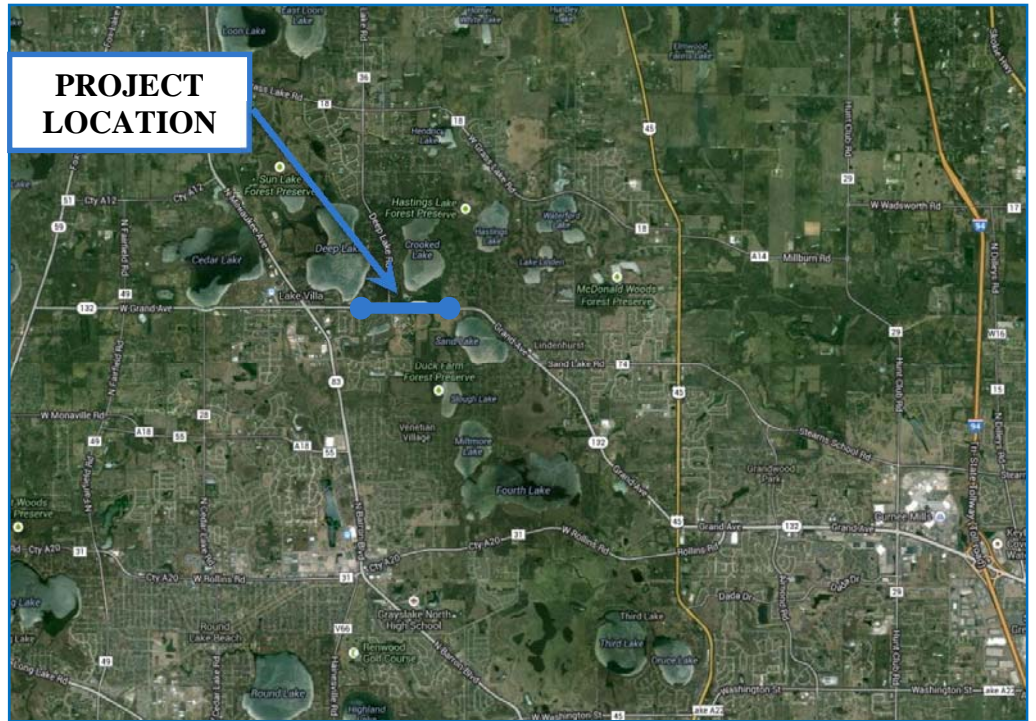




**SECTION 4(f) DE MINIMIS DOCUMENTATION**

**DUCK FARM FOREST PRESERVE  
LAKE COUNTY FOREST PRESERVE DISTRICT**

**ILLINOIS ROUTE 132  
DEEP LAKE ROAD TO MUNN ROAD**



**P-91-410-13**

**Villages of Lake Villa and Lindenhurst  
Lake County, Illinois**

*Illinois Department of Transportation  
Division of Highways/District 1/Region 1*

*September 2015*

**4(f) De Minimis Documentation, Duck Farm Forest Preserve  
Illinois Route 132, Deep Lake Road to Munn Road  
Villages of Lake Villa and Lindenhurst, Lake County, Illinois**

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**ATTACHMENTS**

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Proposed Improvement Plans	A-4
Coordination	A-5
Tree Survey	A-6
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**4(f) De Minimis Documentation, Duck Farm Forest Preserve  
Illinois Route 132, Deep Lake Road to Munn Road  
Villages of Lake Villa and Lindenhurst, Lake County, Illinois**

**1. Project Description**

- a. Project number (State and Federal):** P-91-410-13
- b. Project Name:** Illinois Route 132 (IL 132) from Deep Lake Road to Munn Road
- a. Location:** Villages of Lake Villa and Lindenhurst, Lake County, Illinois
- b. Project Termini:** The project limits are from Sheehan Drive to Munn Road in Lake County, Illinois. The segment from Sheehan Drive to Deep Lake Road is located in the Village of Lake Villa and the segment from Deep Lake Road to Munn Road is located in the Village of Lindenhurst.
- c. Project Type:** Dry land bridge replacement and roadway widening and resurfacing. From Sheehan Drive to Deep Lake Road, the scope of work includes resurfacing and rehabilitation due to the pavement condition. From Deep Lake Road to Munn Road, the scope of work includes the removal and reconstruction of the dry land bridge between Victory Drive and Munn Road, the replacement of a box culvert that conveys Hasting Creek under IL 132 and the widening of IL 132 to provide a median and a dedicated left turn lane at Victory Drive. Also included are shared-use path, sidewalk, and drainage improvements. The Deep Lake Road and Munn Road intersections are signalized with dedicated left turn lanes.
- d. Project Length:** 0.79 miles
- e. NEPA Class of Action:** Categorical Exclusion Group II.
- f. Purpose and Need Summary:** The purpose of the proposed action is to improve highway user safety and provide pedestrian accommodations from Deep Lake to Munn Road, address pavement conditions, and mobility. This will be accomplished by replacing the dry land bridge, resurfacing the pavement, separating opposing lanes of traffic, removing left turning vehicles from through traffic, and by expanding the network of pedestrian and bicyclist accommodations. The Lindenhurst Park District has great interest in providing connectivity between the residential area and the Forest Preserve to the east with the recreation center, Lake Villa District Library, and other amenities to the west. The project will also mitigate a known flooding issue at the low point in the road and provide additional freeboard for the 50-year storm event.

**4(f) De Minimis Documentation, Duck Farm Forest Preserve  
Illinois Route 132, Deep Lake Road to Munn Road  
Villages of Lake Villa and Lindenhurst, Lake County, Illinois**

- g. Project Status:** The Illinois Department of Transportation (IDOT) is performing a preliminary engineering and environmental study (Phase I). The anticipated Phase I design approval date is December 2015. Contract plan preparation and land acquisition (Phase II) and construction (Phase III) are not included in IDOT's FY 2016-2021 Proposed Highway Improvement Program. However, this project will be included in our priorities for future funding consideration among similar improvement needs throughout the region.

## **2. Section 4(f) Resources**

- a. Resource Type:** Forest Preserve
- b. Resource Name:** Duck Farm Forest Preserve
- c. Official with Jurisdiction (OWJ):** Lake County Forest Preserve District (LCFPD)
- d. Description of role/significance in the Community:** The preserve is currently 350 acres and was acquired by LCFPD in 1989. The preserve is located on the south side of IL 132. The preserve contains the 48 acre Dog Exercise Area which is one of four designated areas within the Lake County forest preserves where dogs can run and play off-leash. The dog exercise area is located near the Munn Road intersection. Other uses and amenities at the preserve include a parking lot, open fields, grass trails, a comfort station, drinking fountain, fishing, picnic tables, and snowmobiling trails.

## **3. Description of intended Section 4(f) Resource Use**

- a. Type and Acres of Impact:** 0.90 acres
- i. Permanent Easement: 0.63 acres will be used for the construction and maintenance of the sidewalk, construction of the storm sewer, replacement of the Hastings Creek box culvert, and construction of the roadside ditch. From Sta. 67+50 to Sta. 69+75, the existing ditch will be widened and used for compensatory storage with rip rap check dam (water quality BMP). The existing storm sewer system that drains the dry land bridge will be replaced with a new system placed south of the roadway to avoid impacts with an existing 12" sanitary force main, an 8" water line and ADID wetlands on the north side.



**4(f) De Minimis Documentation, Duck Farm Forest Preserve  
Illinois Route 132, Deep Lake Road to Munn Road  
Villages of Lake Villa and Lindenhurst, Lake County, Illinois**

ii. Temporary Easement: 0.27 acres will be used for grading along IL 132 to meet existing ground.

b. **Existing Function of Impacted Acres:** The impacted areas at the preserve consisting of either open space or trees and vegetation are located adjacent to the roadway right-of-way and away from recreational uses and amenities. The existing culvert is already located on LCFPD property and the proposed culvert will be constructed in the same location. The resulting function of the impacted area along IL 132 is the same as its current use. Four trees, with sizes ranging from seven to 16 inches, are anticipated to be removed from the LCFPD property. A Tree Survey Report was prepared and is included as Attachment A-6.

**4. Description of Efforts to Avoid, Minimize, and Mitigate or Enhance Resource**

a. **Avoidance and minimization efforts made and benefits to resource:** The Duck Farm Forest Preserve is located adjacent to IL 132. Widening is required to provide the median and sidewalk. The median width was reduced from 16 feet to 11 feet and the alignment was shifted 2.5 feet north to avoid the Sand Lake Cemetery and minimize impacts to the Duck Farm Forest Preserve. Avoiding the preserve could not be achieved because of its location at the project terminus. The shared-use path is located on the north side of the roadway, which minimizes impacts to the preserve. The raised profile between Victory Drive and Munn Road, which results in grading sideslopes in the preserve, is required to mitigate roadway flooding at the low point east of Victory Drive and provide additional freeboard from the 50 year storm. To minimize the impacts to the forest preserve, two feet of freeboard is provided instead of the three feet of freeboard normally required by IDOT design criteria. The project does not impact any areas that utilized OSLAD or LAWCON funds.

Section 4(f) documentation was previously required for Duck Farm Forest Preserve east of Munn Road for the IL 132 (Munn Road to East of Sand Lake Road) project for sidewalk construction and relocation of the Duck Farm Forest Preserve entrance.

b. **Commitments for mitigation or enhancement:** There are benefits to the LCFPD from this project. The five-foot wide sidewalk on the south side of IL 132 and eight-foot wide shared-use path on the north side of IL 132 will improve community access and connect Duck Farm Forest Preserve with the Lindenhurst Park District's bike trail system. At the Deep Lake Road intersection, the proposed pedestrian and bicyclist accommodations will connect with the Deep Lake Road Trail, which links to the Lake

**4(f) De Minimis Documentation, Duck Farm Forest Preserve  
Illinois Route 132, Deep Lake Road to Munn Road  
Villages of Lake Villa and Lindenhurst, Lake County, Illinois**

Villa District Library and, in the future, the Lakes Community High School's Polley Field. At the Munn Road intersection, the proposed pedestrian and bicyclist accommodations will create a link between the Lake Villa District Library and the Engle Memorial Park, on the north. The proposed pedestrian and bicyclist accommodations will connect to the proposed shared-use path and sidewalk along IL 132 as part of IDOT's IL 132 (Munn Road to East of Sand Lake Road) project (P-91-337-10) linking it to the Fourth Lake Forest Preserve and the Millennium Trail.

All areas disturbed by construction will be restored to turf cover in accordance with the Department's "Guideline for Use of Landscape Items" as appropriate for the project location. All trees and other plants removed for construction will be replaced on a 1:1 nursery stock basis at a minimum wherever feasible and appropriate under Department guidelines. Forested areas or dense strands of trees and shrubs may be replaced with seedling trees on a 3:1 basis where appropriate. Wildflower plantings will be considered for inclusion where applicable to the project.

There will be no cost participation to the LCFPD. IDOT will maintain the proposed culvert and the roadway ditch and the Village of Lindenhurst will maintain the sidewalk. LCFPD will be compensated for the easements needed for the project.

## **5. Evidence of Opportunity for Public Review and Comment**

- a. Type of public availability:** A newspaper ad was posted in the Daily Herald on *date* and *date* to allow the public 30 days to review and comment on the Section 4(f) impacts (See attachment A-7). The Section 4(f) documentation will be available for viewing during the comment period at IDOT (201 W. Center Court, Schaumburg, IL 60196), LCFPD (1899 West Winchester Road, Libertyville, IL 60048) and on IDOT's website <http://www.idot.illinois.gov/transportation-system/environment/index>. Comments can be made by e-mail through the IDOT website at <http://www.idot.illinois.gov/transportation-system/environment/index>. (See Attachment A-7)
- b. Summary of comments:** (See Attachment A-7)

**4(f) De Minimis Documentation, Duck Farm Forest Preserve  
Illinois Route 132, Deep Lake Road to Munn Road  
Villages of Lake Villa and Lindenhurst, Lake County, Illinois**

**6. Evidence of Coordination with Official(s) with Jurisdiction (See Attachment A-5)**

- a. November 7, 2013 .....Initiation letter to LCFPD
- b. November 20, 2013.....Lindenhurst Park District (LPD) request letter for path extension
- c. December 3, 2013 .....Lake Villa District Library (LVDL) support letter for path
- d. December 16, 2013 .....LCDOT response to initiation letter
- e. January 03, 2014 .....LCFPD response to initiation letter
- f. February 19, 2014 .....IDOT response to LDP path extension letter
- g. February 19, 2014 .....IDOT response to LVDL support for path letter
- h. TBD .....Transmittal of Draft Section 4(f) Documentation for LCFPD review
- i. TBD .....Transmittal of Draft Section 4(f) Documentation for public viewing
- j. TBD .....Letter to LCFPD requesting no adverse effect determination and transmittal
- k. TBD .....LCFPD written concurrence with a No Adverse Effect Determination
- l. TBD .....FHWA finding of de minimis impact
- m. TBD .....Transmittal of final Section 4(f) documentation to LCFPD

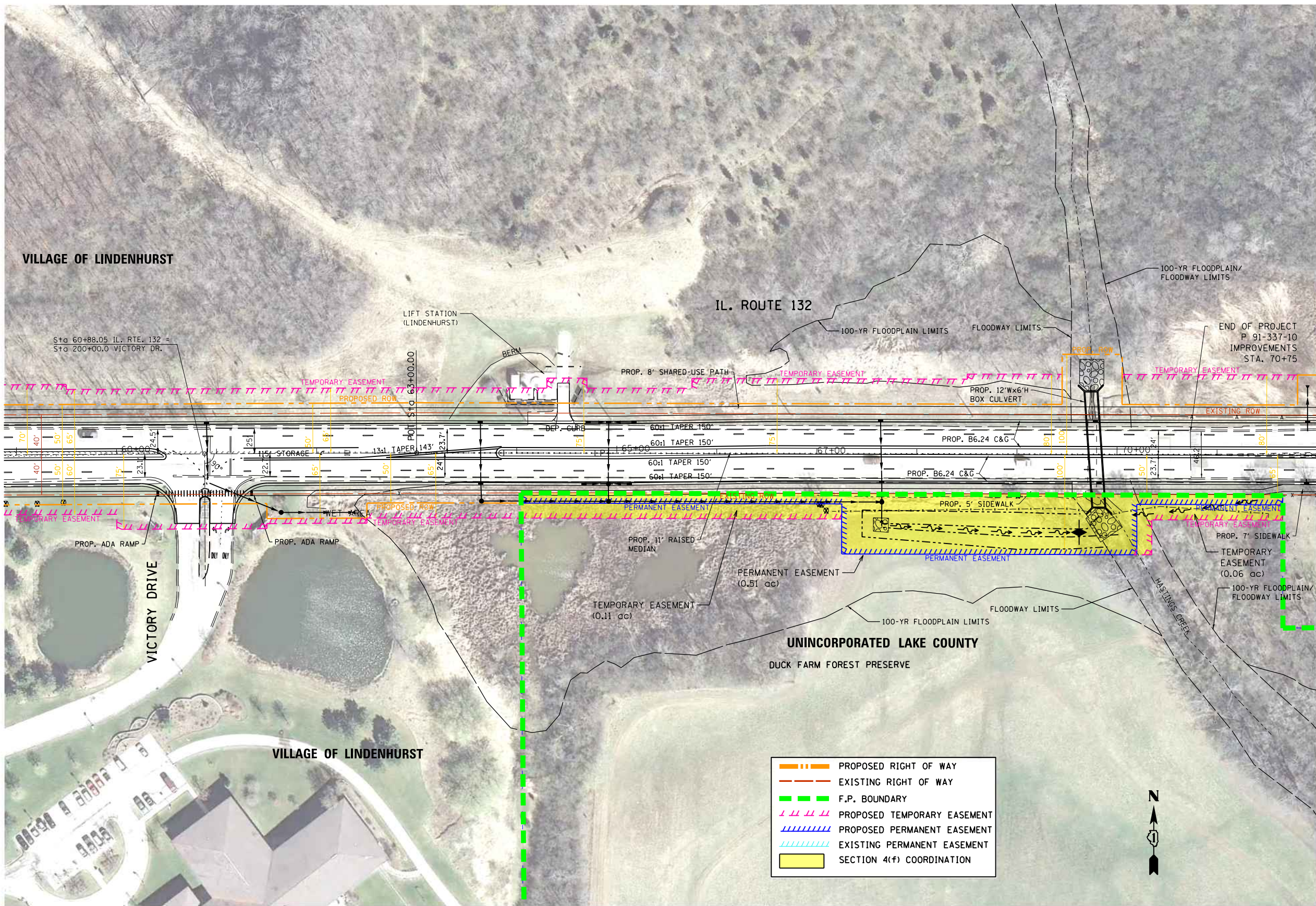
**7. Supporting Documentation**

- a. Section 4(f) Impact Exhibit - Duck Farm Forest Preserve ..... Attachment A-1
- b. Project Location Map..... Attachment A-2
- c. Regional Location Map ..... Attachment A-3
- d. Aerial View – Duck Farm Forest Preserve ..... Attachment A-3
- e. LCFPD Facility Map..... Attachment A-3
- f. Typical Sections ..... Attachment A-4
- g. Preliminary Plan and Profile..... Attachment A-4
- h. Existing Drainage Plan ..... Attachment A-4
- i. Preliminary Proposed Drainage Plan ..... Attachment A-4
- j. Coordination ..... Attachment A-5
- k. Tree Survey ..... Attachment A-6
- l. Public Review and Comment Documentation..... Attachment A-7

# **ATTACHMENT A-1**

Section 4(f) Impact Exhibit





FILE NAME =	USER NAME = chris.wine	DESIGNED -	REVISED -
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

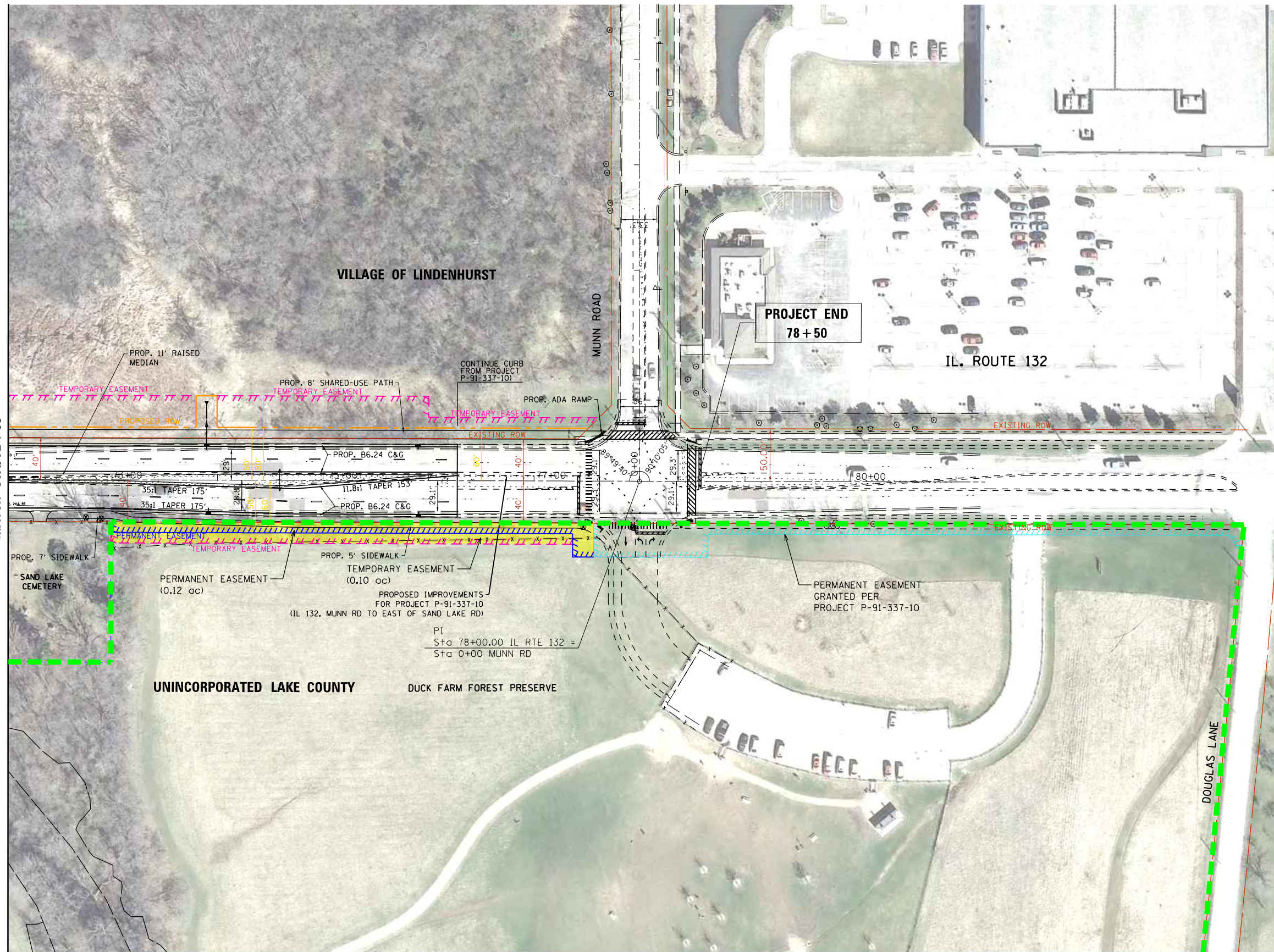
**SECTION 4(f) EXHIBIT  
IL 132 (GRAND AVE) - DEEP LAKE RD TO MUNN RD**

SCALE: 1" = 50'    SHEET 1    OF 2    SHEETS    STA.    TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541		LAKE	2	1
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

**A-1.1**





MATCH STA. 72 + 00

VILLAGE OF LINDENHURST

PROJECT END  
78 + 50

IL. ROUTE 132

MUNN ROAD

DOUGLAS LANE

PROP. 11' RAISED  
MEDIAN

PROP. 8' SHARED-USE PATH

CONTINUE CURB  
FROM PROJECT  
P-91-337-10

PROP. ADA RAMP

TEMPORARY EASEMENT

TEMPORARY EASEMENT

TEMPORARY EASEMENT

EXISTING ROW

EXISTING ROW

PROP. B6.24 C&G

PROP. B6.24 C&G

35:1 TAPER 175'

35:1 TAPER 175'

11.8:1 TAPER 153'

PROP. B6.24 C&G

PROP. 7' SIDEWALK

PERMANENT EASEMENT  
(0.12 ac)

PROP. 5' SIDEWALK

TEMPORARY EASEMENT  
(0.10 ac)

PROPOSED IMPROVEMENTS  
FOR PROJECT P-91-337-10  
(IL 132, MUNN RD TO EAST OF SAND LAKE RD)

PI  
Sta 78+00.00 IL RTE 132 =  
Sta 0+00 MUNN RD

PERMANENT EASEMENT  
GRANTED PER  
PROJECT P-91-337-10

UNINCORPORATED LAKE COUNTY

DUCK FARM FOREST PRESERVE



- PROPOSED RIGHT OF WAY
- EXISTING RIGHT OF WAY
- F.P. BOUNDARY
- / / / / / PROPOSED TEMPORARY EASEMENT
- / / / / / PROPOSED PERMANENT EASEMENT
- / / / / / EXISTING PERMANENT EASEMENT
- SECTION 4(f) COORDINATION



A-1.2

FILE NAME =	USER NAME = chris.wine	DESIGNED -	REVISED -
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

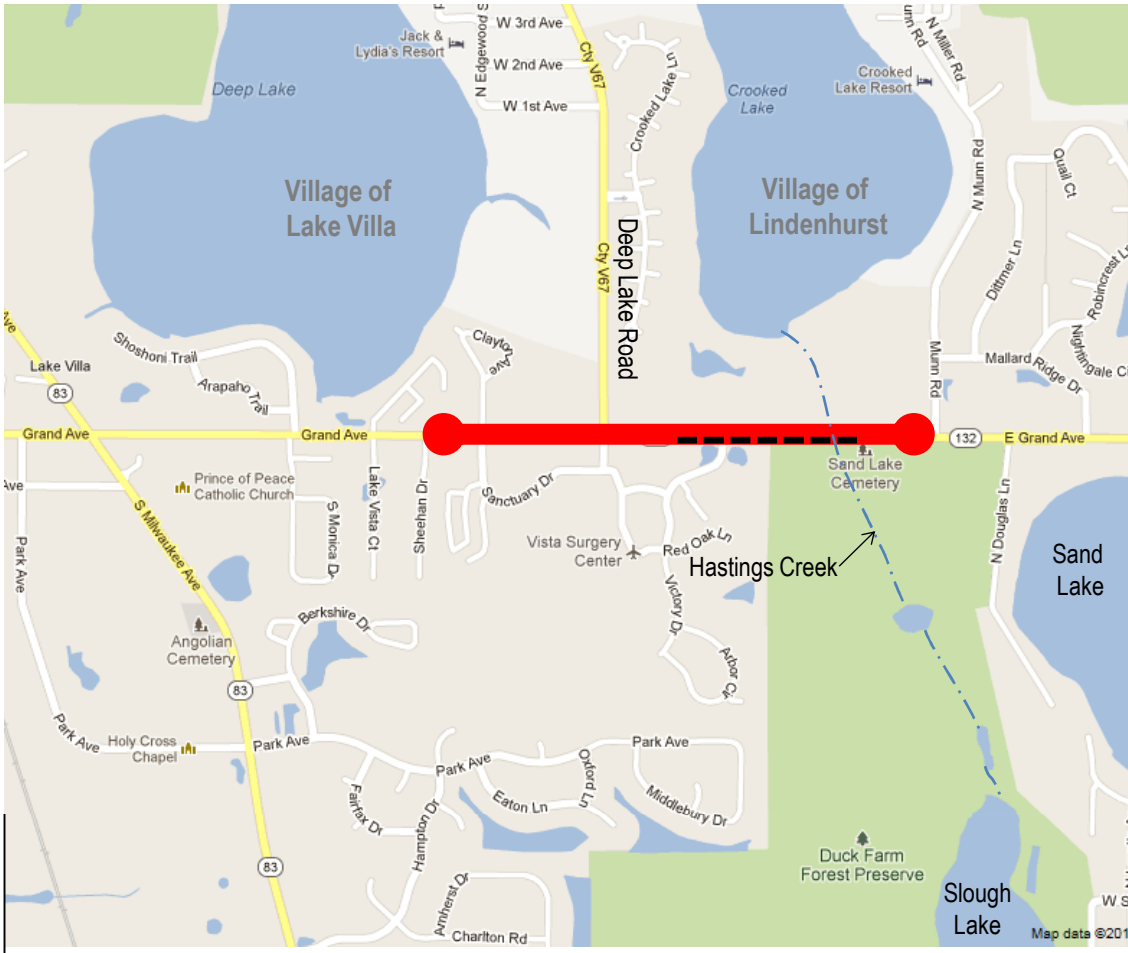
SECTION 4(f) EXHIBIT  
IL 132 (GRAND AVE) - DEEP LAKE RD TO MUNN RD  
SCALE: 1" = 50' SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541			2	2
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				



