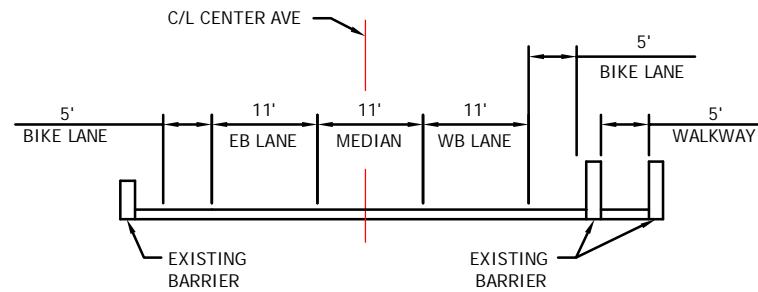
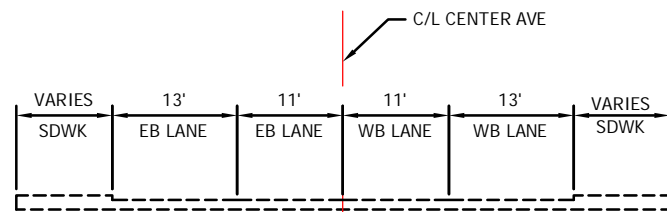


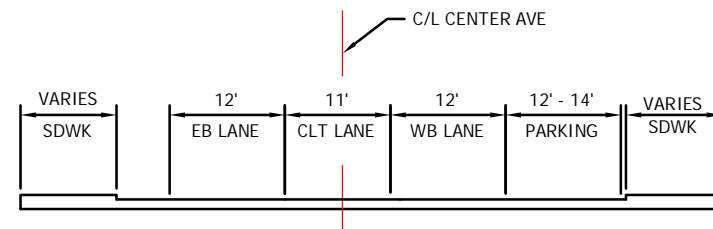
EXISTING BRIDGE TYPICAL SECTION



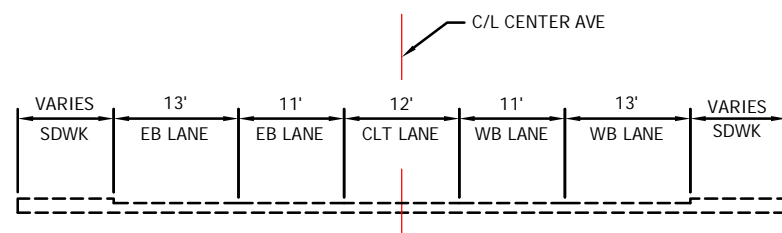
PROPOSED BRIDGE TYPICAL SECTION



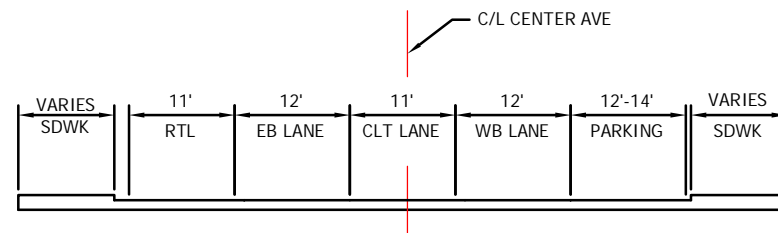
EXISTING 4-LANE TYPICAL SECTION



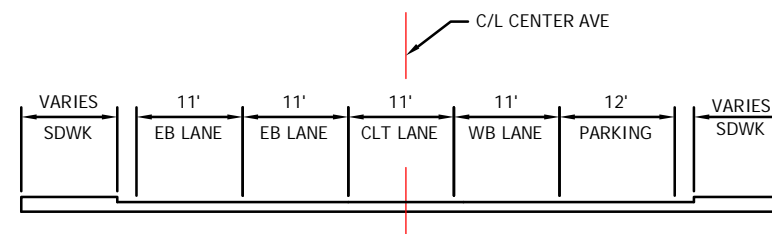
PROPOSED 3-LANE TYPICAL SECTION W/PARKING



