

# PUBLIC NOTICE

US Army Corps  
of Engineers  
New York District  
Jacob K. Javits Federal Building  
New York, N.Y. 10278-0090  
ATTN: Regulatory Branch

**In replying refer to:**

Public Notice Number: NAN-2014-01046-WOR  
Issue Date: August 10, 2015  
Expiration Date: September 9, 2015

To Whom It May Concern:

The New York District, Corps of Engineers has received an application for a Department of the Army permit pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344).

APPLICANT: Orange County  
2455-2459 Route 17M  
P.O. Box 509  
Goshen, New York 10924

ACTIVITY: Discharge of fill material into approximately 4.212 acres of waters of the United States, including wetlands, in association with the realignment of Runway 3-21 at the Orange County Airport.

WATERWAY: Walkkill River (Hudson River Watershed)

LOCATION: Town of Montgomery, Orange County, New York.

A detailed description and plans of the applicant's activity are enclosed to assist in your review.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

**CENAN-OP-RW  
PUBLIC NOTICE NO. NAN-2014-01046-WOR**

ALL COMMENTS REGARDING THE PERMIT APPLICATION MUST BE PREPARED IN WRITING AND MAILED TO REACH THIS OFFICE BEFORE THE EXPIRATION DATE OF THIS NOTICE, otherwise, it will be presumed that there are no objections to the activity. Comments provided will become a part of the public record for this action.

Any person may request, in writing, before this public notice expires, that a public hearing be held to collect information necessary to consider this application. Requests for public hearings shall state, with particularity, the reasons why a public hearing should be held. It should be noted that information submitted by mail is considered just as carefully in the permit decision process and bears the same weight as that furnished at a public hearing.

Our preliminary determination is that the activity for which authorization is sought herein is not likely to affect any Federally endangered or threatened species or their critical habitat. However, pursuant to Section 7 of the Endangered Species Act (16 U.S.C. 1531), the District Engineer is consulting with the appropriate Federal agency to determine the presence of and potential impacts to listed species in the project area or their critical habitat.

In a letter dated February 27, 2015, the New York State Office of Parks Recreation and Historic Preservation (NYSOPRHP) stated that the project would have No Impact on cultural resources listed or eligible for listing on the National Register of Historic Places. Presently unknown archeological, scientific, prehistorical, or historical data may be lost by work accomplished under the required permit.

Reviews of activities pursuant to Section 404 of the Clean Water Act will include application of the guidelines promulgated by the Administrator, U.S. Environmental Protection Agency, under authority of Section 404 (b) of the Clean Water Act and the applicant will obtain a water quality certificate or waiver from the appropriate state agency in accordance with Section 401 of the Clean Water Act prior to a permit decision.

It is requested that you communicate the foregoing information concerning the activity to any persons known by you to be interested and who did not receive a copy of this notice. If you have any questions concerning this application, you may contact this office at (917) 790-8413 and ask for Brian A. Orzel.

In order for us to better serve you, please complete our Customer Service Survey located at <http://www.nan.usace.army.mil/Missions/Regulatory/CustomerSurvey.aspx>.

For more information on New York District Corps of Engineers programs, visit our website at <http://www.nan.usace.army.mil>.

*for*   
Jodi M. McDonald  
Chief, Regulatory Branch

Enclosures

**WORK DESCRIPTION**

The applicant, Orange County, has requested Department of the Army authorization for the discharge of fill material into waters of the United States, including wetlands, in association with the realignment of Runway 3-21 at the Orange County Airport. The project site is located in the Town of Montgomery, Orange County, New York.

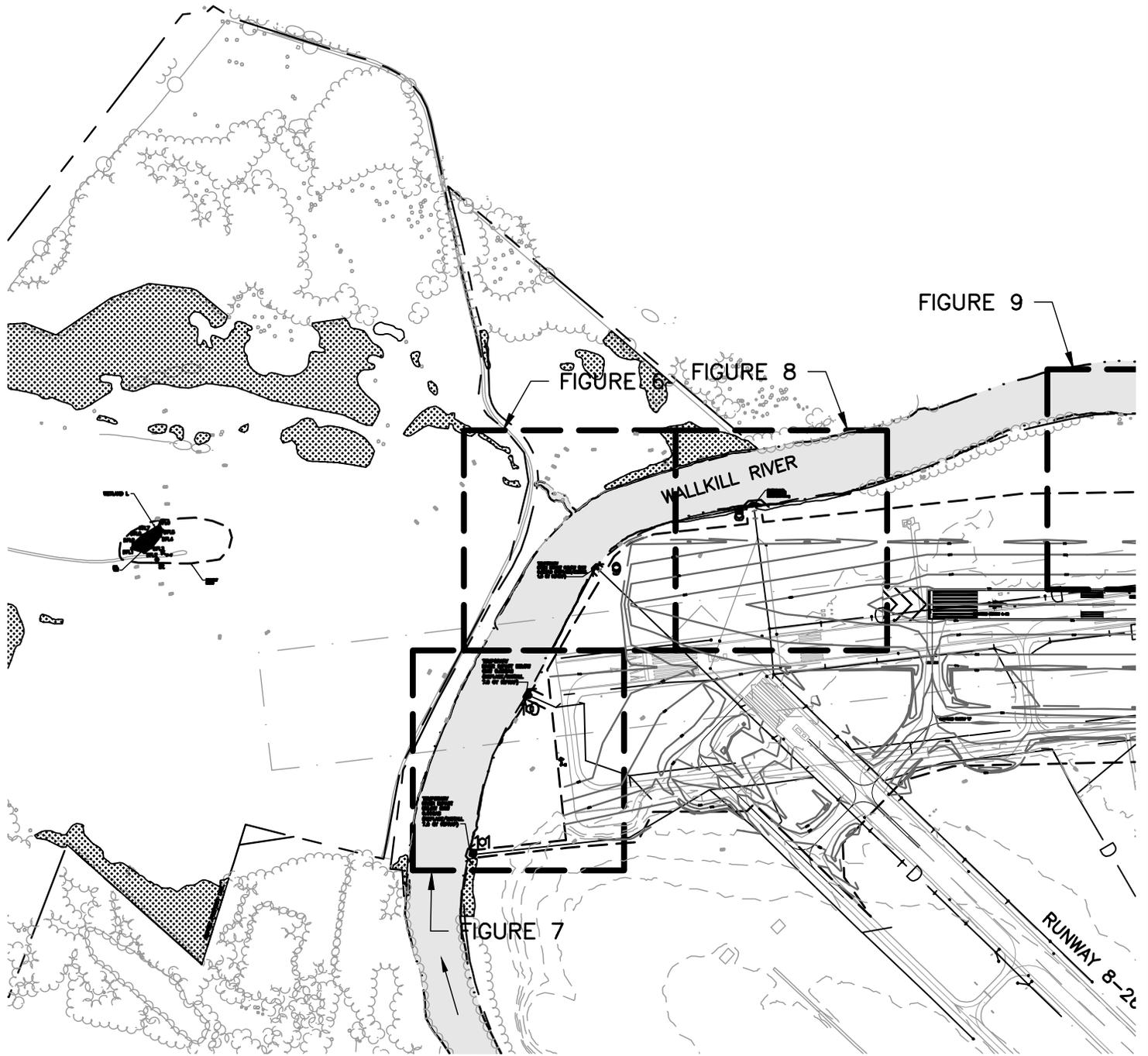
This project would result in the permanent filling of a total of approximately 4.212 acres of waters of the United States, including approximately 2.252 acres of emergent jurisdictional wetlands and approximately 1.96 acres of jurisdictional ponds.

In addition, a total of approximately 9.81 acres of forested, jurisdictional wetlands would be cleared of trees, cut above the soil surface, with no disturbance to soils, in order to remove flight path obstructions for the new runway alignment.

The applicant proposes a mitigation plan which includes the establishment of approximately 4.277 acres of wetlands and the enhancement of approximately 2.275 acres of scrub shrub wetlands that are currently dominated by invasive plant species. Approximately 0.858 acres of existing wetlands would be temporarily impacted during mitigation activities.

The stated purpose of the project is to realign Runway 3-21 in order to comply with safety standards required by the Federal Aviation Administration.

