6.1 Plan Design Concept Recommendations

The City of Seneca, Nemaha County and KDOT should consider implementing the design recommendations contained in **Figures 6A - 6N** as funding and opportunities become available. These concept drawings were developed as recommendations that will address some of the primary access concerns along US-36 through the study area. The recommendations include:

- 1st St. should be redesigned to align with the K-63 west junction to alleviate awkward and unsafe turning movements at this relatively high volume intersection.
- Intersection improvements at 11th St. /US-36 and the future 1st St./K-63 W. JCT/US-36 intersections. Signalization at these intersections could be considered as justified by an engineering analysis. In the interim, they could be stop-controlled if deemed appropriate. KDOT conducted a warrant analysis on the 11th St. intersection in 2009. Warranting criteria were not met at that time.
- Potential development of access roads approximately one block north and south of US-36 in the western portions of the study area. These opportunities should be considered as additional development occurs.
- Geometric and lane configuration Improvements on US-36 at various locations through the study area.

If future signalization occurs at the abovementioned intersections, the removal of the signal at the 6th St./US-36 intersection could be considered to enhance efficient traffic flow, pending a warrant analysis. However, any analysis of the 6th St. intersection needs to consider that Seneca Fire and Seneca EMS use 6th St. as an emergency route. Signal removal would likely not be considered if it would be a significant detriment to emergency response operations.

It should be noted that alternate lane configurations through the developed portions of the study area could also be considered, dependent upon the scope of future projects. In particular, a three-lane cross section may be deemed appropriate. KDOT has implemented a variety of three-lane configurations in locations throughout Kansas, which include a continuous left turn lane.

Also, as sufficient opportunities arise, existing access points in developed areas should be consolidated and/or redesigned. The KDOT Access Spacing Criteria are reasonable spacing standards that help to maintain safety and traffic flow on KDOT facilities. However, it would be nearly impossible to retrofit developed areas with access that fully meets the existing spacing and design standards. Yet, it is feasible to work toward minimizing the number of access points while redesigning those that are substandard.

This plan is specific to the plan study area and has included a detailed analysis of access in both developed and undeveloped areas. Therefore, plan recommendations may impact the access permitting process. In cases where the plan recommendations exceed or conflict with the KDOT Access Spacing Criteria, the plan should be considered as the guiding document on access spacing.

The existing access points have been carefully examined. Potential access improvement locations have been identified and included on the design concept drawings (**Sheets 9-11** on pgs. 40 - 42). As redevelopment occurs and improvements to US-36 are constructed, these improvements should be considered as a potential means of accomplishing plan goals. Beginning on the following page is a listing of the access improvement recommendations. Each number corresponds with the numbered labels on **Sheets 9-11**. The listing also includes a brief textual description of the recommendations.

6. DESIGN RECOMMENDATIONS

#1-2: This parcel has access along the entire length of the south property line abutting US-36. Consolidation should be considered for #1 while maintaining #2.

#3-5: These parcels have considerable open access to US-36. Consolidation should be considered for #3 and #5 while redesigning #4 according to KDOT standards.

#6-8: There is only one existing access to each of these parcels. No changes are recommended.

#9-10: This parcel has access along the entire length of the south property line abutting US-36. Consolidation should be considered for #9 while redesigning #10 according to KDOT standards.

#11: There is only one existing access to this parcel. No change is recommended.

#12: This parcel has off-street parking along US-36, but there is only one existing access. No change is recommended.

#13: There are several existing accesses for this parcel on US-36 and 7th Street. Consolidation be should considered for this access.

#14: There is only one existing access to parcel. No change is recommended.

#15: These parcels have considerable open access to US-36. Consolidation should be considered. Existing access to these parcels could be maintained off of 6th Street.

#16-17: This parcel has access along the entire length of the south property line abutting US-36. Consolidation should be considered for #16 while redesigning #17 according to KDOT standards.

#18-20: This parcel has three distinct access points. No changes are recommended for #18 and #20. Consolidation should be considered for #19, which abuts the T-intersection of US-36 and 5th Street.

#21: There is only one existing access to this parcel. No change is recommended.