# **ATTACHMENT A-2**

Project Location Map





**Legend**

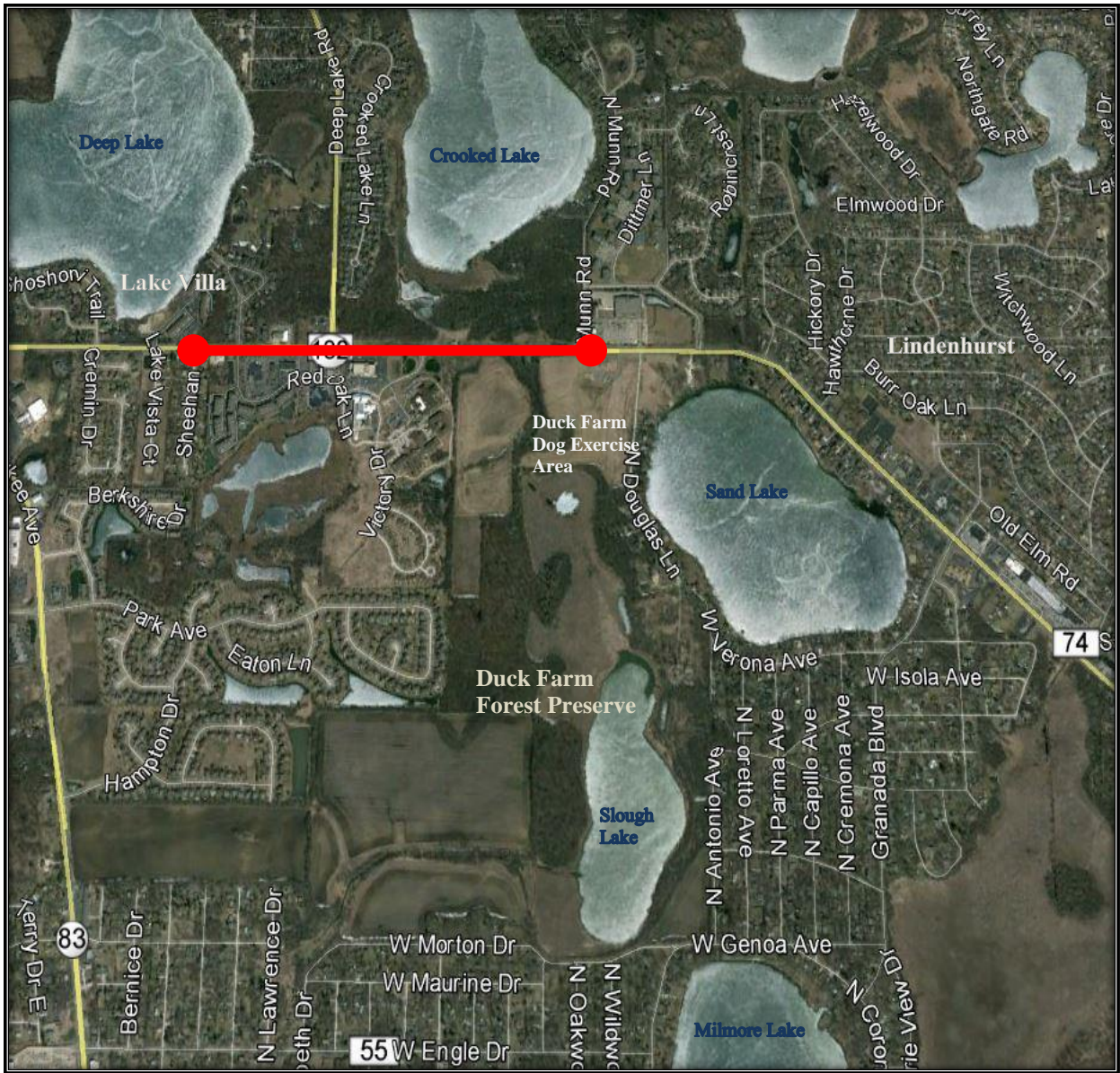
-  Study Limits
-  Existing Dry Land Bridge

**PROJECT LOCATION MAP**  
 IL132  
 Deep Lake Road to Munn Road  
 Village of Lindenhurst  
 Lake County  
 P-91-410-13



# **ATTACHMENT A-3**

LCFPD Facility Area



**Aerial Map**

Duck Farm Forest Preserve  
 Lake County Forest Preserve District

**Legend**

 Study Limit



# Duck Farm Forest Preserve

Courtesy Copy Only.  
Property boundaries indicated are provided for general location purposes. Wetland and flood limits shown are approximate and should not be used to determine setbacks for structure or as a basis for purchasing property.

## Legend

-  Forest Preserve Property
-  Forest Preserve Easements

Prepared using information from:  
Lake County Department of Information  
& Technology: GIS/Mapping Division  
18 North County Street  
Waukegan, Illinois 60085-4357  
847-377-2373

Map Prepared 3 January 2014

2012 Aerial Photo

Lake County Forest Preserve District  
Land Preservation and Special Projects  
1899 W Winchester Rd  
Libertyville, Illinois 60048  
847-968-3351

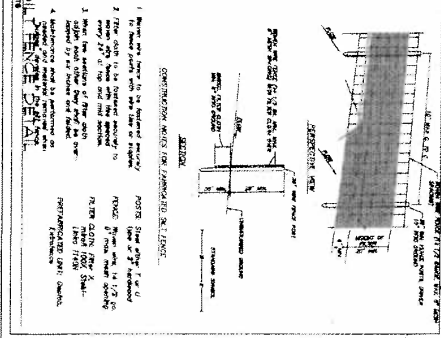
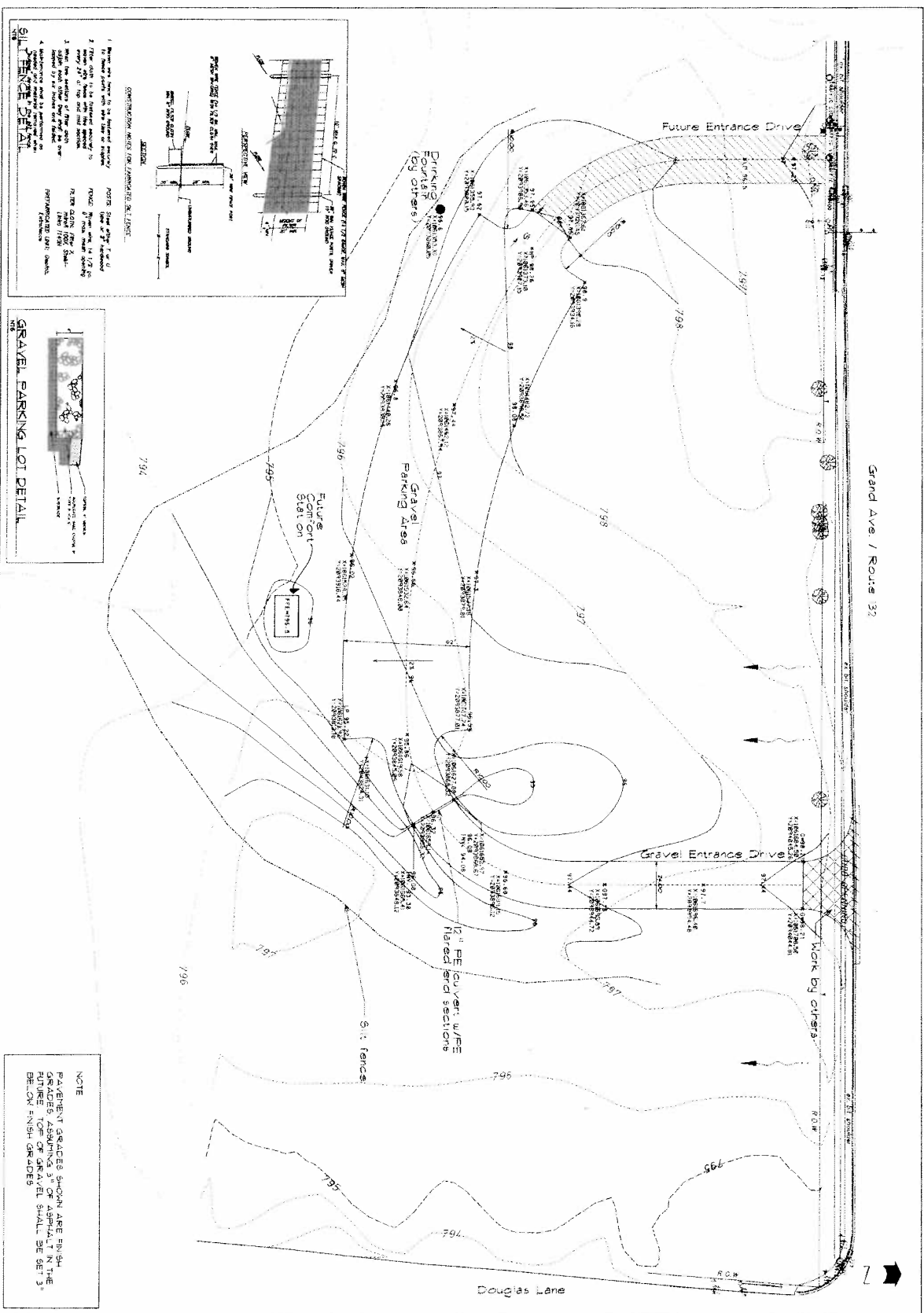




# DUCK FARM DOG AREA MAP



The 48-acre fenced area features open fields, grass trails, a comfort station and drinking fountain.  
**Location:** Duck Farm Dog Exercise Area is located near Lindenhurst and Lake Villa. Enter on Grand Avenue (Route 132) east of Route 83.



**NOTE**

PAVEMENT GRADES SHOWN ARE FINISH GRADES ASSUMING 3" OF ASPHALT IN THE CURB. GRADES OF GRAVEL SHALL BE SET 3" BELOW FINISH GRADES.

# Duck Farm Dog Exercise Area Grading / Layout Plan

Lake County Forest Preserves 2000 North Milwaukee Avenue Libertyville, IL 60048

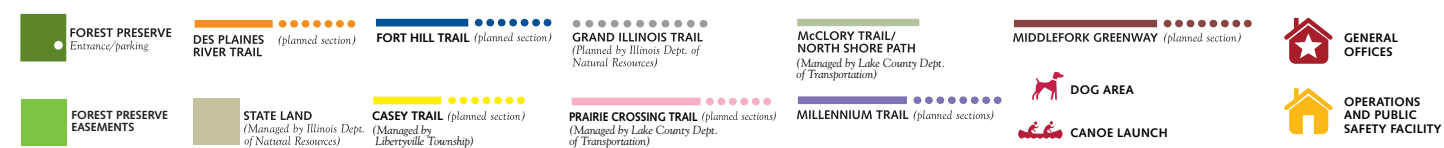
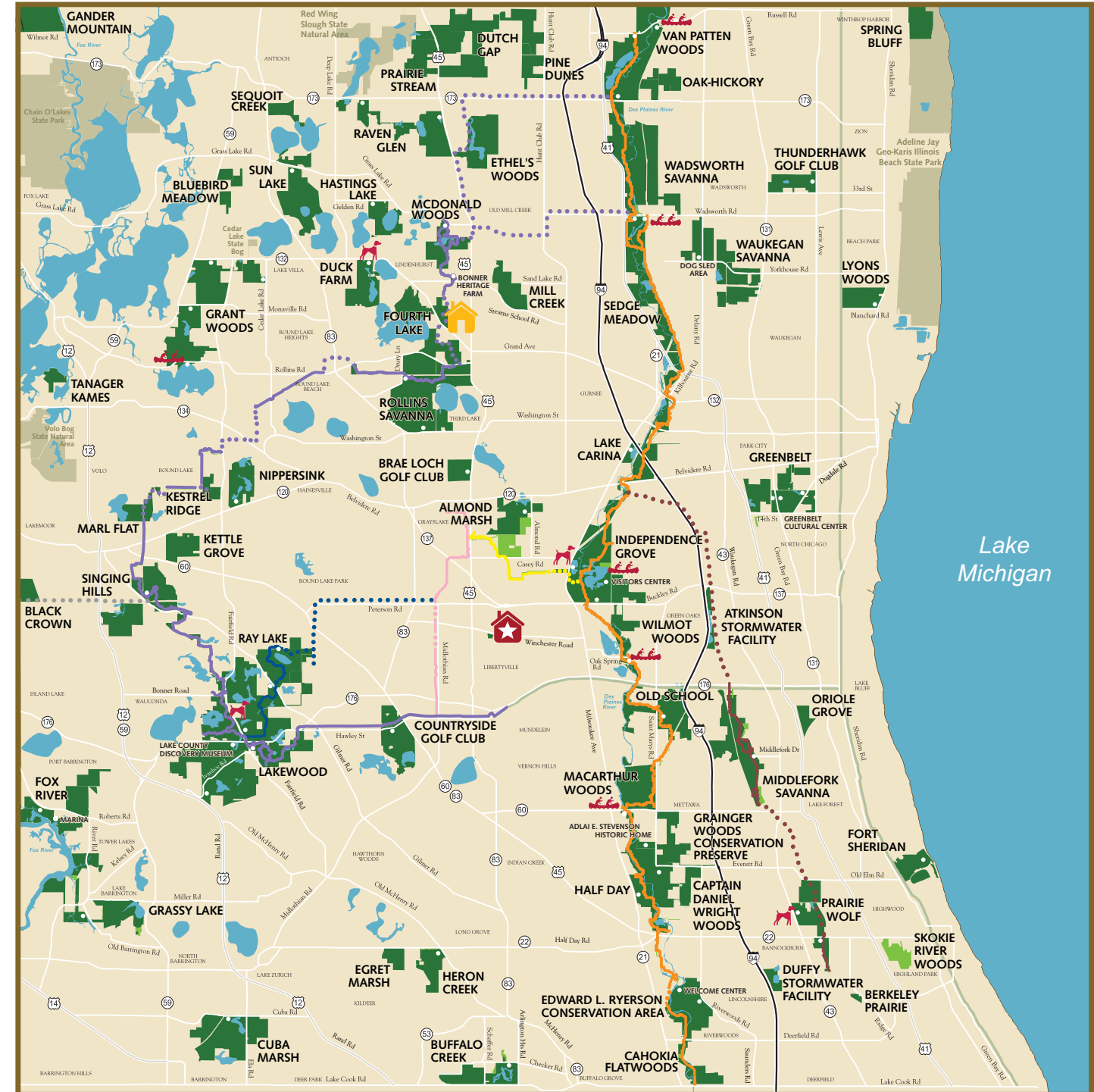
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Date:	8/23/01
Drawn by:	ST
Checked by:	NS
SHT 1	OF 1

11	11
11	11
11	11
11	11
11	11



**Emergency: call 911**  
**Non-emergency public safety issue: 847-549-5200**

GENERAL FACILITIES	ACRES	TRAILS (IN MILES)																																		
		BANQUETS, MTGS, WEDDINGS	BOAT/BICYCLE RENTAL	CAMPING: YOUTH GROUPS	CANOE LAUNCH	DPRT ACCESS	DOG EXERCISE AREA	DRINKING WATER	EQUESTRIAN BOARDING	EXHIBITS, ARCHIVES	FISHING	GIFT/PRO SHOPS/SNACKS	GOLF DRIVING RANGE	HORSE TRAILER PARKING	ICE SKATING	MARINA/BOAT LAUNCH	MILLENNIUM TRAIL ACCESS	MODEL AIRPLANE FIELD	NATIVE SEED NURSERY	NATURE CNTR/NATIVE GARDEN	PARKING	PICNIC SHELTERS	PICNIC TABLES	PLAYGROUND	TOILETS	SLIDDING HILL	OPEN PLAY FIELD	SWIMMING	BICYCLING	CROSS-COUNTRY SKIING	HIKING	HORSEBACK RIDING	IN-LINE SKATING	SELF-GUIDED NATURE	SNOWMOBILING	
Buffalo Creek	408																											4	4	4						
Captain Daniel Wright Woods	747																												4	4	4	3				
Cuba Marsh	781																												3	3	3					
Duck Farm	350																																		2 1/2	
Fourth Lake	618																												1/2	1/2						
Grainger Woods	310																																			
Grant Woods	1,128																											6	6	6*					4 1/2	
Grassy Lake	689																											3 1/2	3 1/2							
Greenbelt	596																											4	4	5					1	
Half Day	236																											1	1	1	1					
Hastings Lake	269																											1	1							
Heron Creek	240																											2 1/4	2 1/4	2 1/4						
Lake Carina	472																											1	1							
Lakewood	2,708																											2	5	11	9				3	
Lyons Woods	272																											2 1/2	2 1/2	2 1/2						
McDonald Woods	298																											4	4	4						
Middlefork Savanna	686																											4	4	4					1/2	
Nippersink	315																											1 1/2	1 1/2	1 1/2					3/4	
Oak Spring Road Canoe Launch																																				
Old School	543																											6	4 1/2	7 1/2	3	1 1/2				
Prairie Wolf	435																											1 1/4	1 1/4	1 1/4					1	
Raven Glen	575																											4	4 1/4	4	2				2	
Ray Lake	517																											3	3	3						
Rollins Savanna	1,216																											5 1/2	5 1/2	5 1/2					2 1/4	
Route 60 Canoe Launch																																				
Singing Hills	688																																			
Sun Lake	629																											3 1/4	3 1/4	3 1/4						
Van Patten Woods	975																											5	5	5*	5*					
Wadsworth Road Canoe Launch																																				
<b>REGIONAL TRAILS</b>																																				
Des Plaines River Trail <sup>2</sup> (DPRT)																												31	31*	31*	31*					8
Fort Hill Trail																												2	2	2	2					
Millennium Trail <sup>1</sup>																												20	20	20	9 1/4					
<b>SPECIAL FACILITIES</b>																																				
Adlai E. Stevenson Historic Home																																				
Bonner Heritage Farm																																				
Brae Loch Golf Club	161																																			
Countryside Golf Club	482																																			
Fort Sheridan (Golf Club temp. closed)	250																																			
Fox River	599																											2	2	2						
Greenbelt Cultural Center																																				
Independence Grove & Visitors Center <sup>1</sup>	1,135																											6 1/4	6 1/4	6 1/4	3 1/4					
Lake County Discovery Museum																																				
Ryerson Woods & Welcome Center <sup>1</sup>	561																											6 1/2	6 1/2						2 1/2	
ThunderHawk Golf Club	241																																			



**CHART LEGEND**

\*When snow cover is adequate, be aware that hikers, skiers and/or horses share some of these trails with snowmobiles.  
Note: 4 inches of snow required for skiers at Ryerson Woods.  
1 Dogs, horses and other pets prohibited at these preserves.  
2 Snowmobiles between Wadsworth Road and Russell Road only.  
3 Horses Lakewood and Singing Hills sections only.  
Note: Permits required for picnic shelters, dog areas, model airplane field and equestrians. Call for details.

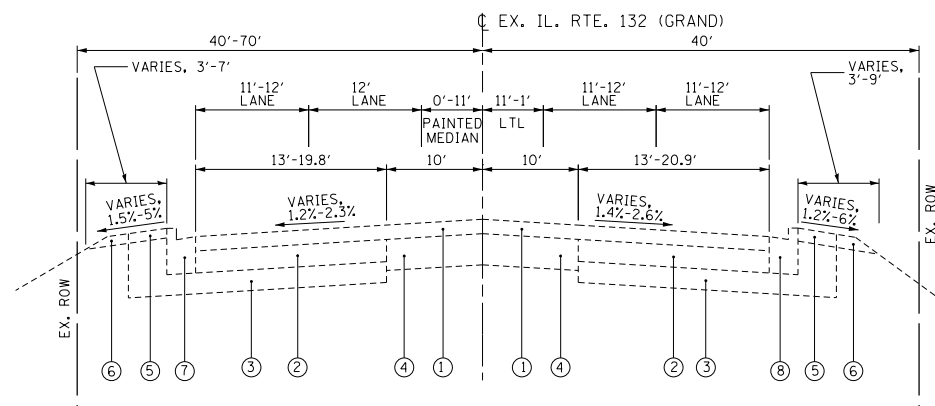
**OTHER AREAS** more than 11,000 acres

Some of these other areas are open to the public (except farmlands and select other sites as posted). However, facilities are not available and parking must comply with local traffic regulations.

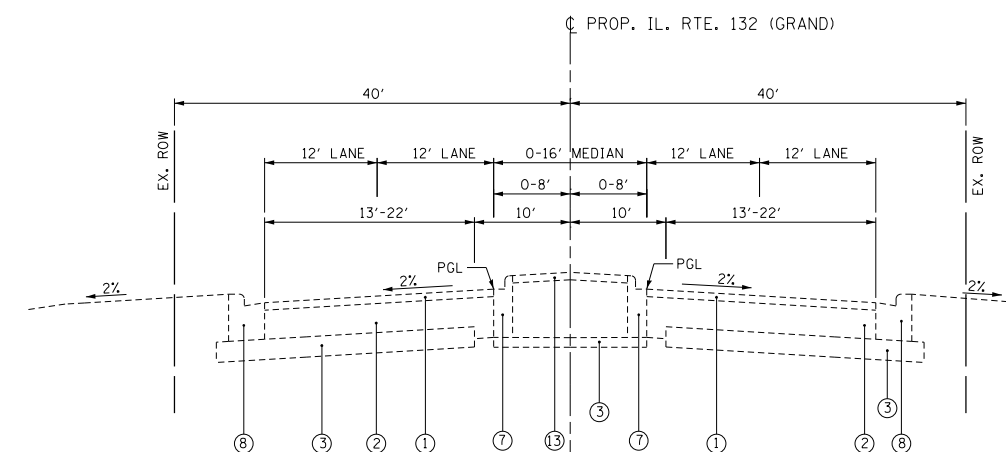
# **ATTACHMENT A-4**

Proposed Improvement Plans

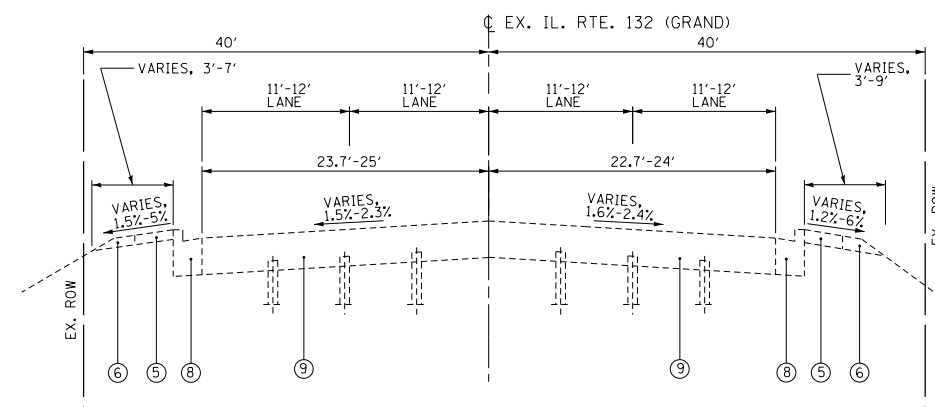




**IL ROUTE 132 (GRAND)**  
**EXISTING TYPICAL SECTION**  
 STA. 36+57 TO STA. 61+14



**EXISTING TYPICAL SECTION**  
 STA. 70+52 TO STA. 74+32  
 (PROJECT 91-337-10 IMPROVEMENTS)



**IL ROUTE 132 (GRAND)**  
**EXISTING TYPICAL SECTION**  
 STA. 61+14 TO STA. 70+52

## PRELIMINARY PRINT

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 PROJECT AND ENVIRONMENTAL STUDIES  
 SUBJECT TO REVISIONS

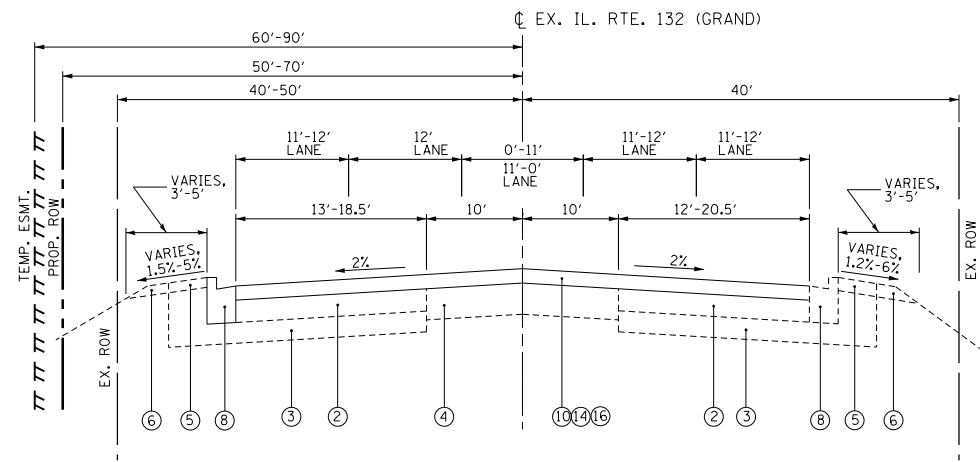
### LEGEND

- ① BITUMINOUS CONCRETE SURFACE COURSE & BINDER COURSE
- ② BITUMINOUS CONCRETE BASE COURSE
- ③ GRANULAR SUB-BASE
- ④ PCC PAVEMENT
- ⑤ HMA SURFACE COURSE
- ⑥ AGGREGATE SHOULDER
- ⑦ COMBINATION CONCRETE C&G, TYPE B-6.12
- ⑧ COMBINATION CONCRETE C&G, TYPE B-6.24
- ⑨ CONCRETE DECK
- ⑩ COLD MILLING OF EXISTING HMA PAVEMENT 2 1/2" MIN
- ⑪ PCC SIDEWALK
- ⑫ LANDSCAPING AREA
- ⑬ CONCRETE MEDIAN
- ⑭ 1 3/4" HMA SURFACE COURSE, MIX "D", N70
- ⑮ 2" HMA SURFACE COURSE, MIX "D", N70
- ⑯ 3/4" POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50
- ⑰ 7/4" HMA BINDER COURSE, IL-19.0, N70 BINDER
- ⑱ 7 3/4" HMA BASE COURSE, IL-19.0, N70
- ⑲ 12" AGGREGATE SUBGRADE IMPROVEMENT