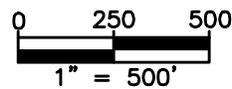




**LEGEND**

- PROJECT LIMITS
- \_\_\_\_\_ AIRPORT PROPERTY LINE
- ORDINARY HIGH WATER
- 350 PROPOSED CONTOUR
- 375 EXISTING CONTOURS
- ▨ TREE OBSTRUCTION REMOVAL AREAS

DATUM: NAD83 NEW YORK STATE PLANE



 <b>LOUIS BERGER</b> 20 CORPORATE WOODS BOULEVARD ALBANY, NEW YORK 12211-2370	
DESIGNED BY: T/JL	<small>IT IS A VIOLATION OF EDUCATION LAW ARTICLE 145 SECTION 7209 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY.</small>
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REVIEWED BY: DF/CH	
DATE: JUNE 2015	

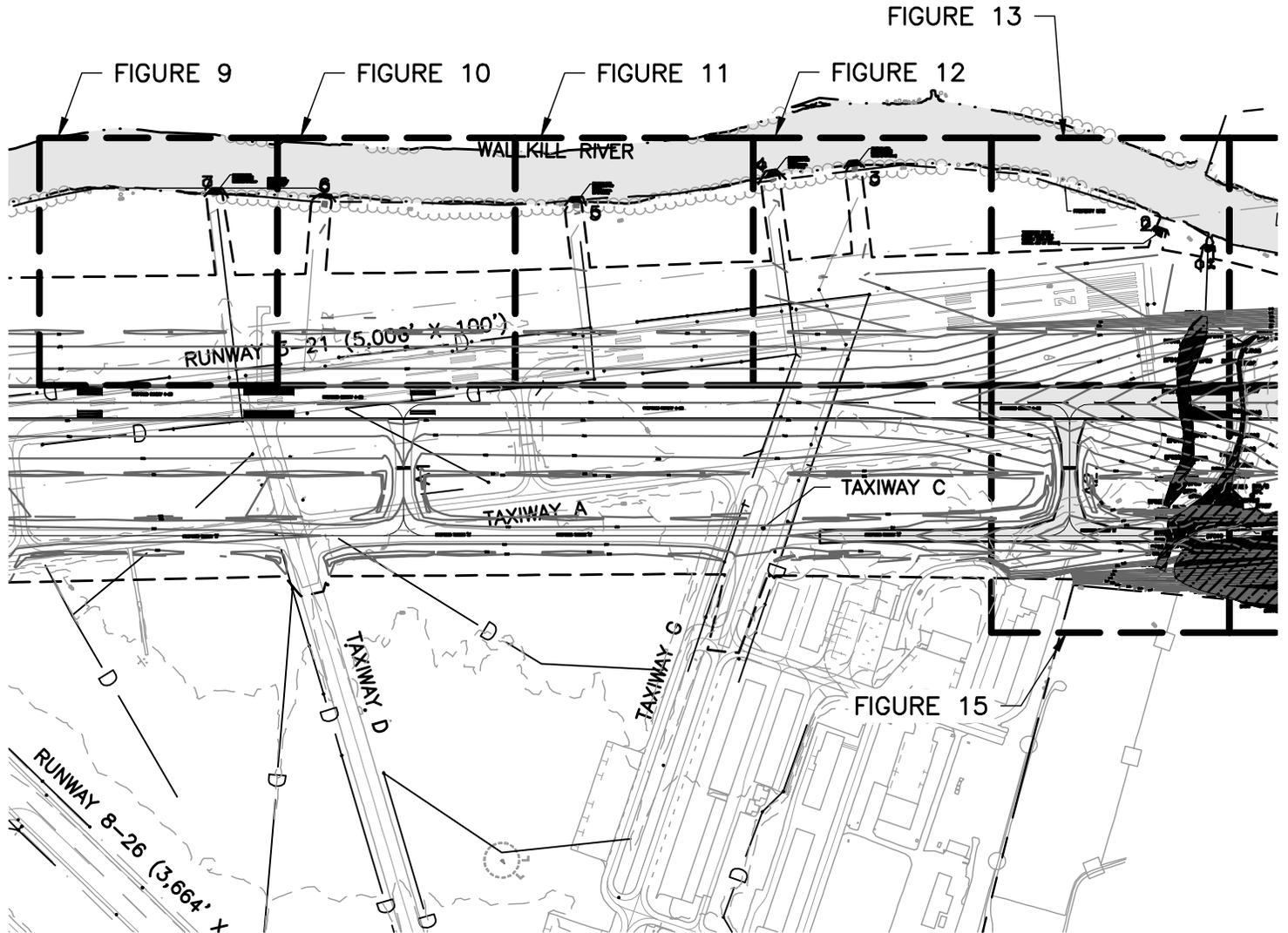
SHEET TITLE
<b>GENERAL WETLAND          IMPACT KEY PLAN          (SHEET 1 OF 3)</b>

PROJECT
<b>ORANGE COUNTY AIRPORT          RUNWAY 3-21 RSA          IMPROVEMENTS / OBSTRUCTION REMOVAL          TOWN OF MONTGOMERY          COUNTY OF ORANGE          STATE OF NEW YORK</b>

APPLICANT
<b>ORANGE          COUNTY, NY</b>

DRAWING NO.
<b>FIGURE 2</b>
SHEET 2 OF 34

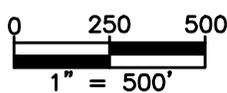
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**LEGEND**

- PROJECT LIMITS
- AIRPORT PROPERTY LINE
- ORDINARY HIGH WATER
- 350 — PROPOSED CONTOUR
- 375 — EXISTING CONTOURS
- TREE OBSTRUCTION REMOVAL AREAS

DATUM: NAD83 NEW YORK STATE PLANE



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SHEET TITLE

**GENERAL WETLAND  
IMPACT KEY PLAN  
(SHEET 2 OF 3)**

PROJECT

ORANGE COUNTY AIRPORT  
RUNWAY 3-21 RSA  
IMPROVEMENTS / OBSTRUCTION REMOVAL  
TOWN OF MONTGOMERY  
COUNTY OF ORANGE  
STATE OF NEW YORK

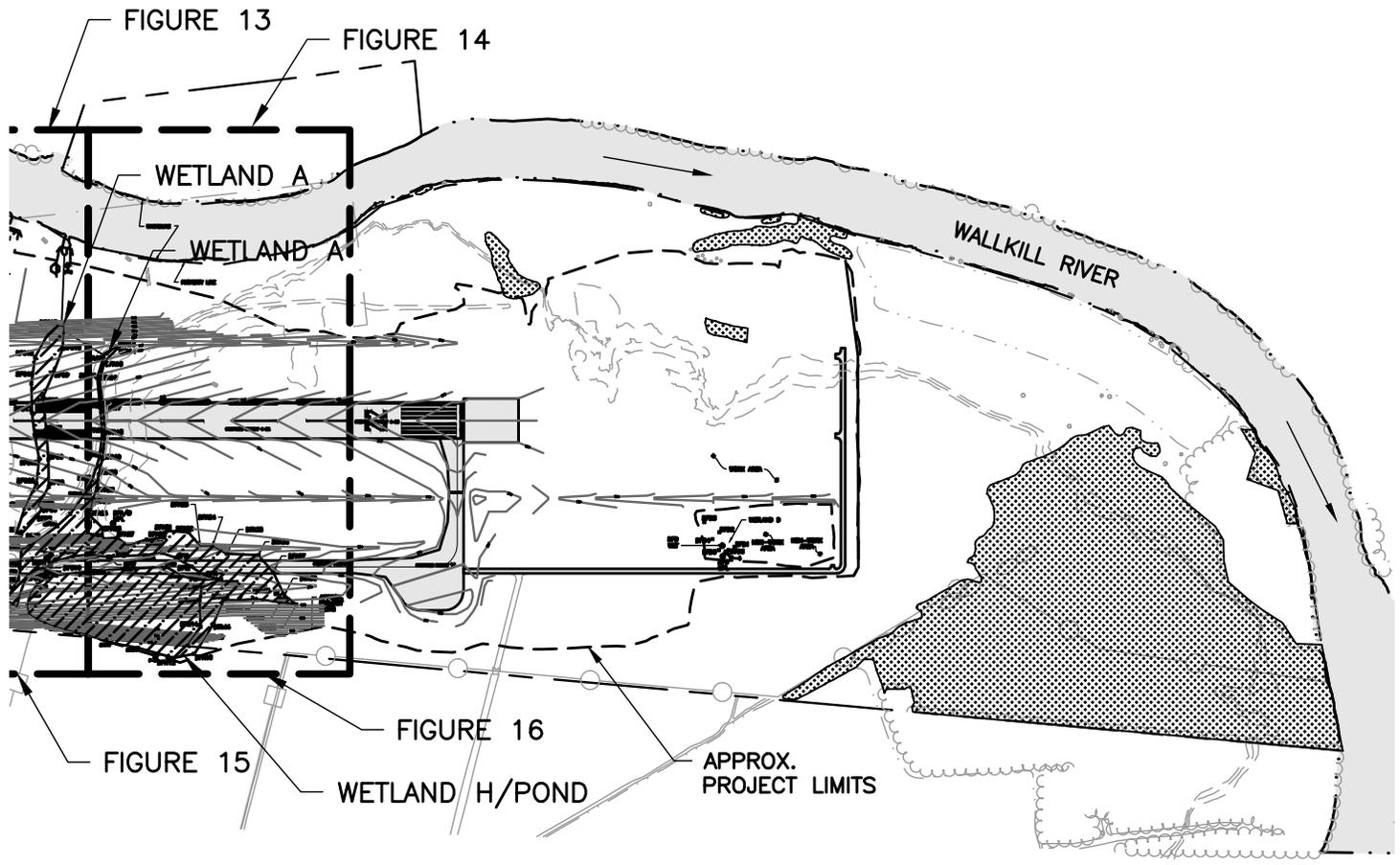
APPLICANT

ORANGE  
COUNTY, NY

DRAWING NO.