#22: This access is located too close to the intersection of US-36 and 11th Street. Consolidation should be considered for this access.

#23-24: This parcel has considerable open access along the north property line abutting US-36. Consolidation should be considered for #24 while redesigning #23 according to KDOT standards.

#25-27: There is only one existing access to each of these parcels. No changes are recommended.

#28: This parcel is served by existing access along US-36 to the west (#27) as well as 8th Street to the east. Consolidation should be considered for this access.

#29: This access is located too close to the intersection of US-36 and 7th Street. Consolidation should be considered for this access.

#30-34: There is only one existing access to each of these parcels. No changes are recommended.

#35: This parcel has considerable open access along the north property line abutting US-36. There is also existing access to the east along 5th Street. Consolidation should be considered for this access.

#36: This access is located too close to the intersection of US-36 and 5th Street. Consolidation should be considered for this access.

#37: This access should be redesigned according to KDOT standards.

#38-39: There is only one existing access to each of these parcels. No change is recommended.

#40-41: There is a considerable amount of open access to US-36 for both of these parcels. Consolidation should be considered for #40 while redesigning #41 according to KDOT standards.

#42-44: There is a considerable amount of open access to US-36 for all three parcels. Consolidation should be considered for #43. No other changes are recommended.

#45-46: There is only one existing access to each of these parcels. No changes are recommended.

#47-48: These accesses are located too close to the intersection of US-36 and 4th Street. Consolidation should be considered for both of these access points.

#49-50: There is only one existing access to each of these parcels. No changes are recommended.

#51-52: These parcels each have additional access along 3rd Street. Consolidation should be considered for both of these access points.

#53: There is only one existing access to this parcel. No change is recommended.

#54: This parcel has access along 2nd Street. Consolidation should be considered for this access.

#55: This access is located too close to the intersection of US-36 and 2nd Street. Consolidation should be considered for this access.

#56-57: There is only one existing access to each of these parcels. No changes are recommended.

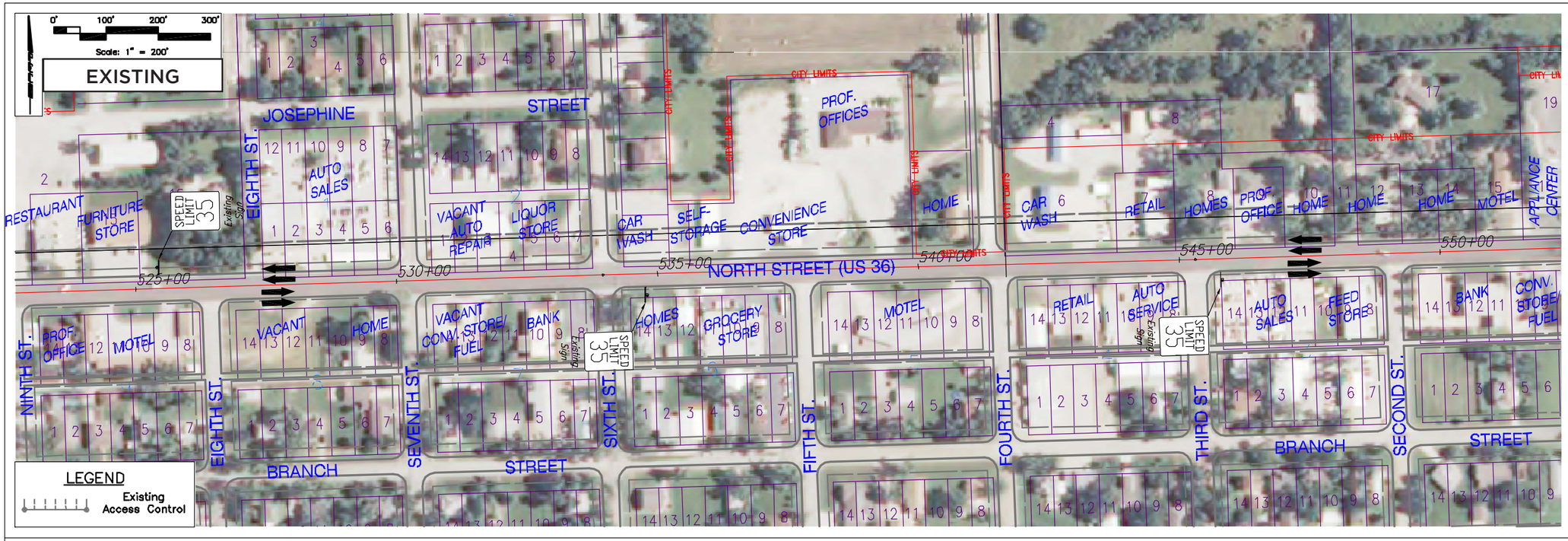
#58: No changes are recommended.