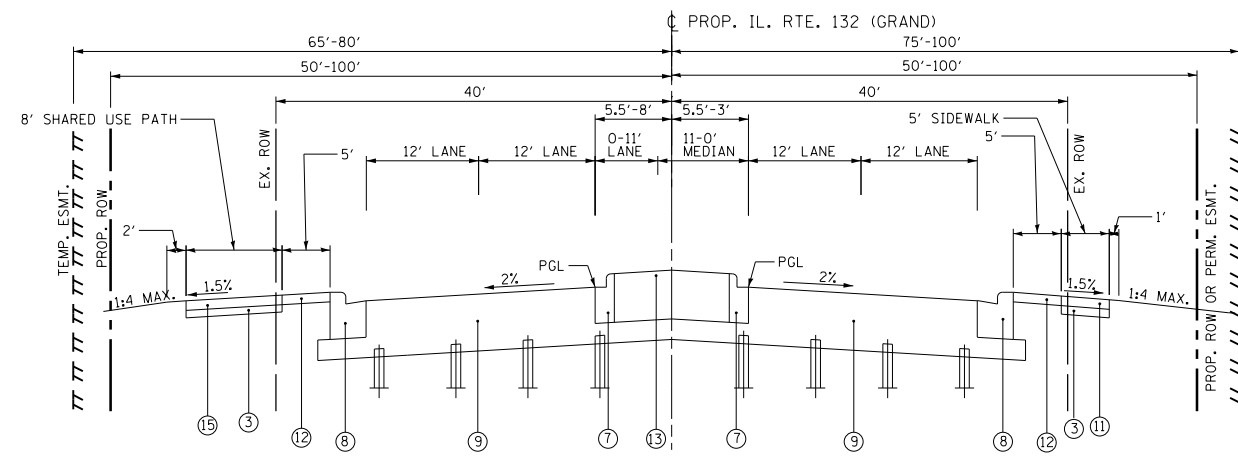
**A-4.1**

FILE NAME =	USER NAME = chriss.wine	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TYPICAL SECTIONS IL 132 (GRAND AVE) - DEEP LAKE RD TO MUNN RD</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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#MODELNAME#		CHECKED -	REVISED -			CONTRACT NO.					
	PLOT DATE = 9/21/2015	DATE -	REVISED -			SCALE:	SHEET 1 OF 2 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT	

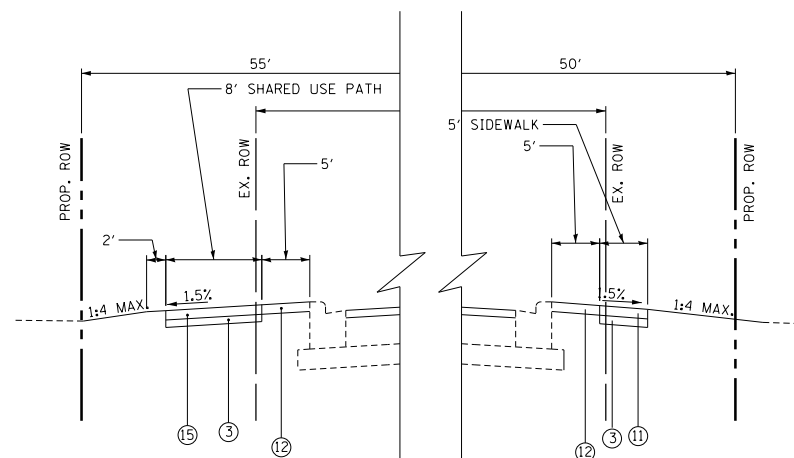




**PROPOSED TYPICAL SECTION**  
STA. 36+57 TO STA. 55+02

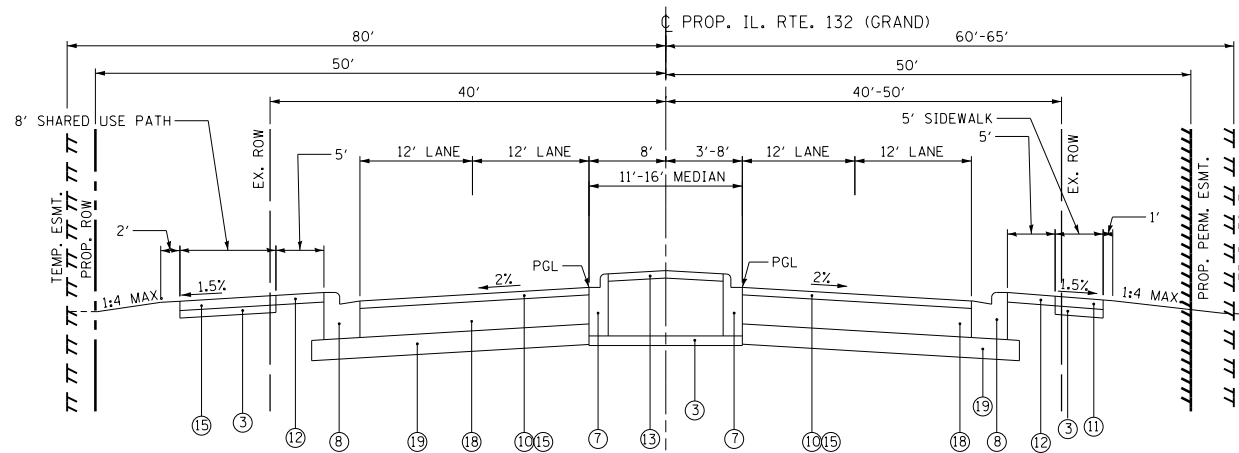


**PROPOSED TYPICAL SECTION**  
STA. 61+19 TO STA. 70+57

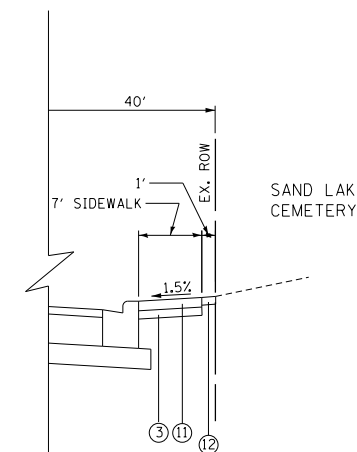


STA. 51+32 TO STA. 55+02

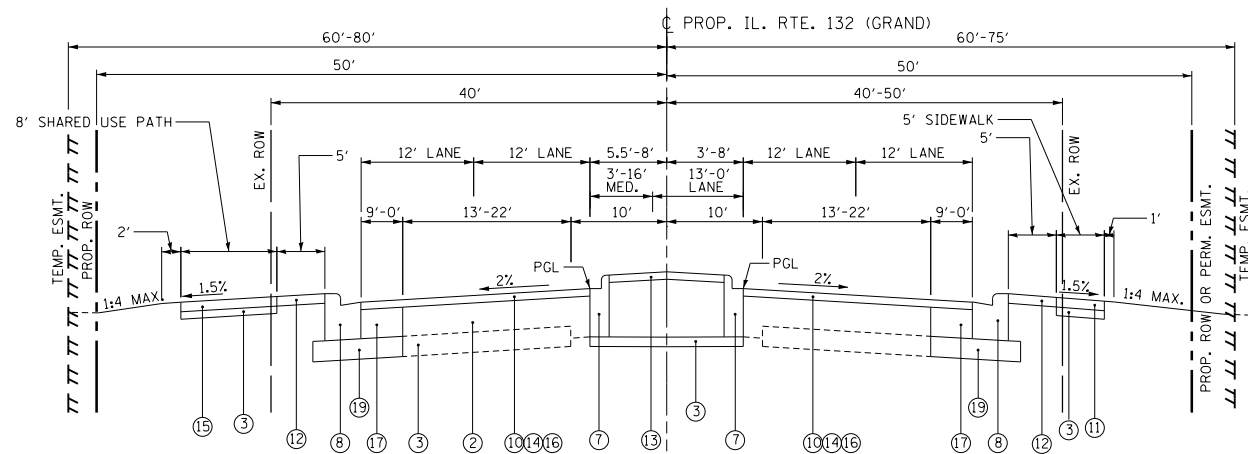
STA. 51+32 TO STA. 55+02



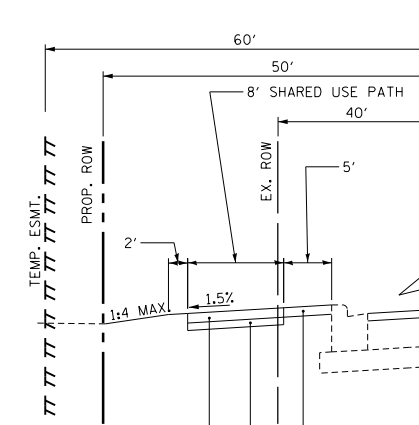
**PROPOSED TYPICAL SECTION**  
STA. 70+57 TO STA. 74+73



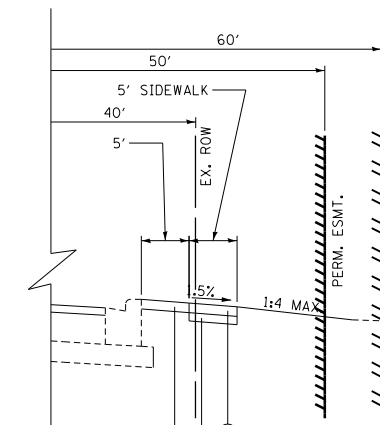
STA. 71+65 TO STA. 73+00



**PROPOSED TYPICAL SECTION**  
STA. 55+02 TO STA. 61+19  
STA. 74+73 TO STA. 76+27



STA. 76+27 TO STA. 78+50



STA. 76+27 TO STA. 78+50

**PRELIMINARY PRINT**  
ILLINOIS DEPARTMENT OF TRANSPORTATION  
PROJECT AND ENVIRONMENTAL STUDIES

SUBJECT TO REVISIONS

- LEGEND**
- ① BITUMINOUS CONCRETE SURFACE COURSE & BINDER COURSE
  - ② BITUMINOUS CONCRETE BASE COURSE
  - ③ GRANULAR SUB-BASE
  - ④ PCC PAVEMENT
  - ⑤ HMA SURFACE COURSE
  - ⑥ AGGREGATE SHOULDER
  - ⑦ COMBINATION CONCRETE C&G, TYPE B-6.12
  - ⑧ COMBINATION CONCRETE C&G, TYPE B-6.24
  - ⑨ CONCRETE DECK
  - ⑩ COLD MILLING OF EXISTING HMA PAVEMENT 2 1/2" MIN
  - ⑪ PCC SIDEWALK
  - ⑫ LANDSCAPING AREA
  - ⑬ CONCRETE MEDIAN
  - ⑭ 1 3/4" HMA SURFACE COURSE, MIX "D", N70
  - ⑮ 2" HMA SURFACE COURSE, MIX "D", N70
  - ⑯ 3/4" POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50
  - ⑰ 7/4" HMA BINDER COURSE, IL-19.0, N70
  - ⑱ 7 3/4" HMA BASE COURSE, IL-19.0, N70
  - ⑲ 12" AGGREGATE SUBGRADE IMPROVEMENT

**A-4.2**

FILE NAME =	USER NAME = chris.wine	DESIGNED -	REVISED -
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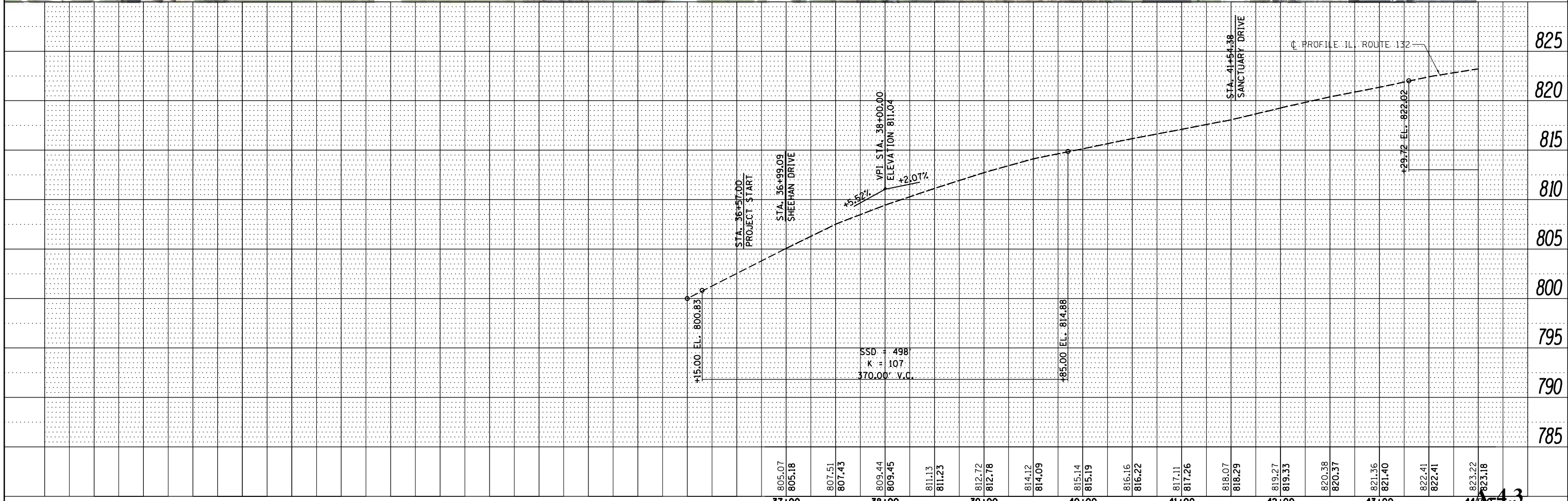
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

<b>TYPICAL SECTIONS</b>			
<b>IL 132 (GRAND AVE) - DEEP LAKE RD TO MUNN RD</b>			
SCALE:	SHEET 2	OF 2 SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541		LAKE	2	2
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

PLAN	SUBMITTED	BY	DATE
	PLOTTED		
	ALIGNMENT CHECKED		
	NOTED		
	CADD FILE NAME		
	NO.		

PROFILE	SUBMITTED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATIONS CHKD		
	NO.		



FILE NAME =	USER NAME = chris.wine	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION												PLAN AND PROFILE				F.A.P. RTE. = 541	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
P:\projects\13008\005\C\CADD\CADD sheets\141013-sht-Section 4(F) planprf.dgn	PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED -													IL 132 (GRAND AVE) - DEEP LAKE RD TO MUNN RD				LAKE	4	1		
MODELNAMEs	PLOT DATE = 9/21/2015	CHECKED -	REVISED -	SCALE: 1" = 50'				SHEET 1	OF 4	SHEETS	STA. 36+57.00	TO STA. 44+00.00	CONTRACT NO.				ILLINOIS FED. AID PROJECT							

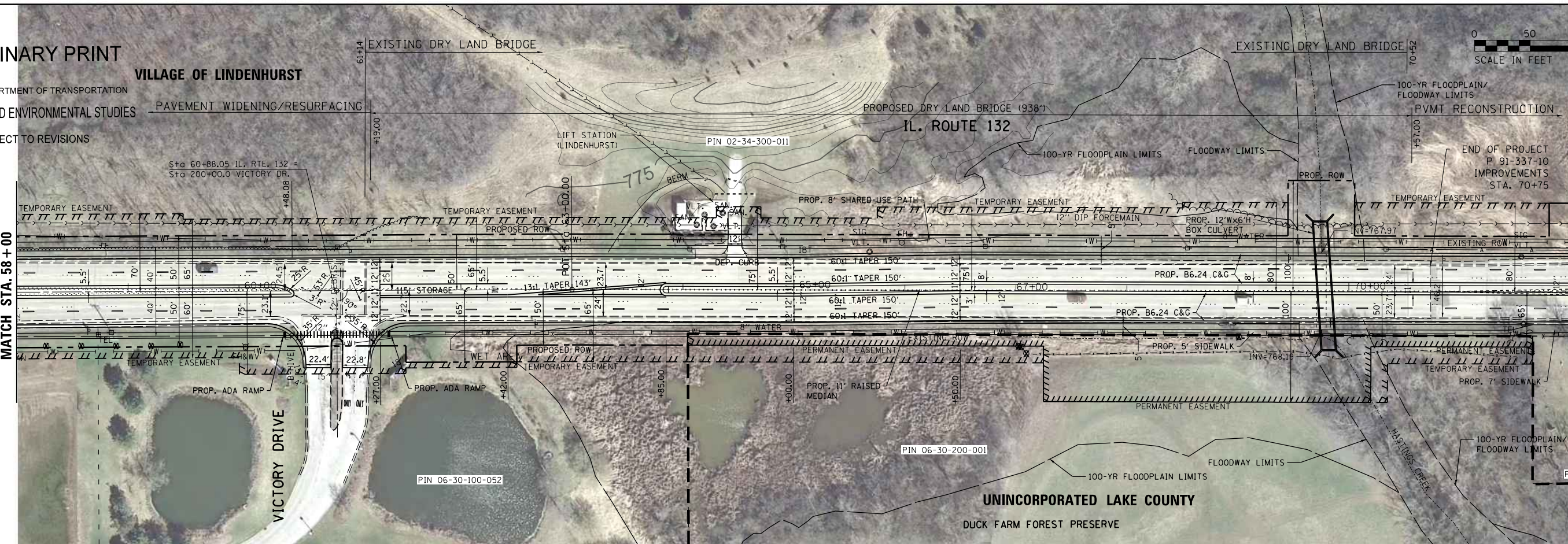
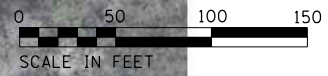






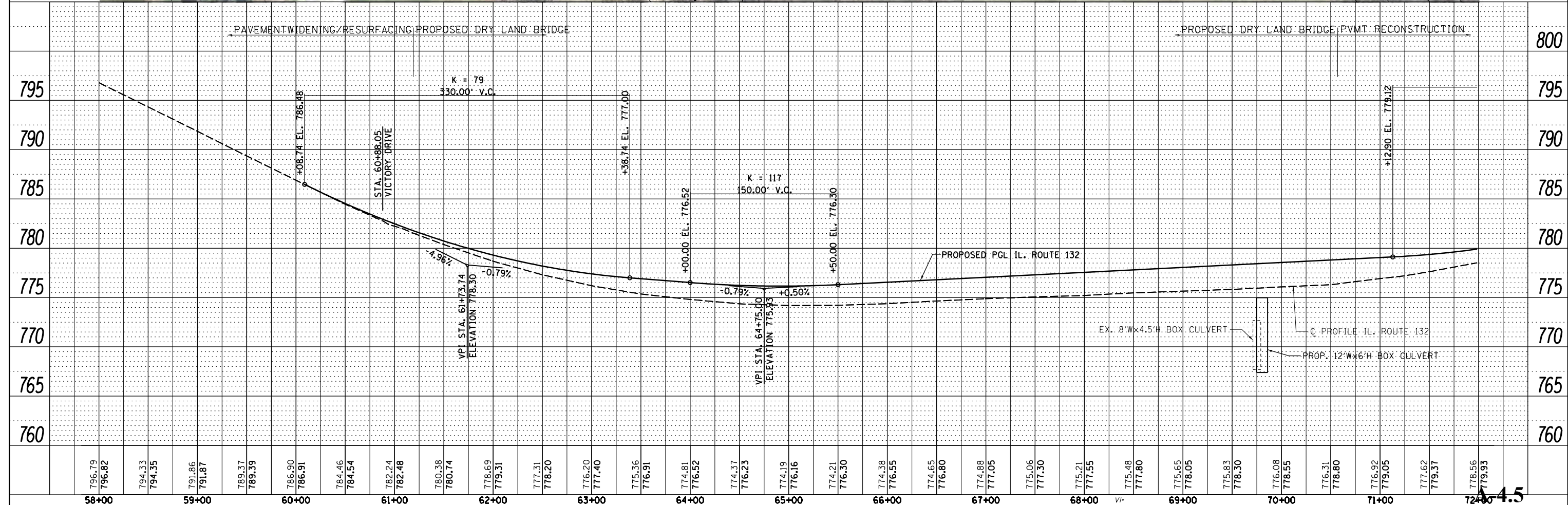
**PRELIMINARY PRINT**

**VILLAGE OF LINDENHURST**  
 ILLINOIS DEPARTMENT OF TRANSPORTATION  
 PROJECT AND ENVIRONMENTAL STUDIES PAVEMENT WIDENING/RESURFACING  
 SUBJECT TO REVISIONS



PLAN	SUBMITTED	DATE
NOTE BOOK	PLOTTED	
NO.	ALIGNED	
	CHECKED	
	FILED	
	NO.	
	DATE	

PROFILE	SUBMITTED	DATE
NOTE BOOK	PLOTTED	
NO.	GRADES	
	CHECKED	
	STRUCTURE	
	NOTATIONS	
	CHKD	



FILE NAME =	USER NAME = chris.wine	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b> <b>PLAN AND PROFILE</b> <b>IL 132 (GRAND AVE) - DEEP LAKE RD TO MUNN RD</b> SCALE: 1" = 50' SHEET 3 OF 4 SHEETS STA. 58+00.00 TO STA. 72+00.00	F.A.P. RTE. 541	SECTION	COUNTY LAKE	TOTAL SHEETS 4	SHEET NO. 3
P:\projects\13008\005\CADD\CADD sheets\141013-sht-Section 4(F) planprf.dgn		DRAWN -	REVISED -		ILLINOIS FED. AID PROJECT				
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PLOT DATE = 9/21/2015		DATE -	REVISED -						



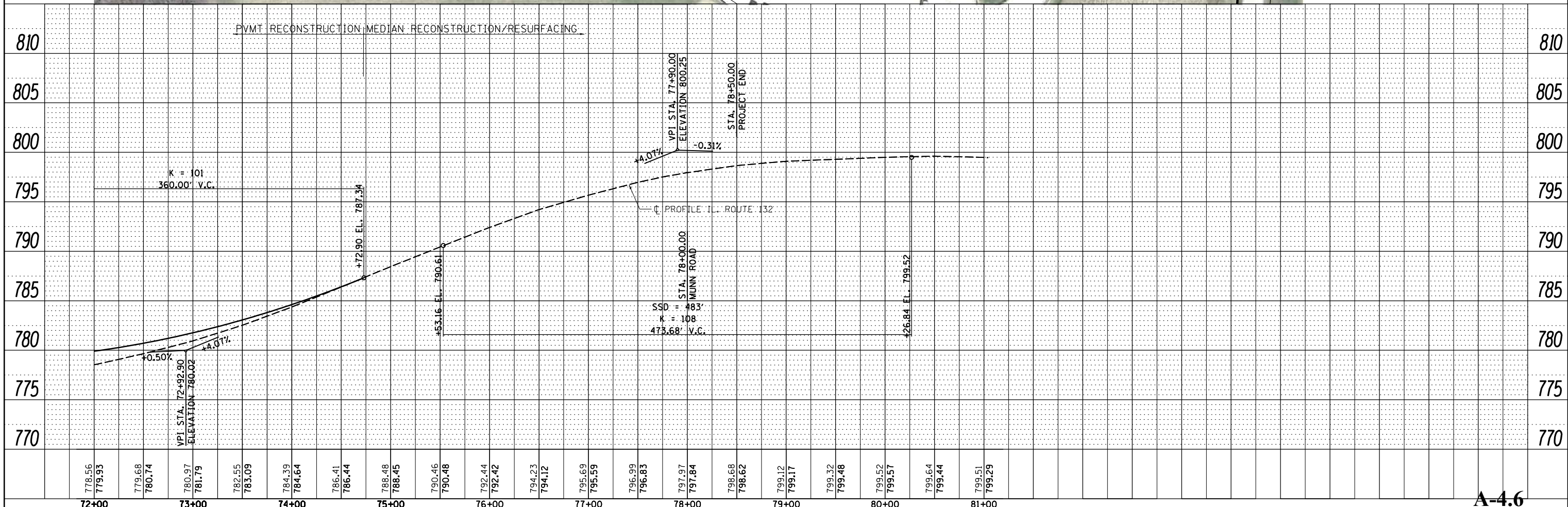
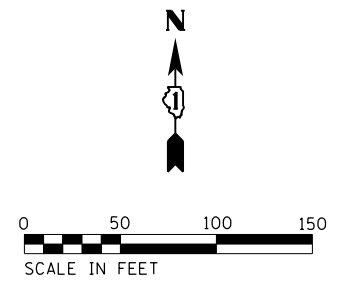
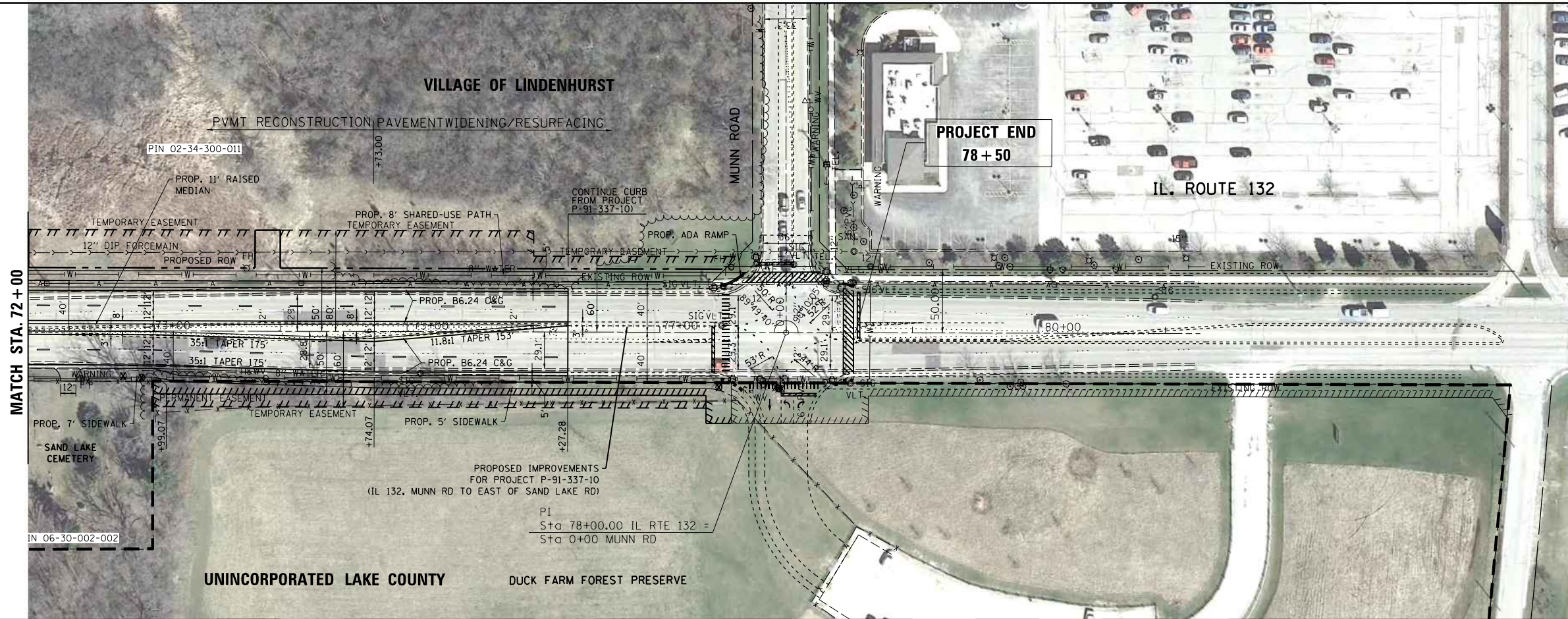
**PRELIMINARY PRINT**