EXISTING 5-LANE TYPICAL SECTION



PROPOSED 3-LANE TYPICAL SECTION W/PARKING & RIGHT TURN LANE



PROPOSED 4-LANE TYPICAL SECTION W/PARKING

ALTERNATIVE DEVELOPMENT B - CONSTRUCTION NOTES:

RE-ALIGN 4TH STREET TO CREATE A PERPENDICULAR CROSSING AT CENTER AVE. REMOVE THE EXISTING TRAFFIC SIGNAL AT 4TH STREET AND INSTALL A NEW TRAFFIC SIGNAL AT THE PROPOSED LOCATION. 4TH STREET WOULD UTILIZE A 3-LANE SECTION WITH TWO THROUGH LANES AND A CENTER LEFT TURN LANE.

RE-STRIPING CENTER AVENUE ACROSS THE RED RIVER BRIDGE THEN MILL AND OVERLAY AND RE-STRIPING FROM 4TH STREET TO 8TH STREET AS A 3-LANE FACILITY WITH SHARED USE THRU/BIKE LANES AND ON-STREET PARKING ALONG THE NORTH SIDE OF CENTER AVE. THE 2-LANE SECTION ACROSS THE BRIDGE WILL BE ONE EASTBOUND THROUGH LANE AND ONE WESTBOUND THROUGH LANE WITH DEDICATED BIKE LANES AND A STRIPED MEDIAN. THE STRIPED MEDIAN WILL BECOME AN EASTBOUND LEFT TURN LANE AT 4TH STREET. EAST OF 4TH STREET THE 3-LANE SECTION WILL BE ONE LANE IN EACH DIRECTION WITH A CENTER LEFT TURN LANE. THE BIKE LANES WILL END AT 7TH STREET.

END BIKE LANES AT 7TH STREET WITH SIGNAGE TO GO NORTH ON 7TH STREET. NOTE: A BICYCLE RIDING IN THE ROADWAY - EVEN IN A BIKE LANE - WISHING TO TAKE A LEFT TURN SHOULD DO SO IN THE CENTER LEFT TURN LANE TO TURN NORTH, EVEN WITHOUT A SIGNAL THEY WOULD NEED TO FOLLOW THE SAME RULES OF THE ROADWAY AND TURN LEFT IN THE CENTER LEFT TURN LANE AND YIELD TO ON-COMING TRAFFIC.

MODIFY RAILING ON SOUTH SIDE OF BRIDGE TO MEET MINIMUM HEIGHT REQUIREMENTS

NO REALIGNMENT OF 4TH STREET

ADD AN EASTBOUND RIGHT TURN LANE AT THE 5TH STREET INTERSECTION. THE LENGTH OF THIS TURN LANE IS YET TO BE DETERMINED. THE CITY OF MOORHEAD IS PLANNING TO COLLECT VIDEO TO SHOW QUEUING DATA WHEN A TRAIN IS PRESENT.

BETWEEN 7TH AND 8TH STREET: CENTER LEFT TURN LANE. ONE THROUGH LANE IN THE WESTBOUND DIRECTION. ONE THROUGH LANE AND ONE SHARED RIGHT TURN/THROUGH LANE IN THE EASTBOUND DIRECTION. EAST OF THE 8TH STREET INTERSECTION, THE OUTSIDE WESTBOUND THROUGH LANE WOULD BECOME A DROP RIGHT TURN LANE TO GO NORTH AT 8TH STREET. ADD ON-STREET PARALLEL PARKING ALONG THE NORTH SIDE OF CENTER AVENUE.

LOOK TO IDENTIFY ANY OTHER LOCATIONS WHERE ON-STREET PARKING IS FEASIBLE (I.E. - POSSIBLY BETWEEN 6TH AND 7TH STREET). DIAGONAL PARKING CANNOT BE CONSIDERED ALONG THE CENTER AVENUE CORRIDOR AS IT DOES NOT MEET STATE-AID STANDARDS.