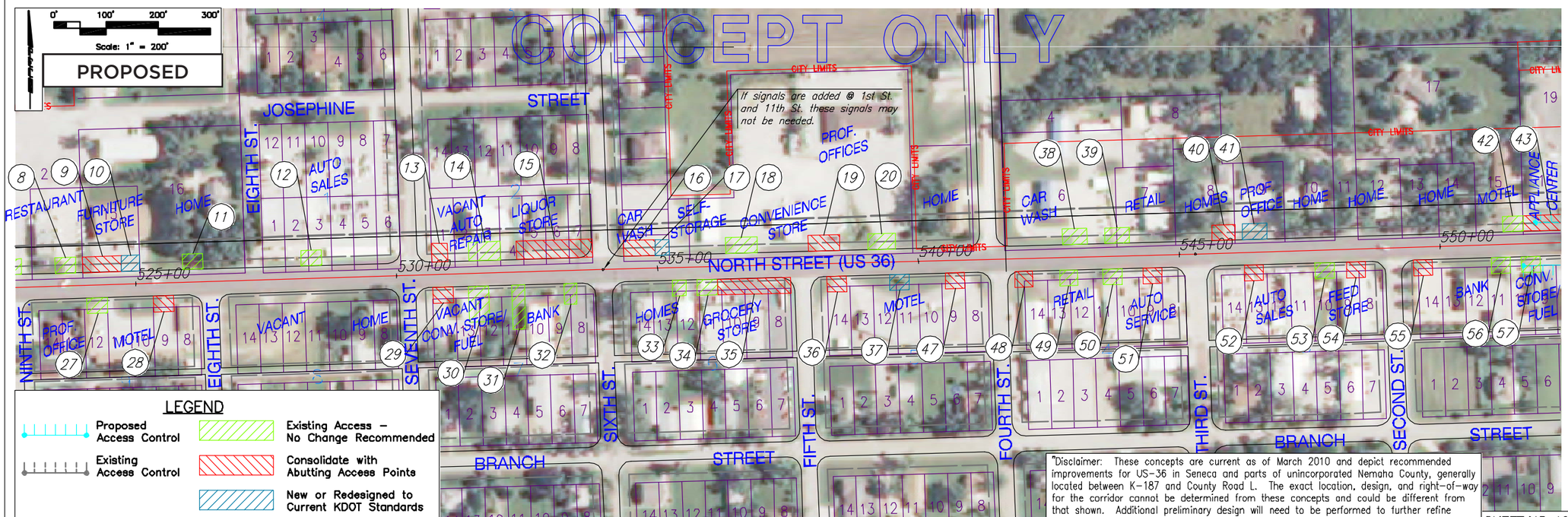
#59: 1st Street south of US-36 should be realigned as illustrated in the design concept drawings.

#60-61: This parcel has considerable open access to US-36. Consolidation should be considered for #60 while redesigning #61 to KDOT standards.

#62-63: There is only one existing access to each of these parcels. No changes are recommended.

Figure 6J - Design Concept Drawings Sheet No. 10





"Disclaimer: These concepts are current as of March 2010 and depict recommended improvements for US-36 in Seneca and parts of unincorporated Nemaha County, generally located between K-187 and County Road L. The exact location, design, and right-of-way for the corridor cannot be determined from these concepts and could be different from that shown. Additional preliminary design will need to be performed to further refine these improvements and the right-of-way requirements."

