ACTION TRANSMITTAL No. 2015-37

DATE:	August 21, 2015
TO:	Technical Advisory Committee
FROM:	TAC Funding & Programming Committee
PREPARED BY:	Joe Barbeau, Senior Planner (651-602-1705)
SUBJECT:	Scope Change Request for Anoka County CSAH 116 Reconstruction Project
REQUESTED ACTION:	Anoka County requests a scope change to modify the scope of its STP-funded project (SP # 002-716-015) in 2016 to modify project length, modify access, and add a turn lane.
RECOMMENDED MOTION:	TAC Funding & Programming Committee recommends approval of the request to modify the scope for the STP-funded project (SP # 002-716-015) in 2016 to modify project length, modify access, and add a turn lane.

BACKGROUND AND PURPOSE OF ACTION: Anoka County received $7,000,000 ($7,840,000, adjusted for inflation) in Surface Transportation Program (STP) funding for reconstruction of CSAH 116 (Bunker Lake Blvd) in the 2011 Regional Solicitation. The County is requesting a scope change that would allow for the following changes:

- Total project construction cost increases from $11,477,760 to $11,581,964.
  - Does not include $926,557 for design engineering.
- Extend the west terminus to Crane Street. Current terminus is "just E of Crane Street." This change accommodates the addition of a lane on southbound Crane Street (see next bullet).
- Add a second outbound lane on Crane Street (one right turn lane and one through / left turn lane.
- Extend the east terminus to .1 mile east of Van Buren Street. Current terminus is Jefferson Street. Left turn lanes are proposed in both eastbound (left into senior housing complex) and westbound (left to Van Buren Street) directions.
- Add trail on the north side of CSAH 116 between Crane Street and former west terminus to fill in the gap between proposed and existing trails
- Wintergreen Street: change access from right-in / right-out to ¾ access.
- Butternut Street: change access from right-in / right-out to ¾ access.
- Anoka County Farms (125 Bunker Lake Blvd NE): change access from right-in / right-out to full access.
- Terrace Road: change from a cul-de-sac to right-in / right out.

RELATIONSHIP TO REGIONAL POLICY: Projects that receive funding through the regional solicitation process are subject to the regional scope change policy. The purpose of this policy is to ensure that the project is designed and constructed according to the plans and intent described in the original application. Additionally, federal rules require that any federally-funded project scope change must go through a formal review

and TIP amendment process if the project description or total project cost changes substantially. The scope change policy and process allow project sponsors to make adjustments to their projects as needed while still providing substantially the same benefits described in their original project applications. A TIP amendment accompanies this request.

STAFF ANALYSIS: Staff reviewed the submitted scope change request. The project originally scored 743 points and was ranked first out of seven projects that applied in the "A" Minor Relievers category. Staff review, which included sharing the proposed update with some of the scorers from the 2011 solicitation, examined whether the updated project would have scored well enough to be funded. Potentially changed scores are shown underlined in the "New" column on the second table below. They include a slight decrease in crash reduction cost effectiveness (due to the increase in cost) and decreases in two access management-related categories (due to the relaxation of access management measures). Staff also assigned additional points for an air quality improvement cost effectiveness, which is based on updated modeling. Even without this increases, the adjusted score of 716 is above the score of the project that finished second (708 points). That project was also funded.

Most of the points reduced are related to access. The original application sold the project in part on safety and limiting the number of full access entrances onto CSAH 116. The original application reduced access for four intersections. The updated project only reduces access at two of these intersections; neither to the level originally proposed:

Intersection	**Original Scope**	**Proposed Scope**
Wintergreen St. (T Intersection)*	Full to right-in / right-out	¾ (re-allow left-in)
Butternut St. (T-Intersection)	Full to right-in / right-out	¾ (re-allow left-in)
Anoka County Farms (T-Intersection)	Full to right-in / right-out	Maintain full access
Terrace Rd. (T-Intersection)	Right-in / right-out to no access	Maintain right-in / right-out

*Note that the attached letter indicates this intersection to have a reduction in access from the original application. Staff disagrees. It appears to have originally been proposed as right-in / right-out and is now proposed as a ¾ intersection; an increase in access from the original application.

#	Category	Max	Orig	New	Notes
A	Relative Importance of Route	100	69	69	Not provided to scorer: Not likely to change
B.1	Crash Reduction	100	60	60	Scorer reports that score would not change
B.2	Air Quality	100	100	100	Scorer reports that project would have slight air quality improvement (but already at top score)
B.3	Congestion Reduction	150	100	100	Scorer reports that score not likely to change
C.1	Crash Reduction Cost Effectiveness	125	38	33	Scorer reports that slight reduction in score due to increased project cost.
C.2	Congestion Reduction Cost Effectiveness	75	40	40	Scorer reports that score not likely to change
C.3	Air Quality Cost Effectiveness	75	45	55	Scorer reports 33% improvement in cost per kg reduced. Staff therefore assumes score increase of 33% of gap to top score (10 points)
D.1	Development Framework Planning Area Objectives	100	27	27	Not provided to scorer: Not likely to change
D.2	Progress Toward Affordable Housing Goals	50	15	15	Not provided to scorer: Not likely to change
D.3	Land Use And Access Mgmt Planning	75	65	60	Scorer reports a reduction of 5 points
D.4	Access Management Improvements	75	50	33	Scorer reports a reduction of 17 points
D.5	Integration of Modes	125	103	103	Scorer retired. Assume no change.
E	Maturity of Project Concept	100	31	31	Scorer reported that score would not change.
TOTAL		**1250**	**743**	**726**	

COMMITTEE COMMENTS AND ACTION: At its August 20, 2015, meeting, the TAC Funding and Programming Committee unanimously recommended approval of the scope change request as requested by the County.

ROUTING

TO	ACTION REQUESTED	DATE COMPLETED
TAC Funding & Programming Committee	Review & Recommend	8/20/2015
Technical Advisory Committee	Review & Recommend	
Transportation Advisory Board	Review & Approve	

Anoka County
TRANSPORTATION DIVISION
Highway

Douglas W. Fischer, PE
County Engineer

July 20, 2015

Mr. Joseph Barbeau
Funding and Programming
390 Robert Street North
St. Paul, MN 55101

Dear Mr. Barbeau,

In 2011 Anoka County applied for and received STP funding for the reconstruction of CSAH 116 (Bunker Lake Blvd. NW) from Crane St. to Jefferson St. in the Cities of Andover and Ham Lake. The funding is in the 2015-2018 STIP in the year 2016 in the amount of $11,477,760 with $7,840,000 in federal funds.

As part of the public involvement process and discussions within the project management team meetings and the Cities several changes are being proposed based on safety and mobility of the traveling public. Anoka County is requesting a scope change due to a change in the project length, minor access changes, and turn lane addition on Crane St. in Andover.

Trail has been added along the north side of Bunker Lake Boulevard from the beginning of the reconstruction to the west to Crane St. This additional trail will connect the proposed trail to the east with the existing trail to the west of Crane St. Without this piece of trail there would be a 500' gap in the continuity of the trail.

We are proposing the addition of a second outbound lane on Crane St. in Andover. With the closure of the left out movement at Wintergreen St. it was shown that significant additional left turning vehicles would be making that move from the Crane St. intersection. A left turn lane is proposed to separate that traffic from the right turns.

The original concept indicated that Wintergreen St. would be reduced to a right in/right out access. This design would force eastbound vehicles wishing to turn north on Wintergreen St. to cross the BNSF tracks, do a U-turn at Sycamore St. and then travel back across the tracks increasing train/vehicle exposure. We are proposing a ¾ access with an eastbound left in to Wintergreen St. to avoid traffic crossing the tracks and allow for a safe turning movement for residents.

Several access changes are being proposed in the area from Butternut St. in Andover to Terrace Road in Ham Lake. The original design proposed a full access at Butternut St., two right in/right out driveways and a cul-de-sac at Terrace Rd. We are proposing a ¾ access at Butternut, a full access at one of the driveways with the other remaining right in/right out and right in/right out access at Terrace Rd. The full access at one of the driveways is proposed to allow access for the

two commercial property uses on the north side of Bunker Lake Blvd. This access will allow the traffic to and from TH 65 to the salvage yard and will allow access to Anoka County Farms which is a destination for many school field trips. Without this access buses coming from the east be forced to travel to TH 65 to make a U-turn. Likewise vehicles coming from the salvage yard would be forced to Butternut St. to make a U-turn to head back to TH 65 for an additional 0.8 miles. As a compromise to this additional full intersection we propose to reduce the access at Butternut to ¾ which would reduce that access to conditional secondary (right in/right out/left in).

In addition to the access change we are proposing to lengthen the project by 0.4 miles to the east end. During the public involvement process it was identified that the end of the project and the transition back to the existing two lane section was happening in the area of the intersection of Van Buren St. /entrance to a senior housing complex. It was felt that this transition in an area where many seniors would be trying to turn left from a thru lane would create an unsafe situation. We propose to add left turn lanes in both directions with a painted median to provide a safe turning refuge.

Anoka County feels that the proposed changes were warranted and enhance the safety of project while still meeting the intent of the original design.

Attached is the additional information as requested. If you have any questions or need any additional information please contact me at 736-862-4248 or gina.pizzo@co.anoka.mn.us.

Sincerely,

Gina Pizzo

SCOPE CHANGE REQUEST

CSAH 116 (Bunker Lake Blvd. NW) from Crane St. to Jefferson St.
S.P. 002-716-015
Anoka County, Minnesota

REVISED PROJECT DESCRIPTION

CSAH 116 – Crane through Van Buren St. NE Reconstruction

The proposed project reconstructs CSAH 116 to a four lane divided urban roadway with dedicated right and left turn lanes from approximately 600' east of Crane St. in the City of Andover to approximately 600' east of Van Buren St. NE in the City of Ham Lake. The last 1300' in the City of Ham Lake is a transition to the existing 2 lane rural section and will not have a raised center island. This portion will provide painted channelization at the intersection with Van Buren St. and the senior housing development entrance to the north. This project includes the addition of a right turn lane on Crane St. and the realignment of the Prairie Road intersection. The project also includes the addition of bus/truck pull out lanes at the crossing with the Burlington Northern Santa Fe Railroad to be used by vehicles that are required to stop at the crossing.

