	
Ed Cange	715 N. Van Nortwick, Batavia			X		X	
Beverly Cange	715 N. Van Nortwick, Batavia						
Don Lindman	700 W. Fabyan # 7A, Batavia		X				
Bryan Peterson	1089 Winnebago Trail, Batavia						
Cathy Barnard	605 Winnebago Trail, Batavia			X			
Carl Holmgren	582 N. Van Nortwick, Batavia						
Steve and Amy Hylka	1165 Winnebago Trail, Batavia						
Deborah Morgan	582 Blackhawk Drive, Batavia	X					
John Morgan	582 Blackhawk Drive, Batavia	X					
Denise Pizarro	926 Britta Lane, Batavia						X
Keith and Kara Helmlinger	434 East Fabyan, Batavia						
John Carroll	1077 Winnebago Trail, Batavia						
Bill Kettering	786 N. Van Nortwick, Batavia			X			
Linnea C. Miller	Batavia 3rd Ward Alderwoman	X				X	
Richard Vance	555 Blackhawk Drive, Batavia					X	
Gail Carroll	1077 Winnebago Trail, Batavia	X					
David G. Czuprynski	372 Orion Road, Batavia						
Ann and Doug Bongen	1411 Orion Road, Batavia						
Avanellac and Sherrim Jeffers	1412 Surrey Road, Batavia	X					
Susan Cechner	1010 Fabyan, Geneva	X					
Daniel Brand	1010 Fabyan, Geneva	X					
Debbie and Mike Abbs	786 Carriage Drive, Batavia		X				
Charles and Cynthia Webb	1065 Pontiac Drive, Batavia						
Mairan M. Allen	President Holmstad Res Council						
Katherine Jordan	1425 Orion Road, Batavia						
Leo Bellantoni	651 Thorsen Lane						
** William and Jeanne Everhart	825 W. Fabyan, Geneva						
*** Robert and Carol Giertz	635 Considine, Geneva						
****Mr. & Mrs. John Knudsen	449 Davis Road, Batavia						
Robert P. Smith	835 W. Fabyan, Geneva	X					
Dave and Sheila Morris	765 Fabyan, Geneva		X	X		X	
TOTAL		8	3	4		5	1

* Respondant requested a meeting with the County concerning obtaining access for his property just north of Dryer Medical and Campana.

** Respondant requested plans for another bridge across the river between Aurora and Geneva.

*** Respondant requested better street lighting at the intersection of Fabyan and Heather.

**** Respondant requested the opportunity to attend a Daytime Meeting for future meetings.

NAME	ADDRESS	Left Turn Lane @ Van Nortwick		Closure of Heather		Closure of Carriage		Closure of Thoria		Closure of Surrey	
		For	Against	For	Against	For	Against	For	Against	For	Against
Bill Coon - VWR International	800 E. Fabyan Parkway, Batavia										
Ed & Jennifer Leman	1095 Winnebago Trail, Batavia										
*Robert E. Byrnes - Brynes & Co.	200 S. Batavia Ave.										
Karen Maladra	2004 Allen Drive, Geneva										
Dale Grischow	2016 Heather Road, Geneva			X							
Gerald Sternberg	785 Carriage Drive, Batavia					X					
Ed Cange	715 N. Van Nortwick, Batavia					X					
Beverly Cange	715 N. Van Nortwick, Batavia	X									
Don Lindman	700 W. Fabyan # 7A, Batavia	X									
Bryan Peterson	1089 Winnebago Trail, Batavia										
Cathy Barnard	605 Winnebago Trail, Batavia					X					
Carl Holmgren	582 N. Van Nortwick, Batavia									X	
Steve and Amy Hylka	1165 Winnebago Trail, Batavia					X					
Deborah Morgan	582 Blackhawk Drive, Batavia						X				
John Morgan	582 Blackhawk Drive, Batavia	X					X				
Denise Pizarro	926 Britta Lane, Batavia						X				
Keith and Kara Helmlinger	434 East Fabyan, Batavia										
John Carroll	1077 Winnebago Trail, Batavia										
Bill Kettering	786 N. Van Nortwick, Batavia					X					
Linnea C. Miller	Batavia 3rd Ward Alderwoman	X			X		X		X		X
Richard Vance	555 Blackhawk Drive, Batavia					X					
Gail Carroll	1077 Winnebago Trail, Batavia										
David G. Czuprynski	372 Orion Road, Batavia										
Ann and Doug Bongon	1411 Orion Road, Batavia										
Avanellac and Sherrim Jeffers	1412 Surrey Road, Batavia										
Susan Cechner	1010 Fabyan, Geneva				X						
Daniel Brand	1010 Fabyan, Geneva				X						
Debbie and Mike Abbs	786 Carriage Drive, Batavia	X		X		X		X		X	
Charles and Cynthia Webb	1065 Pontiac Drive, Batavia	X				X					
Mairan M. Allen	President Holmstad Res Council										
Katherine Jordan	1425 Orion Road, Batavia										
Leo Bellantoni	651 Thorsen Lane			X		X		X		X	
** William and Jeanne Everhart	825 W. Fabyan, Geneva										
*** Robert and Carol Giertz	635 Considine, Geneva										
****Mr. & Mrs. John Knudsen	449 Davis Road, Batavia										
Robert P. Smith	835 W. Fabyan, Geneva										
Dave and Sheila Morris	765 Fabyan, Geneva										
TOTAL		6		3	3	9	4	2	1	3	1

* Respondant requested a meeting with the County concerning obtai

** Respondant requested plans for another bridge across the river be

*** Respondant requested better street lighting at the intersection of F

**** Respondant requested the opportunity to attend a Daytime Meetin

NAME	ADDRESS	Closure of Van Nortwick		Concern with Noise Levels	Lower/Enforce Speed Limit	Concern w/ Ped. Safety	Coordination of Traffic Signals	Traffic Signals @ Van Nortwick	
		For	Against					For	Against
Bill Coon - VWR International	800 E. Fabyan Parkway, Batavia								
Ed & Jennifer Leman	1095 Winnebago Trail, Batavia			X	X	X			
*Robert E. Byrnes - Brynes & Co.	200 S. Batavia Ave.								
Karen Maladra	2004 Allen Drive, Geneva			X			X		
Dale Grischow	2016 Heather Road, Geneva								X
Gerald Sternberg	785 Carriage Drive, Batavia			X	X	X			
Ed Cange	715 N. Van Nortwick, Batavia	X							
Beverly Cange	715 N. Van Nortwick, Batavia				X				
Don Lindman	700 W. Fabyan # 7A, Batavia						X	X	
Bryan Peterson	1089 Winnebago Trail, Batavia			X		X			
Cathy Barnard	605 Winnebago Trail, Batavia								X
Carl Holmgren	582 N. Van Nortwick, Batavia							X	
Steve and Amy Hylka	1165 Winnebago Trail, Batavia				X				
Deborah Morgan	582 Blackhawk Drive, Batavia						X		
John Morgan	582 Blackhawk Drive, Batavia						X		
Denise Pizarro	926 Britta Lane, Batavia								
Keith and Kara Helmlinger	434 East Fabyan, Batavia					X			
John Carroll	1077 Winnebago Trail, Batavia			X					
Bill Kettering	786 N. Van Nortwick, Batavia	X				X	X		
Linnea C. Miller	Batavia 3rd Ward Alderwoman		X		X	X			
Richard Vance	555 Blackhawk Drive, Batavia								
Gail Carroll	1077 Winnebago Trail, Batavia			X	X				
David G. Czuprynski	372 Orion Road, Batavia								
Ann and Doug Bongon	1411 Orion Road, Batavia					X			
Avanellac and Sherrim Jeffers	1412 Surrey Road, Batavia				X				
Susan Cechner	1010 Fabyan, Geneva								
Daniel Brand	1010 Fabyan, Geneva								
Debbie and Mike Abbs	786 Carriage Drive, Batavia					X			
Charles and Cynthia Webb	1065 Pontiac Drive, Batavia							X	
Mairan M. Allen	President Holmstad Res Council								
Katherine Jordan	1425 Orion Road, Batavia								
Leo Bellantoni	651 Thorsen Lane						X	X	
** William and Jeanne Everhart	825 W. Fabyan, Geneva								
*** Robert and Carol Giertz	635 Considine, Geneva				X				
****Mr. & Mrs. John Knudsen	449 Davis Road, Batavia								
Robert P. Smith	835 W. Fabyan, Geneva						X		X
Dave and Sheila Morris	765 Fabyan, Geneva				X				
TOTAL		2	1	6	9	8	7	4	3