SHEET NO. 10

U.S. HIGHWAY 36
STA. 525+00 TO STA. 550+00

EXISTING

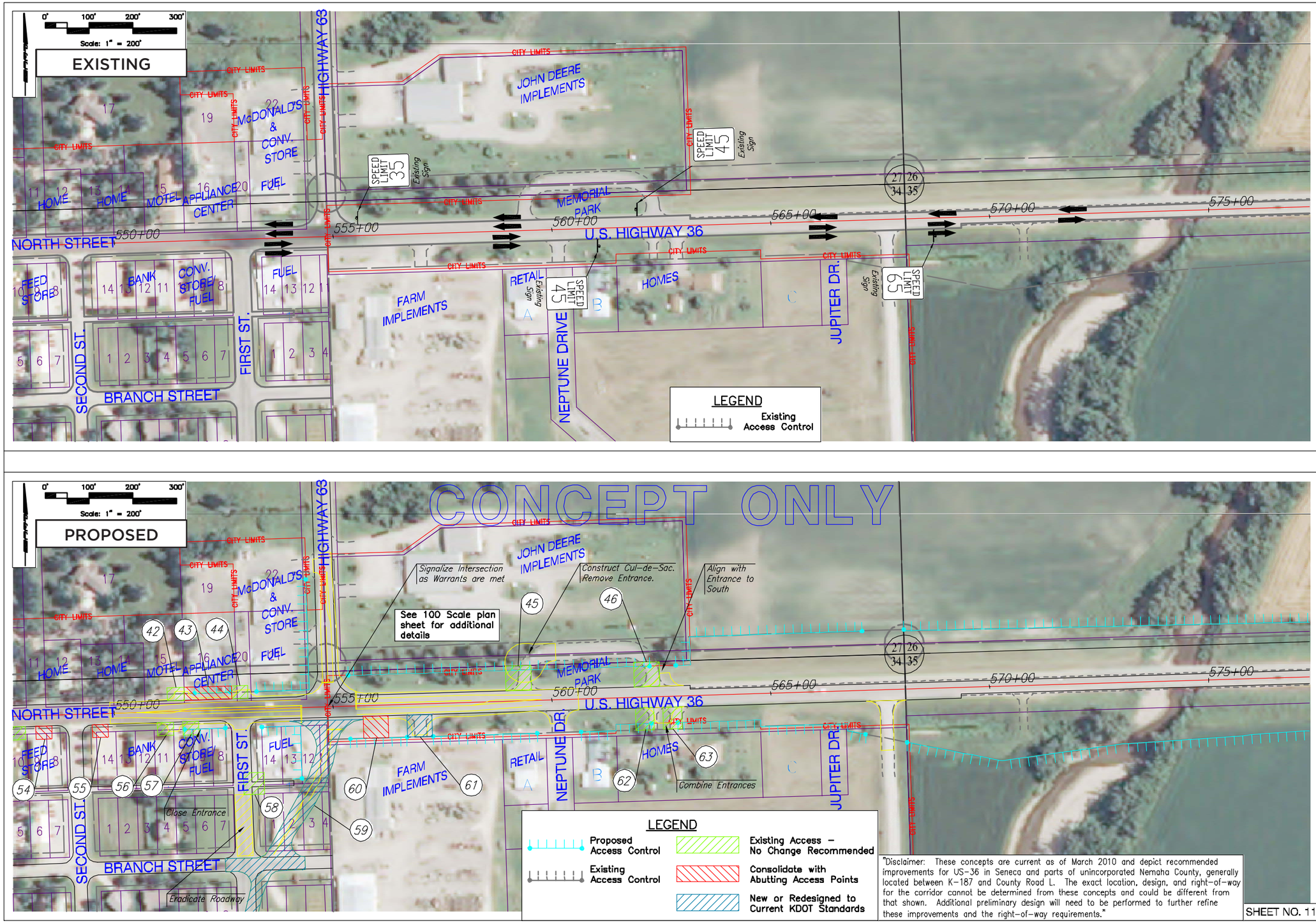
PROPOSED

Professional Engineering Consultants, P.A.
1503 SW. TOPEKA BLVD. - TOPEKA, KANSAS 66612
785-233-8300 • FAX 785-233-8865