FIGURE 3

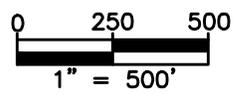
SHEET 3 OF 34



DATUM: NAD83 NEW YORK STATE PLANE

**LEGEND**

- PROJECT LIMITS
- AIRPORT PROPERTY LINE
- ORDINARY HIGH WATER
- 350— PROPOSED CONTOUR
- 375— EXISTING CONTOURS
- [Hatched Box] TREE OBSTRUCTION REMOVAL AREAS



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**GENERAL WETLAND  
IMPACT KEY PLAN  
(SHEET 3 OF 3)**

PROJECT

ORANGE COUNTY AIRPORT  
RUNWAY 3-21 RSA  
IMPROVEMENTS / OBSTRUCTION REMOVAL  
TOWN OF MONTGOMERY  
COUNTY OF ORANGE  
STATE OF NEW YORK

APPLICANT

ORANGE  
COUNTY, NY

DRAWING NO.

FIGURE 4

SHEET 4 OF 34

**Wetland Impacts and Mitigation Summary Table**

Figure Number	Wetland Area	Permanent Fills (Acres)	Type	Temporary Impacts (Acres)	Type	Mitigation (Acres)	Type
6	Wallkill River			0.002	RIV		
7	Wallkill River			0.016	RIV		
8	Wallkill River			0.006	RIV		
9	Wallkill River			0.008	RIV		
10	Wallkill River			0.006	RIV		
11	Wallkill River			0.007	RIV		
12	Wallkill River			0.013	RIV		
13	Wallkill River, Wetland A	0.238	WET	0.012	RIV		
14	Wetland A	0.03	WET				
15	Wetland H (Pond)	0.5	OW				
15	Wetland A	0.754	WET				
16	Wetland H (Pond)	1.46	OW				
16	Wetland A	1.23	WET				
20						0.013	WET
21						0.097	WET
24				0.483	WCT	1.341	WET
25				0.368	WCT	0.607	WET
26						0.042	WET
27						1.400	WET
28						0.777	WET
<b>TOTALS</b>		<b>2.252</b>	<b>WET</b>	<b>0.07</b>	<b>RIV</b>	<b>4.277</b>	<b>WET</b>
		<b>1.96</b>	<b>OW</b>	<b>0.851</b>	<b>WCT</b>		

**KEY**

WET	EMERGENT WETLAND, MOWED GRASS
OW	OPEN WATER POND
RIV	RIVER
WCT	WETLAND CONSTRUCTION TEMPORARY IMPACT*

\* WCT impacts from minor regrading required to blend existing grades with created wetland grades.

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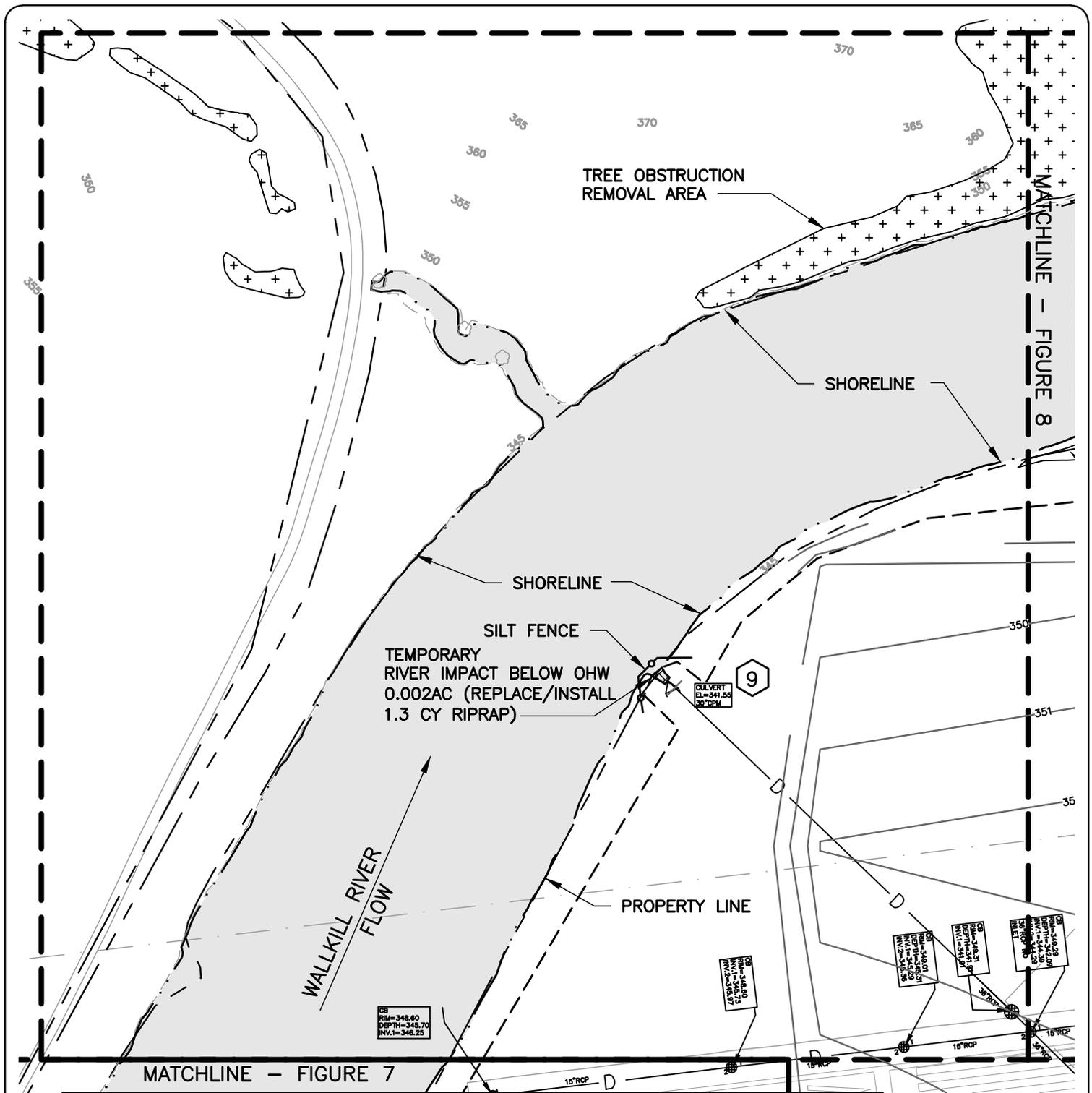
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SHEET TITLE  <b>WETLAND IMPACTS AND MITIGATION SUMMARY TABLE</b>
--

PROJECT  ORANGE COUNTY AIRPORT RUNWAY 3-21 RSA IMPROVEMENTS / OBSTRUCTION REMOVAL TOWN OF MONTGOMERY COUNTY OF ORANGE STATE OF NEW YORK
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APPLICANT  ORANGE COUNTY, NY
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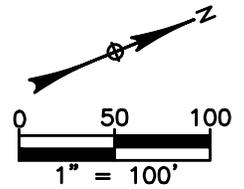
DRAWING NO.  <b>FIGURE 5</b>
SHEET 5 OF 34



MATCHLINE - FIGURE 8

MATCHLINE - FIGURE 7

LEGEND	
-----	PROJECT LIMITS
-----	AIRPORT PROPERTY LINE
-----	ORDINARY HIGH WATER (OHW)
○	UPLAND/WETLAND DATA POINTS
— 350 —	PROPOSED CONTOUR
— 375 —	EXISTING CONTOURS
↑ P-#	PHOTO LOCATION
▨	JURISDICTIONAL WETLAND/RIVER TEMPORARY IMPACT
▩	JURISDICTIONAL WETLAND/RIVER PERMANENT IMPACT



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DATE: JUNE 2015	

SHEET TITLE

**GENERAL WETLAND IMPACT PLAN (SHEET 1 OF 11)**

PROJECT

ORANGE COUNTY AIRPORT RUNWAY 3-21 RSA IMPROVEMENTS / OBSTRUCTION REMOVAL  
 TOWN OF MONTGOMERY  
 COUNTY OF ORANGE  
 STATE OF NEW YORK

APPLICANT

ORANGE COUNTY, NY

DRAWING NO.