* Respondant requested a meeting with the County concerning obtai

** Respondant requested plans for another bridge across the river be

*** Respondant requested better street lighting at the intersection of F

**** Respondant requested the opportunity to attend a Daytime Meetin

NAME	ADDRESS	Traffic Signals @ Allen/River Rock		Auxiliary Turn Lanes		Reduction of Traffic Signals West of IL 31	Right Turn Lane @ Van Nortwick	
		For	Against	For	Against		For	Against
Bill Coon - VWR International	800 E. Fabyan Parkway, Batavia			X				
Ed & Jennifer Leman	1095 Winnebago Trail, Batavia							
*Robert E. Byrnes - Brynes & Co.	200 S. Batavia Ave.							
Karen Maladra	2004 Allen Drive, Geneva							
Dale Grischow	2016 Heather Road, Geneva	X						
Gerald Sternberg	785 Carriage Drive, Batavia							
Ed Cange	715 N. Van Nortwick, Batavia							
Beverly Cange	715 N. Van Nortwick, Batavia						X	
Don Lindman	700 W. Fabyan # 7A, Batavia	X		X				
Bryan Peterson	1089 Winnebago Trail, Batavia							
Cathy Barnard	605 Winnebago Trail, Batavia							
Carl Holmgren	582 N. Van Nortwick, Batavia							
Steve and Amy Hylka	1165 Winnebago Trail, Batavia							
Deborah Morgan	582 Blackhawk Drive, Batavia					X		
John Morgan	582 Blackhawk Drive, Batavia					X	X	
Denise Pizarro	926 Britta Lane, Batavia			X				
Keith and Kara Helmlinger	434 East Fabyan, Batavia							
John Carroll	1077 Winnebago Trail, Batavia							
Bill Kettering	786 N. Van Nortwick, Batavia					X		
Linnea C. Miller	Batavia 3rd Ward Alderwoman			X			X	
Richard Vance	555 Blackhawk Drive, Batavia		X			X		
Gail Carroll	1077 Winnebago Trail, Batavia							
David G. Czuprynski	372 Orion Road, Batavia							
Ann and Doug Bongon	1411 Orion Road, Batavia							
Avanellac and Sherrim Jeffers	1412 Surrey Road, Batavia							
Susan Cechner	1010 Fabyan, Geneva							
Daniel Brand	1010 Fabyan, Geneva							
Debbie and Mike Abbs	786 Carriage Drive, Batavia	X						
Charles and Cynthia Webb	1065 Pontiac Drive, Batavia							
Mairan M. Allen	President Holmstad Res Council			X				
Katherine Jordan	1425 Orion Road, Batavia							
Leo Bellantoni	651 Thorsen Lane	X						
** William and Jeanne Everhart	825 W. Fabyan, Geneva							
*** Robert and Carol Giertz	635 Considine, Geneva			X				
****Mr. & Mrs. John Knudsen	449 Davis Road, Batavia							
Robert P. Smith	835 W. Fabyan, Geneva		X					
Dave and Sheila Morris	765 Fabyan, Geneva							
TOTAL		4	2	6		4	3	

* Respondant requested a meeting with the County concerning obtai

** Respondant requested plans for another bridge across the river be

*** Respondant requested better street lighting at the intersection of F

**** Respondant requested the opportunity to attend a Daytime Meetin

NAME	ADDRESS	Eliminate Left Turns @ Van Nortwick	Frontage Road Northside of Fabyan	Right-In/Right-Out @ Thoria		Right-In/Right-Out @ Surrey	
				For	Against	For	Against
Bill Coon - VWR International	800 E. Fabyan Parkway, Batavia						
Ed & Jennifer Leman	1095 Winnebago Trail, Batavia						
*Robert E. Byrnes - Brynes & Co.	200 S. Batavia Ave.						
Karen Maladra	2004 Allen Drive, Geneva						
Dale Grischow	2016 Heather Road, Geneva						
Gerald Sternberg	785 Carriage Drive, Batavia						
Ed Cange	715 N. Van Nortwick, Batavia						
Beverly Cange	715 N. Van Nortwick, Batavia						
Don Lindman	700 W. Fabyan # 7A, Batavia						
Bryan Peterson	1089 Winnebago Trail, Batavia						
Cathy Barnard	605 Winnebago Trail, Batavia						
Carl Holmgren	582 N. Van Nortwick, Batavia					X	
Steve and Amy Hylka	1165 Winnebago Trail, Batavia						
Deborah Morgan	582 Blackhawk Drive, Batavia						
John Morgan	582 Blackhawk Drive, Batavia						
Denise Pizarro	926 Britta Lane, Batavia						
Keith and Kara Helmlinger	434 East Fabyan, Batavia						
John Carroll	1077 Winnebago Trail, Batavia						
Bill Kettering	786 N. Van Nortwick, Batavia	X	X				
Linnea C. Miller	Batavia 3rd Ward Alderwoman			X		X	
Richard Vance	555 Blackhawk Drive, Batavia						
Gail Carroll	1077 Winnebago Trail, Batavia						
David G. Czuprynski	372 Orion Road, Batavia			X		X	
Ann and Doug Bonggen	1411 Orion Road, Batavia						
Avanellac and Sherrim Jeffers	1412 Surrey Road, Batavia			X		X	
Susan Cechner	1010 Fabyan, Geneva						
Daniel Brand	1010 Fabyan, Geneva						
Debbie and Mike Abbs	786 Carriage Drive, Batavia						
Charles and Cynthia Webb	1065 Pontiac Drive, Batavia						
Mairan M. Allen	President Holmstad Res Council						
Katherine Jordan	1425 Orion Road, Batavia			X		X	
Leo Bellantoni	651 Thorsen Lane						
** William and Jeanne Everhart	825 W. Fabyan, Geneva						
*** Robert and Carol Giertz	635 Considine, Geneva						
****Mr. & Mrs. John Knudsen	449 Davis Road, Batavia						
Robert P. Smith	835 W. Fabyan, Geneva						
Dave and Sheila Morris	765 Fabyan, Geneva			X		X	
TOTAL		1	1	5		6	