Designed By TLC
Drawn By LDS
Job No. 09302-001
Date DECEMBER 2009

PLAN / PROFILE
CHECKED
CHECKED
BY
DATE

Figure 6K - Design Concept Drawings Sheet No. 11



PLAN — DATE | BY | CHECKED | CHECKED

PROFILE — DATE | BY | CHECKED | CHECKED

U.S. HIGHWAY 36
STA. 550+00 TO STA. 575+00

EXISTING

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1365 SW. TOPEKA BLVD. - TOPEKA, KANSAS 66612
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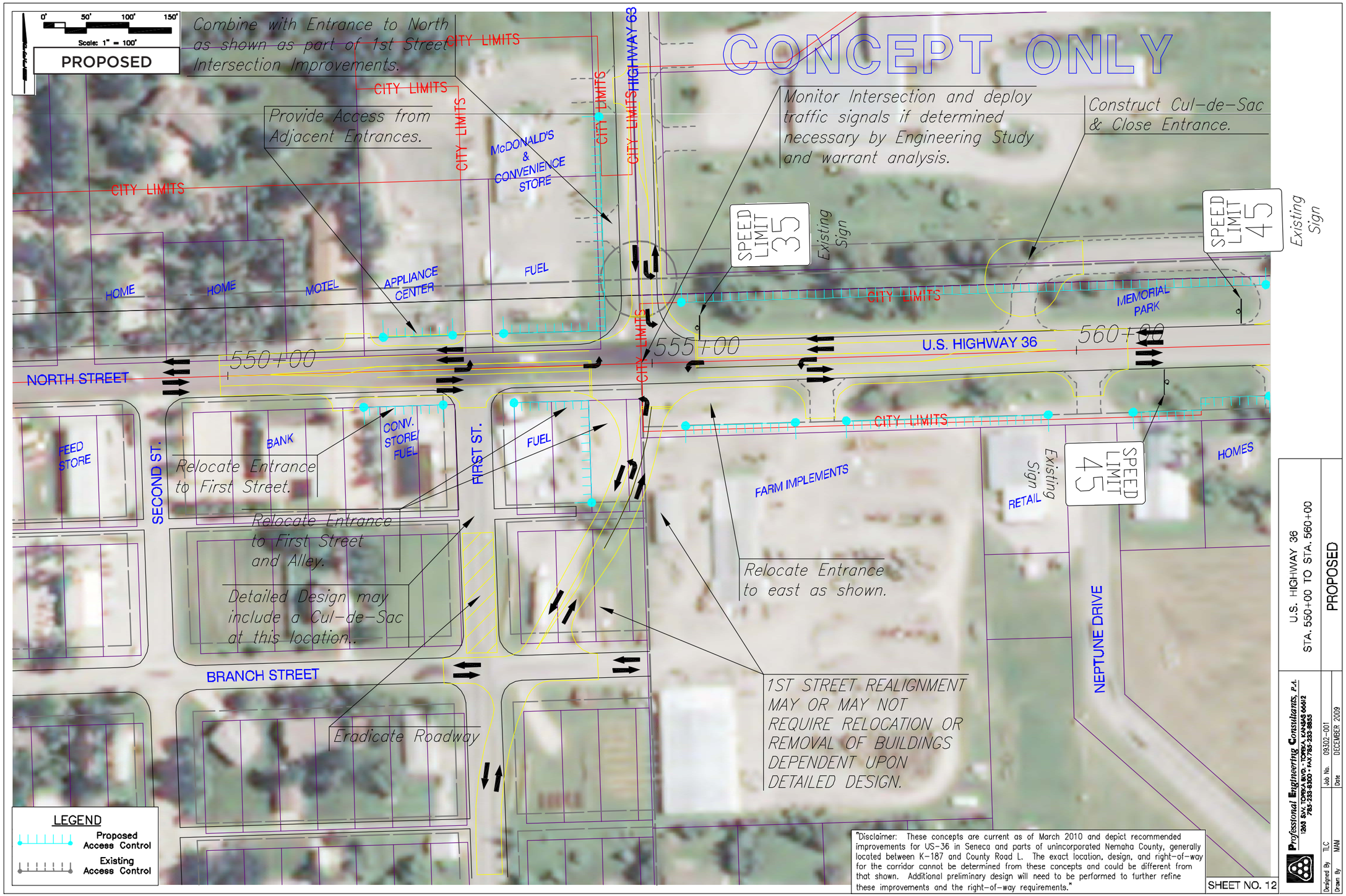
Designed By TLC | Job No. 09302-001
Drawn By LDS | Date DECEMBER 2009