The project will include the construction of trail along the north side of CSAH 116 from Crane St. to Jefferson St. and along the south side of CSAH 116 from Crane St. and across the BNSF tracks to connect to an existing trail in Bunker Hills Regional Park. There will also be two other trail connections made to Bunker Hills Park trails; one at the Prairie Road intersection and another from the trail along the north side of CSAH 116 thru a pedestrian underpass approximately 1400' east of Prairie Road. This underpass connection will continue east in the Park to the Goldenrod St. NW/New Park entrance intersection. The trail crossings with the BNSF Railroad will include pedestrian gate arms to provide safe pedestrian crossings at the tracks.

This project is approximately 2.7 miles in length.

WORK TO BE COMPLETED

Submit 95% plans to State Aid for review	…….. September 2015
Permits	…….. September 2015
Right of Way Acquisition complete	…….. December, 2015
Plan Approval	……. November 2015
Advertise for bids	……. December 2015

PROJECT LOCATION MAP

A map showing the location of the project within the area and the region is attached as Exhibit 1.

PROJECT LAYOUT

The proposed project layout is attached as Exhibit 2.

REVISED PROJECT COST ESTIMATE

The revised project cost estimate is attached as Exhibit 3.

RECALCULATED RESPONSES TO KEY CRITERIA

Below you will find computations for key components of the STP application.

B.1.a

AR-11-01

From Application:

AADT: 17,600 + 19,200/2 = 18,400 (average of 2007 and 2009 volumes)

No of Years: 3

No of Crashes: 114

Segment Length: 2.3 miles

*Crash Rate: 114*1,000,000 / (365) (3) (18,400) (2.3) = 114,000,000/46,340,400 = 2.46*

The crash rate for CSAH 14 is 2.46.

Recomputed crash rate:

AADT: 17,600 + 19,200/2 = 18,400 (average of 2007 and 2009 volumes)

No of Years: 3

No of Crashes: 114

Segment Length: 2.7 miles

Crash Rate: 114*1,000,000 / (365) (3) (18,400) (2.7) = 114,000,000/46,340,400 = 2.10

The crash rate for CSAH 14 is 2.10.

B.2 Air Quality. (original)
Segment Length = 2.3 miles
Posted Speed Limit = 55 mph
Existing Conditions
Free-flow travel time = (2.3 mile /55 mph) x 60 = 2.51 minutes
Signalized intersection delay: (1 location – Prairie Rd) = 75 seconds; (1 location – Jefferson St) = 50 seconds = 125 seconds = 2.1 minutes
Mid-block Delays due to left-turns at minor streets/drives (1 location)
Mid-block delay = 1 x 10 seconds = 10 seconds = 0.2 minutes
Arterial Speed = (2.3/ (2.51 + 2.1+ 0.2 minutes)) x 60 = 28.7 mph
Proposed Conditions
Free-flow travel time = (2.3 mile /55 mph) x 60 = 2.51 minutes
Signalized intersection delay (1 location – Prairie Rd) = 30 seconds; (1 location – Jefferson St) = 30 seconds = 60 seconds = 1 minute
All mid-block delays due to left-turns at minor streets/driveways will be reduced to zero due to the center median and left-turn lanes at full intersections.
Arterial Speed = (2.3/ (2.51 + 1.0 minutes)) x 60 = 39.3 mph

New:

B.2 Air Quality. (original)
Segment Length = 2.7 miles
Posted Speed Limit = 55 mph
Existing Conditions
Free-flow travel time = (2.7 mile /55 mph) x 60 = 2.95 minutes
Signalized intersection delay: (1 location – Prairie Rd) = 75 seconds; (1 location – Jefferson St) = 50 seconds = 125 seconds = 2.1 minutes
Mid-block Delays due to left-turns at minor streets/drives (1 location)
Mid-block delay = 2 x 10 seconds = 10 seconds = 0.33 minutes
Arterial Speed = (2.7/ (2.95 + 2.1+ 0.33 minutes)) x 60 = 30 mph
Proposed Conditions
Free-flow travel time = (2.7 mile /55 mph) x 60 = 2.95 minutes
Signalized intersection delay (1 location – Prairie Rd) = 30 seconds; (1 location – Jefferson St) = 30 seconds = 60 seconds = 1 minute
All mid-block delays due to left-turns at minor streets/driveways will be reduced to zero due to the center median and left-turn lanes at full intersections.
Arterial Speed = (2.7/ (2.51 + 1.0 minutes)) x 60 = 46.15 mph increase of 6.9mph

VMT Calculations (original)
Annual VMT (commute trips)/250 (number of work days in a year) = miles/day
*Annual VMT: 15,900 (2011 counts)*2.3 (project length)* 365 (year) = 13,348,050 = 13,348,050/250 = 53,392 miles/day*
*Based on the analysis, the peak hour average speed will increase by approximately 11 mph on this segment after proposed project improvements. Using the MOBILE5B emission factors and Vehicle Emissions Reduction Worksheet, total emissions for baseline and build conditions were calculated. Total emissions reduction due to the proposed improvements is **293.1** kilograms/day. Please refer to Attachment F for a copy of the worksheet and Attachment G for traffic volume counts.*

VMT Calculations (original)

Annual VMT (commute trips)/250 (number of work days in a year) = miles/day
Annual VMT: 15,900 (2011 counts)*2.7 (project length)* 365 (year) = 15,669,450
= 15,669,450/250 = 62,678 miles/day
Based on the analysis, the peak hour average speed will increase by approximately 11 mph on this segment after proposed project improvements. Using the MOBILE5B emission factors and Vehicle Emissions Reduction Worksheet, total emissions for baseline and build conditions were calculated. Total emissions reduction due to the proposed improvements is **496.4** kilograms/day. Please refer to Attachment F for a copy of the worksheet and Attachment G for traffic volume counts.

From original application

VEHICLE EMISSIONS REDUCTION WORKSHEET (APPENDIX G)
System Management

BASELINE EMISSIONS WITHOUT PROJECT					
Average Weekday Travel Speed Before Installation:				29	mph
	Emissions Factor (grams/mile)*	Daily VMT (miles)	Emissions (kg/day)		
CO Emissions	15.55	53,392	830.2	kg/day	
NO_x Emissions	1.68	53,392	89.7	kg/day	
VOC Emissions	1.43	53,392	76.4	kg/day	
		Total Emissions	**996.3**	kg/day	
EMISSIONS AFTER PROJECT					
Average Weekday Travel Speed After Installation:				39	mph
	Emissions Factor (grams/mile)*	Daily VMT (miles)	Emissions (kg/day)		
CO Emissions	10.36	53,392	553.143192	kg/day	
NO_x Emissions	1.72	53,392	91.834584	kg/day	
VOC Emissions	1.09	53,392	58.197498	kg/day	
		Total Emissions	**703.2**	kg/day	
		Net Emissions Reductions due to Project	**293.1**	kg/day	
COST EFFECTIVENESS					
Total Cost of the Project:				$10,300,000	
Cost Effectiveness:				35138.8112	

*Use auto emissions factors in Appendix for speeds in F4 and F5

Original 293.1 kg/day

New computations

VEHICLE EMISSIONS REDUCTION WORKSHEET (APPENDIX G)

System Management

BASELINE EMISSIONS WITHOUT PROJECT

Average Weekday Travel Speed Before Installation:				29	mph
	Emissions Factor (grams/mile)*	**Daily VMT (miles)**	**Emissions (kg/day)**		
CO Emissions	15.55	62,678	974.6	kg/day	
NO_x Emissions	1.68	62,678	105.3	kg/day	
VOC Emissions	1.43	62,678	89.6	kg/day	
Total Emissions			**1169.6**	kg/day	

EMISSIONS AFTER PROJECT

Average Weekday Travel Speed After Installation:				46	mph
	Emissions Factor (grams/mile)*	**Daily VMT (miles)**	**Emissions (kg/day)**		
CO Emissions	8.07	62,678	505.81146	kg/day	
NO_x Emissions	1.73	62,678	108.43294	kg/day	
VOC Emissions	0.94	62,678	58.91732	kg/day	
Total Emissions			**673.2**	kg/day	
Net Emissions Reductions due to Project			**496.4**	kg/day	