FIX THE TWO JOGS IN THE CENTER AVENUE ALIGNMENT EAST OF THE 4TH STREET INTERSECTION AND AT 6TH STREET. THIS ALIGNMENT SHIFT CAN EASILY BE CORRECTED BECAUSE OF THE TRANSITION FROM A 4-LANE TO 3-LANE SECTION.

REMOVE THE BUS PULL OUT ALONG THE NORTH SIDE OF CENTER AVENUE AS IT IS NOT DESIRED BY TRANSIT. THIS WOULD PULL THE SIDEWALK AND CURB LINE TO THE SOUTH AT THIS LOCATION.

MOORHEAD - CENTER AVENUE - DRAFT ALTERNATIVE DEVELOPMENT B-2

CITY OF MOORHEAD, MN

CENTER AVENUE COORIDOR STUDY

DATE: 2017-08-09

PROJ. NO.: 193803913

FIGURE: DRAFT B-1





MOORHEAD - CENTER AVENUE - DRAFT ALTERNATIVE DEVELOPMENT B-2

CITY OF MOORHEAD, MN

CENTER AVENUE COORIDOR STUDY

DATE: 2017-08-09

PROJ. NO.: 193803913

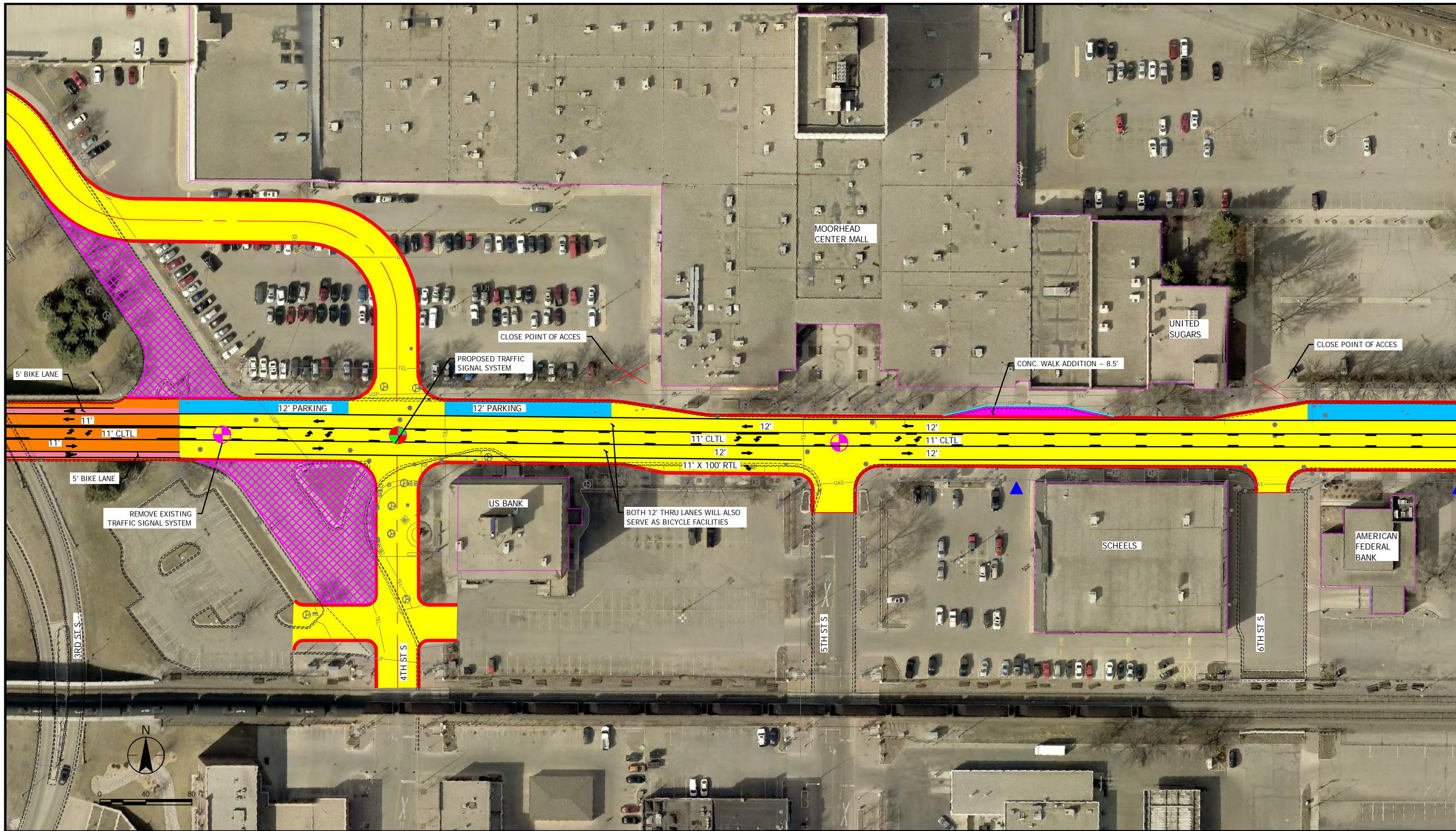
FIGURE: DRAFT B-2



LEGEND

- | | | | |
|-----------------------------------|--------------|---------------------------------|--------------------------|
| BIKE LANE | SIDEWALK | EXISTING MANHOLE OR CATCH BASIN | PROPOSED CURB & GUTTER |
| BRIDGE (EXISTING) | SHOULDER | EXISTING TRAFFIC SIGNAL SYSTEM | EXISTING CURB & GUTTER |
| PROPOSED ROADWAY (MILL & OVERLAY) | CURB/BARRIER | POINT OF ACCESS | REMOVE EXISTING PAVEMENT |

Plot Date: 10/19/2017 - 3:13pm
 Drawing Name: C:\pva_stantec\moohead\193803913\LO_B_2_sheets.dwg
 Xrefs: 193803913_XS1_Center Ave Existing, 193803913_IS_193803913_CI_B_2_193803913_XSNO_B_2