* Respondant requested a meeting with the County concerning obtai

** Respondant requested plans for another bridge across the river be

*** Respondant requested better street lighting at the intersection of F

**** Respondant requested the opportunity to attend a Daytime Meetin

NAME	ADDRESS	Traffic Signal @ Nagel		Traffic Signal @ Surrey		Widen to Six Through Lanes		Left Turn Lane @ Holmstad Entrances	
		For	Against	For	Against	For	Against	For	Against
Bill Coon - VWR International	800 E. Fabyan Parkway, Batavia					X			
Ed & Jennifer Leman	1095 Winnebago Trail, Batavia								
*Robert E. Byrnes - Brynes & Co.	200 S. Batavia Ave.								
Karen Maladra	2004 Allen Drive, Geneva								
Dale Grischow	2016 Heather Road, Geneva								
Gerald Sternberg	785 Carriage Drive, Batavia								
Ed Cange	715 N. Van Nortwick, Batavia								
Beverly Cange	715 N. Van Nortwick, Batavia								
Don Lindman	700 W. Fabyan # 7A, Batavia								
Bryan Peterson	1089 Winnebago Trail, Batavia								
Cathy Barnard	605 Winnebago Trail, Batavia								
Carl Holmgren	582 N. Van Nortwick, Batavia								
Steve and Amy Hylka	1165 Winnebago Trail, Batavia						X		
Deborah Morgan	582 Blackhawk Drive, Batavia								
John Morgan	582 Blackhawk Drive, Batavia								
Denise Pizarro	926 Britta Lane, Batavia								
Keith and Kara Helmlinger	434 East Fabyan, Batavia								
John Carroll	1077 Winnebago Trail, Batavia								
Bill Kettering	786 N. Van Nortwick, Batavia								
Linnea C. Miller	Batavia 3rd Ward Alderwoman								
Richard Vance	555 Blackhawk Drive, Batavia								
Gail Carroll	1077 Winnebago Trail, Batavia								
David G. Czuprynski	372 Orion Road, Batavia								
Ann and Doug Bongen	1411 Orion Road, Batavia								
Avanellac and Sherrim Jeffers	1412 Surrey Road, Batavia	X		X					
Susan Cechner	1010 Fabyan, Geneva								
Daniel Brand	1010 Fabyan, Geneva								
Debbie and Mike Abbs	786 Carriage Drive, Batavia						X		
Charles and Cynthia Webb	1065 Pontiac Drive, Batavia								
Mairan M. Allen	President Holmstad Res Council							X	
Katherine Jordan	1425 Orion Road, Batavia								
Leo Bellantoni	651 Thorsen Lane								
** William and Jeanne Everhart	825 W. Fabyan, Geneva						X		
*** Robert and Carol Giertz	635 Considine, Geneva							X	
****Mr. & Mrs. John Knudsen	449 Davis Road, Batavia						X		
Robert P. Smith	835 W. Fabyan, Geneva		X						
Dave and Sheila Morris	765 Fabyan, Geneva								
TOTAL		1	1	1		1	4	2	

* Respondant requested a meeting with the County concerning obtai

** Respondant requested plans for another bridge across the river be

*** Respondant requested better street lighting at the intersection of F

**** Respondant requested the opportunity to attend a Daytime Meetin

NAME	ADDRESS	Right Turn Lanes @ IL 31		Right Turn Lanes @ IL 25		Low Cost Solutions Now		Concern for Property Values and Taxes	Concern w/ Increase. Britta Traffic Numbers
		For	Against	For	Against	For	Against		
Bill Coon - VWR International	800 E. Fabyan Parkway, Batavia								
Ed & Jennifer Leman	1095 Winnebago Trail, Batavia					X			
*Robert E. Byrnes - Brynes & Co.	200 S. Batavia Ave.								
Karen Maladra	2004 Allen Drive, Geneva								
Dale Grischow	2016 Heather Road, Geneva								
Gerald Sternberg	785 Carriage Drive, Batavia							X	
Ed Cange	715 N. Van Nortwick, Batavia								
Beverly Cange	715 N. Van Nortwick, Batavia								
Don Lindman	700 W. Fabyan # 7A, Batavia								
Bryan Peterson	1089 Winnebago Trail, Batavia								
Cathy Barnard	605 Winnebago Trail, Batavia								
Carl Holmgren	582 N. Van Nortwick, Batavia								
Steve and Amy Hylka	1165 Winnebago Trail, Batavia							X	
Deborah Morgan	582 Blackhawk Drive, Batavia								
John Morgan	582 Blackhawk Drive, Batavia								
Denise Pizarro	926 Britta Lane, Batavia								X
Keith and Kara Helmlinger	434 East Fabyan, Batavia							X	
John Carroll	1077 Winnebago Trail, Batavia								
Bill Kettering	786 N. Van Nortwick, Batavia								
Linnea C. Miller	Batavia 3rd Ward Alderwoman								
Richard Vance	555 Blackhawk Drive, Batavia								
Gail Carroll	1077 Winnebago Trail, Batavia							X	
David G. Czuprynski	372 Orion Road, Batavia								
Ann and Doug Bongon	1411 Orion Road, Batavia								
Avanellac and Sherrim Jeffers	1412 Surrey Road, Batavia								
Susan Cechner	1010 Fabyan, Geneva								
Daniel Brand	1010 Fabyan, Geneva								
Debbie and Mike Abbs	786 Carriage Drive, Batavia							X	
Charles and Cynthia Webb	1065 Pontiac Drive, Batavia								
Mairan M. Allen	President Holmstad Res Council								
Katherine Jordan	1425 Orion Road, Batavia								
Leo Bellantoni	651 Thorsen Lane								
** William and Jeanne Everhart	825 W. Fabyan, Geneva							X	
*** Robert and Carol Giertz	635 Considine, Geneva								
****Mr. & Mrs. John Knudsen	449 Davis Road, Batavia							X	
Robert P. Smith	835 W. Fabyan, Geneva	X		X					
Dave and Sheila Morris	765 Fabyan, Geneva								
TOTAL		1		1		1		7	1

* Respondant requested a meeting with the County concerning obtai

** Respondant requested plans for another bridge across the river be

*** Respondant requested better street lighting at the intersection of F

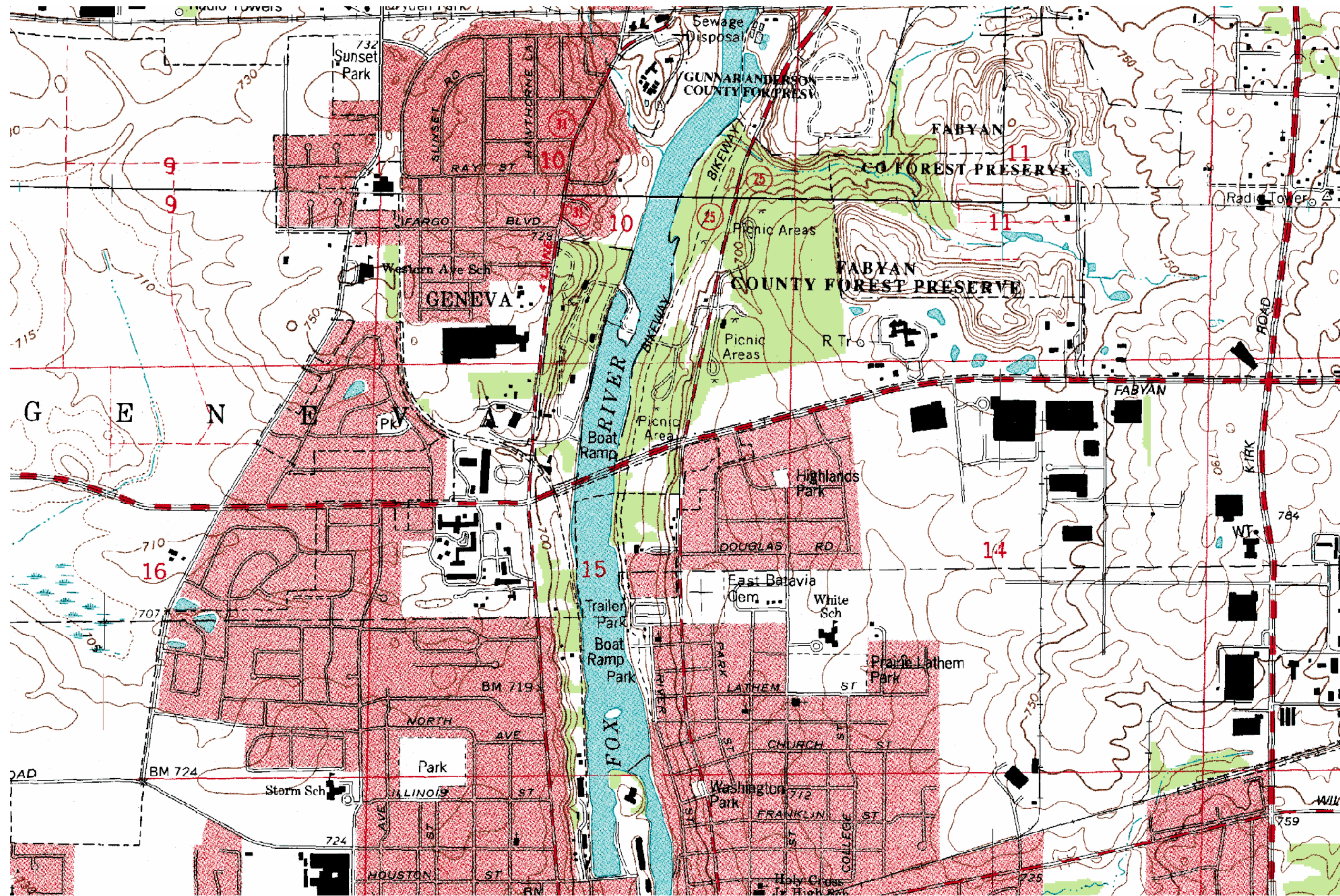
**** Respondant requested the opportunity to attend a Daytime Meetin