COST EFFECTIVENESS

Total Cost of the Project:	$10,300,000	
Cost Effectiveness:	20748.9877	

Original 293.1 kg/day

New reduction of 496.4 kg/day

Increase in reduction of 203.3kg/day

PROJECT LOCATION MAP

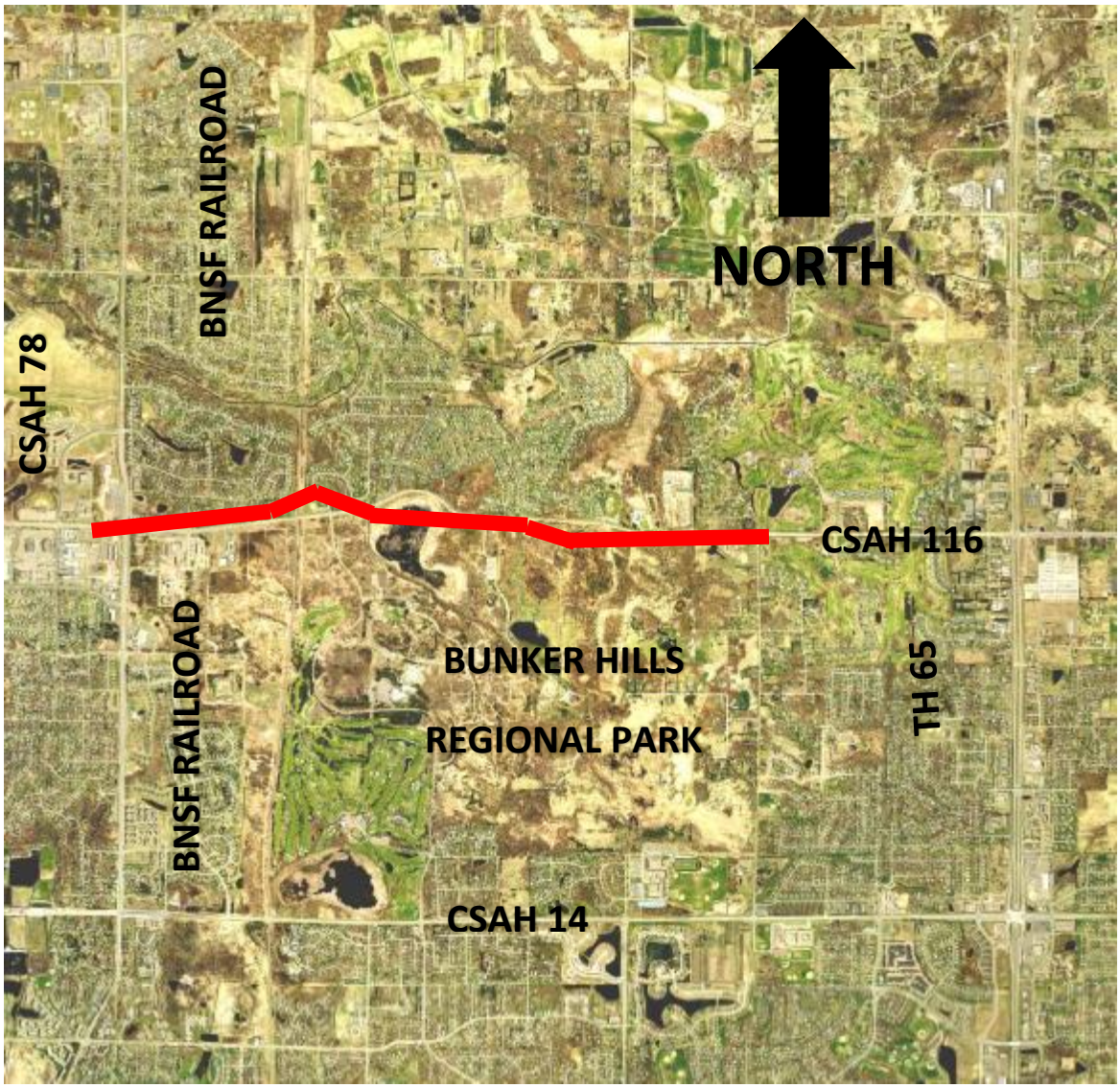
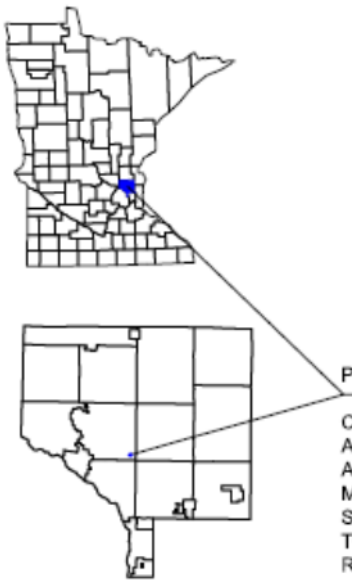


EXHIBIT 1



PROJECT LOCATION

CITIES OF ANDOVER
AND HAM LAKE
ANOKA COUNTY
MN/DOT TRANSPORTATION DISTRICT - METRO
SECTIONS 31, 35 & 36
TOWNSHIP 32 NORTH
RANGES 23 & 24 WEST

EXHIBIT **"A"** = Project Layout
EXHIBIT **"B"** = 60% Estimated Cost Share
EXHIBIT **"C"**= Cost Shering Agreement
by **MARIO 03-16-2015**

EXHIBIT 3
07-15-2015 MN.

ENGINEER'S ESTIMATE OF PROBABLE CONSTRUCTION COSTS
CSAH 116 (BUNKER LAKE BLVD) FROM CRANE STREET TO EAST OF JEFFERSON STREET

ITEM NO.	ITEM DESCRIPTION	UNIT	UNIT PRICE	TOTAL PROJECT QUANTITY		FEDERAL PARTICIPATING						STORM SEWER (D)		FEDERAL NON-PARTICIPATING											
						COUNTY OF ANOKA SP 002-716-015 (A)		CITY OF ANDOVER SP 198-020-000 (B)		CITY OF HAM LAKE SP 197-020-000, (C)		COUNTY=69.2% SP 002-716-015 CITY ANDOVER=23.9% SP 198-020-000 CITY HAM LAKE= 6.9% SP 197-020-000		STATE AID PARTICIPITING						LOCAL					
														COUNTY OF ANOKA SP 002-716-015 (E)		CITY OF ANDOVER SP 198-020-000 (F)		CITY OF HAM LAKE SP 197-020-000 (G)		COUNTY OF ANOKA CP 00-00 (H)		CITY OF ANDOVER CP 00-00 (I)		CITY OF HAM LAKE CP 00-00 (J)		CITY OF CP 00-00 (K)	
				QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
2021.501	MOBILIZATION	LUMP SUM	$550,000.00	1	$550,000.00	0.783	$430,650.00	0.119	$65,450.00	0.025	$13,750.00	0.073	$40,150.00														
2031.501	FIELD OFFICE TYPE D	EACH	$20,000.00	1	$20,000.00	0.783	$15,660.00	0.119	$2,380.00	0.025	$500.00	0.073	$1,460.00														
2041.610	TRAINEES	HOUR	$1.00	1,800	$1,800.00	1,800	$1,800.00																				
2101.501	CLEARING	ACRE	$3,000.00	10.15	$30,450.00	10.15	$30,450.00																				
2101.502	CLEARING	TREE	$150.00	515	$77,250.00	515	$77,250.00																				
2101.506	GRUBBING	ACRE	$3,000.00	10.15	$30,450.00	10	$30,450.00																				
2101.507	GRUBBING	TREE	$100.00	433	$43,300.00	433	$43,300.00																				
2104.501	REMOVE PIPE CULVERTS	LIN FT	$9.00	1	$9.00	1	$9.00																				
2104.501	REMOVE WATER MAIN	LIN FT	$10.00	300	$3,000.00			300	$3,000.00																		
2104.501	REMOVE PIPE SEWERS	LIN FT	$12.00	940	$11,280.00	940	$11,280.00																				
2104.501	REMOVE CURB AND GUTTER	LIN FT	$2.75	9,964	$27,401.00	9,964	$27,401.00																				
2104.501	REMOVE BITUMINOUS CURB	LIN FT	$3.00	237	$711.00	237	$711.00																				
2104.501	REMOVE RETAINING WALL	LIN FT	$20.00	526	$10,520.00	526	$10,520.00																				
2104.501	REMOVE FENCE	LIN FT	$2.50	50	$125.00	50	$125.00																				
2104.503	REMOVE BITUMINOUS WALK	SQ FT	$0.50	59,726	$29,863.00	59,726	$29,863.00																				
2104.503	REMOVE CONCRETE WALK	SQ FT	$0.90	849	$764.10	849	$764.10																				
2104.503	REMOVE CONCRETE MEDIAN	SQ FT	$1.00	16,603	$16,603.00	16,603	$16,603.00																				
2104.505	REMOVE CONCRETE DRIVEWAY PAVEMENT	SQ YD	$8.00	15	$120.00	15	$120.00																				
2104.505	REMOVE BITUMINOUS PAVEMENT	SQ YD	$2.80	75,893	$212,500.40	75,893	$212,500.40																				
2104.509	REMOVE PIPE APRON	EACH	$350.00	8	$2,800.00	8	$2,800.00																				
2104.509	REMOVE MANHOLE OR CATCH BASIN	EACH	$350.00	10	$3,500.00	10	$3,500.00																				
2104.509	REMOVE BITUMINOUS FLUME	EACH	$300.00	3	$900.00	3	$900.00																				
2104.509	REMOVE CONCRETE FLUME	EACH	$500.00	2	$1,000.00	2	$1,000.00																				
2104.509	REMOVE SIGNAL SYSTEM	EACH	$6,500.00	2	$13,000.00	2	$13,000.00																				
2104.511	SAWING CONCRETE PAVEMENT (FULL DEPTH)	LIN FT	$6.00	153	$918.00	153	$918.00																				
2104.513	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	$3.00	1,048	$3,144.00	1,048	$3,144.00																				
2104.523	SALVAGE GATE VALVE & BOX	EACH	$280.00	1	$280.00			1	$280.00																		
2104.523	SALVAGE HYDRANT & VALVE	EACH	$750.00	4	$3,000.00			4	$3,000.00																		
2104.523	SALVAGE SIGN TYPE C	EACH	$50.00	1	$50.00	1	$50.00																				
2104.523	SALVAGE SIGN TYPE SPECIAL	EACH	$75.00	1	$75.00	1	$75.00																				
2104.523	SALVAGE MAIL BOX SUPPORT	EACH	$40.00	3	$120.00	3	$120.00																				
2104.601	HAUL SALVAGED MATERIAL	LUMP SUM	$1,000.00	1	$1,000.00	1	$1,000.00																				
2104.603	ABANDON WATER MAIN	LIN FT	$2.00	22	$44.00	22	$44.00																				
2105.501	COMMON EXCAVATION (EV) (P)	CU YD	$6.50	78,266	$508,729.00	78,266	$508,729.00																				
2105.501	COMMON EXCAVATION (EV) (PONDS)	CU YD	$7.00	26,120	$182,840.00	26,120	$182,840.00																				
2105.505	MUCK EXCAVATION	CU YD	$8.00	65,309	$522,472.00	62,397	$499,176.00			2,912	$23,296.00																