Figure 6L - Design Concept Drawings Sheet No. 12



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SHEET NO. 12

U.S. HIGHWAY 36
STA. 550+00 TO STA. 560+00

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Professional Engineering Consultants, P.A.
1268 SW TOPEKA BLVD. • TOPEKA, KANSAS 66612
785-233-8300 • FAX 785-233-8855

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Drawn By	MAM
Job No.	09302-001
Date	DECEMBER 2009

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PROFILE: BY DATE; CHECKED; CHECKED

Figure 6M - Design Concept Drawings Sheet No. 13

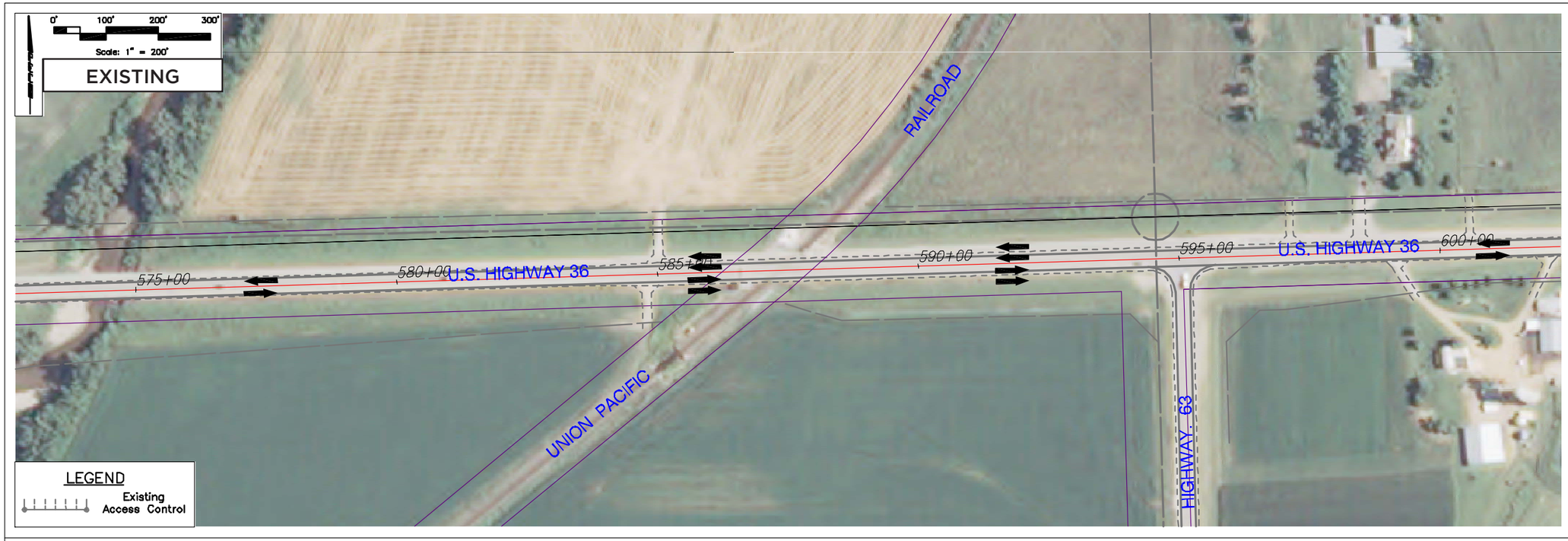

Figure 6N - Design Concept Drawings Sheet No. 14

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SHEET NO. 14