ILLINOIS DEPARTMENT OF TRANSPORTATION  
PROJECT AND ENVIRONMENTAL STUDIES

SUBJECT TO REVISIONS

PLAN	SUBMITTED	DATE
	PLOTTED	
	ALIGNMENT CHECKED	
	NOTE BOOK NO.	
	CADD FILE NAME	

PROFILE	SUBMITTED	DATE
	PLOTTED	
	GRADES CHECKED	
	NOTE BOOK NO.	
	STRUCTURE NOTATIONS CHKD	



FILE NAME =	USER NAME = chris.wine	DESIGNED -	REVISED -
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	PLOT DATE = 9/21/2015	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**PLAN AND PROFILE**  
**IL 132 (GRAND AVE) - DEEP LAKE RD TO MUNN RD**  
SCALE: 1" = 50' SHEET 4 OF 4 SHEETS STA. 72+00.00 TO STA. 78+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541		LAKE	4	4
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

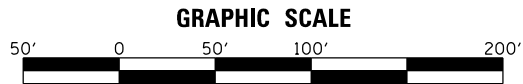
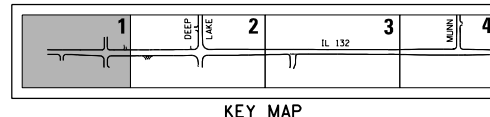
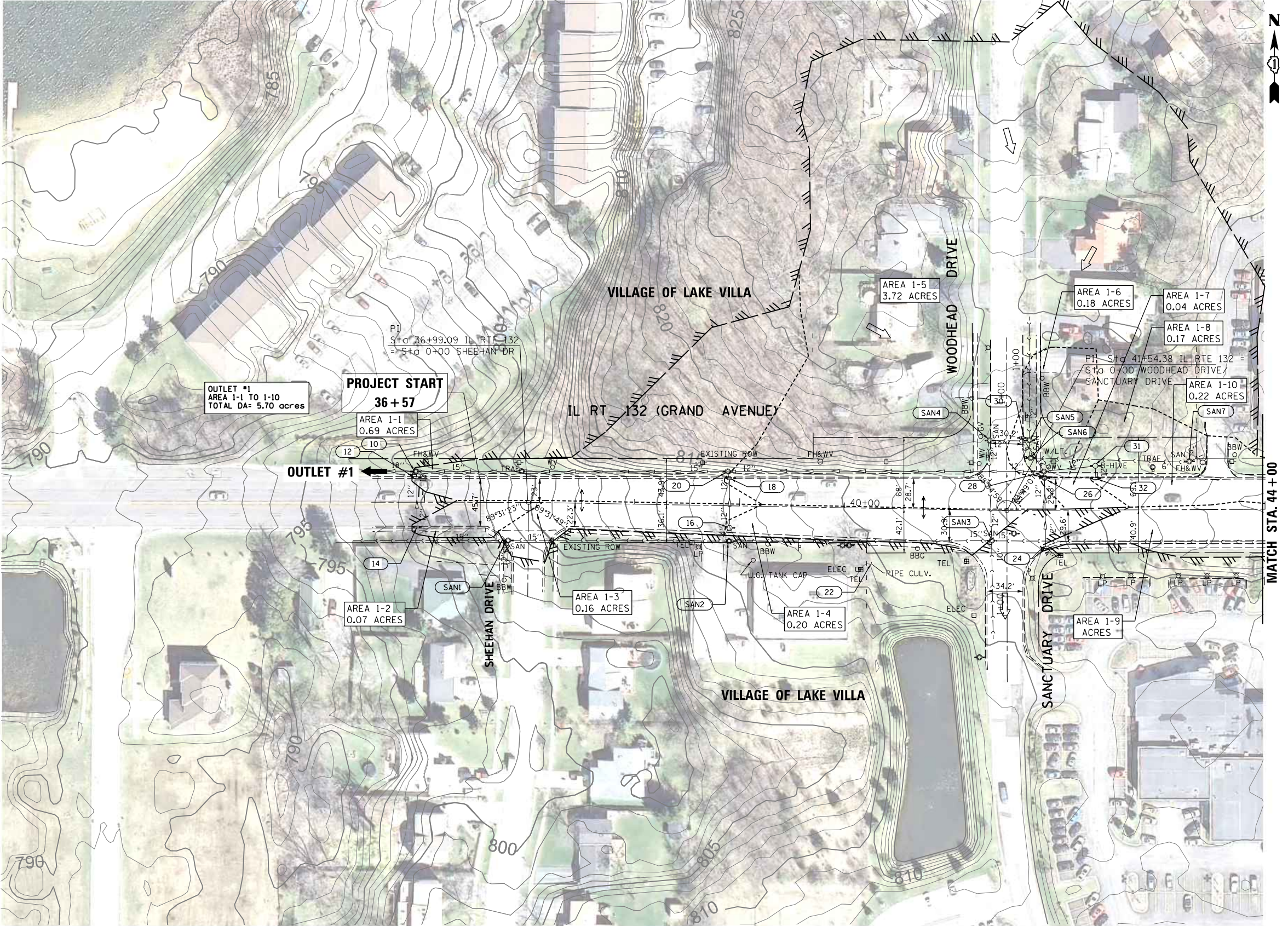
**A-4.6**



- 10 STM MH  
STA 35+91.76, 29.2' LT  
RIM= 800.32  
15" E INV= 795.58  
12" S INV= 795.60  
18" W INV= 794.9
- 12 INLET  
STA 35+92.79, 23.3' LT  
RIM= 799.46  
12" N INV= 795.63  
12" S INV= 795.79
- 14 INLET  
STA 35+92.79, 23.3' LT  
RIM= 799.21  
12" N INV= 796.97
- 16 STM CB  
STA 38+90.77, 21.0' RT  
RIM= 812.01  
12" N INV= 808.86  
4" S INV= 809.62
- 18 INLET  
STA 38+89.51, 26.3' LT  
RIM= 811.86  
12" N INV= 807.78  
12" S INV= 808.01
- 20 STM MH  
STA 38+88.31, 32.7' LT  
RIM= 812.57  
12" E INV= 807.10  
12" S INV= 807.42  
15" W INV= 806.53
- 22 STM MH  
STA 40+26.51, 52.3' RT  
INV= 813.31
- 24 INLET  
STA 41+91.84, 35.5' RT  
RIM= 818.07  
10" DIP N INV= 814.99  
4" S INV= 816.47
- 26 STM MH  
STA 41+90.37, 30.9' LT  
RIM= 818.55  
12" N INV= 814.49  
12" S INV= 814.87
- 28 STM MH  
STA 41+89.61, 36.9' LT  
RIM= 819.07  
12" NW INV= 814.38  
12" E INV= 814.64  
12" S INV= 814.44  
12" W INV= 814.38
- 30 INLET  
STA 41+69.02, 69.1' LT  
RIM= 817.31  
12" S INV=
- 31 STM CB  
STA 42+38.75, 42.2' LT  
RIM= 819.20  
12" S INV= 816.54  
12" W INV= 815.37
- 32 INLET  
STA 42+38.56, 30.2' LT  
RIM= 819.46  
12" N INV= 816.59
- SAN1 SAN MH  
STA 36+99.09, 36.6' RT  
RIM= 803.32  
15" E INV= 788.98  
10" S INV= 789.34  
15" W INV= 788.77
- SAN2 SAN MH  
STA 38+90.39, 33.7' RT  
RIM= 811.86  
15" E INV= 797.46  
15" W INV= 797.32
- SAN3 SAN MH  
STA 41+40.33, 28.9' RT  
RIM= 817.17  
12" N INV= 804.90  
15" E INV= 804.84  
10" S INV= 804.97  
15" W INV= 804.77
- SAN4 SAN MH  
STA 41+36.64, 66.3' LT  
RIM= 817.81  
12" E INV= 805.42  
12" S INV= 805.35
- SAN5 SAN MH  
STA 41+76.07, 66.7' LT  
RIM= 817.90  
12" N INV= 805.52  
6" S INV= 812.66  
12" W INV= 805.55
- SAN6 SAN MH  
STA 41+77.15, 49.9' LT  
RIM= 818.27  
6" E INV= 813.49  
6" W INV= 813.75
- SAN7 SAN MH  
STA 43+28.21, 45.9' RT  
RIM= 822.72  
6" E INV= 818.83  
6" W INV= 818.74

**LEGEND**

- Reference Line/Centerline and Stationing
- Right of Way
- Drainage Divide (Hydrologic Atlas)
- Interpreted Drainage Divide to Outlet
- Drainage Subarea/Label
- Floodway/Floodplain Boundary
- Shallow Conc./Gutter Flow
- Swale
- Ditch
- Outlet
- Sheet Flow
- Summit
- Storm Sewer
- Local Storm Sewer
- Sanitary Sewer
- Catch Basin
- Inlet
- Manhole
- Culvert



**PRELIMINARY PRINT**  
ILLINOIS DEPARTMENT OF TRANSPORTATION  
PROJECT AND ENVIRONMENTAL STUDIES  
SUBJECT TO A-447

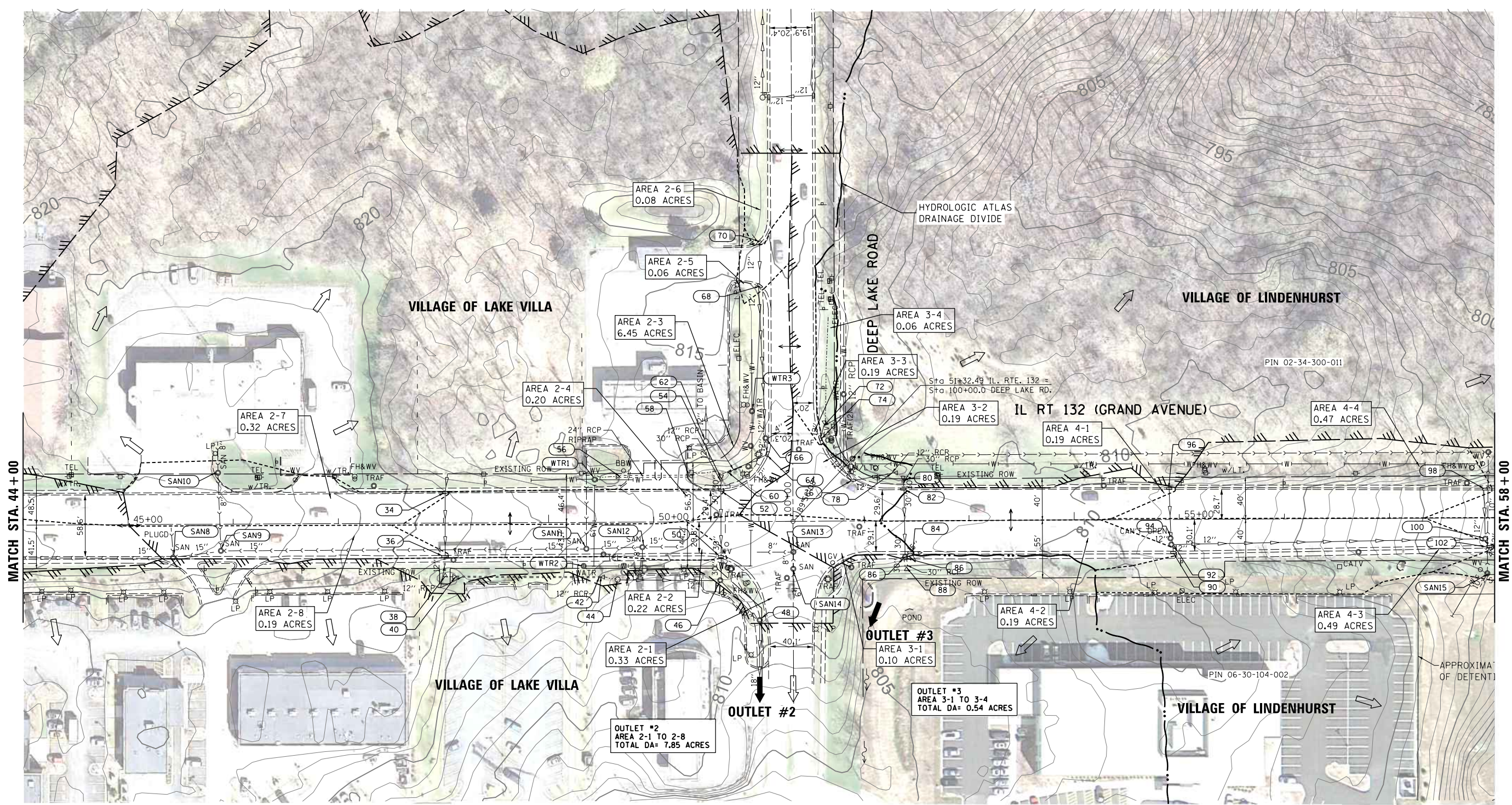
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	PLOT DATE = 9/21/2015	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EXISTING DRAINAGE PLAN  
IL 132 (GRAND AVE) - DEEP LAKE RD TO MUNN RD EX. 1-00b**  
SCALE: 1" = 50' SHEET 1 OF 5 SHEETS STA. 36+99.09 TO STA. 44+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541		LAKE	5	1
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

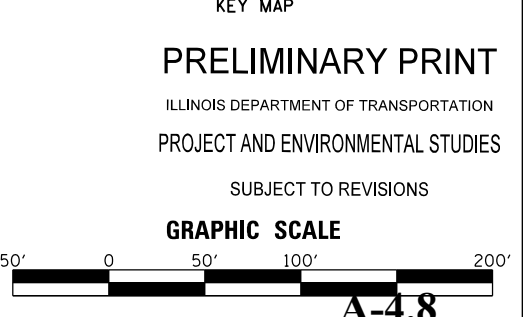
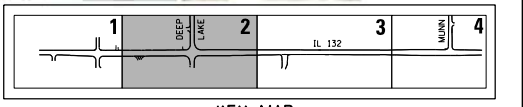




MATCH STA. 44 + 00

MATCH STA. 58 + 00

34	INLET STA 48+02.01, 29.2' LT RIM= 819.03 NO PIPES VISIBLE FULL OF GRAVEL	46	STM MH STA 50+63.01, 55.6' RT RIM= 812.74 30" N INV= 809.23 18" SE INV= 807.75 12" W INV= 808.56	56	FES STA 49+68.02, 43.5' LT 24" INV= 813.41	66	STM MH STA 100+79.29, 25.8' RT RIM= 813.95 12" N INV= 810.88 4" E INV= 811.97 12" S INV= 810.53	76	CURB INLET STA 51+89.85, 38.8' LT RIM= 812.34 12" NE INV= 809.03 12" W INV= 808.90	86	STM MH STA 52+38.99, 34.1' RT RIM= 811.57 30" N INV= 806.98 15" E INV= 808.36 30" S INV= 806.97	96	INLET STA 54+90.53, 29.4' LT RIM= 808.42 12" S INV= 805.76	SAN10	SAN MH STA 45+85.69, 48.9' LT RIM= 823.35 8" N INV= 808.64 8" S INV= 808.45	SAN14	SAN MH STA 51+32.61, 45.1' RT RIM= 812.37 8" N INV= 808.14 8" S INV= 807.94
36	INLET STA 48+00.64, 31.6' RT RIM= 819.12 12" S INV= 815.67	48	STM MH STA 51+00.32, 93.7' LT RIM= 811.17 18" NW INV= 807.10 12" S INV= 804.53	58	FES STA 50+33.23, 43.4' LT 24" INV= 813.24	68	INLET STA 102+24.29, 30.6' LT RIM= 814.71 12" DIP N INV= 811.67 12" DIP S INV= 810.66	78	FES STA 52+28.52, 45.6' LT 12" INV= 808.19	88	FES STA 52+40.19, 43.3' RT 30" INV= 807.06	98	INLET STA 57+90.91, 27.4' LT RIM= 796.69 12" S INV= 794.12	SAN11	SAN MH STA 49+35.87, 25.1' RT RIM= 816.67 6" N INV= 807.06 15" S INV= 806.51 15" W INV= 806.76	SAN15	SAN MH STA 57+92.83, 52.7' RT RIM= 800.66 10" N INV= 786.94 10" S INV= 787.11
38	FES STA 48+01.40, 49.8' RT 12" INV= 816.16	50	STM MH, CURB INLET STA 50+63.65, 33.1' RT RIM= 814.02 30" N S INV= 809.50	60	FES STA 50+70.34, 47.2' LT 12" INV= 812.18	70	INLET STA 102+65.08, 31.3' LT RIM= 814.95 4" ABS N INV= 813.4 12" DIP S INV= 812.48	80	FES STA 52+37.46, 38.6' LT 30" INV= 807.86	90	INLET STA 54+94.12, 31.3' RT RIM= 808.40 12" N INV= 804.96	100	STM MH STA 57+90.97, 19.8' RT RIM= 796.92 12" N INV= 793.43 12" S INV= 793.31	SAN12	SAN MH STA 49+89.11, 23.8' RT RIM= 815.83 15" E INV= 806.94 8" S INV= 806.65 15" W INV= 806.82	WTR1	WVW STA 49+43.99, 40.7' LT RIM= 816.17 T/P 8" DIP= 810.11
40	FES STA 48+12+29, 51.0' RT 12" INV= 815.78	52	STM MH, CURB INLET STA 50+63.65, 33.1' RT RIM= 814.02 30" N S INV= 809.50	62	STM CB STA 50+50.07, 76.4' LT RIM= 814.37 12" N INV= 810.66 12" W/3" RESTRICTOR S INV= 810.70	82	INLET STA 52+37.47, 30.1' LT RIM= 811.18 30" N S INV= 807.69	92	STM MH STA 54+92.29, 23.8' RT RIM= 808.49 12" N INV= 804.25 12" E INV= 803.80 12" S INV= 804.78	SAN8	SAN MH STA 45+42.72, 31.5' RT RIM= 823.25 N INV= PLUGGED 15" E INV= 805.86 15" W INV= 805.79	SAN9	SAN MH STA 45+88.10, 25.3' RT RIM= 822.99 8" N INV= 806.9 15" E INV= 805.92 15" W INV= 805.9	WTR2	WMH STA 49+33.11, 41.5' RT RIM= 816.77 T/P 8" DIP= 808.87	WTR3	WMH STA 100+04.80, 38.6' LT RIM= 815.85 T/P 8" DIP= 808.89
42	FES STA 49+49.31, 52.1' RT 12" INV= 815.09	54	FES STA 50+64.63, 40.9' LT 30" INV= 813.16	64	INLET STA 51+08.49, 64.3' LT RIM= 813.24 12" N INV= 810.61 12" S INV= 810.53	72	FES STA 100+91.87, 30.0' RT RIM= 812.13 12" N INV= 809.43 12" S INV= 809.46	84	INLET STA 52+43.90, 30.4' RT RIM= 811.14 15" SW INV= 808.64 4" W INV= 808.9	94	STM MH STA 54+91.53, 17.8' RT RIM= 808.59 LID CAN'T OPEN	SAN3	SAN MH STA 51+32.74, 28.9' RT RIM= 813.07 8" S INV= 808.14 8" W INV= 807.94				
44	STM CB STA 49+65.51, 54.6' RT RIM= 812.99 12" E INV= 810.07																

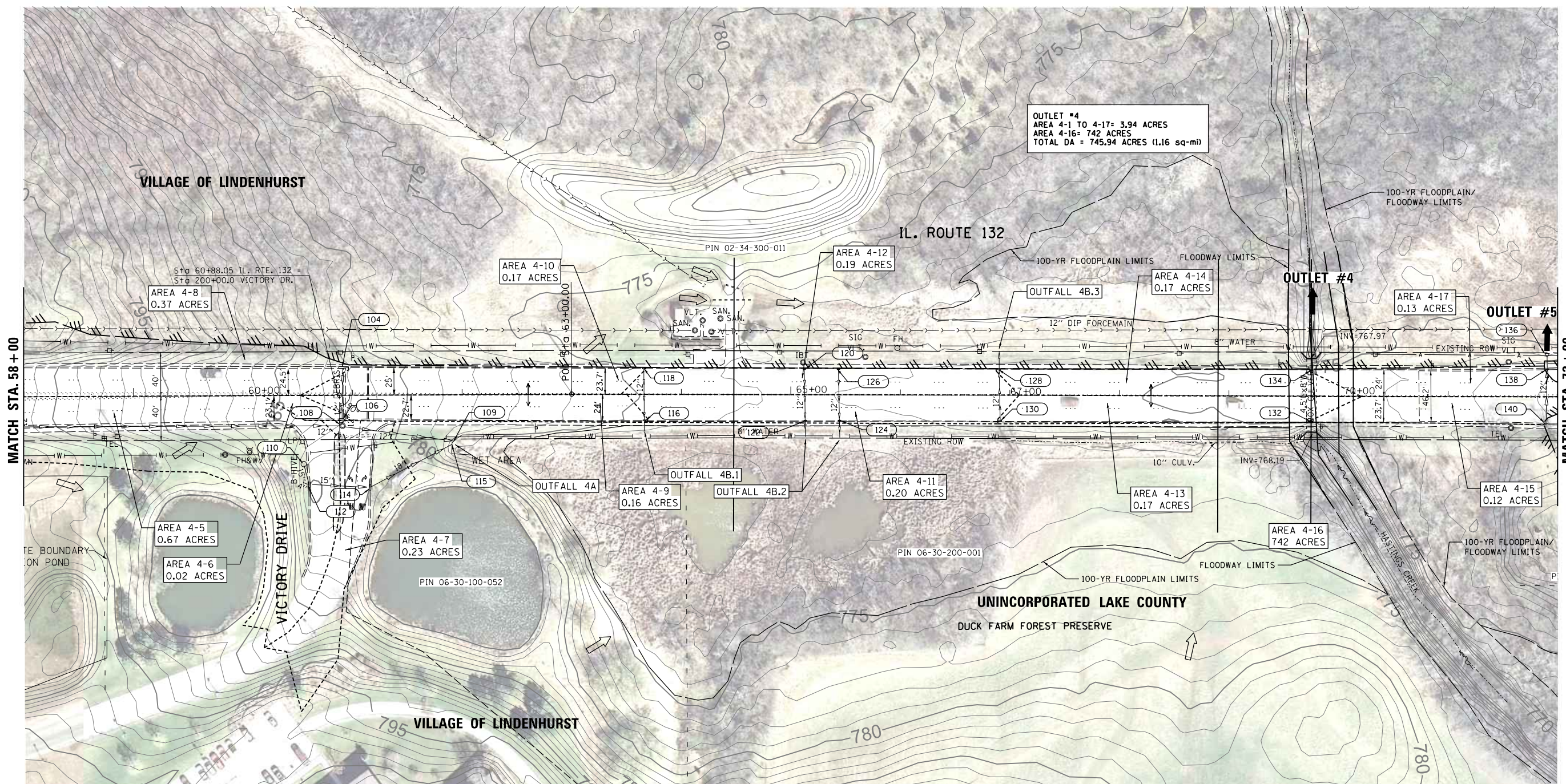


### PRELIMINARY PRINT

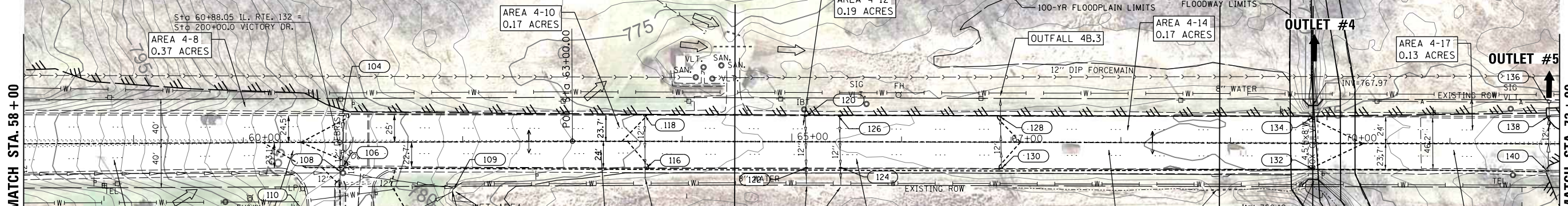
ILLINOIS DEPARTMENT OF TRANSPORTATION  
PROJECT AND ENVIRONMENTAL STUDIES  
SUBJECT TO REVISIONS

FILE NAME =	USER NAME = chris.wine	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		EXISTING DRAINAGE PLAN IL 132 (GRAND AVE) - DEEP LAKE RD TO MUNN RD EX. 1-00b		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
P:\projects\13008\005\CADD\CADDsheets\0141013-sh1-drain-edp.dgn		DRAWN -	REVISED -			SCALE: 1" = 50'		541		LAKE	5	2
#MODELNAME#	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -			SHEET 2 OF 5 SHEETS STA. 44+00.00 TO STA. 58+00.00		CONTRACT NO.				
	PLOT DATE = 9/21/2015	DATE -	REVISED -					ILLINOIS FED. AID PROJECT				