2105.507	SUBGRADE EXCAVATION (EV) (P)	CU YD	$6.50	32,593	$211,854.50	32,593	$211,854.50																				
2105.522	SELECT GRANULAR BORROW (LV)	CU YD	$11.00	36,283	$399,113.00	29,938	$329,314.35			6,345	$69,798.65																
2105.607	COMMON BORROW SPECIAL (CV)	CU YD	$30.00	78	$2,340.00	78	$2,340.00																				
2106.607	SELECT GRANULAR EMBANKMENT (CV) (TEMPORARY)	CU YD	$20.00	859	$17,180.00	859	$17,180.00																				
2123.509	DOZER	HOUR	$45.00	10	$450.00	10	$450.00																				
2130.501	WATER	M GALLON	$25.00	180	$4,500.00	180	$4,500.00																				
2211.501	AGGREGATE BASE CLASS 5	TON	$17.00	95	$1,615.00	95	$1,615.00																				
2211.503	AGGREGATE BASE (CV) CLASS 5 (P)	CU YD	$23.00	24,815	$570,745.00	24,815	$570,745.00																				
2221.503	SHOULDER BASE AGGREGATE (CV) CLASS 5	CU YD	$17.00	444	$7,548.00	444	$7,548.00																				
2232.501	MILL BITUMINOUS SURFACE	SQ YD	$2.00	679	$1,358.00	679	$1,358.00																				
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GALLON	$3.00	10,798	$32,394.00	10,798	$32,394.00																				
2360.501	TYPE SP 9.5 WEARING COURSE MIX (2B)	TON	$71.00	2,576	$182,896.00	1,648	$117,008.00	521	$36,991.00	407	$28,897.00																
2360.501	TYPE SP 12.5 WEARING COURSE MIX (2,B)	TON	$80.00	59	$4,720.00	59	$4,720.00																				
2360.501	TYPE SP 12.5 WEARING COURSE MIX (3,F)	TON	$70.00	25,599	$1,791,930.00	25,599	$1,791,930.00																				
2360.502	TYPE SP 12.5 NON WEAR COURSE MIX (3,B)	TON	$60.00	14,228	$853,680.00	14,228	$853,680.00																				
2360.505	TYPE SP 12.5 BITUMINOUS MIXTURE FOR PATCHING	TON	$85.00	29	$2,465.00	29	$2,465.00																				
2401.513	TYPE P-1 (TL-2) RAILING CONCRETE (3Y46)	LIN FT	$80.00	440	$35,200.00			440	$35,200.00																		
2411.618	MODULAR BLOCK RETAINING WALL	SQ FT	$28.00	4,117	$115,276.00	2,559	$71,652.00	1,558	$43,624.00																		
2411.618	ARCH CONC TEXTURE (SPLIT STONE)	SQ FT	$140.00	6,270.0	$877,800.00	1,491.0	$208,740.00	4,779	$669,060.00																		
2412.511	14 x10 PRECAST CONCRETE BOX CULVERT	LIN FT	$1,050.00	105	$110,250.00			105	$110,250.00																		
2412.512	14 x10 PRECAST CONCRETE BOX CULVERT END SECTION	EACH	$19,000.00	1	$19,000.00			1	$19,000.00																		
2422.618	WOOD NOISE BARRIER	SQ FT	$24.00	36,013	$864,300.00	36,013	$864,300.00																				
2451.501	STRUCTURE EXCAVATION CLASS U (P)	CU YD	$10.00	3,472	$34,720.00			3,472	$34,720.00																		
2451.509	AGGREGATE BEDDING (CV)	CU YD	$30.00	62	$1,860.00	62	$1,860.00																				
2451.511	COARSE FILTER AGGREGATE	CU YD	$65.00	77	$5,005.00			77	$5,005.00																		
2451.513	FINE FILTER AGGREGATE (LV)	CU YD	$100.00	101	$10,100.00	85	$8,500.00	16	$1,600.00																		
2501.511	12" RC PIPE CULVERT CLASS III	LIN FT	$35.00	17	$595.00	17	$595.00																				
2501.511	15" RC PIPE CULVERT CLASS III	LIN FT	$25.00	59	$1,475.00	59	$1,475.00																				
2501.515	12" RC PIPE APRON	EACH	$625.00	4	$2,500.00	2	$1,250.00					2	$1,250.00														
2501.515	15" RC PIPE APRON	EACH	$650.00	19	$12,350.00	6	$3,900.00					13	$8,450.00														
2501.515	18" RC PIPE APRON	EACH	$675.00	7	$4,725.00							7	$4,725.00														
2501.515	21" RC PIPE APRON	EACH	$700.00	1	$700.00							1	$700.00														
2501.515	24" RC PIPE APRON	EACH	$750.00	4	$3,000.00							4	$3,000.00														
2501.515	33" RC PIPE APRON	EACH	$1,000.00	1	$1,000.00							1	$1,000.00														
2501.515	36" RC PIPE APRON	EACH	$1,200.00																								
2501.521	28" SPAN RC PIPE-ARCH CULVERT CLASS IIA	LIN FT	$80.00	125	$10,000.00	125	$10,000.00																				
2501.521	44" SPAN RC PIPE-ARCH CULVERT CLASS IIA	LIN FT	$180.00	146	$26,280.00	146	$26,280.00																				
2501.525	28" SPAN RC PIPE-ARCH APRON	EACH	$780.00	4	$3,120.00	2	$1,560.00					2	$1,560.00														
2501.525	44" SPAN RC PIPE-ARCH APRON	EACH	$1,200.00	2	$2,400.00	2	$2,400.00																				
2501.602	TRASH GUARD FOR 12" PIPE APRON	EACH	$320.00	3	$960.00	1	$320.00					2	$640.00														
2501.602	TRASH GUARD FOR 15" PIPE APRON	EACH	$380.00	11	$4,180.00	3	$1,140.00					8	$3,040.00														
2501.602	TRASH GUARD FOR 18" PIPE APRON	EACH	$450.00	1	$450.00							1	$450.00														
2501.602	TRASH GUARD FOR 28" SPAN PIPE APRON	EACH	$600.00	2	$1,200.00	2	$1,200.00																				
2501.602	TRASH GUARD FOR 44" SPAN PIPE APRON	EACH	$800.00	1	$800.00	1	$800.00																				
2502.541	4" PERF TP PIPE DRAIN (MOD)	LIN FT	$6.00	3,028	$18,168.00	2,548	$15,288.00					480	$2,880.00														
2503.521	28" SPAN RC PIPE-ARCH SEWER CL IIA	LIN FT	$80.00	560	$44,800.00							560	$44,800.00														
2503.541	12" RC PIPE SEWER DESIGN 3006 CL V	LIN FT	$32.00	40	$1,280.00							40	$1,280.00														