FIGURE 6

SHEET 6 OF 34

MATCHLINE - FIGURE 6

INV.1=348.25

TEMPORARY RIVER IMPACT BELOW OHW 0.008AC (REPLACE/INSTALL 7.0 CY RIPRAP)

CULVERT EL=341.18 24" METAL

SILT FENCE

10

WALKKILL RIVER FLOW

SHORELINE

PROPERTY LINE

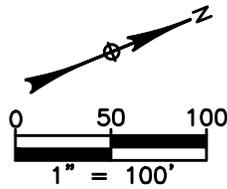
TEMPORARY RIVER IMPACT BELOW OHW 0.008AC (REPLACE/INSTALL 7.0 CY RIPRAP)

SILT FENCE

11

TREE OBSTRUCTION REMOVAL AREA

LEGEND	
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-----	AIRPORT PROPERTY LINE
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○	UPLAND/WETLAND DATA POINTS
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SHEET TITLE

**GENERAL WETLAND IMPACT PLAN**  
(SHEET 2 OF 11)

PROJECT

ORANGE COUNTY AIRPORT  
 RUNWAY 3-21 RSA  
 IMPROVEMENTS / OBSTRUCTION REMOVAL  
 TOWN OF MONTGOMERY  
 COUNTY OF ORANGE  
 STATE OF NEW YORK

APPLICANT

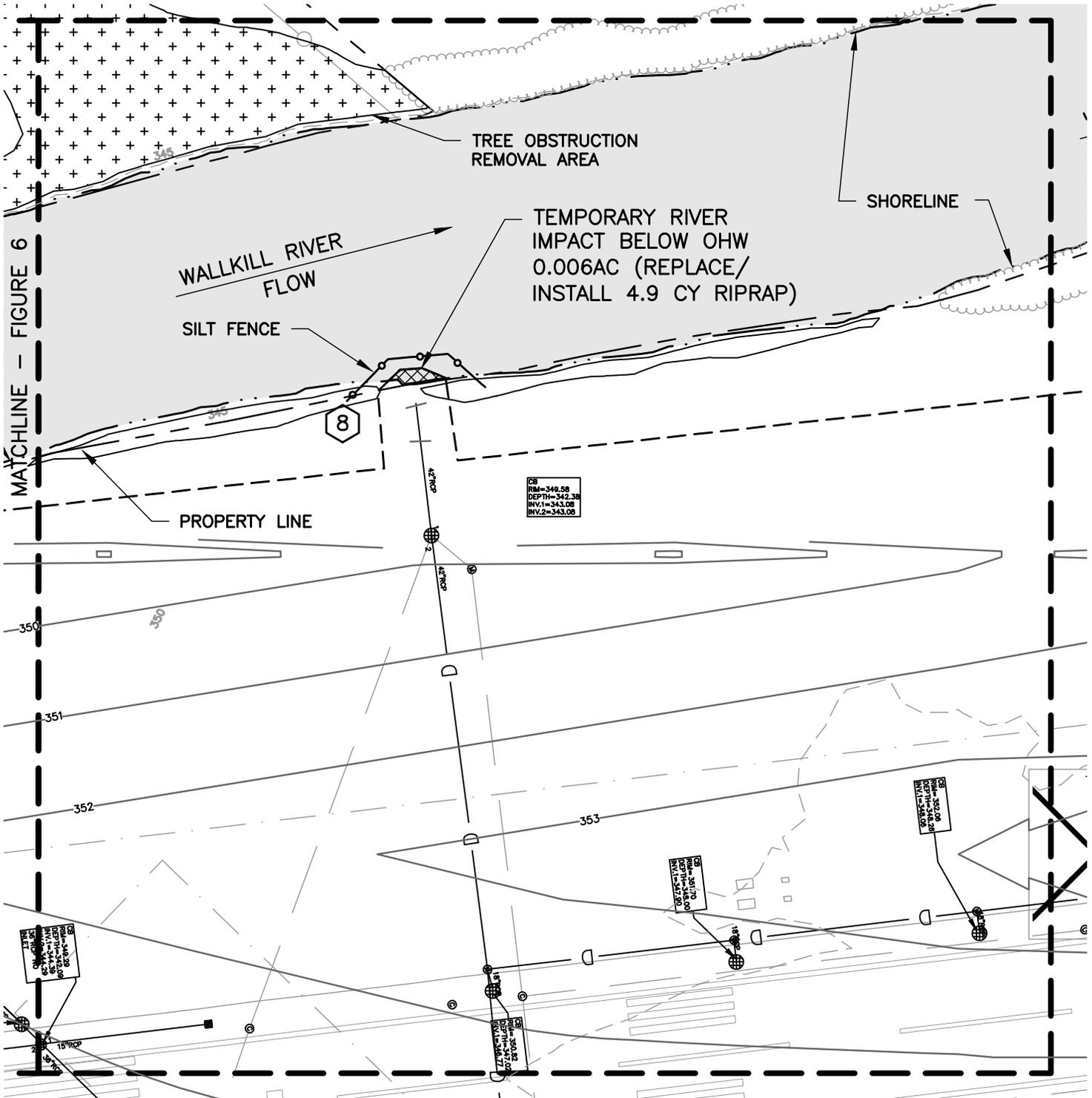
ORANGE COUNTY, NY

DRAWING NO.

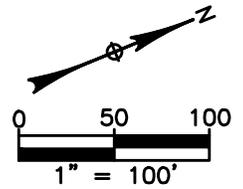
FIGURE 7

SHEET 7 OF 34

MATCHLINE - FIGURE 6



LEGEND	
-----	PROJECT LIMITS
-----	AIRPORT PROPERTY LINE
-----	ORDINARY HIGH WATER (OHW)
○	UPLAND/WETLAND DATA POINTS
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↑ P-#	PHOTO LOCATION
[Cross-hatched box]	JURISDICTIONAL WETLAND/RIVER TEMPORARY IMPACT
[Diagonal hatched box]	JURISDICTIONAL WETLAND/RIVER PERMANENT IMPACT



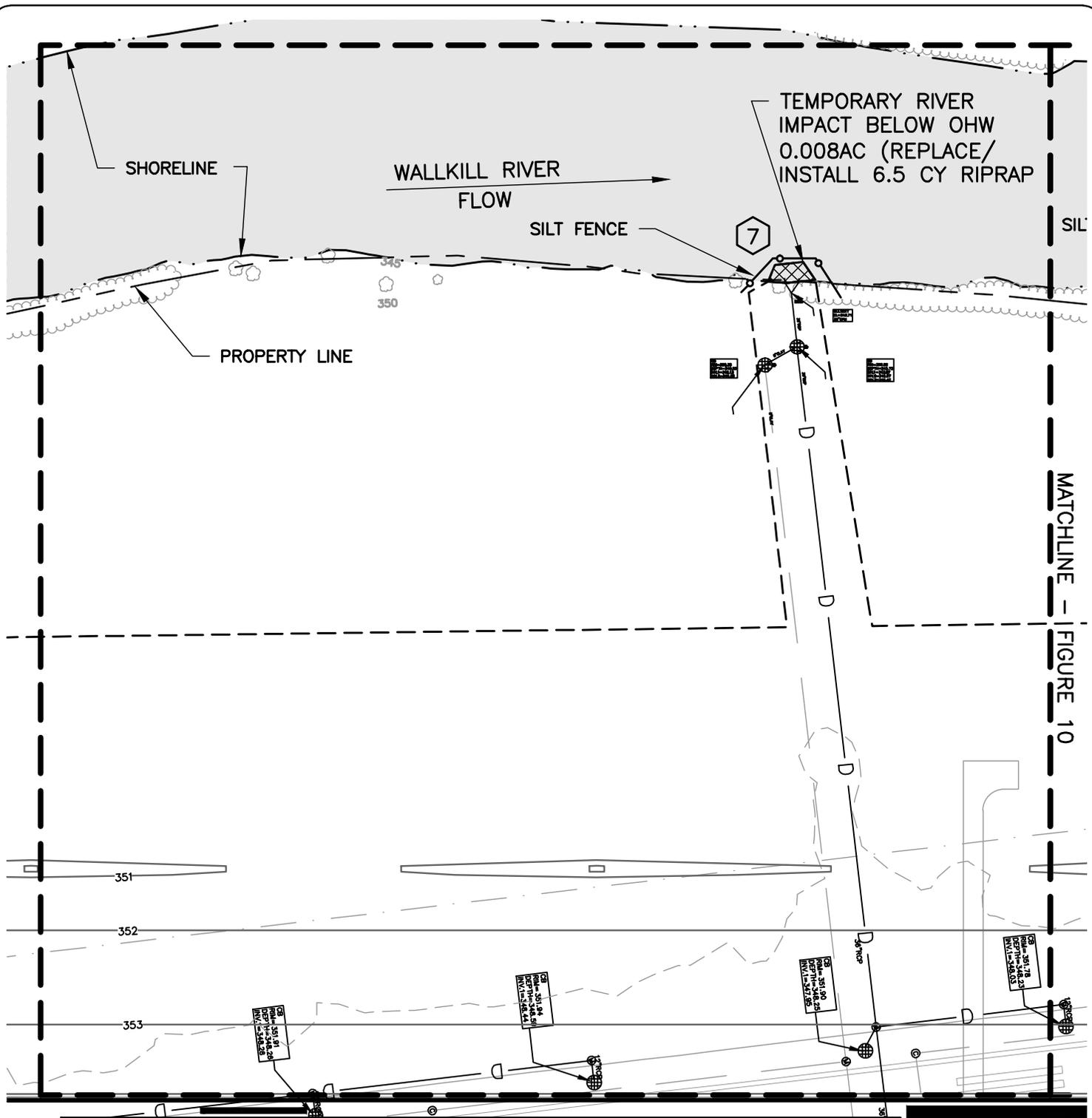
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SHEET TITLE
GENERAL WETLAND IMPACT PLAN (SHEET 3 OF 11)