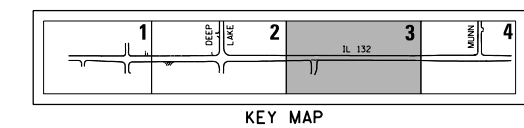
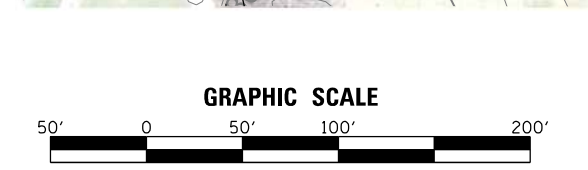




OUTLET #4  
 AREA 4-1 TO 4-17= 3.94 ACRES  
 AREA 4-16= 742 ACRES  
 TOTAL DA = 745.94 ACRES (1.16 sq-mi)



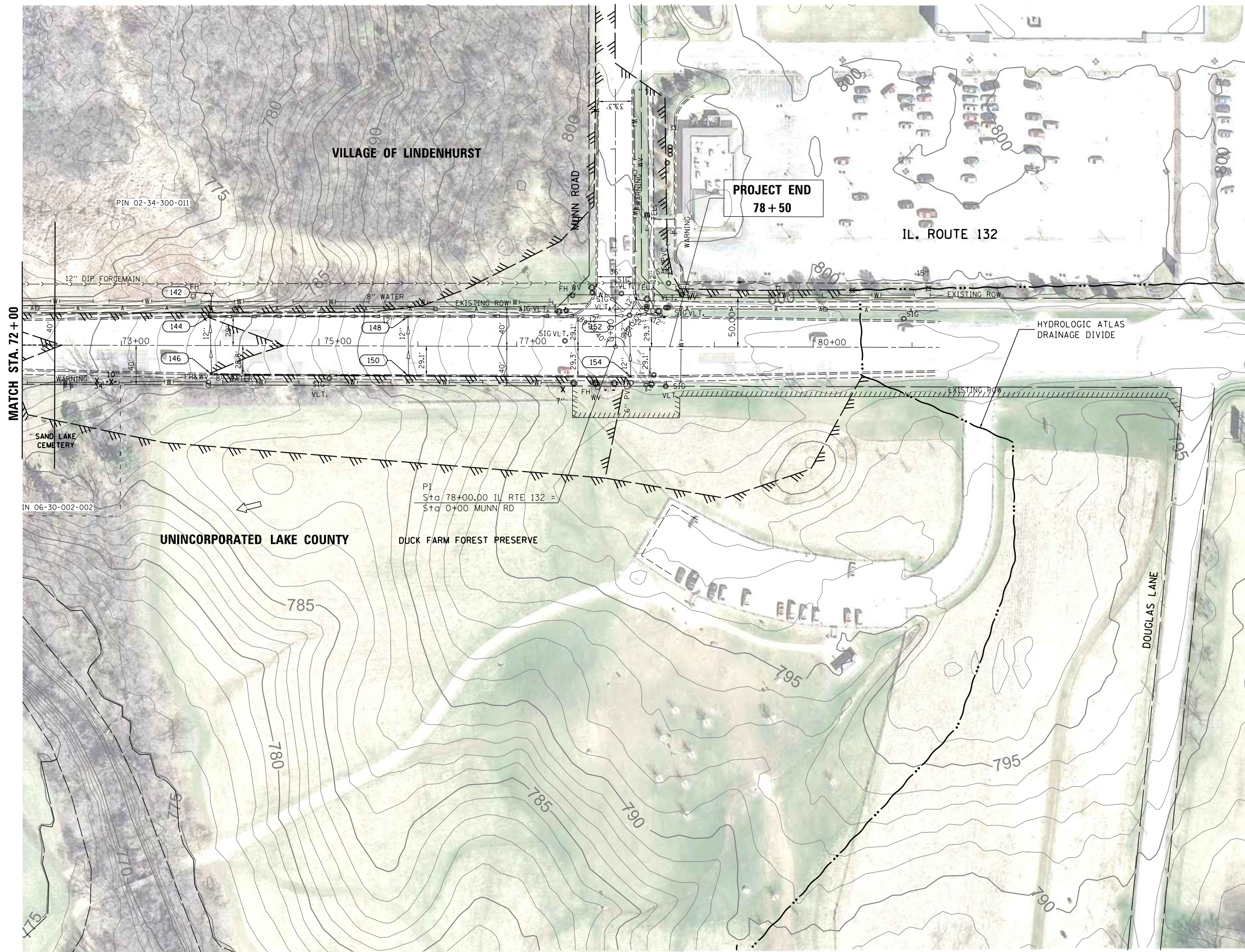
102	INLET STA 57+94.72, 27.2' RT RIM= 796.63 12" NW INV= 793.85 4" S INV= 795.47	112	INLET STA 60+60.15, 81.6' RT RIM= 779.67 12" N INV= 775.29 4" N INV= 778.4 15" E INV= 774.95	122	INLET STA 65+13.22, 23.7' RT RIM= 773.69 12" N INV= xxxx 12" S INV= xxxx	132	INLET STA 69+75.45, 23.6' RT RIM= 775.36 INV= 768.5 (CULVERT)
104	INLET STA 60+89.89, 25.3' LT RIM= 782.04 12" S INV= 778.91	114	INLET STA 61+15.50, 84.2' RT RIM= 779.47 18" E INV= 774.25 15" W INV= 774.29	124	STM MH STA 65+44.50, 23.6' RT RIM= 773.59 12" N INV= xxxx 12" S INV= xxxx	134	INLET STA 69+75.45, 23.6' LT RIM= 775.39 INV= 768.6 (CULVERT)
106	STM MH/ INLET STA 60+89.84, 22.5' RT RIM= 782.03 12" N INV= 778.79 12" S INV= 778.60	115	FES STA 61+92.09, 44.3' RT 18" INV= 773.80	126	INLET STA 65+43.44, 23.5' LT RIM= 773.58 12" S INV= xxxx	136	FES STA 71+90.36, 39.4' 12" INV= 773.71 (BURIED)
108	STM MH STA 60+90.65, 27.8' RT RIM= 781.98 12" N INV= 777.98 12" E INV= 777.20 12" W INV= 777.17	116	INLET STA 63+66.35, 23.8' RT RIM= 779.47 12" N INV= xxxx 12" S INV= xxxx	128	INLET STA 66+90.10, 23.6' LT RIM= 774.18 12" N INV= xxxx 12" S INV= xxxx	138	INLET STA 71+90.49, 25.0' LT RIM= 77.87 CLOGGED
109	FES STA 61+92.09, 42.3' RT 12" INV= 776.55	118	INLET STA 63+65.75, 23.6' RT RIM= 774.62 12" S INV= xxxx	130	INLET STA 66+91.24, 23.6' RT RIM= 774.31 12" N INV= xxxx	140	INLET STA 71+90.49, 25.0' RT RIM= UNKNOWN CLOGGED
110	STM CB STA 60+55.03, 62.6' RT RIM= 781.01 12" S INV= 778.08	120	INLET STA 54+90.53, 29.4' LT RIM= 773.72 12" S INV= xxxx				



**PRELIMINARY PRINT**  
 ILLINOIS DEPARTMENT OF TRANSPORTATION  
 PROJECT AND ENVIRONMENTAL STUDIES  
 SUBJECT TO REVIEW

FILE NAME = P:\projects\13008\005\CADD\CADDsheets\DI141013-sh1-drain-edp.dgn	USER NAME = chris.wine	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>EXISTING DRAINAGE PLAN IL 132 (GRAND AVE) - DEEP LAKE RD TO MUNN RD EX. 1-00b</b>	F.A.P. RTE. 541	SECTION	COUNTY LAKE	TOTAL SHEETS 5	SHEET NO. 3	
#MODELNAME#	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -			SCALE: 1" = 50'	SHEET 3 OF 5 SHEETS	STA. 58+00.00 TO STA. 72+00.00	CONTRACT NO.		ILLINOIS FED. AID PROJECT
	PLOT DATE = 9/21/2015	DATE -	REVISED -			A-4.9					

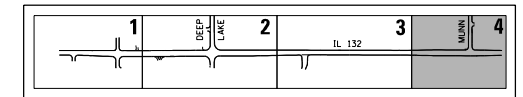




- 142 FES  
STA 73+91.35, 52.9'  
12" INV= 778.31 (BURIED)
- 144 INLET  
STA 73+90, 29.0' LT  
RIM= 783.33  
INV= 779.43
- 146 INLET  
STA 73+90, 25.0' RT  
RIM= UNKNOWN  
CLOGGED
- 148 INLET  
STA 75+90, 30.0' LT  
RIM= 791.53  
INV= 787.45
- 150 INLET  
STA 75+90, 30.0' RT  
RIM= UNKNOWN  
CLOGGED
- 152 STM MH  
STA 77+94, 21.5 LT  
RIM= 797.92  
NW INV= 794.17  
E INV= 793.06  
S INV= 793.01  
W INV= 792.77
- 154 STM CB  
STA 78+15, 30.0' RT  
RIM= 798.01  
N INV= 794.51  
S INV= 796.25



GRAPHIC SCALE



KEY MAP

PRELIMINARY PRINT

ILLINOIS DEPARTMENT OF TRANSPORTATION  
PROJECT AND ENVIRONMENTAL STUDIES

SUBJECT TO REVISION

**A-4.10**

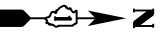
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#MODELNAME#	PLOT DATE = 9/21/2015	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING DRAINAGE PLAN  
IL 132 (GRAND AVE) – DEEP LAKE RD TO MUNN RD EX. 1-00b  
SCALE: 1" = 50' SHEET 4 OF 5 SHEETS STA. 72+00.00 TO STA. 78+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541		LAKE	5	4
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				





**A-4.11**

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	PLOT SCALE = 800.0000' / in.	CHECKED -	REVISED -
#MODELNAME#	PLOT DATE = 9/21/2015	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EXISTING DRAINAGE PLAN  
IL 132 (GRAND AVE) – DEEP LAKE RD TO MUNN RD**

SCALE: 1" = 400' SHEET 5 OF 5 SHEETS STA. TO STA.

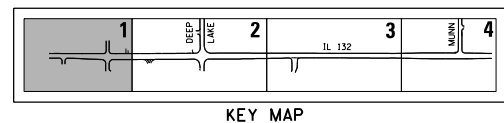
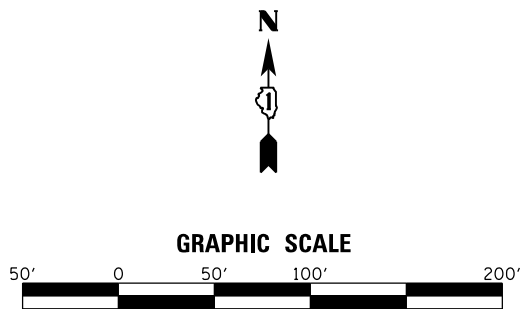
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541		LAKE	5	5
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				



# PRELIMINARY PRINT

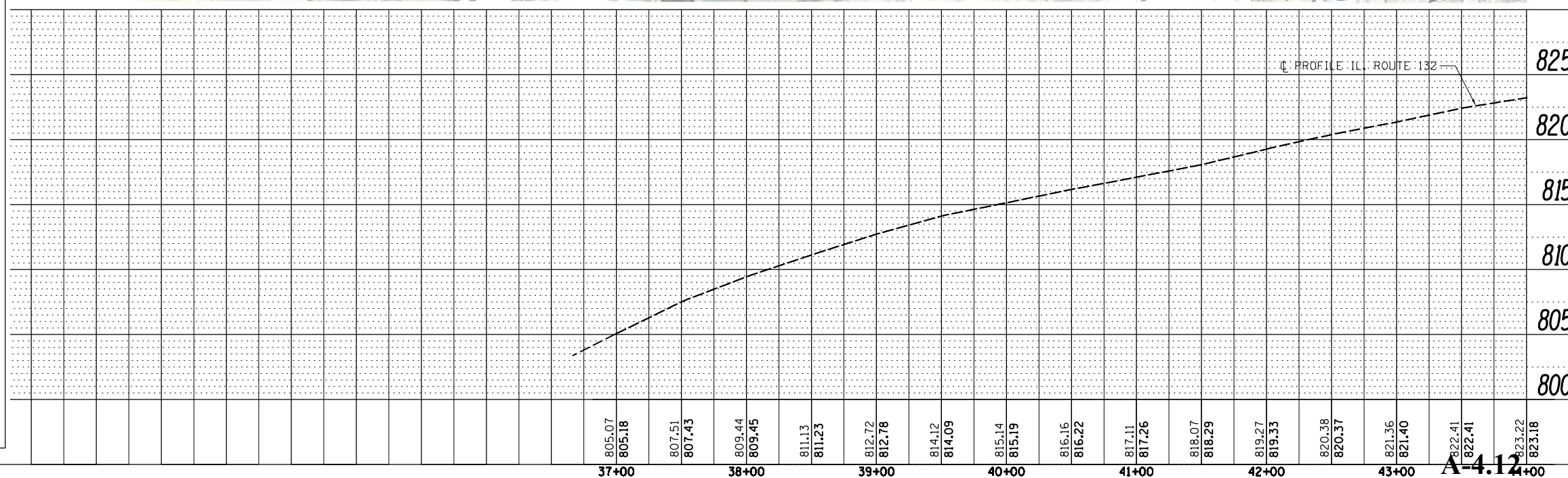
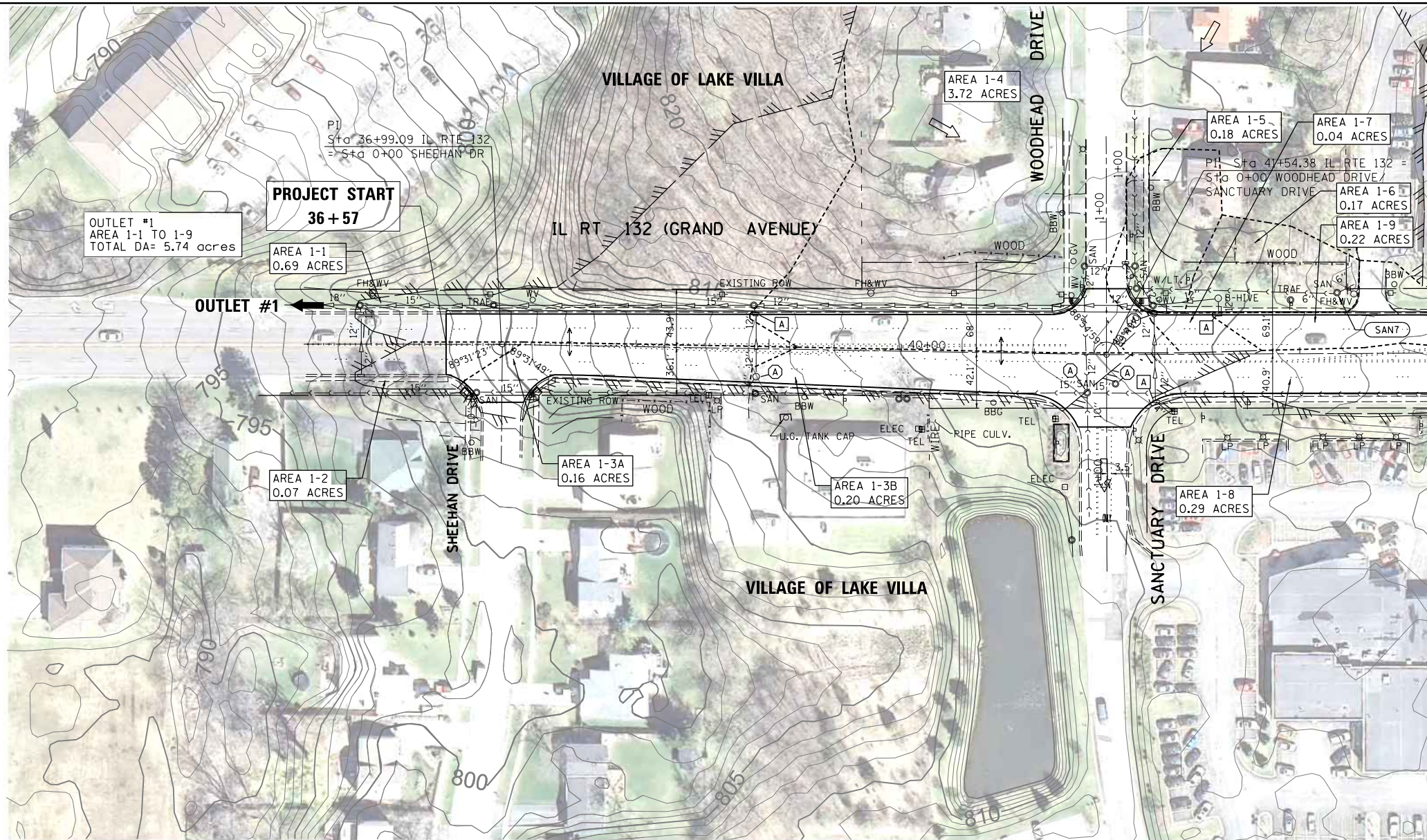
ILLINOIS DEPARTMENT OF TRANSPORTATION  
PROJECT AND ENVIRONMENTAL STUDIES  
SUBJECT TO REVISIONS

PLAN	SUBMITTED	DATE
NOTE BOOK NO.	PLOTTED	
	ALIGNMENT CHECKED	
	CADD FILE NAME	



PROFILE	SUBMITTED	DATE
NOTE BOOK NO.	GRADES CHECKED	
	STRUCTURE NOTATIONS CHKD	

LEGEND		EXISTING / PROPOSED
Reference Line/Centerline and Stationing		0
Right of Way		
Drainage Divide (Hydrologic Atlas)		
Interpreted Drainage Divide to Outlet		
Drainage Subarea/Label		
Floodway/Floodplain Boundary		
Shallow Conc./Gutter Flow		
Swale		
Ditch		
Outlet		
Sheet Flow		
Summit		
Storm Sewer		
Sanitary Sewer		
Catch Basin		
Inlet		
Manhole		
Flared End Section		
Culvert		
Adjust Structure		
Adjust Frame & Grate		
Adjust Frame & Lid		
Remove Structure		
Clean Structure		
Relocate Structure		
Permanent Easement		
Temporary Easement		
Storm Sewer Removal		
Rock Check Dam		

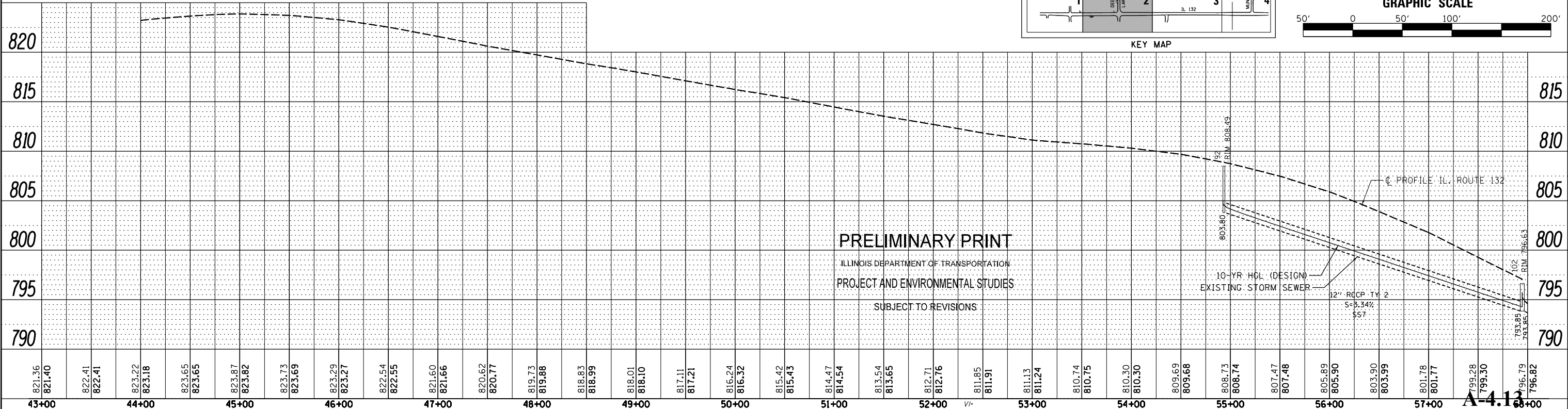
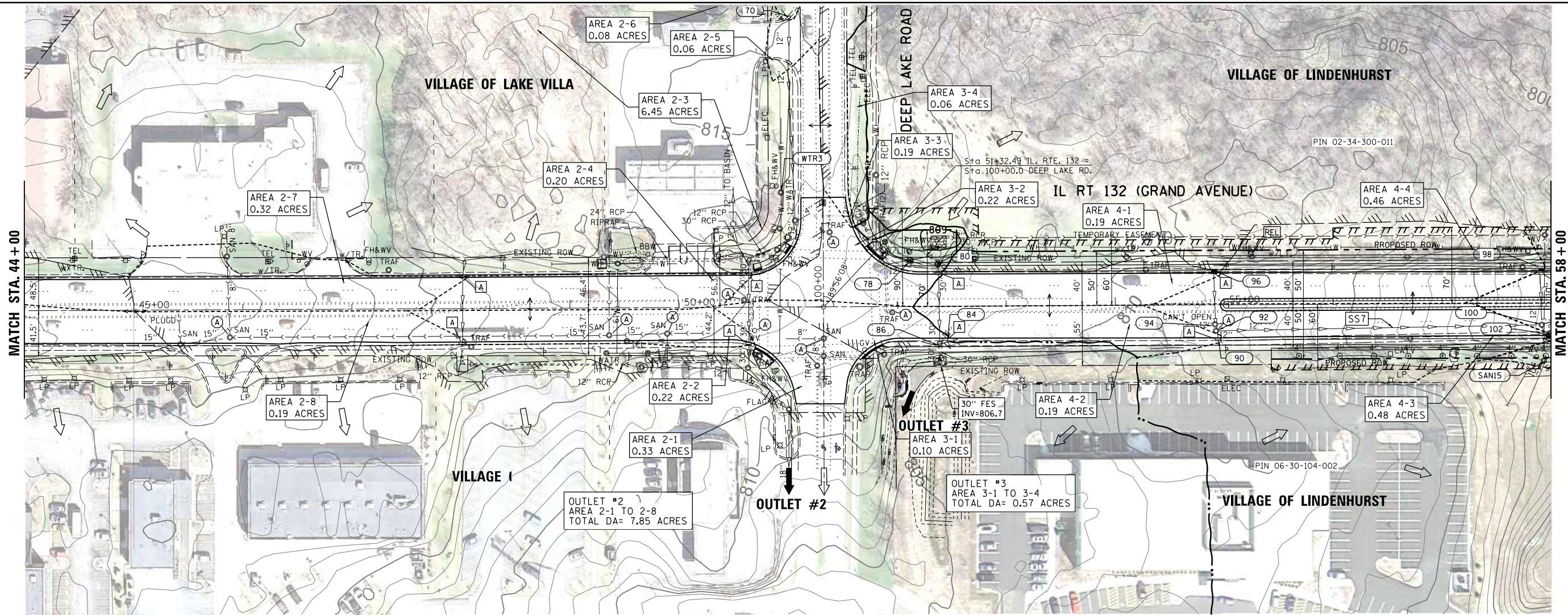


FILE NAME =	USER NAME = chris.wine	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED DRAINAGE PLAN</b> <b>IL 132 (GRAND AVE) - DEEP LAKE RD TO MUNN RD</b>			F.A.P. RTE. 541	SECTION	COUNTY LAKE	TOTAL SHEETS 4	SHEET NO. 1
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\$MODELNAME\$	PLOT DATE = 9/21/2015	DATE -	REVISED -		ILLINOIS FED. AID PROJECT							
					CONTRACT NO.							



PLAN	SURVEYED	DATE
	PLOTTED	BY
	ALIGNED	
	CHECKED	
	FILED	
	NO.	
	NO.	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES	
	CHECKED	
	STRUCTURE	
	NOTATIONS	
	CHKD	
	NO.	
	NO.	