EXHIBIT **"A"** = Project Layout
EXHIBIT **"B"** = 60% Estimated Cost Share
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by **MARIO 03-16-2015**

EXHIBIT 3
07-15-2015 MN.

ENGINEER'S ESTIMATE OF PROBABLE CONSTRUCTION COSTS
CSAH 116 (BUNKER LAKE BLVD) FROM CRANE STREET TO EAST OF JEFFERSON STREET

ITEM NO.	ITEM DESCRIPTION	UNIT	UNIT PRICE	TOTAL PROJECT QUANTITY		FEDERAL PARTICIPATING						STORM SEWER (D) COUNTY=69.2% SP 002-716-015 CITY ANDOVER=23.9% SP 198-020-000 CITY HAM LAKE= 6.9% SP 197-020-000		FEDERAL NON-PARTICIPATING											
						COUNTY OF ANOKA SP 002-716-015 (A)		CITY OF ANDOVER SP 198-020-000 (B)		CITY OF HAM LAKE SP 197-020-000, (C)				STATE AID PARTICIPITING						LOCAL							
														COUNTY OF ANOKA SP 002-716-015 (E)		CITY OF ANDOVER SP 198-020-000 (F)		CITY OF HAM LAKE SP 197-020-000 (G)		COUNTY OF ANOKA CP 00-00 (H)		CITY OF ANDOVER CP 00-00 (I)		CITY OF HAM LAKE CP 00-00 (J)		CITY OF CP 00-00 (K)	
				QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
2503.541	15" RC PIPE SEWER DESIGN 3006 CL V	LIN FT	$30.00	6,762	$202,860.00							6,762	$202,860.00														
2503.541	18" RC PIPE SEWER DESIGN 3006 CL III	LIN FT	$32.00	1,972	$63,104.00							1,972	$63,104.00														
2503.541	21" RC PIPE SEWER DESIGN 3006 CL III	LIN FT	$35.00	702	$24,570.00							702	$24,570.00														
2503.541	24" RC PIPE SEWER DESIGN 3006 CL III	LIN FT	$40.00	951	$38,040.00							951	$38,040.00														
2503.541	30" RC PIPE SEWER DESIGN 3006 CL III	LIN FT	$50.00	579	$28,950.00							579	$28,950.00														
2503.541	33" RC PIPE SEWER DESIGN 3006 CL III	LIN FT	$60.00	782	$46,920.00							782	$46,920.00														
2503.602	CONNECT TO EXISTING STORM SEWER	EACH	$600.00	1	$600.00							1	$600.00														
2503.602	PLUG AND ABANDON PIPE SEWER	EACH	$2,500.00	1	$2,500.00							1	$2,500.00														
2504.602	CONNECT TO EXISTING WATER MAIN	EACH	$1,000.00	2	$2,000.00			2	$2,000.00																		
2504.602	6" GATE VALVE & BOX	EACH	$1,300.00	4	$5,200.00			4	$5,200.00																		
2504.602	12" BUTTERFLY VALVE & BOX	EACH	$2,750.00	2	$5,500.00			2	$5,500.00																		
2504.602	HYDRANT	EACH	$4,500.00	4	$18,000.00			4	$18,000.00																		
2504.602	ADJUST HYDRANT & GATE VALVE	EACH	$1,000.00	2	$2,000.00			2	$2,000.00																		
2504.602	ADJUST GATE VALVE & BOX	EACH	$300.00	2	$600.00			2	$600.00																		
2504.603	6" WATERMAIN DUCTILE IRON CL 52	LIN FT	$35.00	15	$525.00			15	$525.00																		
2504.603	12" WATERMAIN DUTILE IRON CL 52	LIN FT	$60.00	300	$18,000.00			300	$18,000.00																		
2504.604	4" POLYSTYRENE INSULATION	SQ YD	$40.00	21	$840.00			21	$840.00																		
2504.608	DUCTILE IRON FITTINGS	POUND	$6.00	900	$5,400.00			900	$5,400.00																		
2506.501	CONST. DRAINAGE STRUCTURE DESIGN H	LIN FT	$250.00	138.8	$34,695.00							138.8	$34,695.00														
2506.501	CONST. DRAINAGE STRUCTURE DESIGN 48-4020	LIN FT	$290.00	456.1	$132,259.34							456.1	$132,259.34														
2506.501	CONST. DRAINAGE STRUCTURE DESIGN 54-4020	LIN FT	$350.00	32.6	$11,406.50							32.6	$11,406.50														
2506.501	CONST. DRAINAGE STRUCTURE DESIGN 60-4020	LIN FT	$350.00	44.4	$15,547.00							44.4	$15,547.00														
2506.501	CONST. DRAINAGE STRUCTURE DESIGN 66-4021	LIN FT	$470.00	5.8	$2,702.50							5.8	$2,702.50														
2506.501	CONST. DRAINAGE STRUCTURE DESIGN 72-4020	LIN FT	$510.00	24.5	$12,495.00							24.50	$12,495.00														
2506.516	CASTING ASSEMBLY	EACH	$650.00	172	$111,800.00							172.0	$111,800.00														
2506.522	ADJUST FRAME & RING CASTING	EACH	$610.00	2	$1,220.00	2	$1,220.00																				
2511.501	RANDOM RIPRAP CLASS II	CU YD	$100.00	826	$82,600.00	826	$82,600.00																				
2511.515	GEOTEXTILE FILTER TYPE III	SQ YD	$3.50	2,011	$7,038.50	2,011	$7,038.50																				
2521.501	4" CONCRETE WALK	SQ FT	$3.30	95,076	$313,750.80	92,361	$304,791.30	2,715	$8,959.50																		
2521.501	6" CONCRETE WALK	SQ FT	$5.50	1,763	$9,696.50	1,763	$9,696.50																				
2531.501	CONCRETE CURB & GUTTER DESIGN B418 (MOD)	LIN FT	$11.00	22,821	$251,031.00	22,821	$251,031.00																				
2531.501	CONCRETE CURB & GUTTER DESIGN B424	LIN FT	$12.50	20,014	$250,175.00	10,884	$136,050.00	6,934	$86,675.00	2,196	$27,450.00																
2531.501	CONCRETE CURB & GUTTER DESIGN B612	LIN FT	$14.00	173	$2,422.00	105	$1,463.00	69	$959.00																		
2531.501	CONCRETE CURB & GUTTER DESIGN B618	LIN FT	$13.50	370	$4,995.00	185	$2,497.50	185	$2,497.50																		
2531.501	CONCRETE CURB & GUTTER DESIGN B618 (MOD)	LIN FT	$15.00	856	$12,840.00	856	$12,840.00																				
2531.501	CONCRETE CURB & GUTTER DESIGN B624	LIN FT	$16.00	496	$7,936.00	248	$3,968.00	248	$3,968.00																		
2531.503	CONCRETE MEDIAN (NOSE)	SQ YD	$50.00	71	$3,550.00	71	$3,550.00																				
2531.604	CONCRETE DRAINAGE FLUME	SQ YD	$65.00	90	$5,850.00	90	$5,850.00																				
2531.618	TRUNCATED DOMES	SQ FT	$28.00	500	$14,000.00			380	$10,640.00	120	$3,360.00																
2533.507	PORTABLE PRECAST CONC BARRIER DES 8337	LIN FT	$22.00	1,560	$34,320.00	1,560	$34,320.00																				
2535.501	BITUMINOUS CURB	LIN FT	$4.00	26	$104.00	26	$104.00																				
2540.602	INSTALL MAIL BOX SUPPORT	EACH	$150.00	3	$450.00	3	$450.00																				
2540.602	RELOCATE MAIL BOX SUPPORT	EACH	$75.00	3	$225.00	3	$225.00																				
2557.501	WIRE FENCE DESIGN SPECIAL VINYL COATED	LIN FT	$50.00	1,861	$93,050.00	1,136	$56,800.00	725	$36,250.00																		
2563.601	TRAFFIC CONTROL SUPERVISOR	LUMP SUM	$15,000.00	1	$15,000.00	0.783	$11,745.00	0.119	$1,785.00	0.025	$375.00	0.073	$1,095.00														
2563.601	TRAFFIC CONTROL	LUMP SUM	$80,000.00	1	$80,000.00	0.783	$62,640.00	0.119	$9,520.00	0.025	$2,000.00	0.073	$5,840.00														
2563.610	POLICE OFFICER	HOUR	$125.00	30	$3,750.00	30	$3,750.00																				
2564.531	SIGN PANELS TYPE C	SQ FT	$50.00	134	$6,700.00	134	$6,700.00																				
2564.552	HAZARD MARKER X4-3	EACH	$150.00	22	$3,300.00	22	$3,300.00																				
2565.511	TRAFFIC CONTROL SIGNAL SYSTEM A	SIG SYS	$180,000.00	1	$180,000.00	0.33	$59,400.00	0.67	$120,600.00																		
2565.511	TRAFFIC CONTROL SIGNAL SYSTEM B	SIG SYS	$150,000.00	1	$150,000.00	0.25	$37,500.00			0.75	$112,500.00																
2565.601	EMERGENCY VEHICLE PREEMPTION SYSTEM A	LUMP SUM	$12,000.00	1	$12,000.00			1.0	$12,000.00																		
2565.601	EMERGENCY VEHICLE PREEMPTION SYSTEM B	LUMP SUM	$8,000.00	1	$8,000.00					1.0	$8,000.00																
2565.601	TRAFFIC CONTROL INTERCONNECTION	LUMP SUM	$100,000.00	1	$100,000.00	1	$100,000.00																				
2565.601	COUNTY FURNISHED MATERIAL	LUMP SUM	$25,000.00	2	$50,000.00									1.0	$25,000.00	0.5	$12,500.00	0.5	$12,500.00								
2565.602	SIGNAL SERVICE CABINET	EACH	$10,000.00	2	$20,000.00	2	$20,000.00																				
2573.502	SILT FENCE, TYPE MS	LIN FT	$2.50	30,130	$75,325.00	30,130	$75,325.00																				
2573.530	STORM DRAIN INLET PROTECTION	EACH	$160.00	200	$32,000.00	200	$32,000.00																				
2573.533	SEDIMENT CONTROL LOG TYPE WOOD FIBER	LIN FT	$5.00	736	$3,680.00	736	$3,680.00																				
2573.550	EROSION CONTROL SUPERVISOR	LUMP SUM	$12,000.00	1	$12,000.00	1	$12,000.00																				
2575.501	SEEDING (P)	ACRE	$400.00	16.5	$6,600.00	16.5	$6,600.00																				
2575.502	SEED MIXTURE 25-121	POUND	$5.00	569	$2,845.00	569	$2,845.00																				
2575.502	SEED MIXTURE 25-131	POUND	$4.00	696	$2,784.00	696	$2,784.00																				
2575.502	SEED MIXTURE 33-261	POUND	$22.00	68	$1,496.00	68	$1,496.00																				
2575.502	SEED MIXTURE 35-241	POUND	$15.00	67	$1,005.00	67	$1,005.00																				
2575.505	SODDING TYPE SALT TOLERANT	SQ YD	$9.00	18,028	$162,253.80	18,028	$162,253.80																				
2575.511	MULCH MATERIAL TYPE 1	TON	$160.00	18.4	$2,944.00	18.4	$2,944.00																				
2576.511	MULCH MATERIAL TYPE 3	TON	$500.00	3.5	$1,750.00	3.5	$1,750.00																				
2575.519	DISK ANCHORING (P)	ACRE	$60.00	11.2	$672.00	11.2	$672.00																				
2575.523	EROSION CONTROL BLANKETS CATEGORY 3	SQ YD	$2.50	18,954	$47,385.00	18,954	$47,385.00																				
2575.532	FERTILIZER TYPE 3	POUND	$1.25	3,466	$4,332.50	3,466	$4,332.50																				
2575.532	FERTILIZER TYPE 4	POUND	$1.25	505	$631.25	505	$631.25																				
2575.571	RAPID STABILIZATION METHOD 3	M GALLON	$425.00	108.7	$46,197.50	108.7	$46,197.50																				
2582.501	PAVEMENT MESSAGE (LT ARROW) PREFORMED THERMOPLASTIC	EACH	$500.00	6	$3,000.00	6	$3,000.00																				
2582.501	PAVEMENT MESSAGE (RT ARROW) PREFORMED THERMOPLASTIC	EACH	$500.00	6	$3,000.00	6	$3,000.00																				
2582.502	24" SOLID LINE WHITE - PREFORMED THERMOPLASTIC	LIN FT	$18.00	263	$4,734.00	263	$4,734.00																				
2582.502	24" SOLID LINE YELLOW - PREFORMED THERMOPLASTIC	LIN FT	$18.00	555	$9,990.00	555	$9,990.00																				

EXHIBIT **"A"** = Project Layout
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by **MARIO 03-16-2015**

EXHIBIT 3
07-15-2015 MN.