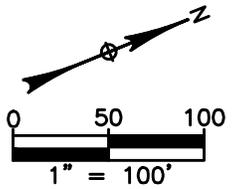
PROJECT
ORANGE COUNTY AIRPORT RUNWAY 3-21 RSA IMPROVEMENTS / OBSTRUCTION REMOVAL TOWN OF MONTGOMERY COUNTY OF ORANGE STATE OF NEW YORK

APPLICANT
ORANGE COUNTY, NY

DRAWING NO.
FIGURE 8
SHEET 8 OF 34



LEGEND	
-----	PROJECT LIMITS
-----	AIRPORT PROPERTY LINE
-----	ORDINARY HIGH WATER (OHW)
○	UPLAND/WETLAND DATA POINTS
— 350 —	PROPOSED CONTOUR
— 375 —	EXISTING CONTOURS
↑ P-#	PHOTO LOCATION
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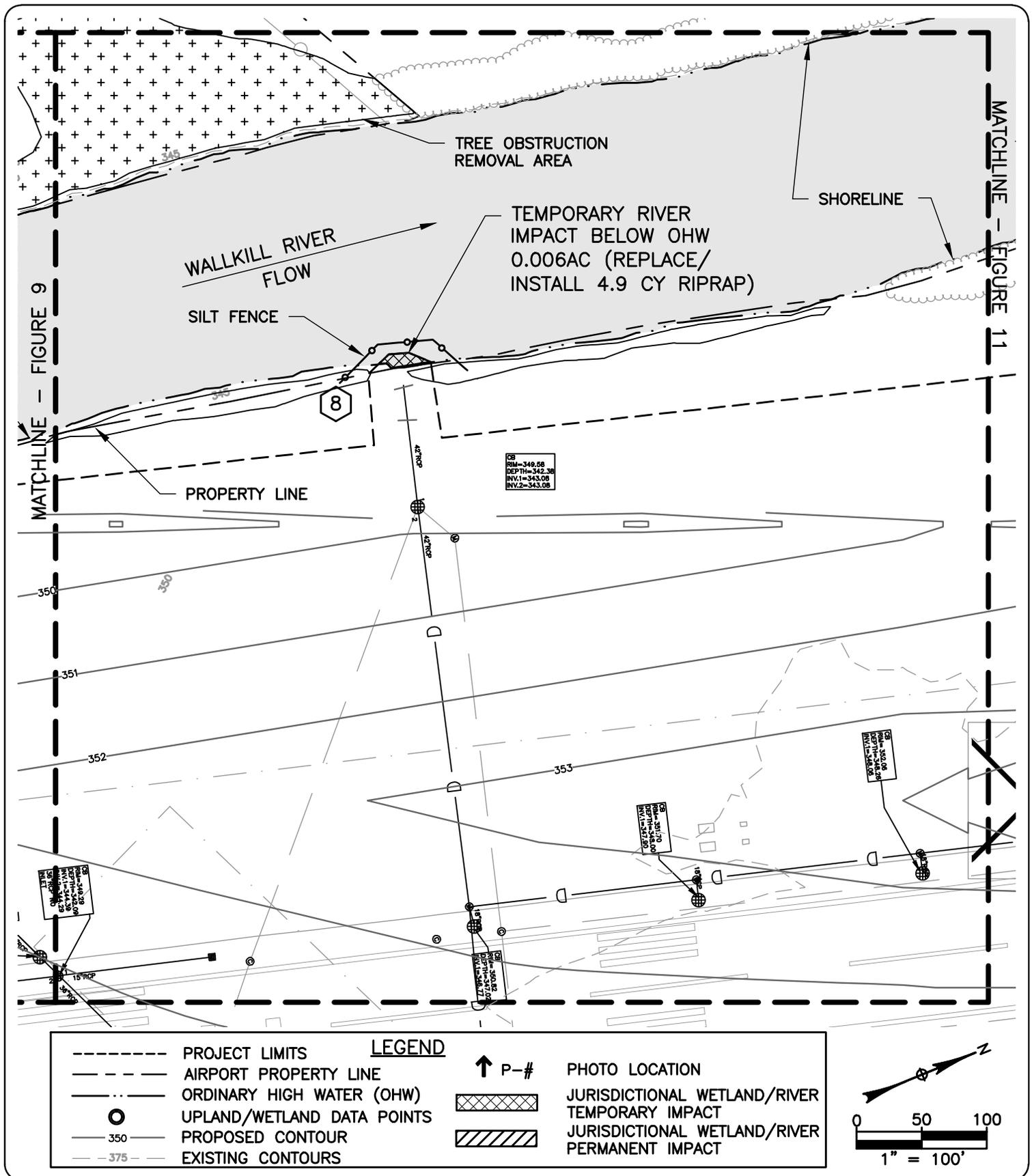
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SHEET TITLE
<b>GENERAL WETLAND          IMPACT PLAN          (SHEET 4 OF 11)</b>

PROJECT
<b>ORANGE COUNTY AIRPORT          RUNWAY 3-21 RSA          IMPROVEMENTS / OBSTRUCTION REMOVAL          TOWN OF MONTGOMERY          COUNTY OF ORANGE          STATE OF NEW YORK</b>

APPLICANT
<b>ORANGE          COUNTY, NY</b>

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<b>FIGURE 9</b>
SHEET 9 OF 34



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**GENERAL WETLAND IMPACT PLAN (SHEET 5 OF 11)**

PROJECT

ORANGE COUNTY AIRPORT RUNWAY 3-21 RSA IMPROVEMENTS / OBSTRUCTION REMOVAL TOWN OF MONTGOMERY COUNTY OF ORANGE STATE OF NEW YORK