MOORHEAD - CENTER AVENUE - DRAFT ALTERNATIVE DEVELOPMENT B-2

CITY OF MOORHEAD, MN
 CENTER AVENUE COORIDOR STUDY

DATE: 2017-08-09 PROJ. NO.: 193803913

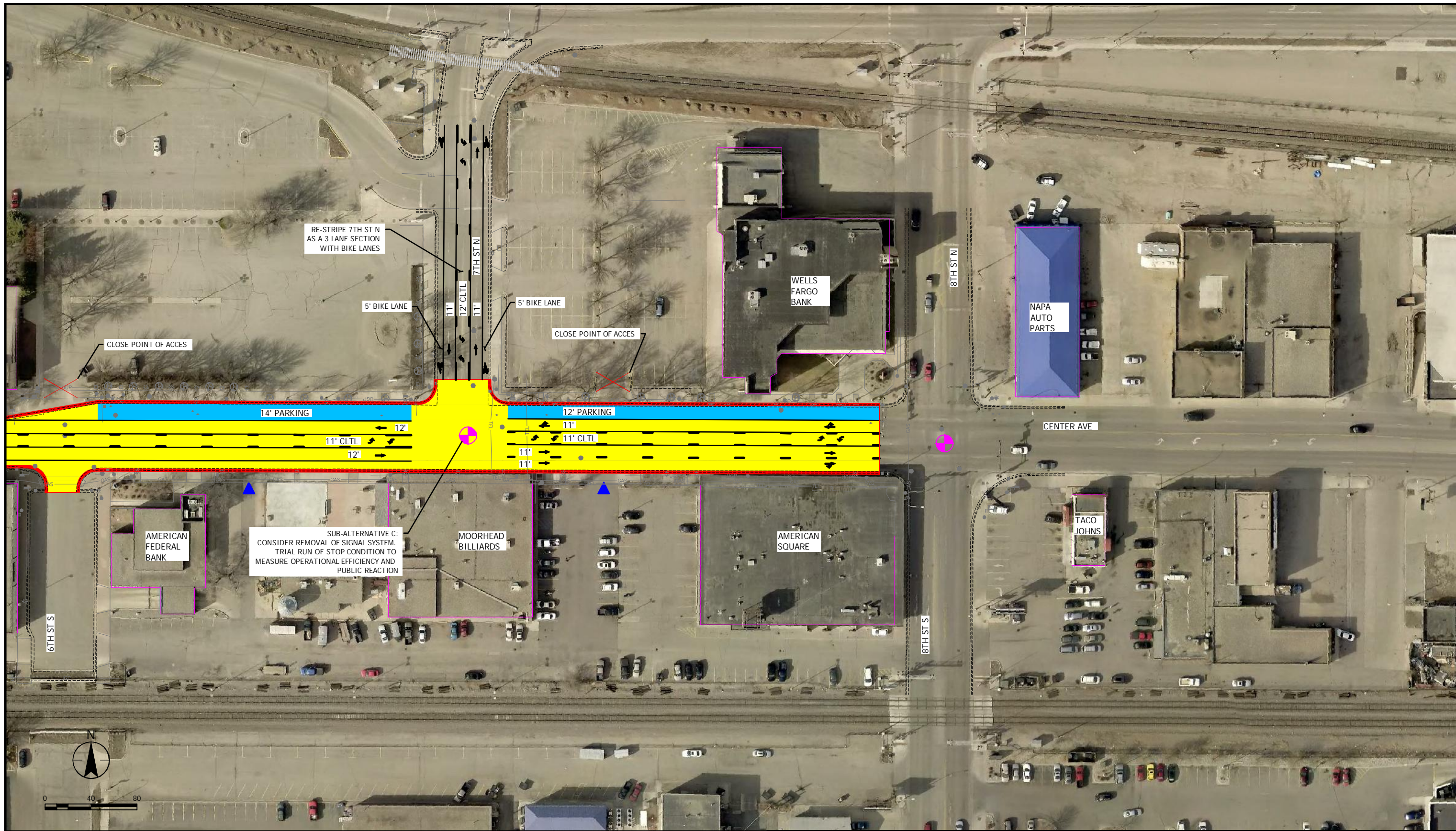
FIGURE: DRAFT B-3



LEGEND

- | | | | |
|-----------------------------------|--------------|---------------------------------|--------------------------|
| BIKE LANE | SIDEWALK | EXISTING MANHOLE OR CATCH BASIN | PROPOSED CURB & GUTTER |
| BRIDGE (EXISTING) | SHOULDER | EXISTING TRAFFIC SIGNAL SYSTEM | EXISTING CURB & GUTTER |
| PROPOSED ROADWAY (MILL & OVERLAY) | CURB/BARRIER | POINT OF ACCESS | REMOVE EXISTING PAVEMENT |

Plot Date: 10/19/2017 - 3:14pm
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MOORHEAD - CENTER AVENUE - DRAFT ALTERNATIVE DEVELOPMENT B

LEGEND

CITY OF MOORHEAD, MN

CENTER AVENUE COORIDOR STUDY

DATE: 2017-08-09

PROJ. NO.: 193803913

FIGURE: DRAFT B-4



- | | | | |
|-----------------------------------|--------------|---------------------------------|--------------------------|
| BIKE LANE | SIDEWALK | EXISTING MANHOLE OR CATCH BASIN | PROPOSED CURB & GUTTER |
| BRIDGE (EXISTING) | SHOULDER | EXISTING TRAFFIC SIGNAL SYSTEM | EXISTING CURB & GUTTER |
| PROPOSED ROADWAY (MILL & OVERLAY) | CURB/BARRIER | POINT OF ACCESS | REMOVE EXISTING PAVEMENT |

Plot Date: 10/19/2017 - 3:44pm
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