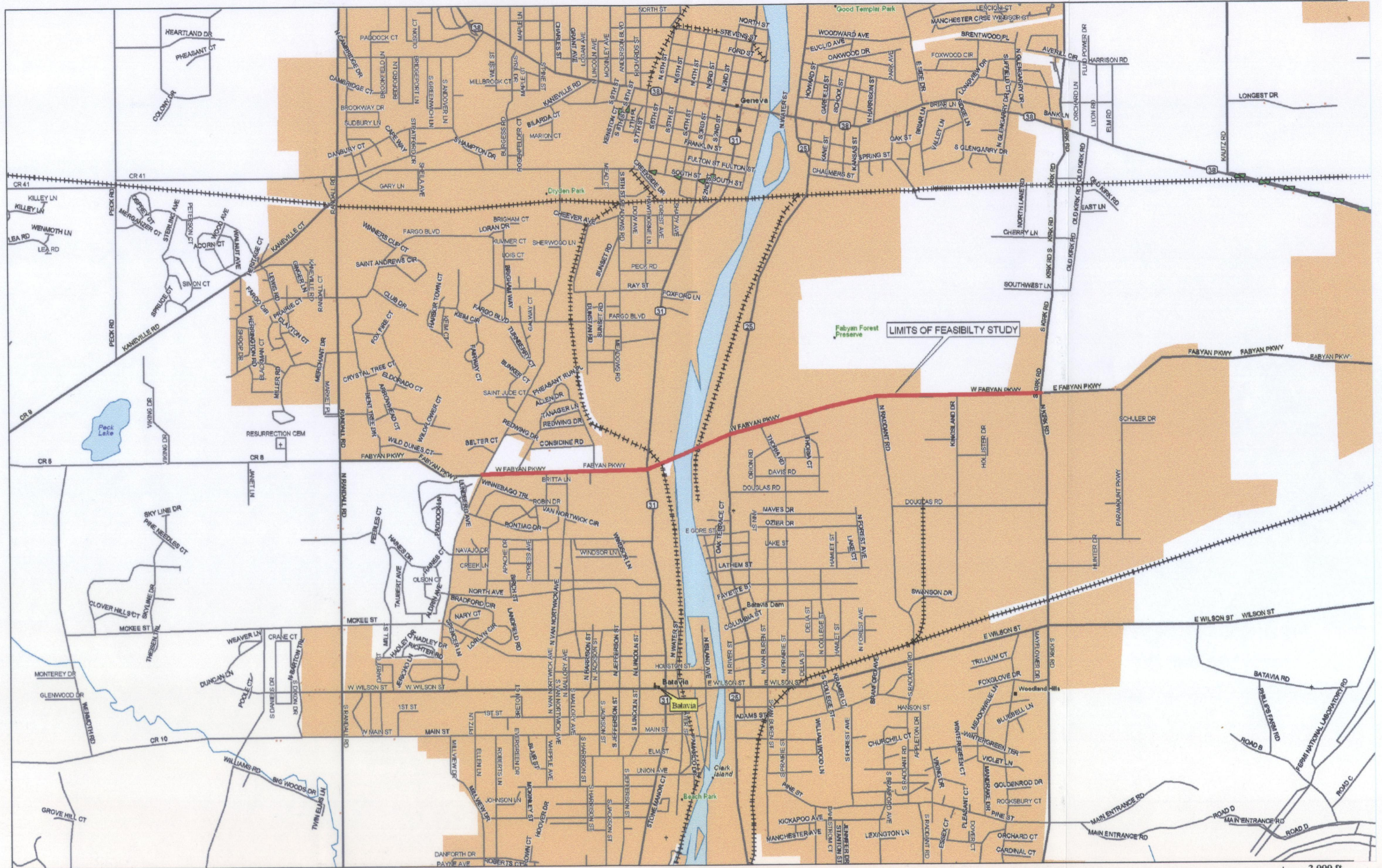
EXHIBIT 17

Maps in Support of the Feasibility Study



SCALE: NONE

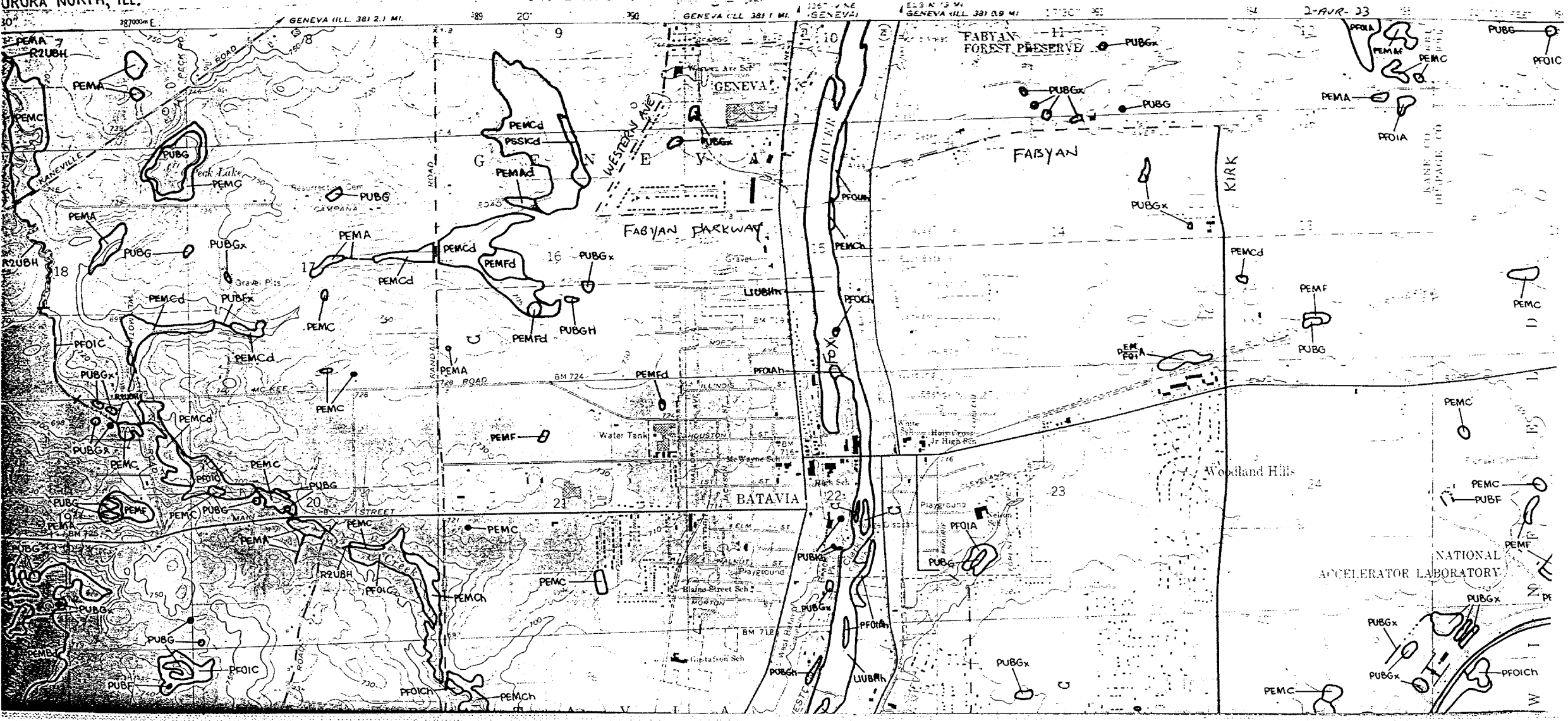


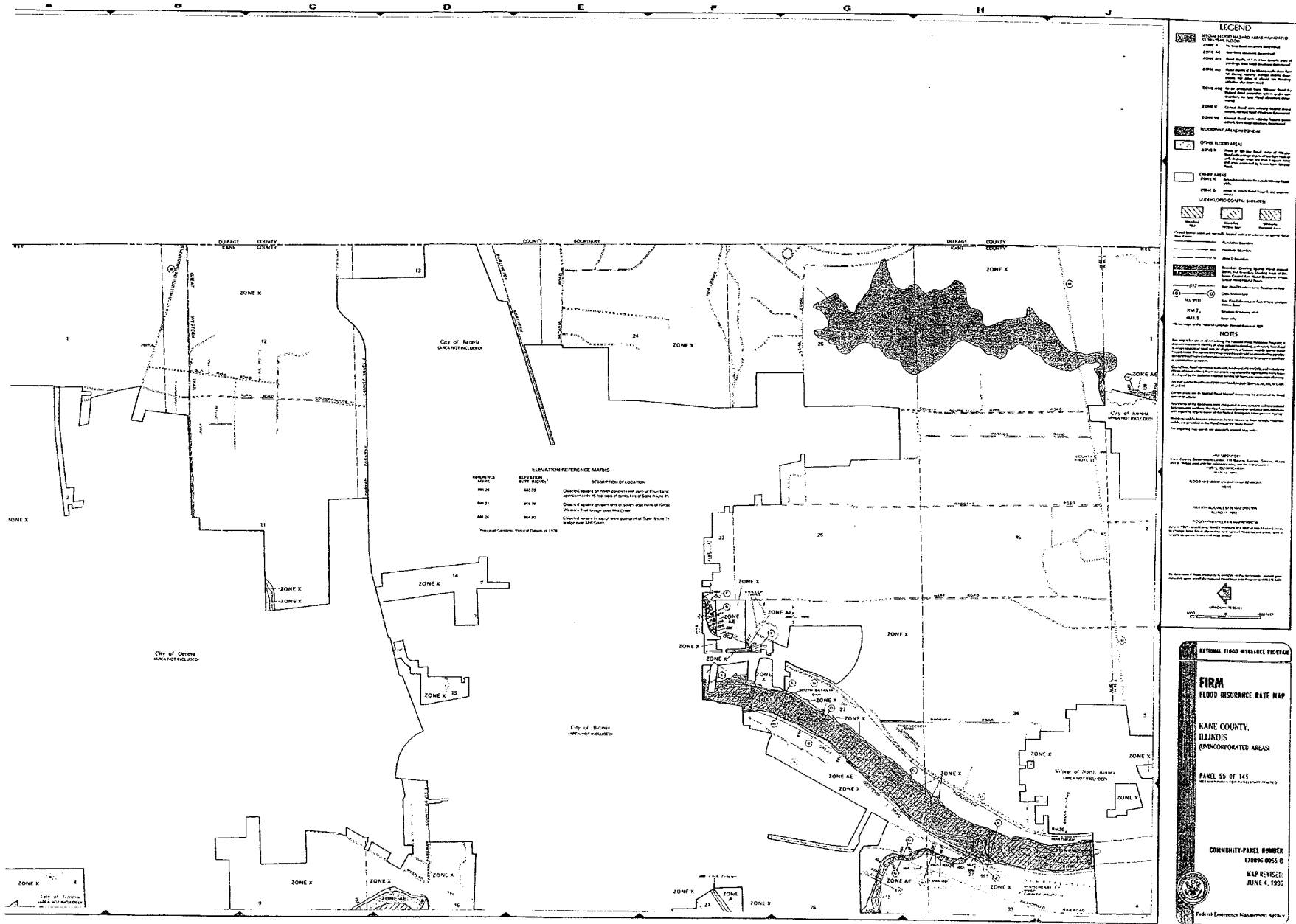


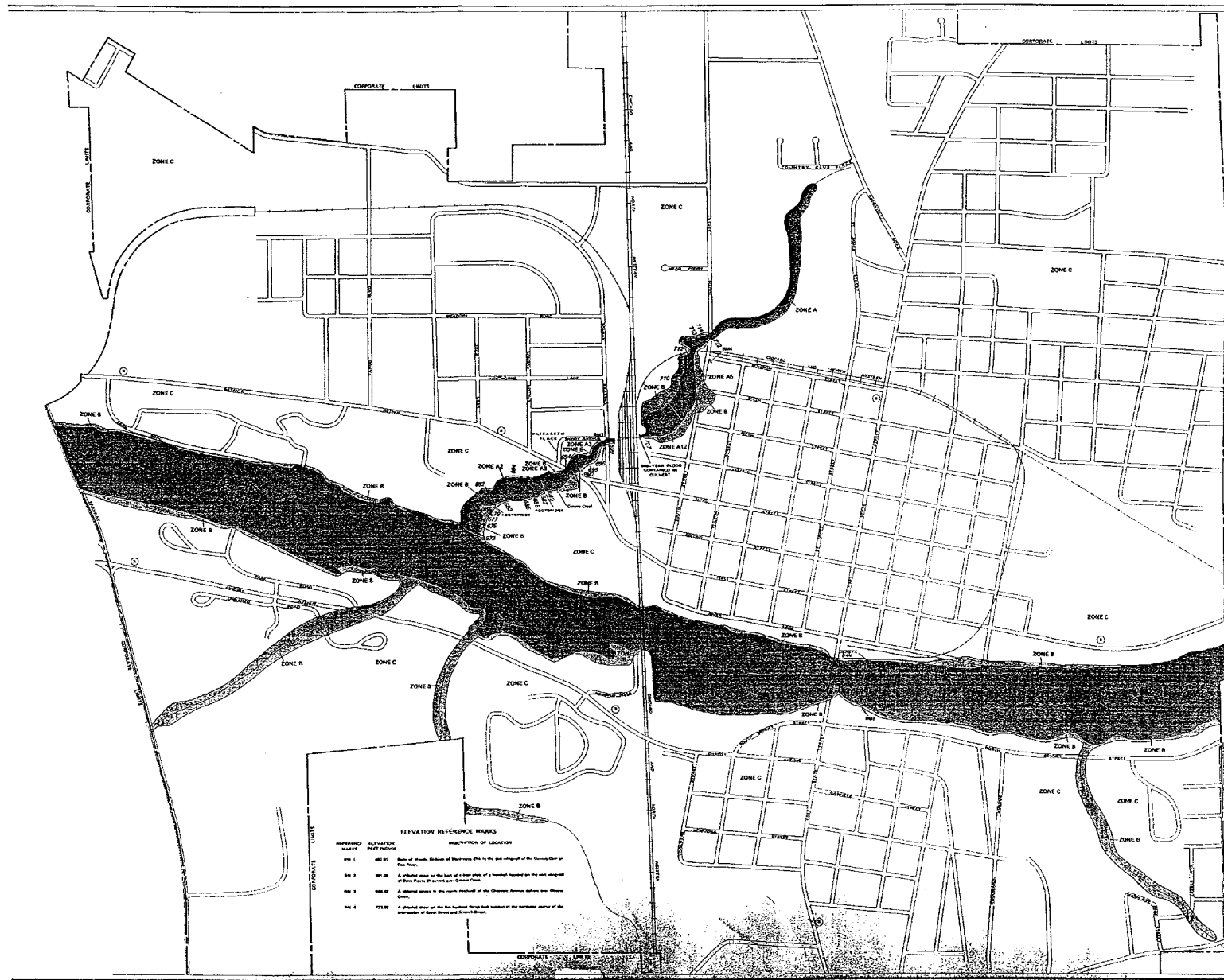
NATIONAL WETLANDS INVENTORY

UNITED STATES DEPARTMENT OF THE INTERIOR

URORA NORTH, ILL.







ELEVATION REFERENCE MARKS

MARKER NUMBER	ELEVATION (FEET)	DESCRIPTION OF LOCATION
101	88.00	Base of Flood Station at Riverbank on the east side of the Street near the Park.
102	89.00	A marked point on the east side of a Street located on the east side of the River at the north end of the Street.
103	90.00	A marked point on the east side of a Street located on the east side of the River at the north end of the Street.
104	91.00	A marked point on the east side of a Street located on the east side of the River at the north end of the Street.

KEY TO MAP

100 Year Flood Boundary
 500 Year Flood Boundary
 100 Year Flood Boundary
 500 Year Flood Boundary
 100 Year Flood Boundary
 500 Year Flood Boundary

Map Prepared Under Contract No. 100-1000
 Date: 1981
 Prepared by: [Firm Name]

EXPLANATION OF ZONE DESIGNATIONS

ZONE A