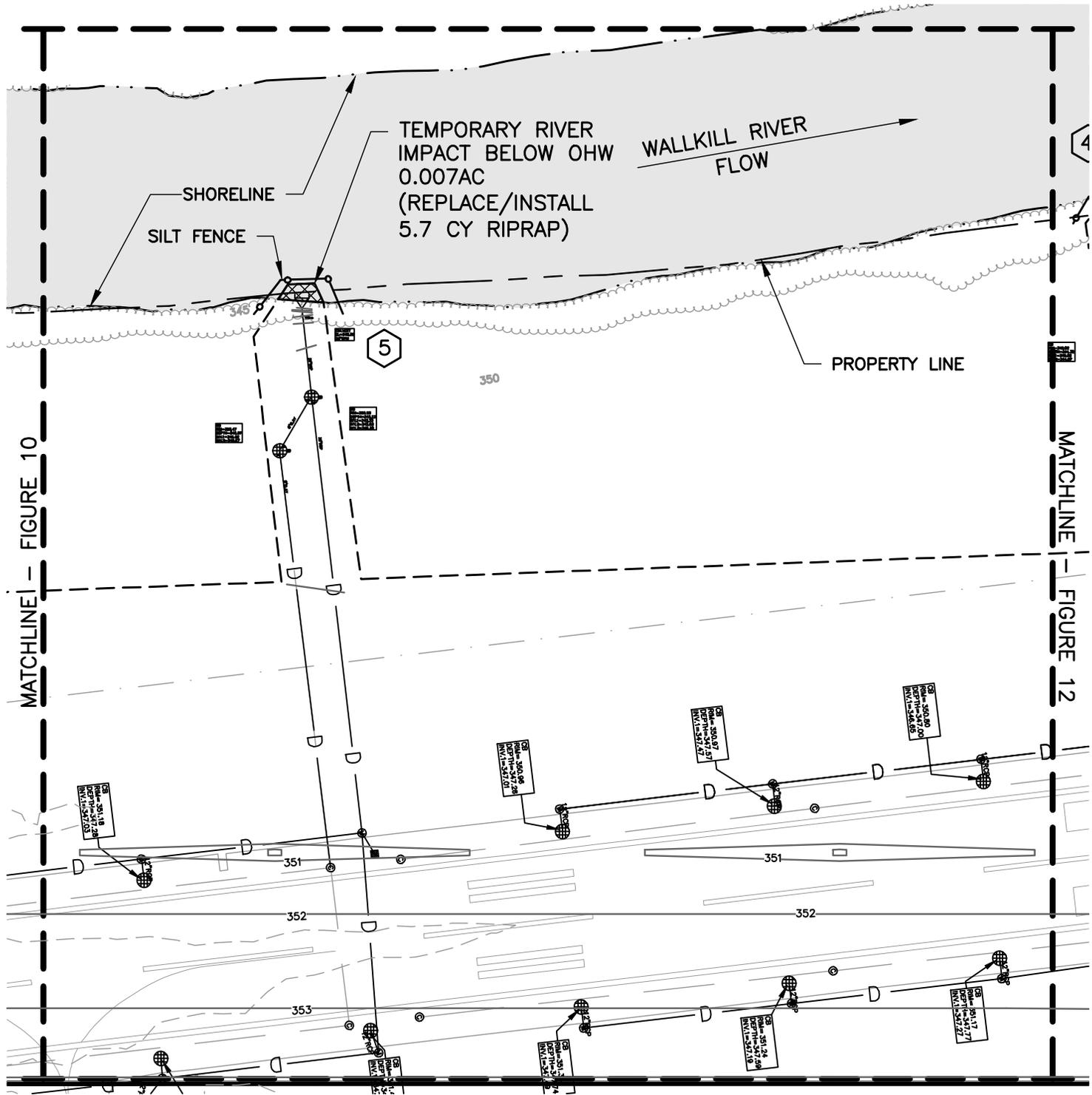
APPLICANT

ORANGE COUNTY, NY

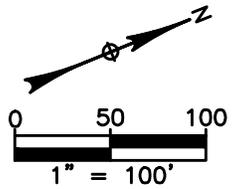
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FIGURE 10

SHEET 10 OF 34



LEGEND	
-----	PROJECT LIMITS
-----	AIRPORT PROPERTY LINE
-----	ORDINARY HIGH WATER (OHW)
○	UPLAND/WETLAND DATA POINTS
— 350 —	PROPOSED CONTOUR
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SHEET TITLE  <b>GENERAL WETLAND          IMPACT PLAN          (SHEET 6 OF 11)</b>
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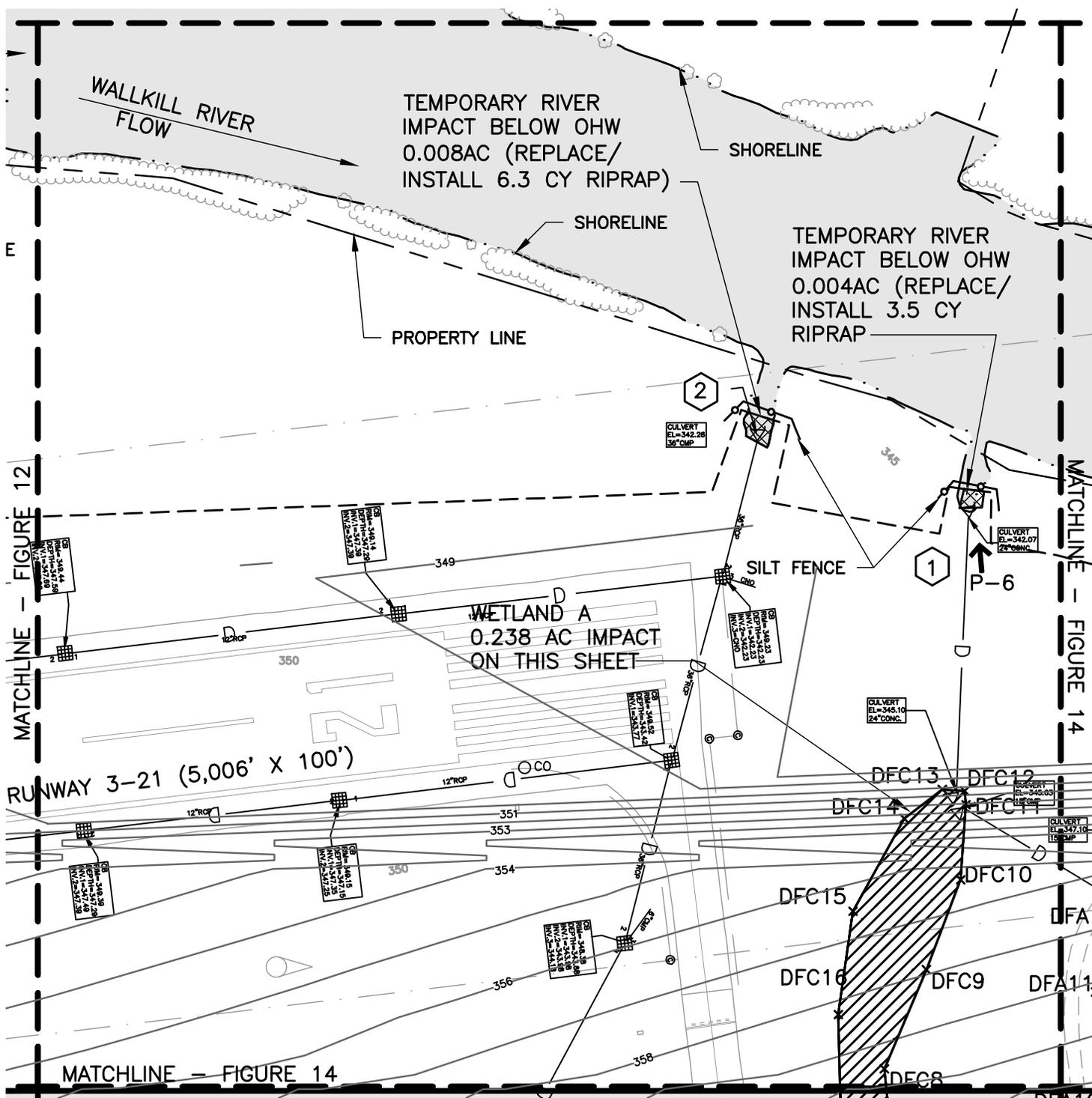
PROJECT  <b>ORANGE COUNTY AIRPORT          RUNWAY 3-21 RSA          IMPROVEMENTS / OBSTRUCTION REMOVAL          TOWN OF MONTGOMERY          COUNTY OF ORANGE          STATE OF NEW YORK</b>
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APPLICANT  <b>ORANGE          COUNTY, NY</b>
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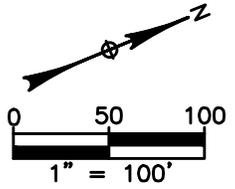
DRAWING NO.  <b>FIGURE 11</b>
SHEET 11 OF 34

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LEGEND	
-----	PROJECT LIMITS
-----	AIRPORT PROPERTY LINE
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SHEET TITLE

**GENERAL WETLAND IMPACT PLAN (SHEET 8 OF 11)**

PROJECT

ORANGE COUNTY AIRPORT RUNWAY 3-21 RSA IMPROVEMENTS / OBSTRUCTION REMOVAL TOWN OF MONTGOMERY COUNTY OF ORANGE STATE OF NEW YORK