ENGINEER'S ESTIMATE OF PROBABLE CONSTRUCTION COSTS
CSAH 116 (BUNKER LAKE BLVD) FROM CRANE STREET TO EAST OF JEFFERSON STREET

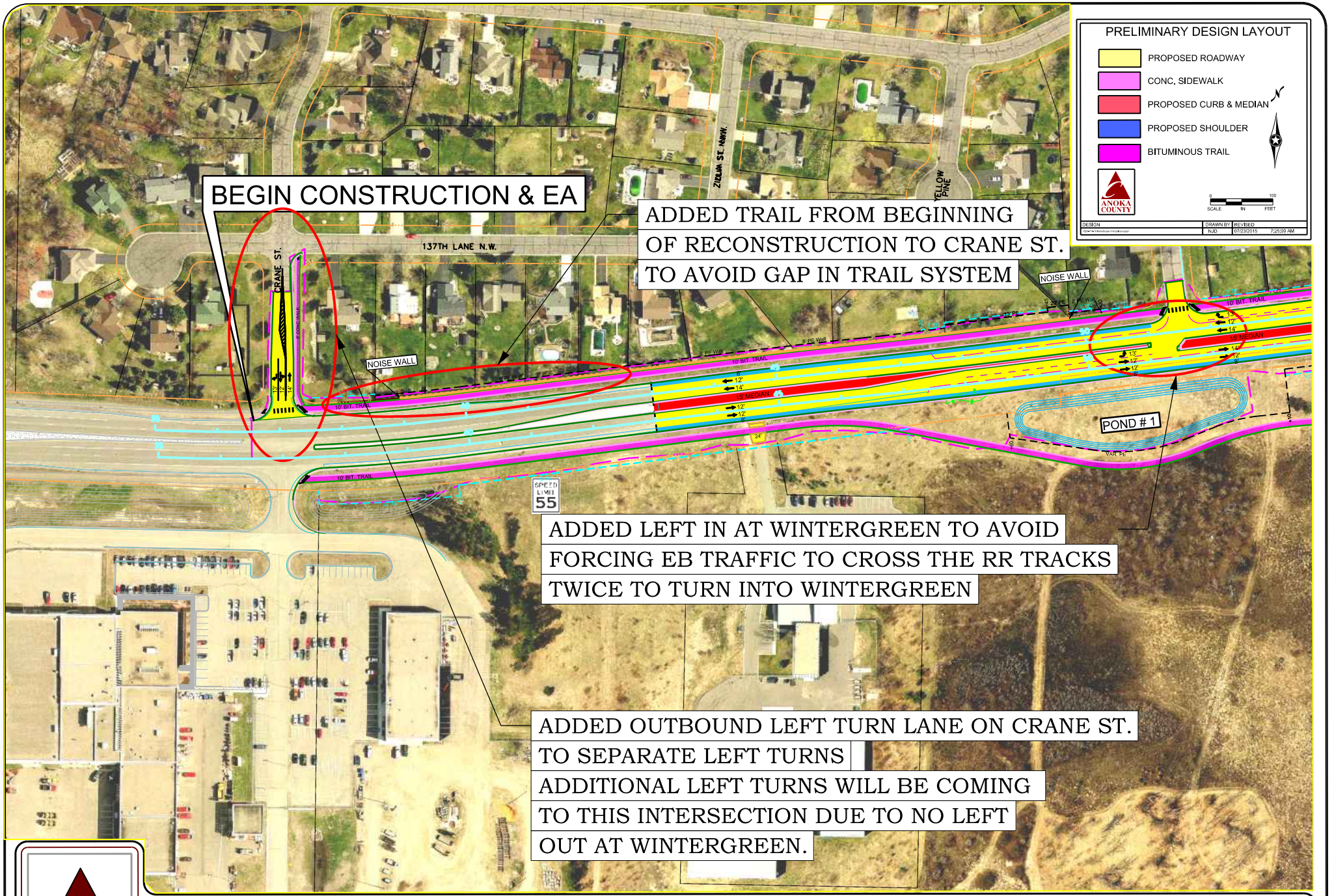
ITEM NO.	ITEM DESCRIPTION	UNIT	UNIT PRICE	TOTAL PROJECT QUANTITY		FEDERAL PARTICIPATING						STORM SEWER (D)		FEDERAL NON-PARTICIPATING											
						COUNTY OF ANOKA SP 002-716-015 (A)		CITY OF ANDOVER SP 198-020-000 (B)		CITY OF HAM LAKE SP 197-020-000, (C)		COUNTY=69.2% SP 002-716-015 CITY ANDOVER=23.9% SP 198-020-000 CITY HAM LAKE= 6.9% SP 197-020-000		STATE AID PARTICIPITING						LOCAL					
														COUNTY OF ANOKA SP 002-716-015 (E)		CITY OF ANDOVER SP 198-020-000 (F)		CITY OF HAM LAKE SP 197-020-000 (G)		COUNTY OF ANOKA CP 00-00 (H)		CITY OF ANDOVER CP 00-00 (I)		CITY OF HAM LAKE CP 00-00 (J)		CITY OF CP 00-00 (K)	
				QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
2582.502	4" SOLID LINE WHITE - EPOXY	LIN FT	$0.30	32,510	$9,753.00	32,510	$9,753.00																				
2582.502	4" BROKEN LINE WHITE - EPOXY	LIN FT	$0.40	5,021	$2,008.40	5,021	$2,008.40																				
2582.502	8" BROKEN LINE WHITE - EPOXY	LIN FT	$4.20	160	$672.00	160	$672.00																				
2582.502	4" SOLID LINE YELLOW - EPOXY	LIN FT	$0.60	25,215	$15,129.00	25,215	$15,129.00																				
2582.502	4" DOUBLE SOLID LINE YELLOW - EPOXY	LIN FT	$0.65	3,455	$2,245.75	3,455	$2,245.75																				
2582.503	CROSSWALK MARKING - WHITE PREFORMED THERMOPLASTIC	SQ FT	11.00	792	$8,712.00	792	$8,712.00																				
	SUBTOTAL				$11,581,964.34		$9,009,789.35		$1,381,479.00		$289,926.65		$850,769.34		$25,000.00		$12,500.00		$12,500.00								
					11,581,964.34		A		B		C		D		E		F		G		H		I		J		K

Federal Funds Available SP 002-716-012	**$7,840,000.00**
Match Amount (Anoka County)	
Total Federal Funds Available	**$7,840,000.00**
% Federal Funding	**68.06%**

Funding Group:		Group A		Group B		Group C		Group D		Group E		Group F		Group G		Group H		Group I		Group J		Group K
Totals:	$11,581,964.34		$9,009,789.35		$1,381,479.00		$289,926.65		$850,769.34				$12,500.00		$12,500.00							
Total Federal Eligible Items:	$11,531,964.34		$9,009,789.35		$1,381,479.00		$289,926.65		$850,769.34													
Federal Funds Available	$7,840,000.00		$6,123,439.98		$940,216.93		$197,320.36		$579,022.73													

SP 002-716-015, CSAH 116 (From Crane St. to East of Jefferson St.) Improvement Project - FUNDING SPLITS

	PROJECT TOTALS	ANOKA COUNTY				CITY OF ANDOVER					CITY OF HAM LAKE				
		TOTALS	FEDERAL FUNDS	STATE AID FUNDS	LOCAL FUNDS (H)	TOTALS	FEDERAL FUNDS	STATE AID FUNDS	LOCAL FUNDS (I)	LOCAL FUNDS (J)	TOTALS	FEDERAL FUNDS	STATE AID FUNDS	LOCAL FUNDS (G)	LOCAL FUNDS (K)
ROADWAY	10,731,195.00	9,034,789.35	6,123,439.98	2,886,349.37	25,000.00	1,393,979.00	940,216.93	441,262.07	12,500.00		302,426.65	197,320.36	92,606.29	12,500.00	
DRAINAGE (69.2% County, 23.9% Andover, 6.9% Ham Lake)	850,769.34	588,401.39	400,458.46	187,942.93		203,472.76	138,480.96	64,991.80			58,895.18	40,083.31	18,811.87		
CONSTRUCTION TOTAL	11,581,964.34	9,623,190.74	6,523,898.44	3,074,292.31	25,000.00	1,597,451.76	1,078,697.89	506,253.87	12,500.00		361,321.83	237,403.67	111,418.16	12,500.00	
8% CONSTRUCTION ENGINEERING	926,557.15	769,855.26		767,855.26	2,000.00	127,796.14		126,796.14	1,000.00		28,905.75		27,905.75	1,000.00	
DESIGN ENGINEERING															
RIGHT OF WAY															
UTILITY RELOCATION															
PROJECT TOTAL	**12,508,521.49**	10,393,046.00	6,523,898.44	3,842,147.57	27,000.00	1,725,247.90	1,078,697.89	633,050.01	13,500.00		390,227.57	237,403.67	139,323.91	13,500.00	

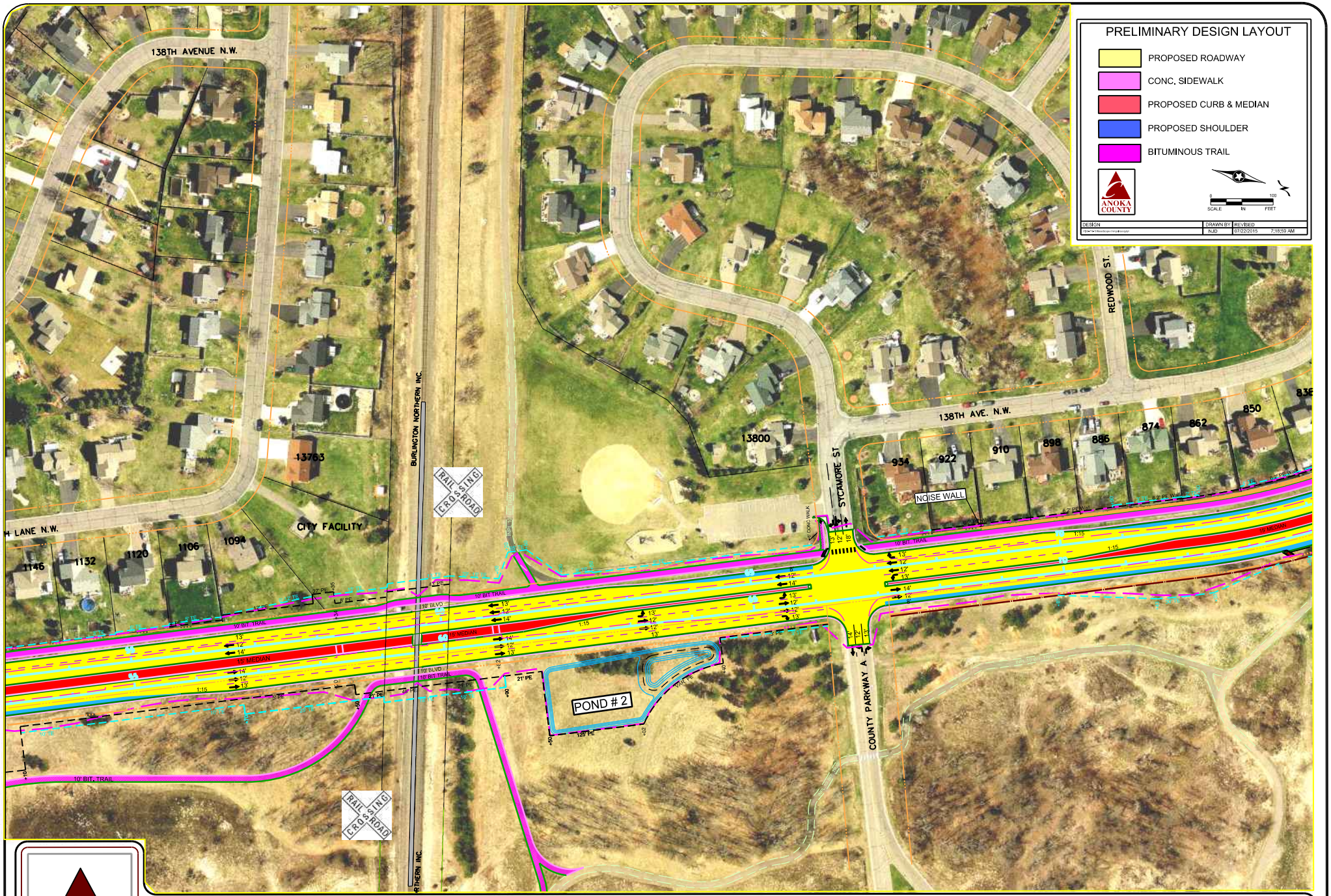


ANOKA COUNTY

REVISED LAYOUT

CSAH 116 - Reconstruction Project
Crane St. to 2230' east of Jefferson St.