 Areas of Moderate Flood Hazard (Areas of Moderate Flood Hazard)

ZONE B
 Areas of Moderate Flood Hazard (Areas of Moderate Flood Hazard)

ZONE C
 Areas of Moderate Flood Hazard (Areas of Moderate Flood Hazard)

ZONE D
 Areas of Moderate Flood Hazard (Areas of Moderate Flood Hazard)

ZONE E
 Areas of Moderate Flood Hazard (Areas of Moderate Flood Hazard)

ZONE F
 Areas of Moderate Flood Hazard (Areas of Moderate Flood Hazard)

ZONE G
 Areas of Moderate Flood Hazard (Areas of Moderate Flood Hazard)

ZONE H
 Areas of Moderate Flood Hazard (Areas of Moderate Flood Hazard)

ZONE I
 Areas of Moderate Flood Hazard (Areas of Moderate Flood Hazard)

ZONE J
 Areas of Moderate Flood Hazard (Areas of Moderate Flood Hazard)

ZONE K
 Areas of Moderate Flood Hazard (Areas of Moderate Flood Hazard)

ZONE L
 Areas of Moderate Flood Hazard (Areas of Moderate Flood Hazard)

ZONE M
 Areas of Moderate Flood Hazard (Areas of Moderate Flood Hazard)

ZONE N
 Areas of Moderate Flood Hazard (Areas of Moderate Flood Hazard)

ZONE O
 Areas of Moderate Flood Hazard (Areas of Moderate Flood Hazard)

ZONE P
 Areas of Moderate Flood Hazard (Areas of Moderate Flood Hazard)