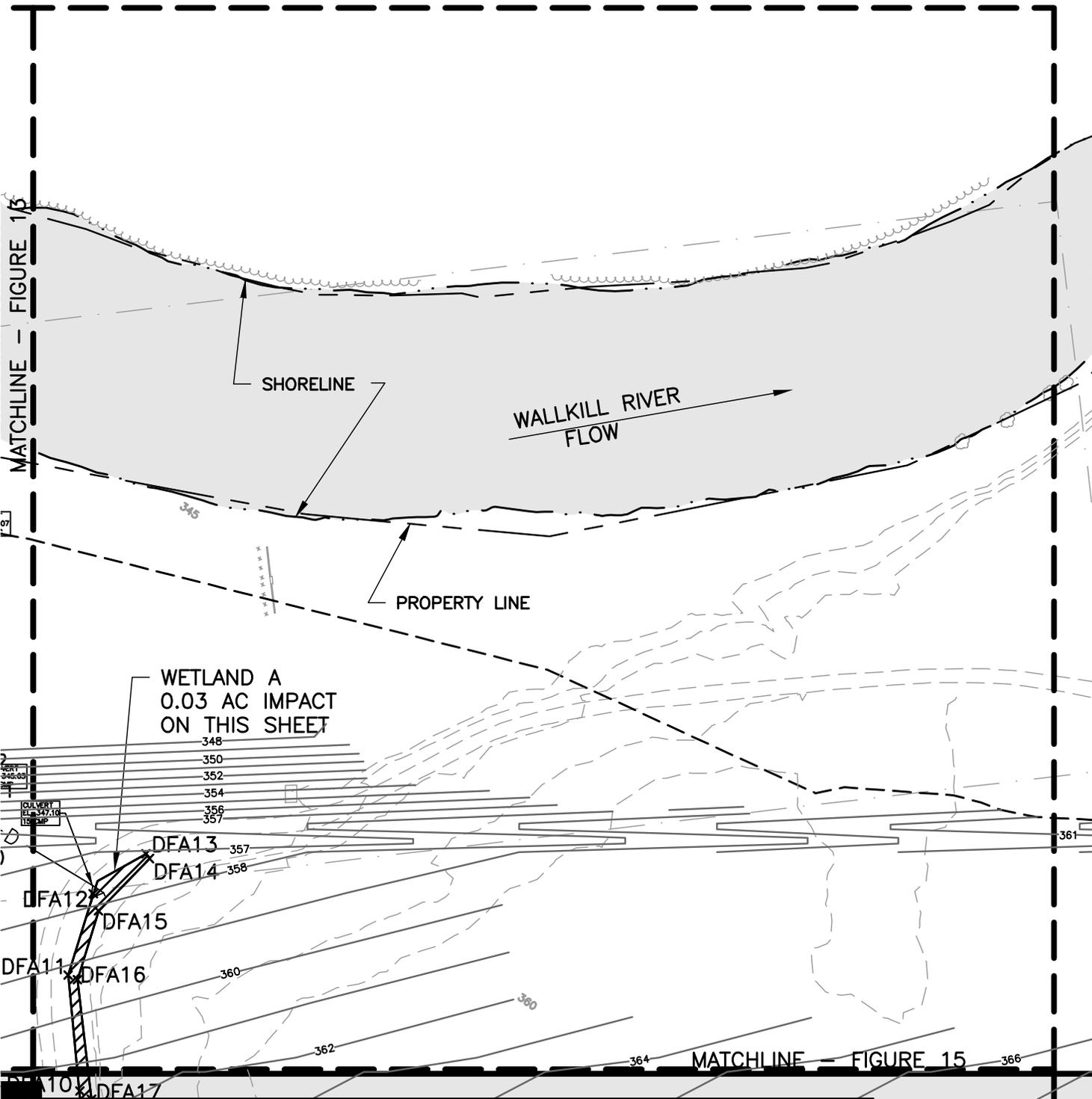
APPLICANT

ORANGE COUNTY, NY

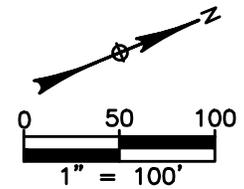
DRAWING NO.

FIGURE 13

SHEET 13 OF 34



LEGEND	
-----	PROJECT LIMITS
-----	AIRPORT PROPERTY LINE
-----	ORDINARY HIGH WATER (OHW)
○	UPLAND/WETLAND DATA POINTS
— 350 —	PROPOSED CONTOUR
— 375 —	EXISTING CONTOURS
↑ P-#	PHOTO LOCATION
[Cross-hatched box]	JURISDICTIONAL WETLAND/RIVER TEMPORARY IMPACT
[Diagonal hatched box]	JURISDICTIONAL WETLAND/RIVER PERMANENT IMPACT



**LOUIS BERGER**  
 20 CORPORATE WOODS BOULEVARD  
 ALBANY, NEW YORK 12211-2370

DESIGNED BY: TJL	IT IS A VIOLATION OF EDUCATION LAW ARTICLE 145 SECTION 7209 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY.
DRAWN BY: TJL	
REVIEWED BY: DF/CH	
DATE: JUNE 2015	

SHEET TITLE

**GENERAL WETLAND IMPACT PLAN (SHEET 9 OF 11)**

PROJECT

ORANGE COUNTY AIRPORT RUNWAY 3-21 RSA IMPROVEMENTS / OBSTRUCTION REMOVAL  
 TOWN OF MONTGOMERY  
 COUNTY OF ORANGE  
 STATE OF NEW YORK

APPLICANT

ORANGE COUNTY, NY

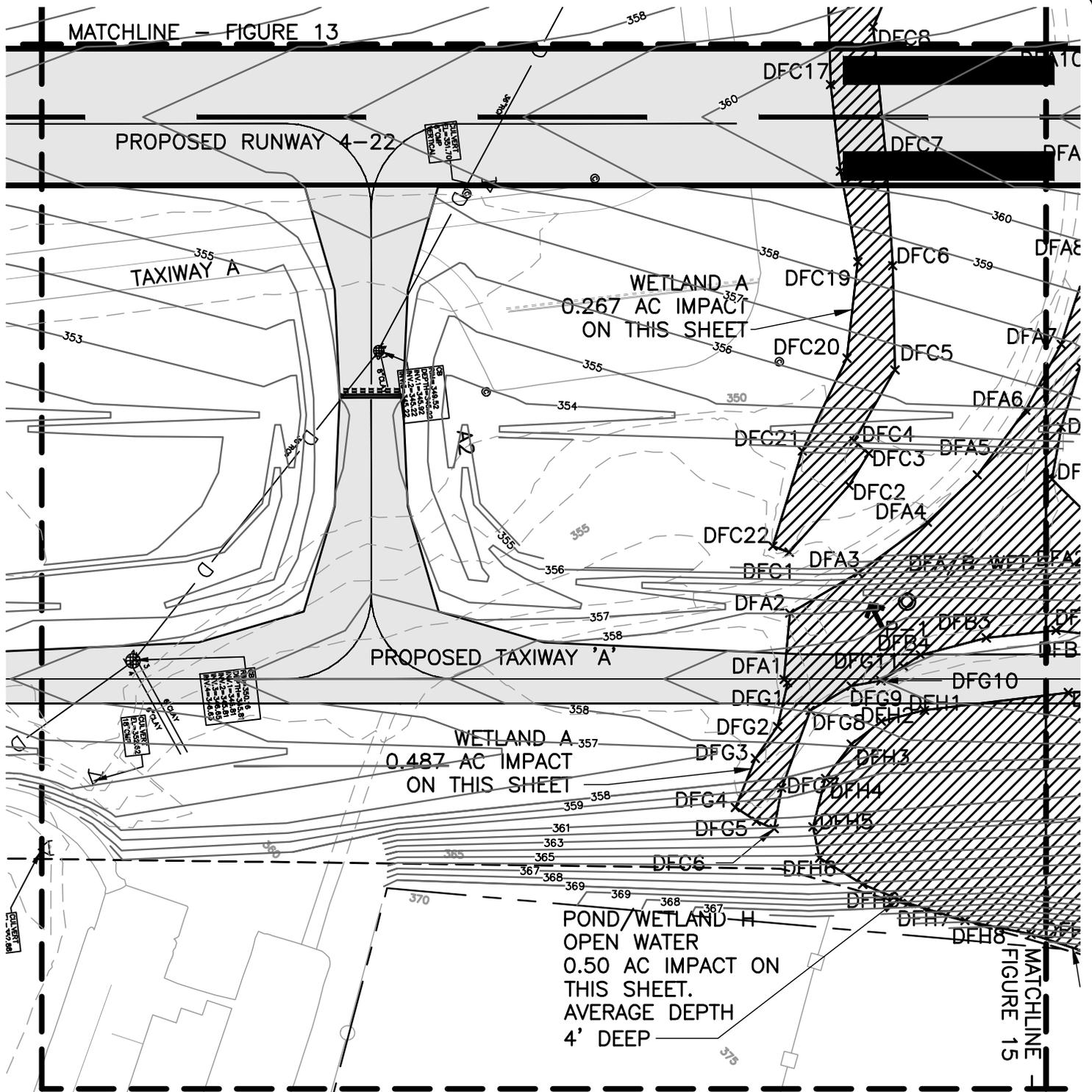
DRAWING NO.

FIGURE 14

SHEET 14 OF 34

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MATCHLINE — FIGURE 13

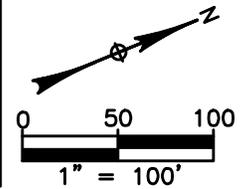


WETLAND A  
0.267 AC IMPACT  
ON THIS SHEET

WETLAND A  
0.487 AC IMPACT  
ON THIS SHEET

POND/WETLAND H  
OPEN WATER  
0.50 AC IMPACT ON  
THIS SHEET.  
AVERAGE DEPTH  
4' DEEP

LEGEND	
-----	PROJECT LIMITS
-----	AIRPORT PROPERTY LINE
-----	ORDINARY HIGH WATER (OHW)
○	UPLAND/WETLAND DATA POINTS
— 350 —	PROPOSED CONTOUR
— 375 —	EXISTING CONTOURS
↑ P-#	PHOTO LOCATION
▨	JURISDICTIONAL WETLAND/RIVER TEMPORARY IMPACT
▩	JURISDICTIONAL WETLAND/RIVER PERMANENT IMPACT



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<p><b>LOUIS BERGER</b> 20 CORPORATE WOODS BOULEVARD ALBANY, NEW YORK 12211-2370</p>	
DESIGNED BY: TJL DRAWN BY: TJL REVIEWED BY: DF/CH DATE: JUNE 2015	IT IS A VIOLATION OF EDUCATION LAW ARTICLE 145 SECTION 7209 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY.