FILE NAME: P:\02-716-15\Base\Scope change layout.dgn



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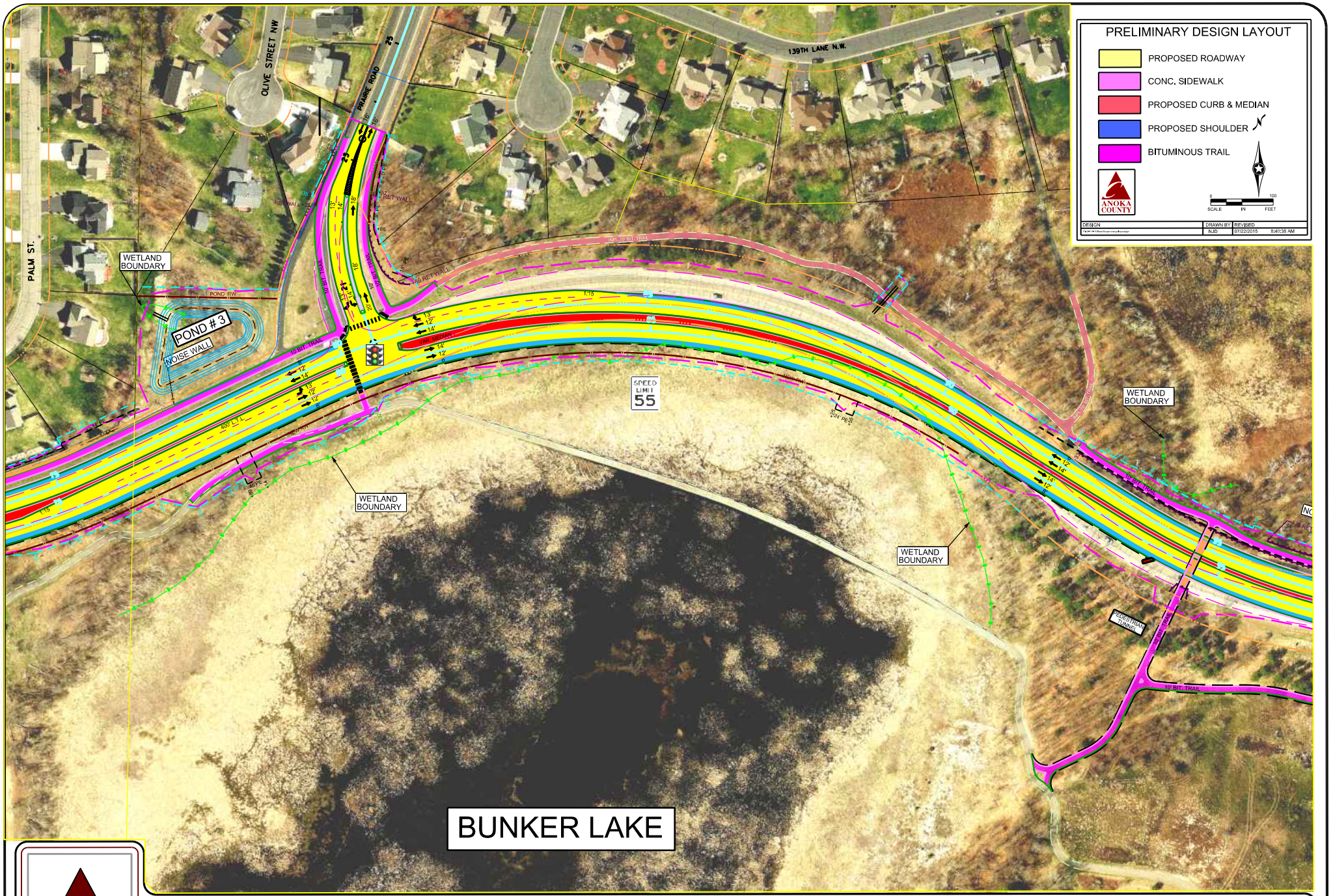

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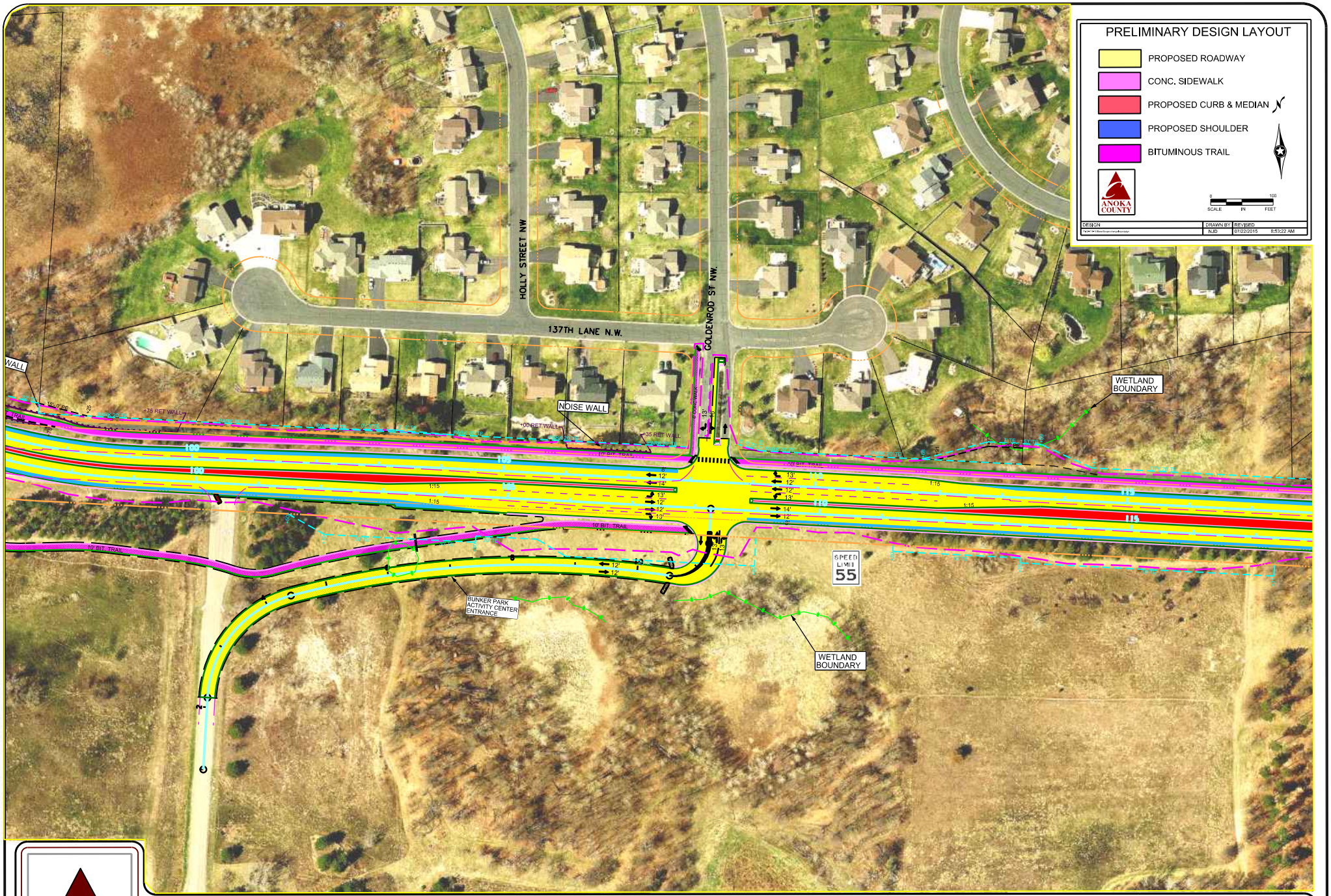