FILE NAME =	USER NAME = chrismw	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED DRAINAGE PLAN</b> <b>IL 132 (GRAND AVE) - DEEP LAKE RD TO MUNN RD</b>			SECTION 541 COUNTY LAKE TOTAL SHEETS 4 SHEET NO. 2
P:\projects\13008\005\CADD\CADDsheets\141013-sht-drain-rdp.dgn		DRAWN -	REVISED -		<b>EXH. 2-00a</b>			
PLOT SCALE = 100.0000' / in.		CHECKED -	REVISED -		SCALE: 1" = 50'    SHEET 2 OF 4 SHEETS    STA. 44+00 TO STA. 58+00			
\$MODELNAME\$		DATE -	REVISED -		CONTRACT NO. ILLINOIS FED. AID PROJECT			







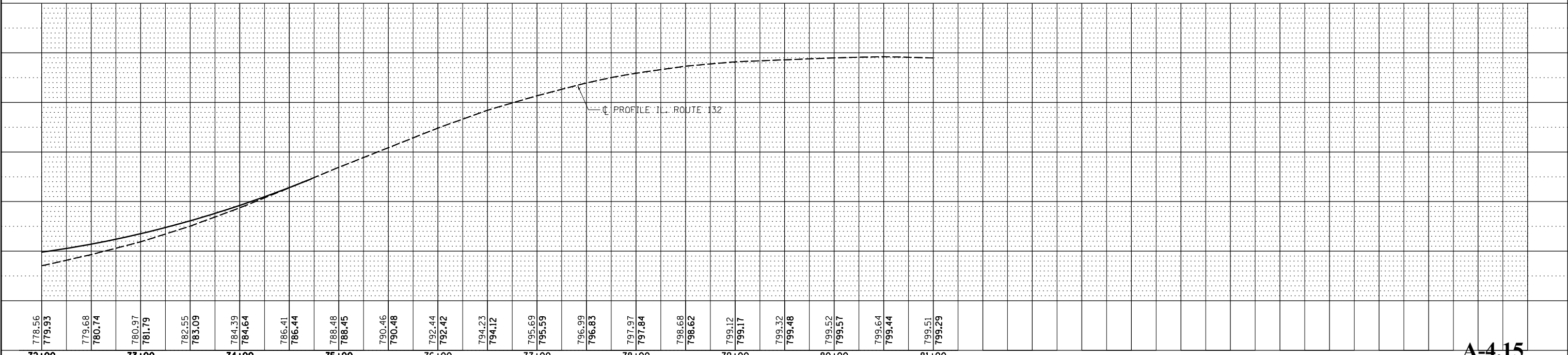
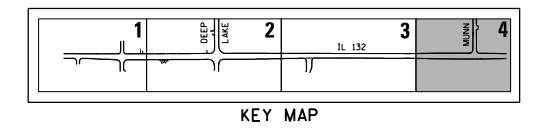
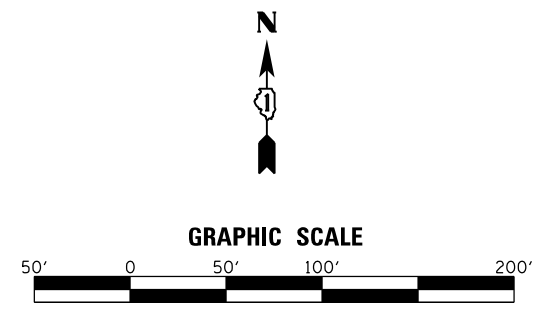
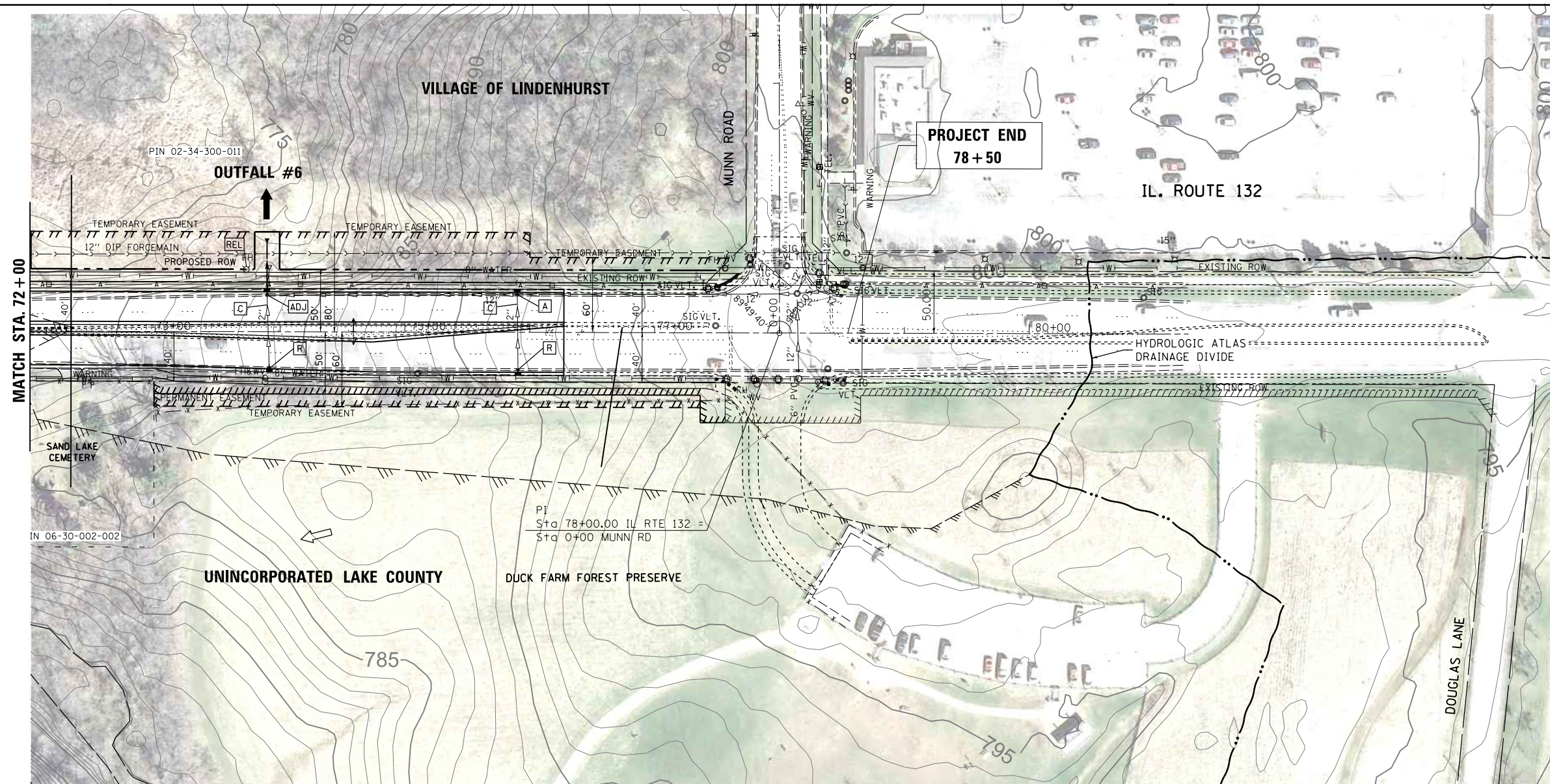
**PRELIMINARY PRINT**

ILLINOIS DEPARTMENT OF TRANSPORTATION  
PROJECT AND ENVIRONMENTAL STUDIES

SUBJECT TO REVISIONS

PLAN	SUBMITTED	DATE
	PLOTTED	
	CHECKED	
	NO. _____	

PROFILE	SUBMITTED	DATE
	PLOTTED	
	CHECKED	
	NO. _____	



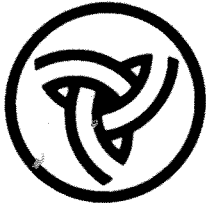
778.56	779.93	779.68	780.74	780.97	781.79	782.55	783.09	784.39	784.64	786.41	786.44	788.48	788.45	790.46	790.48	792.44	792.42	794.23	794.12	795.69	795.59	796.99	796.83	797.97	797.84	798.68	798.62	799.12	799.17	799.32	799.48	799.52	799.57	799.64	799.44	799.51	799.29
72+00	73+00	74+00	75+00	76+00	77+00	78+00	79+00	80+00	81+00																												

**A-4.15**

FILE NAME =	USER NAME =	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>				<b>PROPOSED DRAINAGE PLAN IL 132 (GRAND AVE) - DEEP LAKE RD TO MUNN RD EXH. 2-00a</b>				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
P:\projects\13008\005\CADD\CADDsheets\141013-sht-drain-pdp.dgn	christ.wine	DRAWN -	REVISED -									541		LAKE	4	4
PLOT SCALE = 100.0000' / in.		CHECKED -	REVISED -									CONTRACT NO.				
PLOT DATE = 9/21/2015		DATE -	REVISED -									ILLINOIS FED. AID PROJECT				

# **ATTACHMENT A-5**

Coordination



# Illinois Department of Transportation

Division of Highways/Region One / District One  
201 West Center Court/Schaumburg, Illinois 60196-1096

FILE COPY

November 7, 2013

Mr. John Nelson  
Engineering Manager  
Planning, Conservation & Development Department  
Forest Preserve District of Lake County  
1899 West Winchester Road  
Libertyville, IL 60048-1199

Dear Mr. Nelson:

The Illinois Department of Transportation (Department) has recently initiated preliminary engineering and environmental studies (Phase I) for the improvement IL 132 from Deep Lake Road to Munn Road in the Village of Lindenhurst in Lake County. A location map is attached for your reference. This improvement is not currently included in the Department's FY 2014-2019 Proposed Multi-Modal Transportation Improvement Program. However, this project will be included in our priorities for future funding consideration among similar improvement needs throughout the region. The proposed project is anticipated to consist of reconstructing the existing dry land bridge and roadway.

The subject improvement is in the vicinity of the Duck Farm Holdings of the Lake County Forest Preserve District. At this early stage in our project development, we ask that you provide the Department with some background information concerning these holdings. The following information would be of particular interest to us:

1. Size in acres, as well as a right-of-way plat and/or site plan
2. Common name and type of facility (recreation, historic, etc.)
3. Available recreational activities (fishing, swimming, bike trails, etc.)
4. Facilities, existing and planned (description and location)
5. Usage (approximate number of users for each activity)
6. Relationship to other similarly used lands in the vicinity
7. Access (pedestrian, bicycle, equestrian, and vehicular)
8. Ownership and applicable clauses affecting title, such as covenants, restrictions or conditions including forfeiture or federal encumbrances (i.e., LAWCON funds)
9. Unusual characteristics of the property (flooding, vegetation, terrain conditions, or any other future plans)
10. A map identifying the extent of your holdings in the area of our proposed improvement




Mr. John Nelson  
November 7, 2013  
Page 2

If you have any questions or need additional information, please contact  
Kimberly Murphy, Consultant Studies Unit Head, at (847) 705-4791.

Very truly yours,

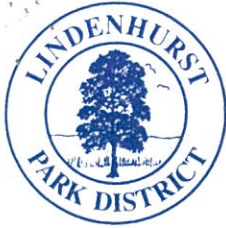
John Fortmann, P.E.  
Deputy Director of Highways,  
Region One Engineer

By:   
John A. Baczek, P.E.  
Project and Environmental Studies Section Chief

Enclosures

bcc: Jose Rios  
Ken Yang

S:\Gen\WP\p&es\CONSULT\Projects - Active\IL 132 (Deep Lake Road to Munn Road)\Coordination\2013-08-19 Initial Letter- Forest Preserve.docx



# Lindenhurst Park District

2200 East Grass Lake Road, Lindenhurst, Illinois 60046

847.356.6011 847.356.6063 Fax

[www.lindenhurstparks.org](http://www.lindenhurstparks.org)

November 20, 2013

**Project & Environmental Studies; IL. 132  
Munn Road to East of Sand Lake Road; Lake Co.**

Mr. John Fortmann, PE  
Region One Engineer  
Illinois Department of Transportation  
201 West Center Court  
Schaumburg, IL 60196-1096

Re: **Request to Include "Extend the Improvement West to Deep Lake Road"**.

Dear Mr. Fortmann:

A belated thank you for your September 16, 2013 letter on the aforementioned project.

I'd like to take this opportunity to follow-up on page 3, comment no. 6 of the letter referring to "extend the improvement west to Deep Lake Road".

Although it states in this paragraph that "this project will be included in our priorities for future consideration among similar improvement needs", it would be very advantageous for all concerned to do this "stretch" of IL. 132 during the construction project between Munn Road to East of Sand Lake Road – Lindenhurst.

Locally, the area along IL. 132 between Munn Road and west to Deep Lake Road is critical to our Lindenhurst Community Pedestrian & Bicycle Comprehensive Plan; considered Priority No. 1 pedestrian pathway to our residents.

So much so, that the Village of Lindenhurst secured \$250,000.00 in State Funding (F.Y. 2010, HBO312, DCEO) from former State Rep. Sandy Cole to develop this pathway and particularly this stretch. Local funding is here – Now.

Please review enclosed plan excerpts.

Basically, and why it is a No. 1 Priority, is this "stretch" between Munn Road west to Deep Lake Road will allow all Lindenhurst (and east of...) residents to safely walk, jog, ride bicycles to the Lake Villa District Library and VISTA Health Medical Center, as well as Victory Lakes Retirement Community.

Currently, this cannot be done.

On behalf of the Village of Lindenhurst, Lindenhurst Park District, Lake Villa District Library, and local schools, for consideration by IDOT to include the aforementioned "stretch" (Munn Road west to Deep Lake Road) as part of the upcoming IL. 132 Munn Road to east of Sand Lake Road major project.

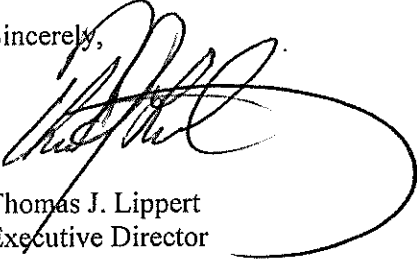


We can therefore, utilize the previously mentioned State Grant funds.

Your consideration is certainly appreciated, and we all look forward to hearing from you.

If you have any questions, please contact Village of Lindenhurst Administrator Matt Formica or myself.

Sincerely,

A handwritten signature in black ink, appearing to read 'T. Lippert', with a large, sweeping flourish extending to the right.

Thomas J. Lippert  
Executive Director

enclosures

cc: Matt Formica, Village Administrator  
Paul Kaplan, Assistant Director, Lake Villa District Library  
Scott Czaplicki, IDOT, Bureau of Programming  
Board of Park Commissioners  
Dawn Suchy, Village Trustee/Park District Liaison

jfortmann/lindam



In locations where the barrier median is wide enough, a grass median is proposed, unless a local agency requests trees or enhanced landscaping. Depending on the treatment, the local agency may be required to cost participate for the additional cost, and will be required to provide maintenance. The Village of Lindenhurst has indicated support for enhanced median landscaping for this project. The landscaping plans will be developed in the next phase of the project.

**4. U-turns are not safe.**

The FHWA considers left-turns into and out of a driveway less safe than a U-turn, and comprises the majority of driveway crashes. Studies have shown that providing a U-turn at a median opening to get to the opposite side of a busy highway rather than a direct left-turn from a side street or driveway can result in a reduction in crashes of 25 percent.

**5. The barrier median will inhibit emergency responders.**

The proposed improvements were coordinated with local fire and police departments, and were designed to accommodate emergency vehicles.

**6. Extend the improvement west to Deep Lake Road.**

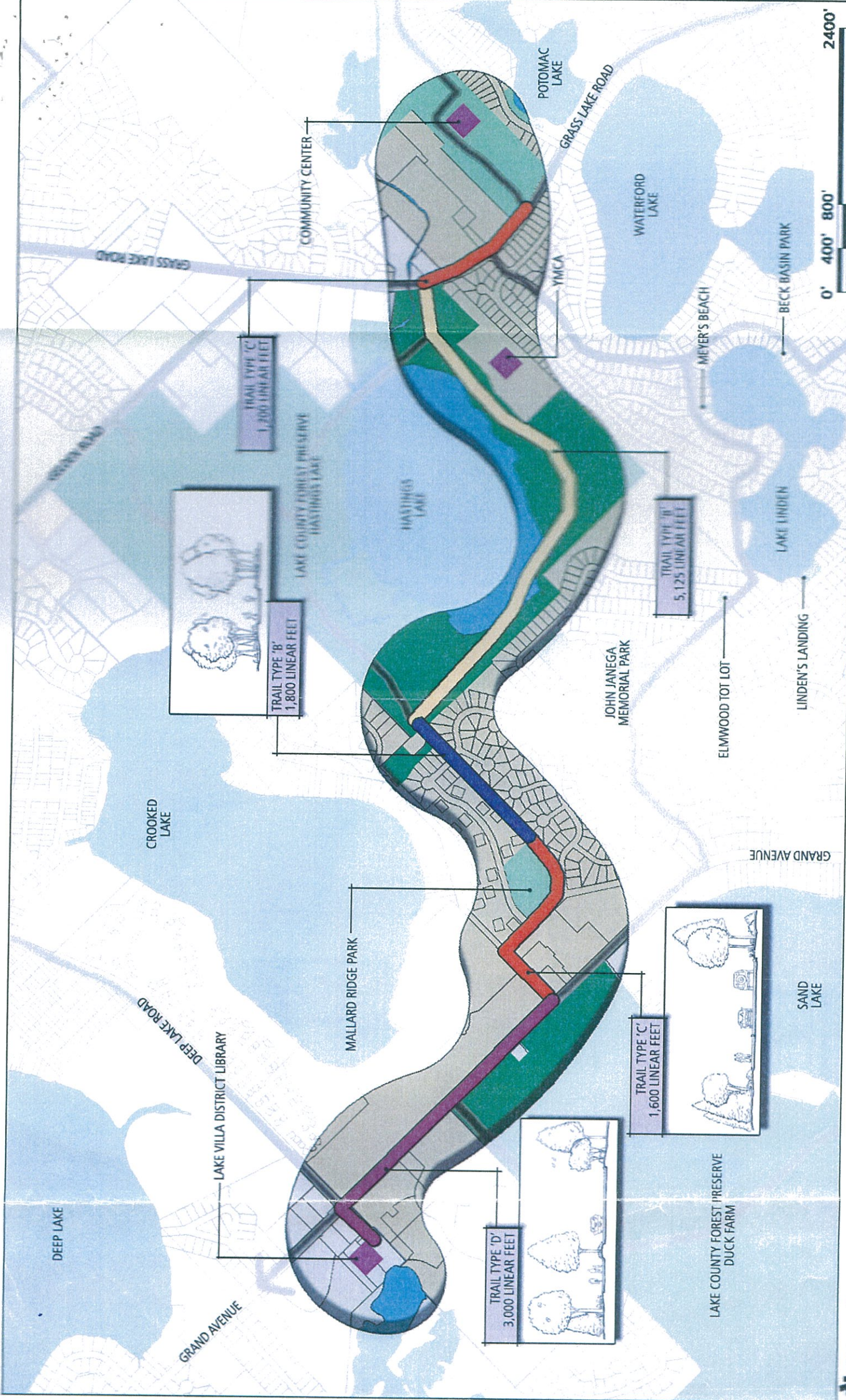
*Our Request*

The Department has initiated a preliminary engineering and environmental study (Phase I) along IL 132 from Deep Lake Road to Munn Road. The improvement is anticipated to include the reconstruction of the existing dry land bridge to provide two lanes in each direction separated by a median, pedestrian and bicyclist accommodations, and drainage improvements. This improvement is not currently included in the Department's FY 2014-2019 Proposed Multi-Modal Transportation Improvement Program. However, this project will be included in our priorities for future funding consideration among similar improvement needs throughout the region.

**7. Provide pedestrian and bicyclist crossings.**

Pedestrian signals and striped crosswalks are proposed at the signalized IL 132 intersections with Munn Road, Granada Boulevard/Lindenhurst Drive and Sand Lake Road which will be timed to allow pedestrians to cross the entire roadway safely.





PRIORITY #1 TRAIL SEGMENTS  
SCHEMATIC PLAN



LAKE COUNTY FOREST PRESERVE  
ETHEL'S WOODS / RAVEN GLEN

LAKES COMMUNITY HIGH SCHOOL

MILLBURN WEST SCHOOL

LAKE COUNTY FOREST PRESERVE  
HASTINGS LAKE

DEEP LAKE ROAD

SAND LAKE

GRAND AVENUE

LINDENHURST VILLAGE HALL / POLICE DEPARTMENT

VILLAGE GREEN

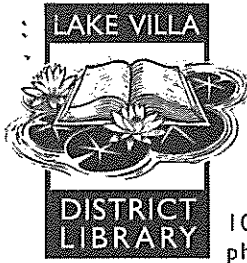
LAKE COUNTY FOREST PRESERVE  
ROLLINS SAVANNA

LEGEND

- █ PRIORITY #1 SEGMENT
- █ PRIORITY #2 SEGMENT
- █ PRIORITY #3 SEGMENT
- █ NORTHERN LINDENHURST SEGMENT
- █ CENTRAL LINDENHURST SEGMENT
- █ VILLAGE GREEN LINDENHURST SEGMENT
- █ GRAND AVENUE LINDENHURST SEGMENT
- █ DEEP LAKE ROAD LINDENHURST SEGMENT







1001 East Grand Avenue • Lake Villa, Illinois 60046  
ph 847-356-7711 • fx 847-265-9595 • [www.lvdl.org](http://www.lvdl.org)

December 3, 2013

**Project & Environmental Studies; IL. 132  
Munn Road to East of Sand Lake Road; Lake Co.**

Mr. John Fortmann, PE  
Region One Engineer  
Illinois Department of Transportation  
201 West Center Court  
Schaumburg, IL 60196-1096

**Re: Request to Include "Extend the Improvement West to Deep Lake Road"**

Dear Mr. Fortmann:

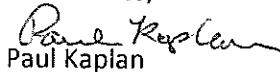
We want to lend our support to the November 20, 2013 request letter by the Lindenhurst Park District to address the area:

"along 132 between Munn Road and west to Deep Lake Road (as it is) critical to our Lindenhurst Community Pedestrian & Bicycle Comprehensive Plan; considered Priority No. 1 pedestrian pathway to our residents."

Our library is located centrally in the township but there are few pedestrian pathways to it. We have noticed people- teens and adults- using the streets for biking to our library. We are very inaccessible without a proper route. For safety reasons and to promote the good and welfare of the community we support the efforts to make Munn Road to Deep Lake Road a friendly pedestrian and bicycle pathway.

Your consideration is appreciated. We are ready to meet with you at any time or place to further the discussion.

Best wishes,

  
Paul Kaplan

Assistant Director  
[pkaplan@lvdl.org](mailto:pkaplan@lvdl.org)

cc:

Thomas J. Lippert, Executive Director, Lindenhurst Park District  
Matt Formica, Village Administrator  
Scott Czaplicki, IDOT, Bureau of Programming



Division of Transportation

Paula J. Trigg, P.E.  
Director of Transportation/County Engineer

600 West Winchester Road  
Libertyville, Illinois 60048-1381  
Phone 847-377-7400  
Fax 847-984-5888

**Preliminary Engineering & Environmental Study (Phase I)  
Illinois Route 132 (Deep Lake Rd to Munn Rd)  
Lake County**

**December 16, 2013**

**BUREAU OF PROGRAMMING  
RECEIVED**

**DEC 23 2013**

**DISTRICT #1**

Mr. John Fortmann, P.E.  
Deputy Director of Highways  
Illinois Department of Transportation  
Division of Highways/District 1  
201 West Center Court  
Schaumburg, IL 60196-1096

**ATTN: Kimberly Murphy**  
Consultant Studies Unit Head

Dear Mr. Fortmann:

Enclosed are compiled comments from Lake County for the above referenced project.

Should you have any questions, or need additional information, do not hesitate to contact me at (847) 377-7400.

Very truly yours,

Joe Meyer, P.E.  
Project Manager

Enclosures

cc: Emily J. Karry, Director of Planning, LCDOT  
Linda Rubeck, LCDOT  
Valbona Kokoshi, LCDOT  
Gordon White, LCPW  
Brittany Sloan, LCPB&D

**Compiled Review Comments  
Lake County**

LAKE COUNTY DIVISION OF TRANSPORTATION – PLANNING & PROGRAMMING DEPARTMENT

1. We encourage IDOT to contact the Village of Lindenhurst and the Lake County Forest Preserve District directly regarding local participation in potential bike and pedestrian facilities.
2. LCDOT recently upgraded the existing traffic signal at IL 132 and Deep Lake Road under an IDOT Permit. We added left turn phasing on the north and south legs.
3. LCDOT also has a planned resurfacing of Deep Lake Road between IL 132 and Gelden Road in 2018. We'd like to coordinate the limits of our two projects.
4. Non-motorized connectivity recommendations are included in the attached exhibit.

LAKE COUNTY PUBLIC WORKS

- Lake County Public Works has no facilities within the area.

LAKE COUNTY PLANNING, BUILDING & DEVELOPMENT

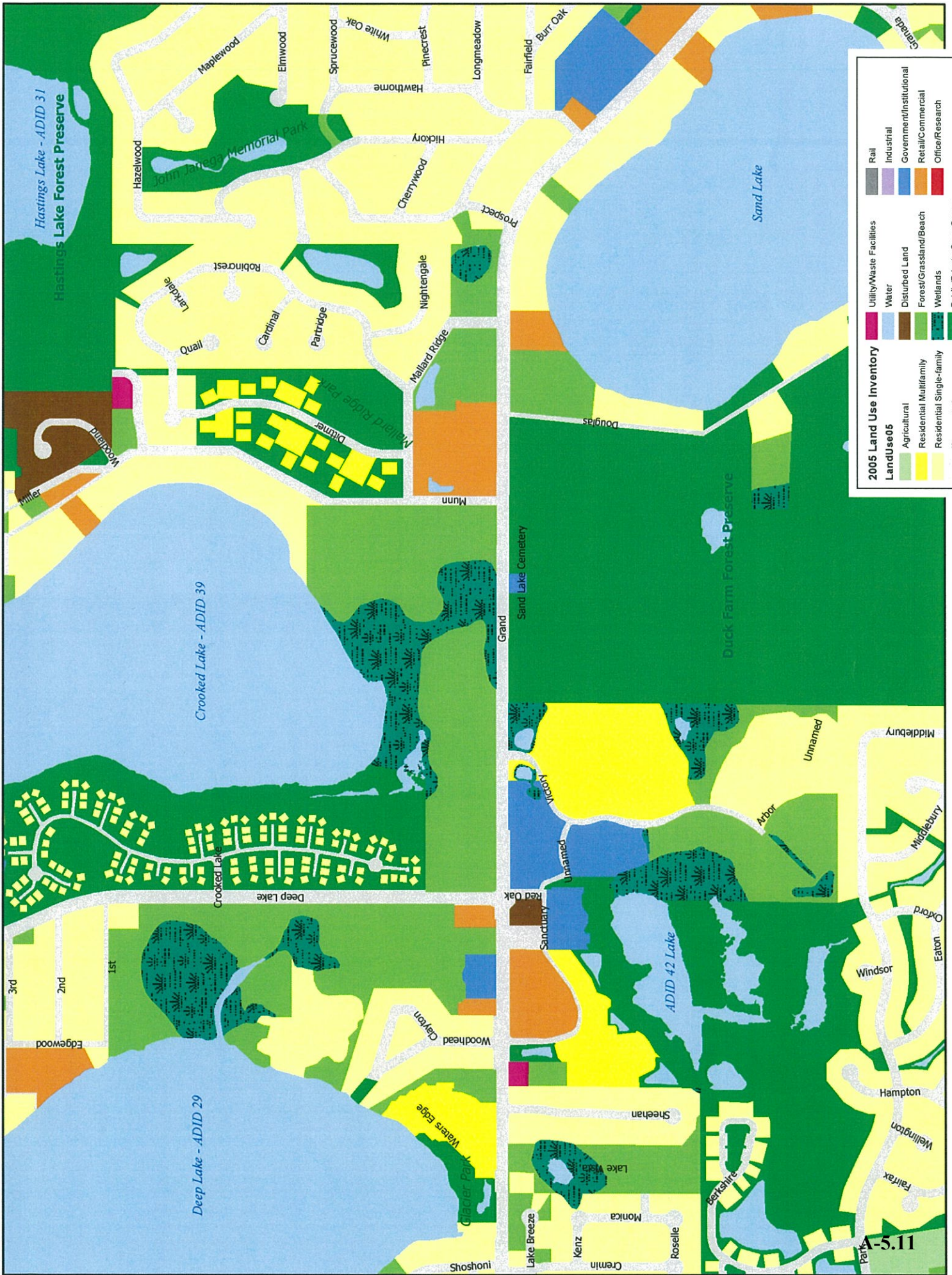
We have attached the following exhibits for your information:

1. 2005 Land Use Inventory
2. Future Land Use
3. Unincorporated Zoning

Here's the link to the UDO Article 5 which describes the zoning districts  
[http://www.lakecountyil.gov/Planning/Zoning/Documents/UDO\\_text/Article5.pdf](http://www.lakecountyil.gov/Planning/Zoning/Documents/UDO_text/Article5.pdf)