ZONE Q
 Areas of Moderate Flood Hazard (Areas of Moderate Flood Hazard)

ZONE R
 Areas of Moderate Flood Hazard (Areas of Moderate Flood Hazard)

ZONE S
 Areas of Moderate Flood Hazard (Areas of Moderate Flood Hazard)

ZONE T
 Areas of Moderate Flood Hazard (Areas of Moderate Flood Hazard)

ZONE U
 Areas of Moderate Flood Hazard (Areas of Moderate Flood Hazard)

ZONE V
 Areas of Moderate Flood Hazard (Areas of Moderate Flood Hazard)

ZONE W
 Areas of Moderate Flood Hazard (Areas of Moderate Flood Hazard)

ZONE X
 Areas of Moderate Flood Hazard (Areas of Moderate Flood Hazard)

ZONE Y
 Areas of Moderate Flood Hazard (Areas of Moderate Flood Hazard)

ZONE Z
 Areas of Moderate Flood Hazard (Areas of Moderate Flood Hazard)

NOTES TO USER

This map is a Flood Insurance Rate Map (FIRM) prepared under contract with the Federal Insurance Administration. It is intended to provide information on flood insurance rates for the City of Geneva, Illinois. The map is not to be used for any other purpose. The user should consult the Flood Insurance Manual for more information.

DATE OF REVISION
 AUGUST 1, 1981

PREPARED BY
 [Firm Name]

APPROVED BY
 [Firm Name]