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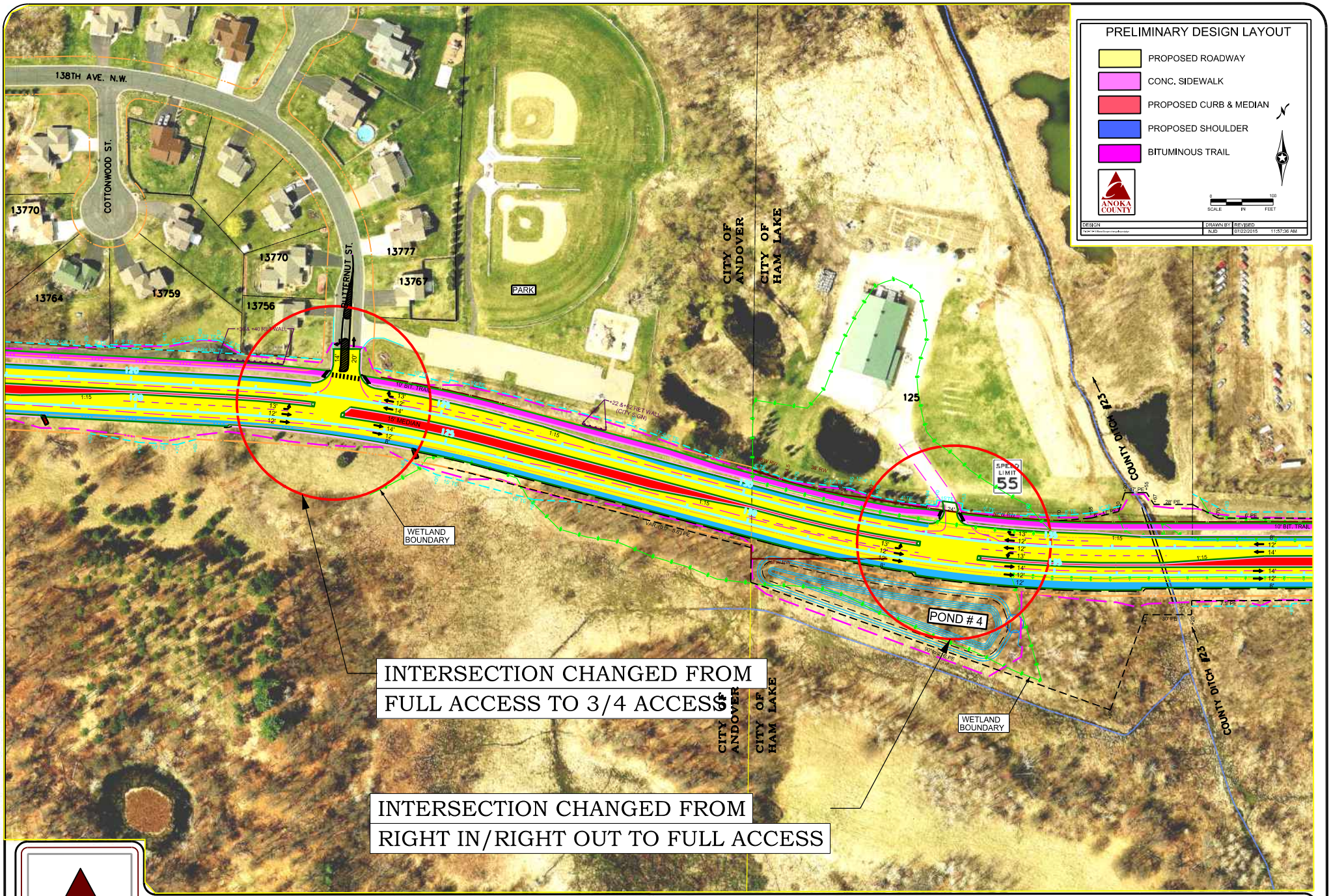

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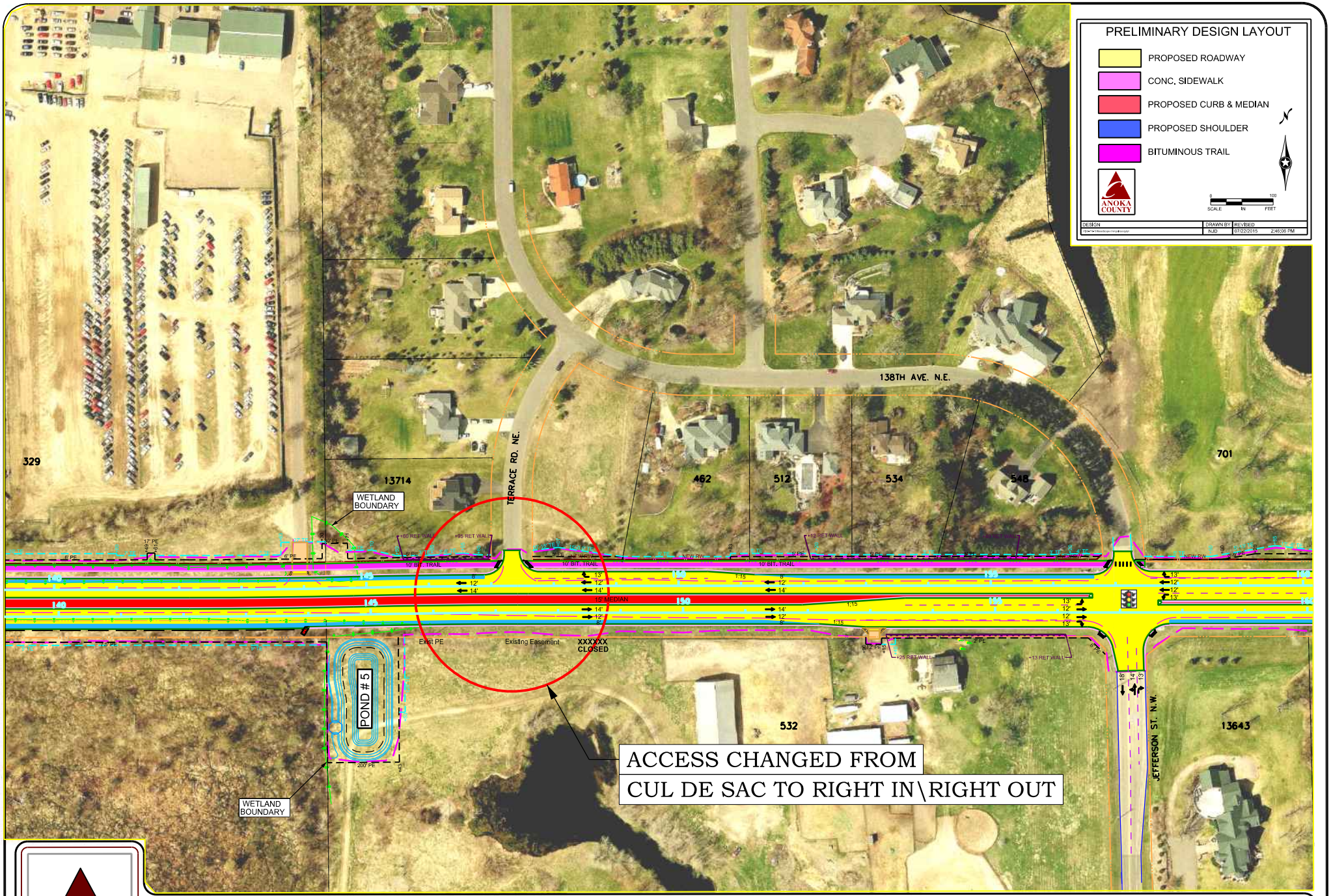

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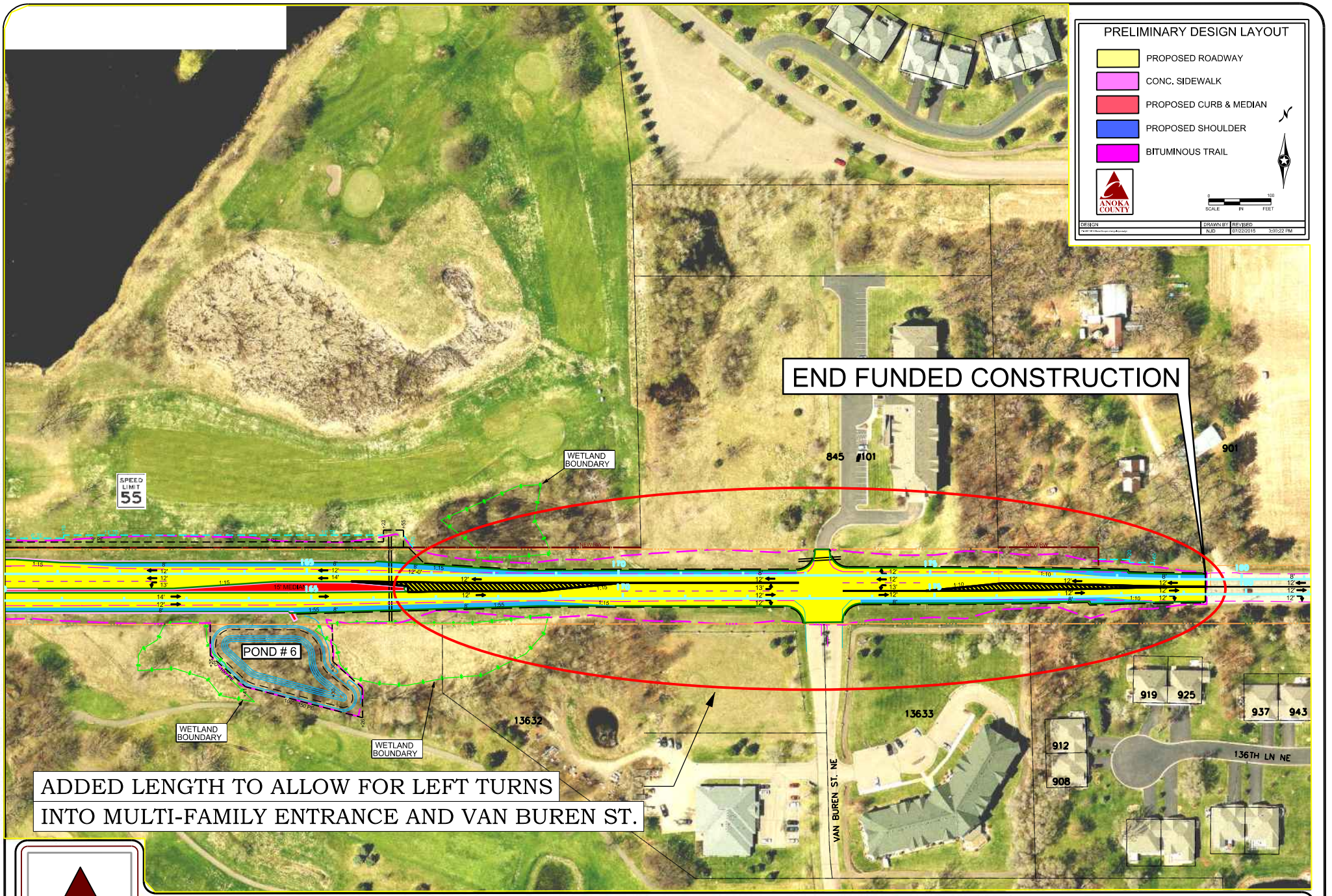

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