Here's the link to the Land Use chapter of the Framework Plan  
<http://www.lakecountyil.gov/Planning/PlanningandSupportServices/Documents/FrameworkPlan/Chapters2-13-07/Chapter9.pdf>



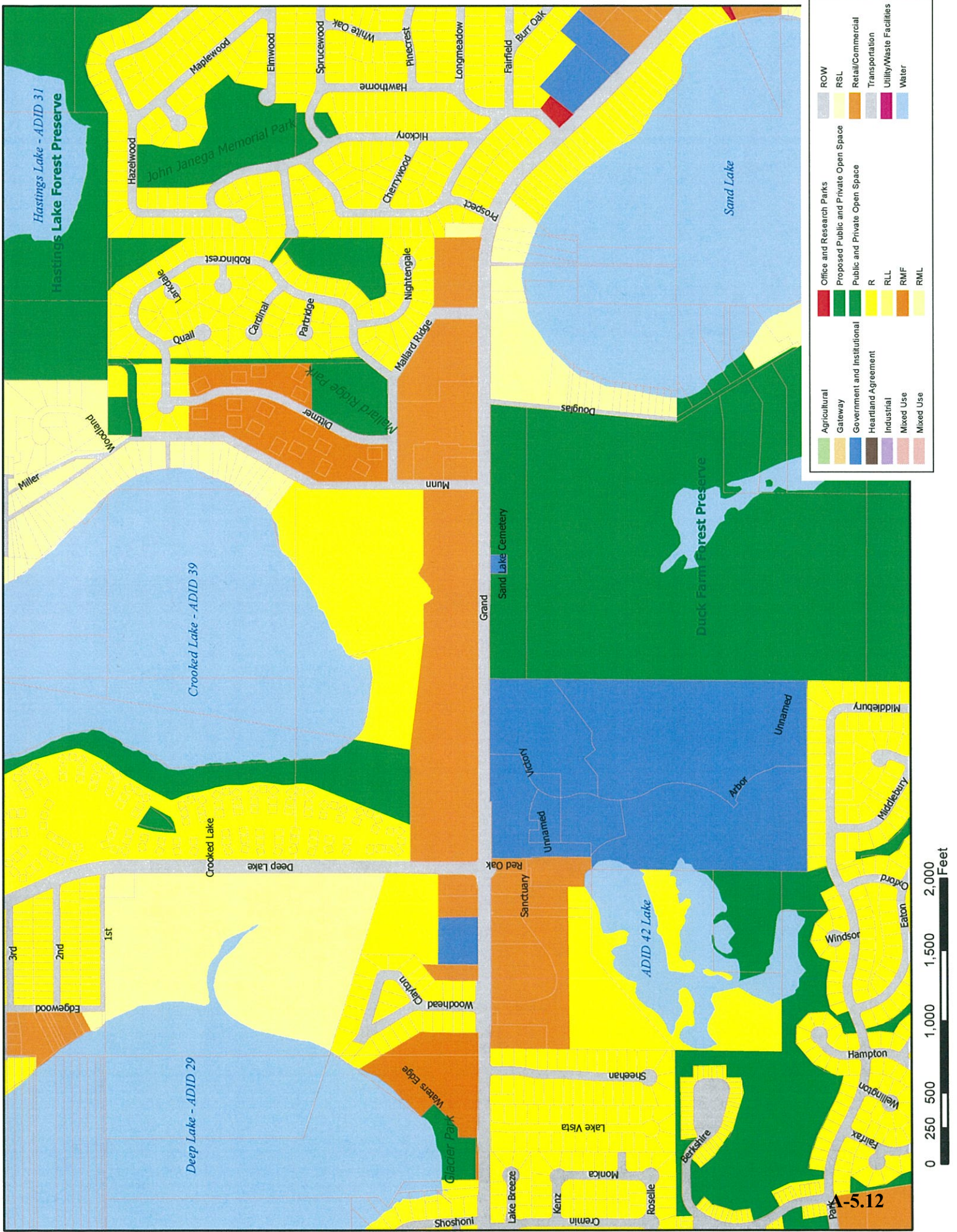


**2005 Land Use Inventory**

	Utility/Waste Facilities		Rail
	Water		Industrial
	Disturbed Land		Government/Institutional
	Forest/Grassland/Beach		Retail/Commercial
	Wetlands		Office/Research
	Agricultural		Public/Private Open Space
	Residential Multifamily		Transportation
	Residential Single-family		

Park A-5.11



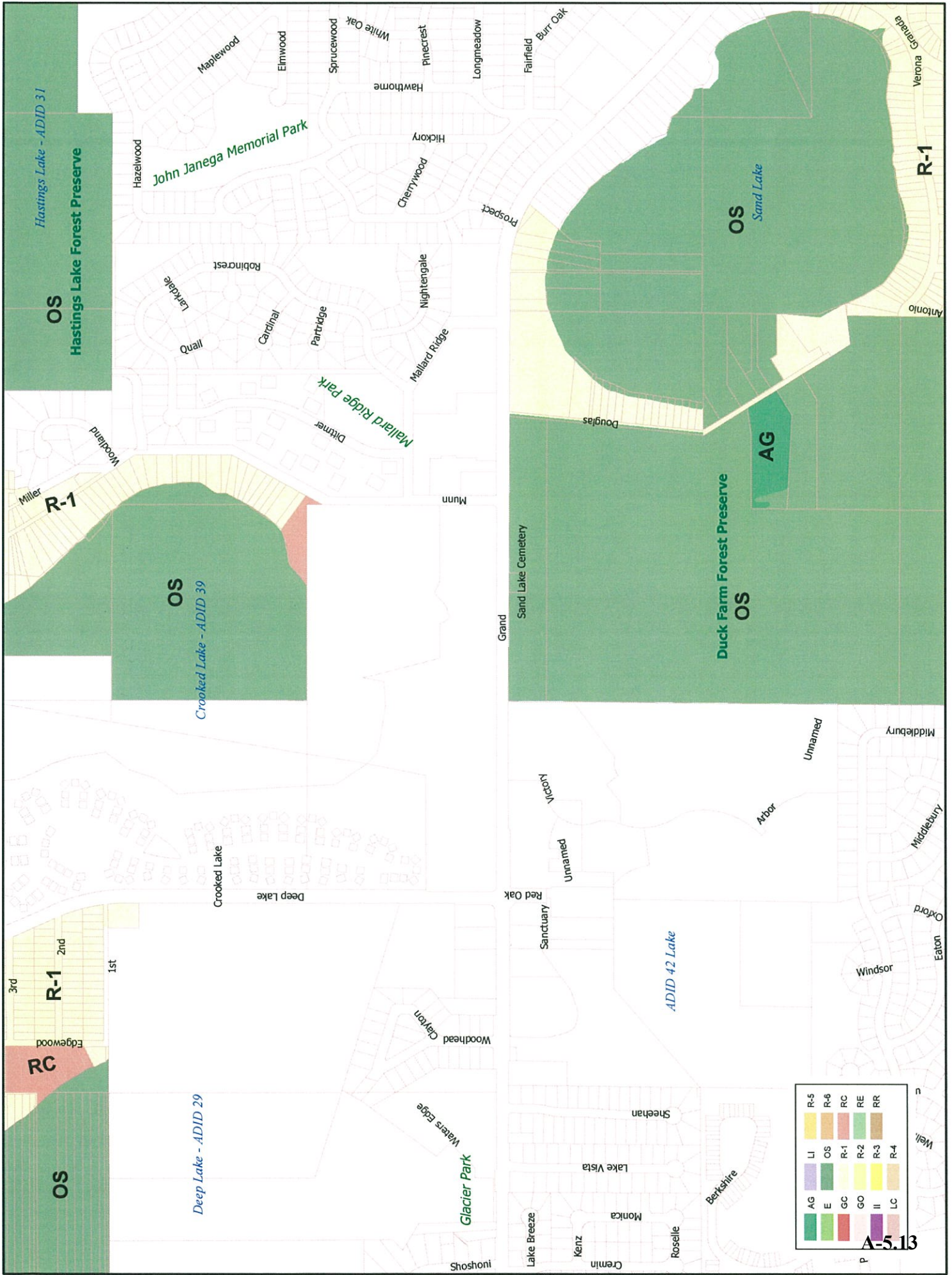


	Agricultural		Office and Research Parks		Water
	Gateway		Proposed Public and Private Open Space		R
	Government and Institutional		Public and Private Open Space		RLL
	Heartland Agreement		R		RMF
	Industrial		RLL		RML
	Mixed Use		RMF		
	Mixed Use		RML		
	ROW		RSL		
	Retail/Commercial		Transportation		
	Utility/Waste Facilities				



A-5.12





Hastings Lake - ADID 31

OS  
Hastings Lake Forest Preserve

John Janega Memorial Park

OS  
Crooked Lake - ADID 39

Mallard Ridge Park

Glacier Park

OS  
Duck Farm Forest Preserve

OS  
Sand Lake

A-5.13

AG	LI	R-5
E	OS	R-6
GC	R-1	RC
GO	R-2	RE
II	R-3	RR
LC	R-4	





IDOT Preliminary Engineering & Environmental Study (Phase I)  
IL 132 from Deep Lake Rd. to Munn Road, Village of Lindenhurst

Study Limits





# Non-Motorized Connectivity Recommendations



Study Limits

Proposed Shared-Use Path

Existing Shared-Use Path

Signal Ped. Crossing at this location needed to connect shared-used path users to the LCFPD property.

Lake County Forest Preserve Parking Entrance (LCFPD)

The Village of Lindenhurst's existing path ends just north of IL Rte. 132 right of way. A proposed shared-use path along IL Rte 132 is recommended to make the connection between the Village's existing path and the existing LCFPD's paths. The proposed path along IL Rte 132, beyond the study limits, would connect with the Lake Villa Metra Station to the west and to the LCFPD's Millennium Trail to the east.





LAKE COUNTY FOREST PRESERVES  
www.LCFPD.org

Preservation, Restoration, Education and Recreation

January 3, 2014

Mr. John A. Baczek, P.E.  
Project and Environmental Studies Section Chief  
ILLINOIS DEPARTMENT OF TRANSPORTATION  
Division of Highways/Region One  
201 West Center Court  
Schaumburg, Illinois 60196-1096

RE: Illinois Route 132  
Deep Lake Road to Munn Road  
Lake County

Dear Mr. Baczek:

The Lake County Forest Preserve District (District) has received your letter of November 7, 2013 requesting information regarding the District's Duck Farm Forest Preserve. Please refer to the information provided below and the enclosed documents.

1. Size - Duck Farm Forest Preserve contains 354 acres. See the attached site map. Also enclosed is a copy of Recorded Document No. 421143, filed January 28, 1936 dedicating public right-of-way.
2. Name & type of facility - The entire site is known as Duck Farm Forest Preserve and it is a recreational facility. The northern 48-acres of the site is set aside as a special use area known as the Duck Farm Dog Exercise Area.
3. Available recreational activities - Dog exercise area, fishing, and snowmobiling. See the attached Map and Guide. The snowmobile trail is maintained by the Northeastern Illinois Association of Snowmobile Clubs on the District's property. Refer to the enclosed snowmobile trail map.
4. Facilities - The existing facilities include a parking lot, drinking fountain, and toilet that serve the Duck Farm Dog Exercise Area. See the attached plans. It is intended that the parking lot entrance will be relocated to the Munn Rd intersection as part of IDOT's project on IL 132 - Munn Rd to Sand Lake Rd. The proposed parking lot modification is also shown on the plans.
5. Usage - The Dog Exercise Area is open daily 6:30am to sunset or 7:00pm (whichever is later). The snowmobile trail is open 6:30am - 12:00am when conditions allow (snow



IDOT  
IL 132 – Deep Lake Rd to Munn Rd  
Duck Farm Forest Preserve

greater than four inches). The remainder of the site is open daily to the public from 6:30am to sunset.

6. Relationship to other similarly used lands - See the attached Map and Guide.
7. Access – Public vehicular access to the site is via the existing driveway on the south side of IL 132. There is also a maintenance access off of Douglas Lane. Improved pedestrian and bicycle access to the site are planned as part of IDOT's IL 132 – Munn Rd to Sand Lake Rd IL 132 – Munn Rd to Sand Lake Rd.
8. Ownership – Fee simple. No title restrictions, such as LAWCON, OSLAD or OLT, are known.
9. Unusual characteristics of the property - There is a creek that flows north from Slough Lake within Duck Farm Forest Preserve north under IL 132 and ultimately to Crooked Lake.

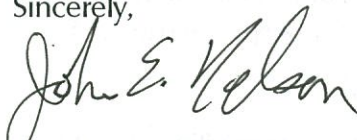
If not already done, it is recommended that IDOT also contact the Village of Lindenhurst and Lindenhurst Park District regarding their future plans in the area as identified in their August 2008 "Lindenhurst Community Pedestrian & Bicycle Comprehensive Plan." It is available on-line at:

[http://www.lindenhurstparks.org/site/files/538/67199/258167/517216/1573-07105\\_FINAL\\_REPORT\\_8-5-2008.pdf](http://www.lindenhurstparks.org/site/files/538/67199/258167/517216/1573-07105_FINAL_REPORT_8-5-2008.pdf)

10. Map – See the attached map.

If you have any questions or need additional information, please contact me at (847)968-3407 or [jenelson@LCFPD.org](mailto:jenelson@LCFPD.org).

Sincerely,



John E. Nelson, P.E.  
Engineering Manager

enclosures

BUREAU OF PROGRAMMING  
RECEIVED

JAN 07 2014

DISTRICT #1

BUREAU OF PROGRAMMING  
RECEIVED

JAN 07 2014

DISTRICT #1





# Illinois Department of Transportation

Division of Highways / Region 1 / District 1  
201 West Center Court / Schaumburg, Illinois 60196-1096

FILE COPY

February 19, 2014

Mr. Thomas J. Lippert  
Executive Director  
Lindenhurst Park District  
2200 East Grass Lake Road  
Lindenhurst, IL 60046

Dear Mr. Lippert:

This is in response to your November 20, 2013 letter regarding the improvement of IL 132 in the Village of Lindenhurst. As you know, the Illinois Department of Transportation (Department) is nearing completion of a preliminary engineering and environmental study (Phase I) for IL 132 from Munn Road to Deer Path Drive. This improvement is included in the Department's FY 2014-2019 Proposed Multi-Modal Transportation Improvement Program utilizing funding from the Highway Safety Improvement Program (HSIP). Our current contract letting is in the middle years of our current multi-year program contingent upon plan readiness, land acquisition, and funding availability through our future annual legislative appropriations. Extending this current study further west to Deep Lake Road would delay the project schedule and potentially jeopardize funding for this safety improvement.

We recently initiated a Phase I study for the improvement of IL 132 from Deep Lake Road to Munn Road. The proposed project is anticipated to consist of reconstructing the existing dry land bridge to provide two lanes in each direction separated by a median, as well as pedestrian and bicyclist accommodations and drainage improvements. Although this improvement is not currently included in our multi-year program, we will consider your request as we develop the next program.

If you would like to pursue a locally led project for a shared-use path, supplements to the grant funding you have already received may be available. The Illinois Transportation Enhancement Program (ITEP) provides funding for community based projects that expand travel choices and enhance the transportation experience by improving the cultural, historic, aesthetic, and environmental aspects of our transportation infrastructure. Project sponsors may receive up to 80 percent reimbursement for eligible project costs. The remaining 20 percent is the responsibility of the project sponsor. More information regarding the ITEP application process can be found at this website: <http://www.dot.il.gov/opp/itep.html>.

In addition, your village may be interested in the Illinois Safe Routes to School (SRTS) Program, which supports projects and programs that enable and encourage walking and bicycling to and from school. The program applies to schools serving grades kindergarten through 8th grade.



Mr. Thomas Lippert  
February 19, 2014  
Page 2

In 2012, \$21.7 million in SRTS grants were awarded to 229 projects. For more information on SRTS please visit this website:  
<http://www.dot.il.gov/saferoutes/saferouteshome.aspx>.

If you have any questions or need additional information, please contact me or Kimberly Murphy, Consultant Studies Unit Head, at (847) 705-4791.

Very truly yours,



John Fortmann, P.E.  
Deputy Director of Highways,  
Region One Engineer

Prepared By: Ken Yang  
Bureau of Programming

cc: Paul Kaplan, Lake Villa District Library  
Matt Formica, Village of Lindenhurst  
Dawn Suchy, Village of Lindenhurst Trustee

bcc: John Fortmann  
Jose Rios  
Ken Yang

#### MAILING LIST

Mr. Paul Kaplan  
Assistant Director  
Lake Villa District Library  
1001 East Grand Avenue  
Lake Villa, IL 60046

Mr. Matt Formica  
Village Administrator  
Village of Lindenhurst  
2301 East Sand Lake Road  
Lindenhurst, Illinois, 60046

Ms. Dawn Suchy  
Village of Lindenhurst Trustee/Park District Liaison  
2301 East Sand Lake Road  
Lindenhurst, Illinois, 60046



Ken Yang



# Illinois Department of Transportation

Division of Highways / Region 1 / District 1  
201 West Center Court / Schaumburg, Illinois 60196-1096

February 19, 2014

Mr. Paul Kaplan  
Assistant Director  
Lake Villa District Library  
1001 East Grand Avenue  
Lake Villa, IL 60046

Dear Mr. Kaplan:

This is in response to your December 3, 2013 letter regarding improvement of IL 132 in the Village of Lindenhurst. As you know, the Illinois Department of Transportation (Department) is nearing completion of a preliminary engineering and environmental study (Phase I) for IL 132 from Munn Road to Deer Path Drive. This improvement is included in the Department's FY 2014-2019 Proposed Multi-Modal Transportation Improvement Program utilizing funding from the Highway Safety Improvement Program (HSIP). Our current contract letting is in the middle years of our current multi-year program contingent upon plan readiness, land acquisition, and funding availability through our future annual legislative appropriations. Extending this current study further west to Deep Lake Road would delay the project schedule and potentially jeopardize funding for this safety improvement.

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In addition, your village may be interested in the Illinois Safe Routes to School (SRTS) Program, which supports projects and programs that enable and encourage walking and bicycling to and from school. The program applies to schools serving grades kindergarten through 8th grade.

Mr. Paul Kaplan  
February 19, 2014  
Page 2

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If you have any questions or need additional information, please contact me or Kimberly Murphy, Consultant Studies Unit Head, at (847) 705-4791.

Very truly yours,



John Fortmann, P.E.  
Deputy Director of Highways,  
Region One Engineer

Prepared By: Ken Yang  
Bureau of Programming

cc: Thomas J. Lippert, Executive Director  
Matt Formica, Village of Lindenhurst  
Dawn Suchy, Village of Lindenhurst Trustee

bcc: John Fortmann  
Jose Rios  
Ken Yang

#### MAILING LIST

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Village Administrator  
Village of Lindenhurst  
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Lindenhurst, Illinois, 60046

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Executive Director  
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Dawn Suchy  
Village of Lindenhurst Trustee  
Village of Lindenhurst  
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Lindenhurst, Illinois, 60046

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# **ATTACHMENT A-6**

Tree Survey Report

*FINAL*  
**TREE SURVEY REPORT**  
**IL 132**  
**Deep Lake Road to Munn Road**  
**Village of Lindenhurst**  
**Lake County, Illinois**

*Authored By:*  
Virginia Flynn  
Kaskaskia Engineering Group, LLC  
208 East Main Street, Suite 100  
Belleville, IL 62220  
KEG NO. 12-1006.01

*Prepared for:*  
Illinois Department of Transportation  
District 1

September 4, 2015





# TABLE OF CONTENTS

1.0	Introduction .....	1
2.0	Methodology.....	1
3.0	Tree Evaluation .....	2
4.0	Summary of Impacts .....	4
5.0	Mitigation Requirements.....	5
6.0	References.....	6

## **TABLES**

- Table 3.1 – Tree Data by Type
- Table 3.2 – Tree Data by Health
- Table 3.3 – Tree Data by Structure
- Table 3.4 – Tree Data by Origin
- Table 3.5 – Northern Long-Eared Bat Habitat Summary

## **EXHIBITS**

- Exhibit A – Project Location Map
- Exhibit B – Impacted Trees Table
- Exhibit C – Tree Survey (Left Offsets)
- Exhibit D – Tree Survey (Right Offsets)
- Exhibit E – Trees to be Added to Contract Plans



## LIST OF ACRONYMS

<b>DBH</b>	Diameter Breast Height
<b>FHWA</b>	Federal Highway Administration
<b>IDOT</b>	Illinois Department of Transportation
<b>ISA</b>	International Society of Arboriculture
<b>KEG</b>	Kaskaskia Engineering Group, LLC
<b>NLEB</b>	Northern Long-Eared Bat
<b>ROW</b>	Right-Of-Way
<b>USFWS</b>	United States Fish and Wildlife Service

## **1.0 Introduction**

The Illinois Department of Transportation (IDOT) is proposing reconstructing the existing dry land bridge and roadway on IL 132 from Deep Lake Road to Munn Road in the Village of Lindenhurst, Lake County, Illinois. Adjacent land use consists of IDOT right-of-way (ROW), commercial, and residential land. The project location map and representative photographs are included in Exhibit A.

A survey to identify trees within the project survey area was performed on May 19, 2015 by Kaskaskia Engineering Group, LLC (KEG) staff. IDOT provided spreadsheets and survey plots indicating tree size, station, and offset.

The objective of this report is to document the potential impacts to tree resources within the project survey area. The project survey area includes all areas that will be disturbed as result of construction activities.

## **2.0 Methodology**

This tree survey followed the IDOT Departmental Policies (D&E – 18) regarding the preservation and replacement of trees. IDOT D&E–18 specifies all landscaped trees (regardless of size), as well as volunteer trees, with a diameter breast height (DBH) of six inches or greater be surveyed. Trees were inventoried within the project survey area using the Direct Counting Method.

The U.S. Fish and Wildlife Service (USFWS) listed the northern long-eared bat as federally threatened with an interim 4(d) rule on April 2, 2015, which is effective May 4, 2015. Projects that require permits from governmental agencies and that include potential northern long-eared bat (NLEB) habitat or the potential to impact migration routes of the NLEB will need to determine whether the proposed action meets the requirements of the interim 4(d) rule. Due to the federal listing of the NLEB as threatened, an assessment for suitable habitat for this species was conducted within the project survey area.

The 2015 Rangewide Indiana Bat Summer Survey Guidelines, which can be used for the NLEB, was followed for the NLEB habitat assessment as this is the current survey guidance (USFWS, 2015). Based on this guidance, if potential suitable summer habitat for the NLEB is present within the project vicinity, an assessment for potential adverse impacts to the NLEB should be conducted.

The project area was assessed to determine the presence of suitable habitat for the NLEB, which consists of “a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields, and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags  $\geq 3$  inches [diameter at breast height] that have exfoliating bark, cracks, crevices, and/or cavities), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit characteristics of suitable roost trees and are within 1,000 feet of other forested/wooded habitat. NLEB has also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses” (USFWS, 2015).



The project location map is included in Exhibit A. Exhibit B details the impacted trees as a result of the survey, in the Impacted Trees table. Tree inventories are provided in Exhibit C (Left Offsets), Exhibit D (Right Offsets), and Exhibit E (Trees to be Added to Contract Plans)..

### 3.0 Tree Evaluation

The following is an evaluation of the tree type, health and structure, and origin of the trees to be impacted by the project. This section also provides an assessment of the amenities provided by the impacted trees (i.e. bat habitat, screening, and special functions).

#### **Tree Type**

One hundred and eleven (111) trees were surveyed within the project survey area. Ninety-eight (98) trees were listed on the spreadsheets provided by IDOT. Eighty-six (86) trees listed on the spreadsheets provided by IDOT are to be removed from the plans as these trees are either no longer present or not within the project limits. Thirteen (13) trees are to be added to the plans. Thus, 25 trees of the 111 surveyed are considered to be impacted by the project. The impacted trees are depicted in the Impacted Trees table in Exhibit B.

Six (6) species of trees were identified within the project survey area. The most common species identified is the Red Maple (*Acer rubrum*, 52 percent) and Box Elder Maple (*Acer negundo*, 16 percent). Table 3.1 presents the tree distribution data.

**Table 3.1 – Tree Data by Type**

Type	Amount	Percent of Total
Red Maple	13	52%
Box Elder Maple	4	16%
Dead	4	16%
Shagbark Hickory	1	4%
Mulberry	1	4%
Silver Maple	1	4%
Black Cherry	1	4%
<b>TOTAL</b>	<b>25</b>	<b>100</b>

Source: Site Visit, May 19, 2015.

#### **Tree Health and Structure**

Tree health and structure were assessed during the tree survey and are summarized in Tables 3.2 and 3.3, respectively. Tree health refers to the vigor of the tree. Signs of disease are considered when evaluating the health of a tree. The structure of the tree refers to the branching pattern. The normal shaping of individual tree species are considered and compared to the tree species in the field. Missing or cut branches are also considered when rating the structure of the tree.

Tree health of the majority of the trees surveyed was good (76 percent). Additionally, tree structure of at least half the trees surveyed was excellent (52 percent). Sixteen (16) percent of the trees surveyed were identified as dead.

**Table 3.2 – Tree Data by Health**

Health	Amount	Percent of Total
Excellent	0	0%
Good	19	76%
Fair	2	8%
Poor	0	0%
Dead	4	16%
<b>TOTAL</b>	<b>25</b>	<b>100%</b>

Source: Site Visit, May 19, 2015.

**Table 3.3 – Tree Data by Structure**

Structure	Amount	Percent of Total
Excellent	13	52%
Good	1	4%
Fair	1	4%
Poor	6	24%
Dead	4	16%
<b>TOTAL</b>	<b>25</b>	<b>100%</b>

Source: Site Visit, May 19, 2015.

### **Tree Origin**

Eight (8) of the inventoried trees within the project survey area are considered volunteer and 13 of the inventoried trees are considered landscaped. Table 3.4 summarizes the tree origin.

**Table 3.4 – Tree Data by Origin**

Origin	Amount	Percent of Total
Landscaped	13	52%
Volunteer	8	32%
Dead	4	16%
<b>TOTAL</b>	<b>25</b>	<b>100</b>

Source: Site Visit, May 19, 2015.