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
 FLOOD INSURANCE RATE MAP

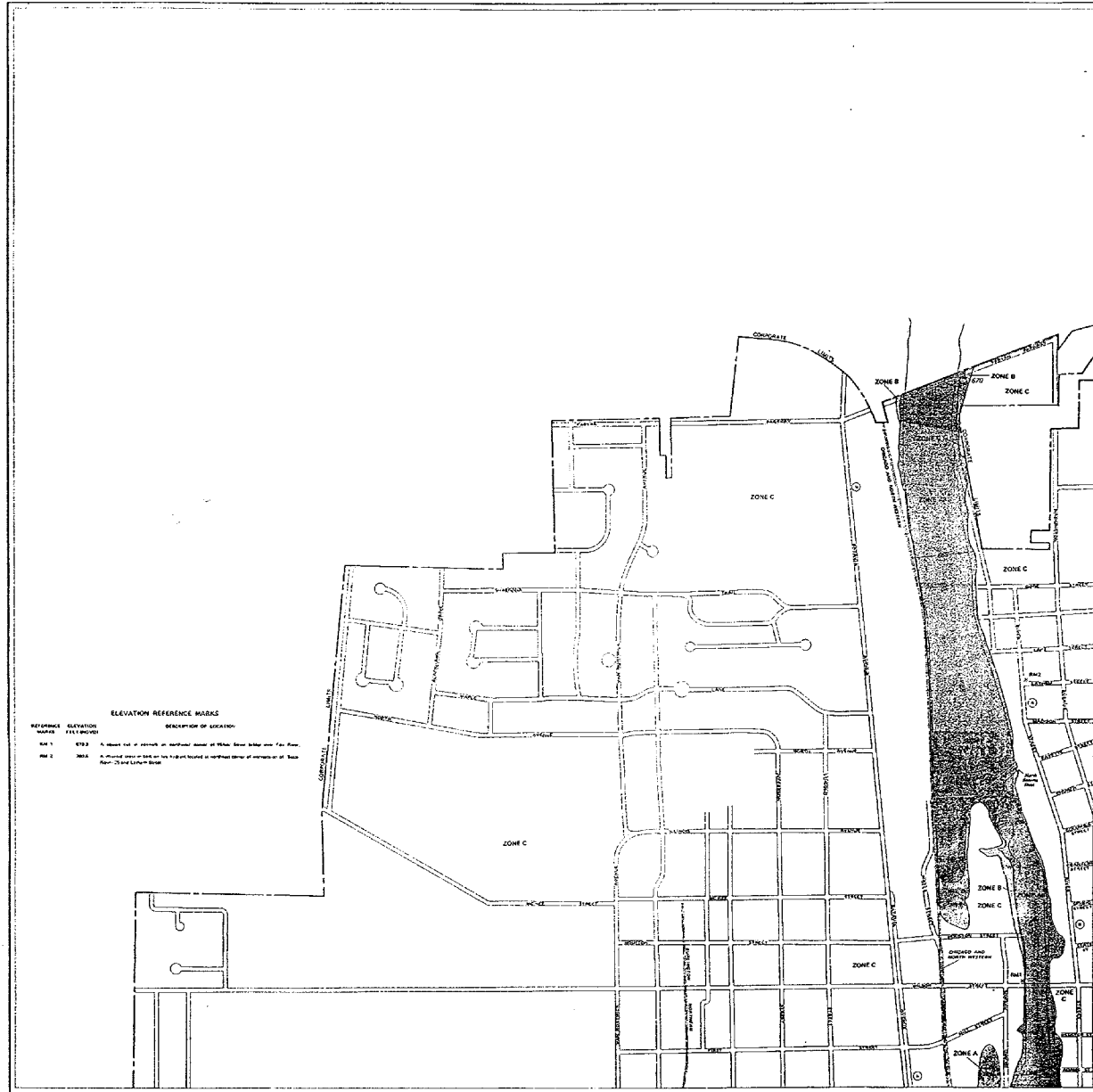
CITY OF GENEVA, ILLINOIS
 HANE COUNTY

PANEL 2 OF 2

COMMUNITY PANEL NUMBER
 170225 0002 0

EFFECTIVE DATE:
 AUGUST 1, 1981

Federal Insurance Administration



ELEVATION REFERENCE MARKS

REFERENCE MARK	ELEVATION (FEET ABOVE SEA LEVEL)	DESCRIPTION OF LOCATION
RM 1	479.2	At corner of street on northeast corner of Main Street and First Street
RM 2	388.8	At corner of street on northeast corner of Main Street and Second Street

KEY TO MAP

100 Year Flood Boundary	Zone B
500 Year Flood Boundary	Zone C
Area of Special Flood Hazard	Zone X
Area of Moderate Flood Hazard	Zone V
Area of Very High Flood Hazard	Zone VE

EXPLANATION OF ZONE DESIGNATIONS

Zone A: Areas of minimal flood hazard, flood protection and development are adequate.

Zone B: Areas of moderate flood hazard, flood protection and development are adequate.

Zone C: Areas of high flood hazard, flood protection and development are inadequate.

Zone X: Areas of special flood hazard, flood protection and development are inadequate.

Zone V: Areas of moderate flood hazard, flood protection and development are inadequate.

Zone VE: Areas of very high flood hazard, flood protection and development are inadequate.

RESULTS TO DATE:

Special areas may be designated as Special Flood Hazard Areas and V by the Department of the Interior.

MAP IDENTIFICATION:

DATE: 1981

FLOOD INSURANCE RATE MAP REFERENCE: 1981

FLOOD INSURANCE RATE MAP REFERENCE: 1981

NOTE ON THE FLOOD INSURANCE RATE MAP EFFECTIVE:

The Department of the Interior has determined that the map is accurate and that the information on the map is correct and complete.

To determine if your property is within the Special Flood Hazard Area, contact the Federal Emergency Management Agency (FEMA) at 400 ...

APPROXIMATE SCALE:

NATIONAL FLOOD INSURANCE PROGRAM

FIRMA

FLOOD INSURANCE RATE MAP

CITY OF BATAVIA, ILLINOIS

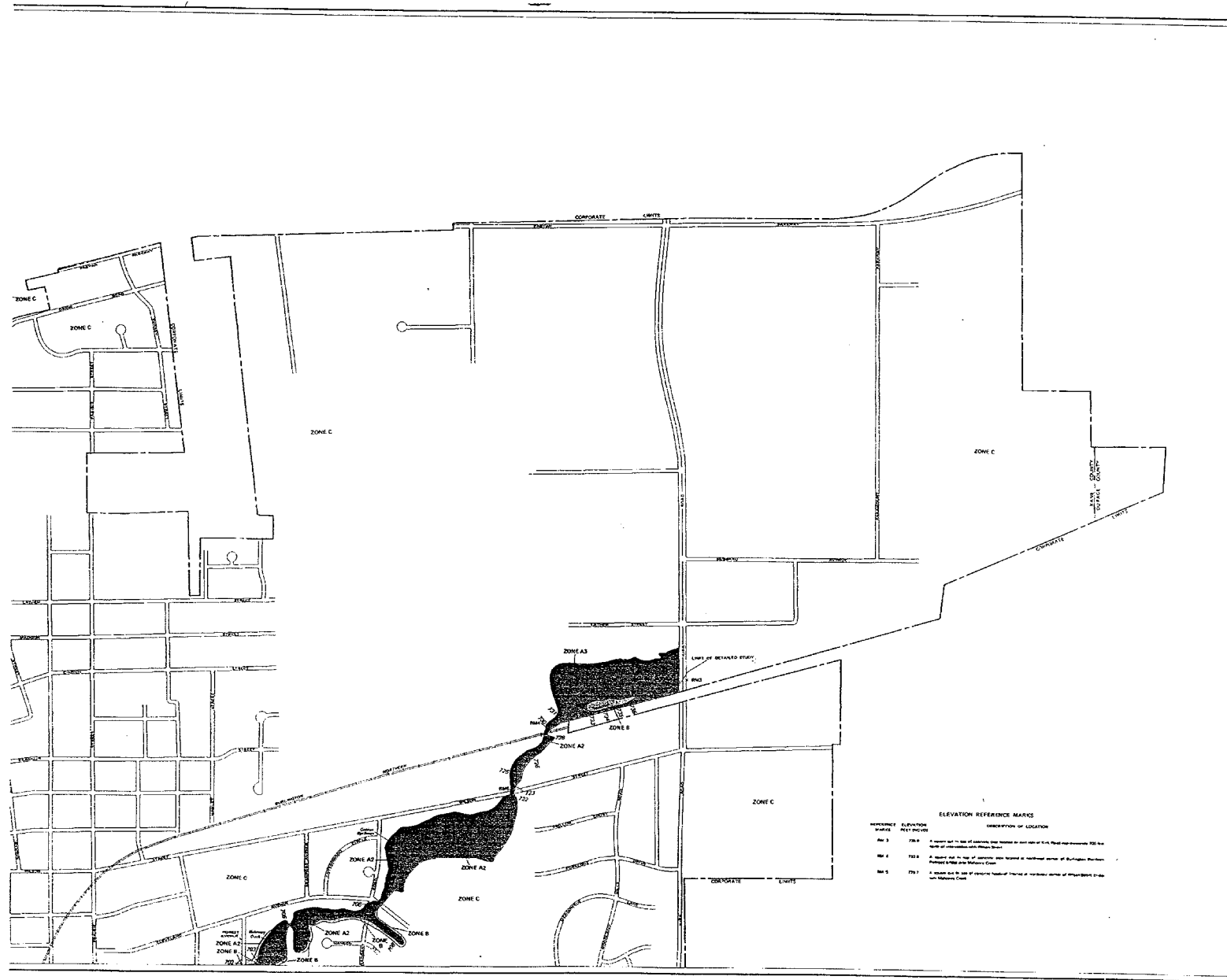
KANE AND DU PAGE COUNTIES

PANEL 1 OF 4

COMMUNITY PANEL NUMBER: 170321 0001 0

EFFECTIVE DATE: SEPTEMBER 2, 1981

Federal Emergency Management Agency
Federal Insurance Administration



ELEVATION REFERENCE MARKS

MARKER	ELEVATION	DESCRIPTION OF LOCATION
BM 1	178.4	Corner of lot 10 of Section 16, Township 38N, Range 10E, Meridian 10E, Cook County, Illinois.
BM 2	178.4	Corner of lot 10 of Section 16, Township 38N, Range 10E, Meridian 10E, Cook County, Illinois.
BM 3	178.4	Corner of lot 10 of Section 16, Township 38N, Range 10E, Meridian 10E, Cook County, Illinois.
BM 4	178.4	Corner of lot 10 of Section 16, Township 38N, Range 10E, Meridian 10E, Cook County, Illinois.

KEY TO MAP

1981 Flood Insurance Rate Map
 1981 Flood Insurance Rate Map
 1981 Flood Insurance Rate Map
 1981 Flood Insurance Rate Map
 1981 Flood Insurance Rate Map

EXPLANATION OF ZONE DESIGNATIONS

Zone A
 Areas of special flood hazard which are subject to flooding by shallow water, wind-driven waves, and surges including storm surge, and which are located in coastal areas or low-lying areas adjacent to large bodies of water and which are subject to frequent and cumulative flooding, but which are not subject to flooding by tidal waves or tsunamis, and which are not subject to flooding by seiche.

Zone B
 Areas of special flood hazard which are subject to flooding by shallow water, wind-driven waves, and surges including storm surge, and which are located in coastal areas or low-lying areas adjacent to large bodies of water and which are subject to frequent and cumulative flooding, but which are not subject to flooding by tidal waves or tsunamis, and which are not subject to flooding by seiche.

Zone C
 Areas of special flood hazard which are subject to flooding by shallow water, wind-driven waves, and surges including storm surge, and which are located in coastal areas or low-lying areas adjacent to large bodies of water and which are subject to frequent and cumulative flooding, but which are not subject to flooding by tidal waves or tsunamis, and which are not subject to flooding by seiche.

Zone X
 Areas of special flood hazard which are subject to flooding by shallow water, wind-driven waves, and surges including storm surge, and which are located in coastal areas or low-lying areas adjacent to large bodies of water and which are subject to frequent and cumulative flooding, but which are not subject to flooding by tidal waves or tsunamis, and which are not subject to flooding by seiche.

Zone Y
 Areas of special flood hazard which are subject to flooding by shallow water, wind-driven waves, and surges including storm surge, and which are located in coastal areas or low-lying areas adjacent to large bodies of water and which are subject to frequent and cumulative flooding, but which are not subject to flooding by tidal waves or tsunamis, and which are not subject to flooding by seiche.

Zone Z
 Areas of special flood hazard which are subject to flooding by shallow water, wind-driven waves, and surges including storm surge, and which are located in coastal areas or low-lying areas adjacent to large bodies of water and which are subject to frequent and cumulative flooding, but which are not subject to flooding by tidal waves or tsunamis, and which are not subject to flooding by seiche.

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

CITY OF
BATAVIA,
ILLINOIS
LAKE AND DU PAGE
COUNTIES

PANEL 2 OF 4

COMMUNITY PANEL NUMBER
178321 002 0

EFFECTIVE DATE:
SEPTEMBER 7, 1981

Federal emergency management agency
Table of Contents page 2 of 4

EXHIBIT 18

Fabyan Parkway Site Photos



Northbound Western Avenue South of Fabyan Parkway



Southbound Western Avenue North of Fabyan Parkway



Westbound Fabyan Parkway at Western Avenue



Example of Driveway Access to Fabyan Parkway (Across from Carriage Drive)



Heather Lane from Fabyan Parkway (T-Intersection with Fabyan Parkway)



Westbound traffic on Fabyan Parkway from Heather Lane



Eastbound Fabyan Parkway, Left Turn Lane and Raised Median at Heather Lane



Eastbound Fabyan Parkway, Left Turn Lane, and Raised Median at Western Avenue.



Northbound Carriage Drive (T-Intersection with Fabyan Parkway)



Eastbound Fabyan Parkway at Carriage Drive



Westbound Fabyan Parkway at Carriage Drive



Northbound VanNortwick Avenue (T-Intersection with Fabyan Parkway)



Eastbound Fabyan Parkway at VanNortwick Avenue



Westbound Fabyan Parkway at VanNortwick Avenue



*Northbound River Rock Road (Western most Entrance to Holmstad Retirement Community)



*Southbound Allen Road

*Please Note that River Rock Road and Allen Road are slightly offset and essentially create one intersection with Fabyan Parkway.



Westbound Fabyan Parkway at River Rock Road / Allen Road



Eastbound Fabyan Parkway at River Rock Road / Allen Road



**East Entrance to Holmstad Retirement Community



**Campana / Dreyer Medical Entrance

**Please note that the previous two entrances are directly across from each other and create the one intersection functionally.



Westbound Fabyan Parkway at IL 31 (Batavia Avenue) and Eastbound through from Fabyan Parkway



Southbound IL RTE 31 (Batavia Avenue) and Eastbound Left from Fabyan Parkway



Eastbound Fayban Parkway at IL RTE 31 (Batavia Avenue)



Northbound IL RTE 31 (Batavia Avenue)



Severe Rutting on Fabyan Parkway near the Eastbound Stopbar



Northbound IL RTE 25; No existing pavement markings due to new resurfacing



Southbound IL RTE 25; No existing pavement marking due to new resurfacing



Eastbound Fabyan Parkway at IL RTE 25



Facing Eastbound Traffic on the Fox River Bridge near IL RTE 25



Northbound Thoria Road (T-Intersection with Fabyan Parkway)



Westbound Fabyan Parkway at Thoria Road



Eastbound Fabyan Parkway at Thoria Road



Eastbound Fabyan Parkway at Surrey Road



Westbound Fabyan Parkway at Surrey Road



Northbound Surrey Road (T-Intersection with Fabyan Parkway)



T-Intersection of Nagel Boulevard and Fabyan Parkway (Looking North)



Eastbound Fabyan Parkway at Nagel Boulevard



Westbound Fabyan Parkway, Left Turn Lane and Raised Median at Nagel Boulevard



Southbound North Raddant Road (Entrance to Kane County Sheriff Dept.)



Westbound Fabyan Parkway, Turnlanes and Raised Median at North Raddant Road



Northbound North Raddant Road



Eastbound Fabyan Parkway and Turn Lanes at North Raddant Road



Eastbound Fabyan Parkway at Settler's Hill Entrance



Settler's Hill Entrance (T-Intersection with Fabyan Parkway)



Westbound Fabyan Parkway at Settler's Hill Entrance



Settler's Hill Entrance and Exit (Looking Due North)



Looking with Northbound Traffic on Kingsland Drive



Eastbound Fabyan Parkway at Kingsland Drive



Westbound Fabyan Parkway at Kingsland Drive



Westbound Fabyan Parkway at Kirk Road



Southbound Kirk Road at Fabyan Parkway



Westbound Fabyan Parkway at Kirk Road



Northbound Kirk Road



Eastbound Fayban Parkway at Kirk Road