### **Northern Long-Eared Bat Habitat Assessment**

The project area was assessed to determine the presence/absence of suitable summer habitat for the NLEB. Dominant cover type consists of mowed turf grass and residential land. Potential flight corridors lead to forested riparian areas associated with Lake County's forest preserves (i.e. Duck Farm Forest Preserve, Hastings Lake Forest Preserve, and Sun Lake Forest Preserve), the various water bodies in the vicinity of the project limits (i.e. Crooked Lake, Deep Lake, Cedar Lake, and Sand Lake), and the various wetlands surrounding the aforementioned preserves and water bodies. As there is the presence of potential flight corridors connecting the project location to riparian areas, suitable habitat appears to be present within the project area.

### **Screening Trees**

Trees that serve as a visual screen within the project survey area (i.e. trees that obstruct the view of a residential lot from an adjacent residence or street) are located within the project limits. No trees providing visual screens were identified during the survey.



### ***Trees with Special Functions***

Trees that serve as a buffer between a highway and a State-listed Natural Area, Nature Preserve, or Land and Water Reserve are considered to possess special functions. There are no trees with special functions located within the proposed project limits.

### ***Specimen and Exceptional Trees***

Specimen trees are those listed on the 2013 Illinois Big Tree Register; those that are outstanding examples possessing exceptional size, form, etc.; or those having recognized historical significance (IDOT D&E-18). None of the surveyed trees are on the 2013 Illinois Big Tree Register.

Exceptional trees are native trees that are average to high quality based on their coefficient of conservatism (C-value, Swink and Wilhelm, 1994), have large size, and have good structure or landscaped trees that provide visual aesthetics, have large size, and have good health and structure. Another factor considered when evaluating exceptional trees is age. *Telling a Tree's Age* (Jones, Bowles, & Jones, 2006) provides a methodology for estimating the approximate age of non-landscaped trees and trees not growing in open areas based on the DBH.

The International Society for Arboriculture (ISA) has developed a methodology for estimating the approximate age of trees based upon DBH. Trees have different growth rates, depending on the species. The approximate age of trees can be calculated by multiplying a tree's DBH by the growth factor for the tree species as determined by the ISA. No exceptional trees were identified during the survey.

### ***Functions of Trees within the Project Limits***

Typically, functions of trees within the project limits would include screening and aesthetic value; however, no trees providing visual screens were identified during the survey. A total of 13 trees within the project limits have aesthetic value. Trees with aesthetic value are detailed in the Impacted Trees table in Exhibit B.

## **4.0 Summary of Impacts**

Anticipated tree removal data was not provided by IDOT or IDOT's engineering consultant of the 98 trees listed on the spreadsheets provided by IDOT. The following summarizes the impacts of these trees, as determined from the site reconnaissance of the project area.

- Eighty-six (86) trees listed on the spreadsheets provided by IDOT are to be removed from the plans, as these trees are either no longer present (i.e. cut down) or not within the project limits.
- There were 13 trees identified within the project area not listed on the spreadsheets provided by IDOT.
- A total of 25 trees are located within the project area.
- All trees within the project area are located within, or immediately adjacent to, the existing ROW, temporary easement, or permanent easement.
- Suitable foraging and flight corridors are present within the project area.
- None of the trees identified within the project area are considered specimen or exceptional.
- No trees providing visual screens were identified during the survey.
- A total of 13 trees within the project limits have aesthetic value.

The recommended action and impact to specific trees has not been developed by the engineer at this time; however, KEG suggested preliminary recommended actions and impacts for trees within the project limits. These suggestions are noted in the tree inventories provided in Exhibits C and D, as well as in Exhibit B.

## **5.0 Mitigation Requirements**

Tree replacement based on the IDOT D&E – 18 policy requires the replacement of isolated trees or small groups of trees within the project ROW to the extent practical. If bare root or balled and burlapped trees are used for replacement plantings, a minimum ratio of 1:1 is recommended for the number of trees planted to the number of trees intended to be established. If seedlings are used, a minimum ratio of 3:1 is recommended for the number of trees planted to the number of trees intended to be established. Replacement trees should be planted in suitable locations as close as practical to the removal site.

Since the USFWS listed the NLEB as federally threatened with an interim 4(d) rule on April 2, 2015, effective May 4, 2015, this project requires assessment of the NLEB and whether the proposed action meets the requirements of the interim 4(d) rule. The Federal Highway Administration (FHWA) and USFWS are collaborating on an effort to develop rangewide consultation and conservation strategies for the NLEB to help expedite the consultation process related to transportation projects.

For the purposes of our impact assessment, it is assumed that direct impacts to the NLEB, as a result of habitat removal, will not occur. This is based upon tree clearing restrictions that would only allow for clearing between August 1 and May 31, outside of the NLEB pup season (June 1 to July 31) under the interim 4(d) rule for the NLEB. Additionally, there is an assumption that maternity colonies and hibernacula are not located within, or immediately adjacent to, the project survey area.

If the project does not meet these conditions, the presence/absence of NLEBs may be determined by conducting mist-netting or acoustic surveys in accordance with the protocols outlined in the 2015 Rangewide Indiana Bat Summer Survey Guidelines within suitable foraging and flight corridors are not present within the project area.

Replacement of trees providing visual screens must provide similar functions as the trees are removed. No trees were identified during the survey that in conjunction with other physical features and trees outside the project limits provide the function of a visual screen.

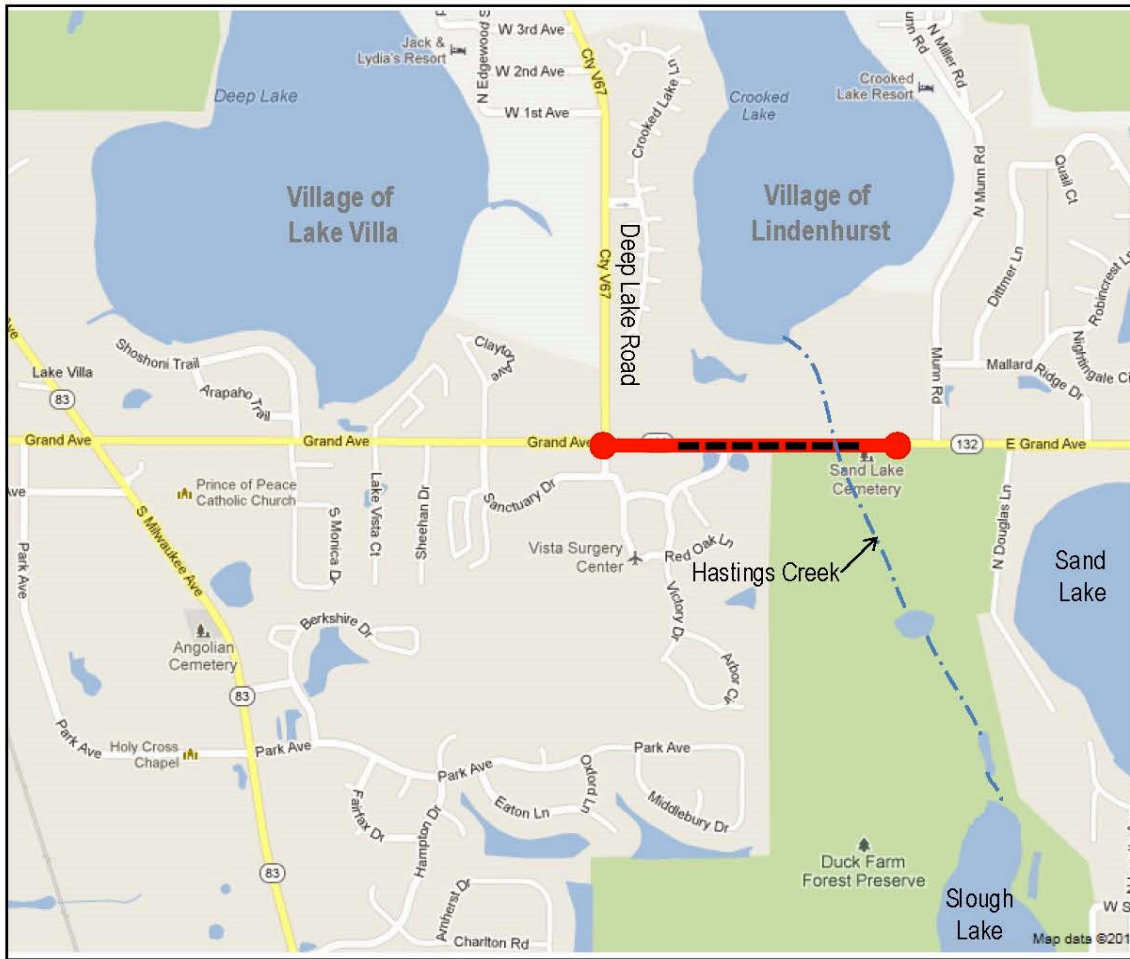


## 6.0 References



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- Jones, Bowles, & Jones, *Telling A Tree's Age*, Chicago Wilderness Magazine, Spring 2006. Retrieved from <http://www.chicagowildernessmag.org/issues/spring2006/fieldnotes.html>.
- Missouri Department of Conservation. How Old Is That Tree? Retrieved from <http://mdc.mo.gov/yourproperty/your-trees-and-woods/backyard-tree-care/how-old-tree>. 2013.
- Mohlenbrock, Robert H., *Forest Trees of Illinois*, Tenth Edition, Illinois Department of Conservation, Division of Forest Resources.
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**EXHIBIT A**  
**PROJECT LOCATION MAP**





**Legend**

-  Study Limits
-  Existing Dry Land Bridge

**PROJECT LOCATION MAP**  
 IL132  
 Deep Lake Road to Munn Road  
 Village of Lindenhurst  
 Lake County  
 P-91-401-13

**EXHIBIT B**

**IMPACTED TREES TABLE**



**IMPACTED TREES**

**PROJECT:** P-91-401-13

**ROUTE:** FAP 541 (IL 132)

STATION	OFFSETFEET	SIZE (INCH.)	TYPE	Function <sup>1</sup>	H <sup>2</sup>	S <sup>2</sup>	Origin <sup>3</sup>	COMMENTS	RECOMMENDED ACTION <sup>4</sup>	IMPACT
51+93.52	-94.9495	13	Dead		Dead	Dead	Dead	Dead		
51+93.83	-66.1655	16	Dead		Dead	Dead	Dead	Dead		
55+68.32	47.2774	4	Red Maple	A	G	E	L	To be Added to Plans		Within Proposed ROW
56+05.49	47.4635	4	Red Maple	A	G	E	L	To be Added to Plans		Within Proposed ROW
56+36.99	47.6213	4	Red Maple	A	G	E	L	To be Added to Plans		Within Proposed ROW
56+68.49	47.7791	4	Red Maple	A	G	E	L	To be Added to Plans		Within Proposed ROW
56+99.99	47.9369	4	Red Maple	A	G	E	L	To be Added to Plans		Within Proposed ROW
57+31.49	48.0947	4	Red Maple	A	G	E	L	To be Added to Plans		Within Proposed ROW
57+62.99	48.2525	4	Red Maple	A	G	E	L	To be Added to Plans		Within Proposed ROW
57+94.49	48.4103	4	Red Maple	A	G	E	L	To be Added to Plans		Within Proposed ROW
58+25.99	48.568	4	Red Maple	A	G	E	L	To be Added to Plans		Within Proposed ROW
58+57.48	48.7258	4	Red Maple	A	G	E	L	To be Added to Plans		Within Proposed ROW
58+88.98	48.8836	4	Red Maple	A	G	E	L	To be Added to Plans		Within Proposed ROW
59+20.48	49.0414	4	Red Maple	A	G	E	L	To be Added to Plans		Within Proposed ROW
59+46.68	47.9878	4	Red Maple	A	G	E	L	To be Added to Plans		Within Proposed ROW
67+02.50	50.2265	10	Dead		Dead	Dead	Dead	Dead		
67+04.81	50.7756	16	Dead		Dead	Dead	Dead	Dead		
69+01.11	41.1437	10	Mulberry		F	G	V			Within Proposed Improvements
72+75.39	35.7268	34	Silver Maple		G	P	V			Within Proposed Improvements
77+46.84	43.4535	7	Black Cherry		F	P	V			Within Proposed Improvements
77+91.59	43.1331	8	Box Elder Maple		G	P	V			Within Proposed Improvements
77+93.50	43.8223	8	Box Elder Maple		G	P	V			Within Proposed Improvements
77+94.51	44.3267	8	Box Elder Maple		G	P	V			Within Proposed Improvements
77+96.52	44.3706	8	Box Elder Maple		G	P	V			Within Proposed Improvements
79+53.50	37.2403	10	Shag Bark Hickory		G	F	V			Within Proposed Improvements

<sup>1</sup> Function: S = Screening, A = Aesthetic

<sup>2</sup> Rate Health (H) and Structure (S): E = Excellent, G= Good, F= Fair, P = Poor

<sup>3</sup> Origin: L = Landscape, V = Volunteer

<sup>4</sup> If Recommended Action is blank, avoid removal unless necessary; dead trees should be evaluated for immediate removal

		Trees to be removed from plans (cut down or outside project plans)	Trees to add to plans	Trees surveyed
Total Impacted	Trees on IDOT Survey Sheets			
25	98	86	13	111

**EXHIBIT C**

**TREE SURVEY (LEFT OFFSETS)**



STATION	OFFSET FEET	SIZE* INCH.	TYPE	H**	S**	COMMENTS	RECOMMENDED ACTION***	IMPACT****
36+27.11	-54.3207	14	Unknown	F	G	Outside of project limits		
36+92.98	-57.5683	13	Unknown	F	G	Outside of project limits		
40+65.28	-61.8385	11	Red Oak	F	P	Outside of project limits		
40+86.75	-62.6862	8	Norway Maple	G	G	Outside of project limits		
40+90.68	-56.7867	34	Red Oak	G	P	Outside of project limits		
41+06.81	-61.6256	9	Black Walnut	G	F	Outside of project limits		
41+08.01	-69.3122	22	Black Walnut	E	G	Outside of project limits		
42+15.39	-65.9726	5	Crabapple	G	F	Outside of project limits		
42+46.04	-54.7627	10	Pine	E	E	Outside of project limits		
43+40.10	-83.7883	9	Norway Maple	G	G	Outside of project limits		
43+41.75	-77.122	7	Norway Maple	G	G	Outside of project limits		
43+43.04	-67.3455	8	Norway Maple	G	G	Outside of project limits		
43+72.63	-66.3149	10	Ash	P	P	Outside of project limits		
43+84.31	-67.6921	11	Norway Maple	G	G	Outside of project limits		
43+88.81	-69.1538	8	Norway Maple	G	G	Outside of project limits		
43+93.46	-65.8248	13	Norway Maple	F	G	Outside of project limits		
44+07.06	-66.7144	9	Norway Maple	G	F	Outside of project limits		
44+18.06	-57.8669	12	Red Oak	G	G	Outside of project limits		
44+30.73	-63.7102	10	Norway Maple	E	G	Outside of project limits		
50+58.99	-68.1928	13	Silver Maple	F	P	Outside of project limits		
50+70.50	-66.3658	11	Honey Locust	F	P	Outside of project limits		
50+78.23	-118.2392	15	Silver Maple	G	F	Outside of project limits		
50+80.77	-74.0841	7	Linden	G	G	Outside of project limits		
50+87.79	-84.6664	10	Linden	G	G	Outside of project limits		
50+88.01	-101.3415	10	Linden	E	E	Outside of project limits		
50+91.58	-149.7864	8	Black Cherry	G	G	Outside of project limits		
51+93.52	-94.9495	13	Dead	Dead	Dead	Dead		
51+93.83	-66.1655	16	Dead	Dead	Dead	Dead		
78+45.48	-96.5278	6	Elm	G	E	Outside of project limits		
78+53.27	-83.4701	7	Elm	G	E	Outside of project limits		
78+53.37	-108.8004	7	Elm	G	E	Outside of project limits		
78+61.01	-72.1493	11	Sycamore	G	E	Outside of project limits		
79+12.98	-55.5274	7	Pear	G	G	Outside of project limits		
79+32.42	-54.6217	6	Cut Down			Cut Down		
79+46.87	-59.4326	8	Cut Down			Cut Down		
79+57.64	-57.2453	5	Cut Down			Cut Down		
79+68.09	-53.4823	5	Lilac	G	G	Outside of project limits		
79+72.89	-59.7052	5	Lilac	G	G	Outside of project limits		
79+76.83	-52.502	6	Lilac	G	G	Outside of project limits		
79+84.00	-56.2178	4	Cut Down			Cut Down		
79+88.69	-54.4314	7	Cut Down			Cut Down		
80+08.77	-50.1463	11	Pine	E	E	Outside of project limits		
80+18.71	-50.355	9	Pine	E	E	Outside of project limits		
80+43.48	-53.9926	9	Ash	E	G	Outside of project limits		
80+60.78	-50.5925	10	Pine	E	E	Outside of project limits		
80+78.70	-58.5161	7	Ash	E	E	Outside of project limits		
81+31.55	-58.5194	9	Ash	E	E	Outside of project limits		
84+99.99	-57.9794	10	Honey Locust	E	E	Outside of project limits		

\* KEY: MS = Multistemmed, HT = Height, SPR = Spread, DM = Decimeters

\*\* Rate Health (H) and Structure (S): E = Excellent, G = Good, F = Fair, P = Poor

\*\*\* If Recommended Action is blank, avoid removal unless necessary;

Dead trees should be evaluated for immediate removal

\*\*\*\* Estimated impacts based on proposed Phase I plans

**EXHIBIT D**

**TREE SURVEY (RIGHT OFFSETS)**



TREE SURVEY - RIGHT OFFSETS

STATION	OFFSET FEET	SIZE' INCH.	TYPE	H **	S **	COMMENTS	RECOMMENDED ACTION**	IMPACT****
36+06.33	33.6328	16	Siberian Elm	P	P	Outside of project limits		
36+53.79	34.5193	11	Siberian Elm	F	F	Outside of project limits		
38+93.09	41.3331	18	Honey Locust	F	F	Outside of project limits		
39+11.22	44.2992	6	Hawthorn	F	F	5x4"; Outside of project limits		
40+16.54	44.7299	24	Honey Locust	G	E	Outside of project limits		
42+13.38	55.7929	6	Honey Locust	E	E	Outside of project limits		
42+44.33	54.7151	7	Honey Locust	E	E	Outside of project limits		
42+58.01	50.7108	5	Honey Locust	E	E	Outside of project limits		
44+16.19	54.5738	5	Honey Locust	E	E	Outside of project limits		
44+35.22	54.8225	6	Honey Locust	E	E	Outside of project limits		
44+86.35	59.2968	3	Honey Locust	G	G	Outside of project limits		
45+04.87	51.1024	5	Honey Locust	E	G	Outside of project limits		
45+23.59	60.0832	5	Honey Locust	E	G	Outside of project limits		
45+53.72	59.8014	5	Honey Locust	E	E	Outside of project limits		
46+27.33	59.76	4	Honey Locust	E	E	Outside of project limits		
46+53.69	56.4035	6	Blue Spruce	E	E	Outside of project limits		
46+64.51	53.01	5	Blue Spruce	E	E	Outside of project limits		
46+77.88	60.2913	5	Honey Locust	E	E	Outside of project limits		
46+92.30	54.6707	5	Blue Spruce	E	E	Outside of project limits		
47+08.57	56.7133	7	Blue Spruce	E	E	Outside of project limits		
47+25.25	60.819	6	Honey Locust	G	E	Outside of project limits		
47+41.35	52.4666	5	Honey Locust	E	E	Outside of project limits		
48+75.26	57.1598	6	Red Maple	E	G	Outside of project limits		
49+07.68	47.8502	5	Linden	E	E	Outside of project limits		
50+09.29	42.6824	5	Linden	E	E	Outside of project limits		
50+55.29	54.7873	6	Linden	E	E	Outside of project limits		
50+91.53	101.1774	5	Green Ash	E	E	Outside of project limits		
51+06.07	118.2946	5	Cut Down			Cut Down		
55+95.68	48.8309	9	Cut Down			Cut Down		
55+68.32	47.2774	4	Red Maple	G	E	To be Added to Plans		Within Proposed ROW
56+05.49	47.4635	4	Red Maple	G	E	To be Added to Plans		Within Proposed ROW
56+36.99	47.6213	4	Red Maple	G	E	To be Added to Plans		Within Proposed ROW
56+68.49	47.7791	4	Red Maple	G	E	To be Added to Plans		Within Proposed ROW
56+99.99	47.9369	4	Red Maple	G	E	To be Added to Plans		Within Proposed ROW
57+31.49	48.0947	4	Red Maple	G	E	To be Added to Plans		Within Proposed ROW
57+62.99	48.2525	4	Red Maple	G	E	To be Added to Plans		Within Proposed ROW
57+94.49	48.4103	4	Red Maple	G	E	To be Added to Plans		Within Proposed ROW
58+25.99	48.568	4	Red Maple	G	E	To be Added to Plans		Within Proposed ROW
58+57.48	48.7258	4	Red Maple	G	E	To be Added to Plans		Within Proposed ROW
58+88.98	48.8836	4	Red Maple	G	E	To be Added to Plans		Within Proposed ROW
59+20.48	49.0414	4	Red Maple	G	E	To be Added to Plans		Within Proposed ROW
59+46.68	47.9878	4	Red Maple	G	E	To be Added to Plans		Within Proposed ROW
56+07.25	49.4858	5	Cut Down			Cut Down		
56+20.20	65.5579	7	Cut Down			Cut Down		
56+37.15	57.7697	7	Cut Down			Cut Down		
67+02.50	50.2285	10	Dead	Dead	Dead	Dead		
67+04.81	50.7756	16	Dead	Dead	Dead	Dead		
67+09.44	56.6677	11	Cottonwood	F	F	Outside of project limits		
69+01.11	41.1437	10	Mulberry	F	G			Within Proposed Improvements
72+75.39	36.7268	34	Silver Maple	G	P			Within Proposed Improvements
77+46.84	43.4535	7	Black Cherry	F	P			Within Proposed Improvements
77+91.59	43.1331	8	Box Elder Maple	G	P			Within Proposed Improvements
77+93.50	44.8223	8	Box Elder Maple	G	P			Within Proposed Improvements
77+94.51	44.3267	8	Box Elder Maple	G	P			Within Proposed Improvements
77+96.52	44.3706	8	Box Elder Maple	G	P			Within Proposed Improvements
79+53.50	37.2403	10	Shag Bark Hickory	G	F			Within Proposed Improvements
79+77.31	42.1061	7	Shag Bark Hickory	G	F			Within Proposed Improvements
79+83.44	41.7749	7	Shag Bark Hickory	G	F			Within Proposed Improvements
79+85.77	36.9241	7	Shag Bark Hickory	G	F			Within Proposed Improvements
79+87.39	41.7751	8	Shag Bark Hickory	G	F			Within Proposed Improvements
79+90.55	36.1712	4	Cut Down			Cut Down		
80+21.58	40.1331	9	Shag Bark Hickory	G	F	Outside of project limits		

\* KEY: MS = Multistemmed, HT = Height, SPR = Spread, DM = Decimeters  
 \*\* Rate Health (H) and Structure (S): E = Excellent, G = Good, F = Fair, P = Poor  
 \*\*\* If Recommended Action is blank, avoid removal unless necessary;  
 Dead trees should be evaluated for immediate removal  
 \*\*\*\*Estimated impacts based on proposed Phase I plans

**EXHIBIT E**

**TREES TO BE ADDED TO CONTRACT PLANS**



**TREES TO BE ADDED TO PLANS**

**PROJECT:** P-91-401-13

**ROUTE:** FAP 541 (IL 132)

**LEFT OFFSETS**

STATION	OFFSET FEET	SIZE INCH.	TYPE (DECIDUOUS OR EVERGREEN)
N/A			

**RIGHT OFFSETS**

STATION	OFFSET FEET	SIZE INCH.	TYPE (DECIDUOUS OR EVERGREEN)
55+68.32	47.2774	4	Red Maple
56+05.49	47.4635	4	Red Maple
56+36.99	47.6213	4	Red Maple
56+68.49	47.7791	4	Red Maple
56+99.99	47.9369	4	Red Maple
57+31.49	48.0947	4	Red Maple
57+62.99	48.2525	4	Red Maple
57+94.49	48.4103	4	Red Maple
58+25.99	48.568	4	Red Maple
58+57.48	48.7258	4	Red Maple
58+88.98	48.8836	4	Red Maple
59+20.48	49.0414	4	Red Maple
59+46.68	47.9878	4	Red Maple

# **ATTACHMENT A-7**

Public Review and Comment Documentation



IDOT is seeking public comments on Section 4(f) impacts the IL 132 from Deep Lake Road to Munn Road project will have on the Duck Farm Forest Preserve owned and operated by the Lake County Forest Preserve District. The proposed improvement consists of roadway widening and resurfacing to provide a median to separate the opposing travel lanes, dry land bridge replacement, accommodations for pedestrians and bicyclists, and drainage improvements. Section 4(f) lands include publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites. The project will impact the Duck Farm Forest Preserve along the south side of IL 132 to replace a box culvert and construct new sidewalk. This is the first opportunity for the public to comment on the additional public land needed for this project. The Section 4(f) de minimis documentation is available for viewing at the following locations during normal business hours.

**DATE:** May 8, 2015 to May 22, 2015  
**TIME:** 9:00 AM to 3:00 PM, Monday thru Friday  
**PLACE:** Illinois Department of Transportation  
Bureau of Programming – 4<sup>th</sup> Floor  
201 West Center Court  
Schaumburg, IL 60196  
  
OR  
Lake County Forest Preserve District  
1899 West Winchester Road,  
Libertyville, IL 60048

Electronic copies are available at <http://www.idot.illinois.gov/transportation-system/environment/index>. Written comments can be submitted at the IDOT office, mailed to the IDOT office, or submitted electronically at <http://www.idot.illinois.gov/transportation-system/environment/index>. Comments must be received by May 22, 2015 to be considered part of the public record.

*This documentation will be accessible to people with disabilities. Anyone needing special assistance should contact Ken Yang at (847)705-4084. Persons planning to visit either site or view the documents who will need a sign language interpreter or other similar accommodations should notify the Department's TTY/TTD number (800) 526-0844/or 711; TTY users (Spanish) (800) 501-0864/or 711; and Telebraille (877) 526-6670 at least five (5) days prior to the visit.*

All correspondence regarding this project should be sent to:

**Illinois Department of Transportation**  
201 West Center Court  
Schaumburg, IL 60196-1096  
Bureau of Programming  
Attn: Ken Yang

Advertise in the **Daily Herald 21 and 7** days prior to the end of the comment period.