SHEET TITLE

**GENERAL WETLAND  
IMPACT PLAN  
(SHEET 10 OF 11)**

PROJECT

ORANGE COUNTY AIRPORT  
RUNWAY 3-21 RSA  
IMPROVEMENTS / OBSTRUCTION REMOVAL  
TOWN OF MONTGOMERY  
COUNTY OF ORANGE  
STATE OF NEW YORK

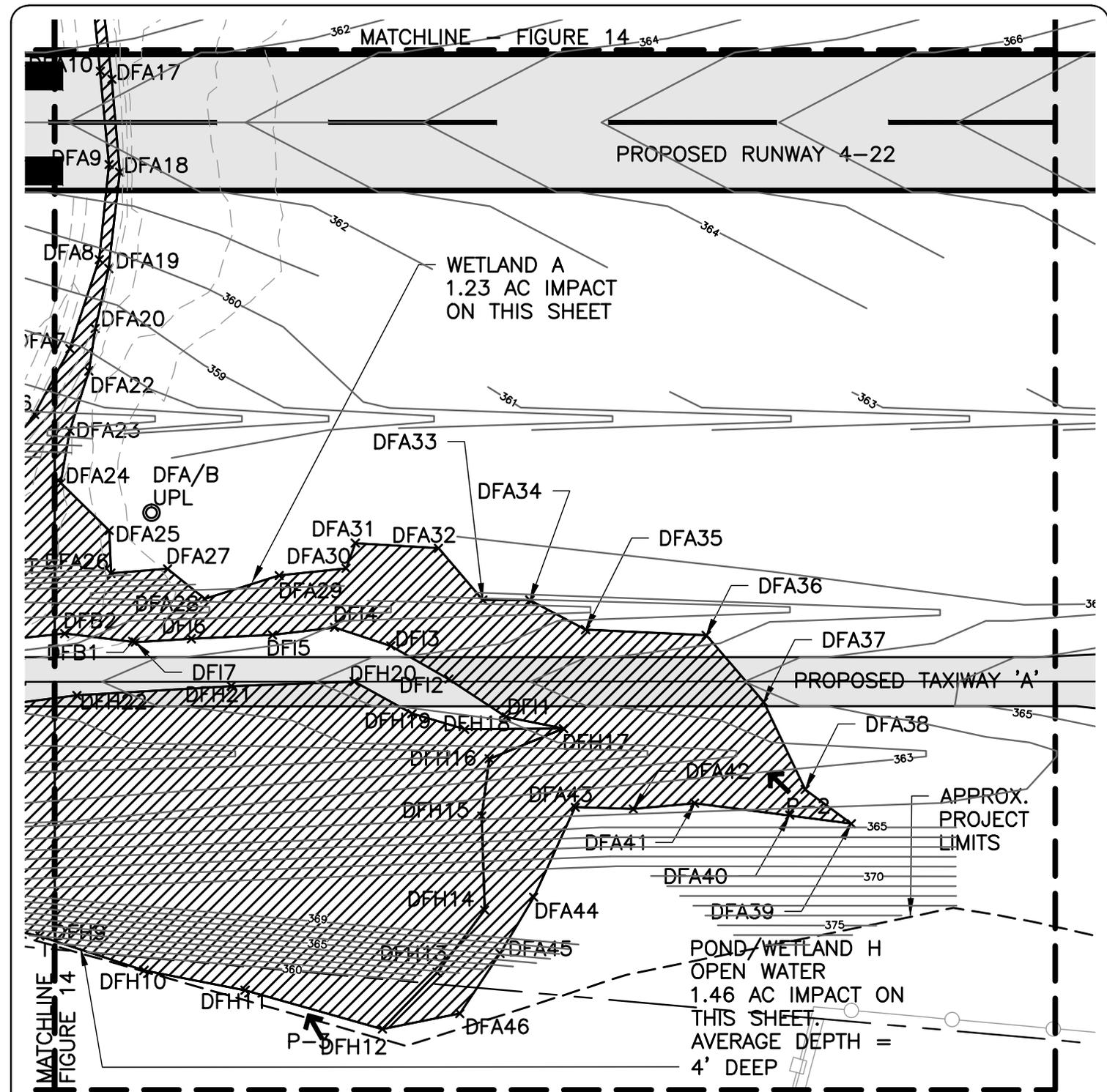
APPLICANT

ORANGE  
COUNTY, NY

DRAWING NO.

**FIGURE 15**

SHEET 15 OF 34

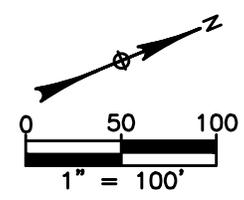


WETLAND A  
1.23 AC IMPACT  
ON THIS SHEET

PROPOSED TAXIWAY 'A'

POND/WETLAND H  
OPEN WATER  
1.46 AC IMPACT ON  
THIS SHEET.  
AVERAGE DEPTH =  
4' DEEP

LEGEND	
	PROJECT LIMITS
	AIRPORT PROPERTY LINE
	ORDINARY HIGH WATER (OHW)
	UPLAND/WETLAND DATA POINTS
	PROPOSED CONTOUR
	EXISTING CONTOURS
	PHOTO LOCATION
	JURISDICTIONAL WETLAND/RIVER TEMPORARY IMPACT
	JURISDICTIONAL WETLAND/RIVER PERMANENT IMPACT



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**LOUIS BERGER**  
20 CORPORATE WOODS BOULEVARD  
ALBANY, NEW YORK 12211-2370

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DRAWN BY: TJL	
REVIEWED BY: DF/CH	
DATE: JUNE 2015	

SHEET TITLE

**GENERAL WETLAND  
IMPACT PLAN  
(SHEET 11 OF 11)**

PROJECT

ORANGE COUNTY AIRPORT  
RUNWAY 3-21 RSA  
IMPROVEMENTS / OBSTRUCTION REMOVAL  
TOWN OF MONTGOMERY  
COUNTY OF ORANGE  
STATE OF NEW YORK

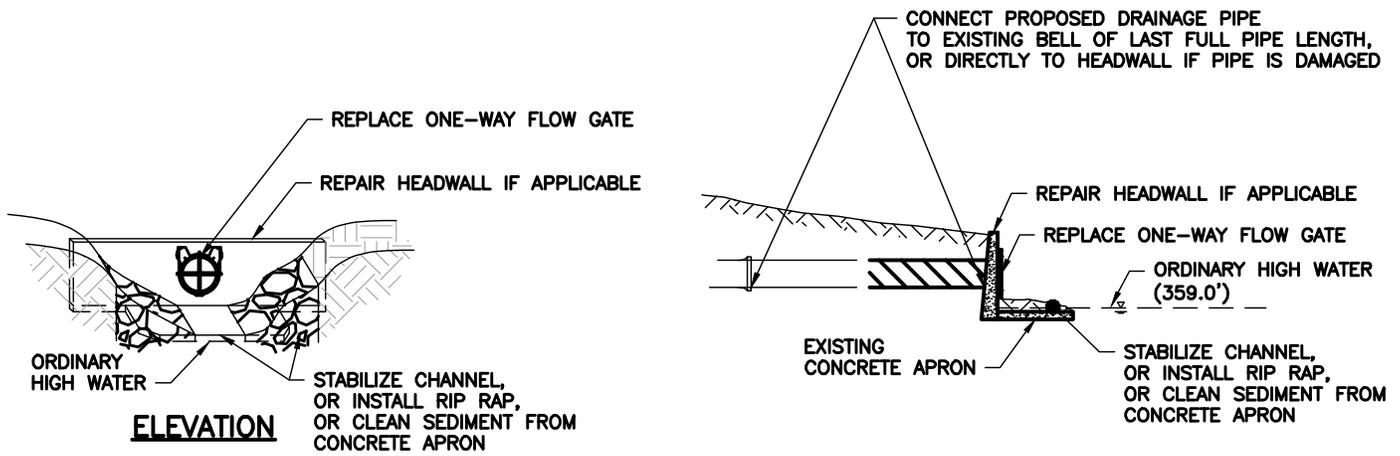
APPLICANT

ORANGE  
COUNTY, NY

DRAWING NO.

FIGURE 16

SHEET 16 OF 34



**TYPICAL CULVERT/HEADWALL RECONSTRUCTION  
DETAIL  
NOT TO SCALE**

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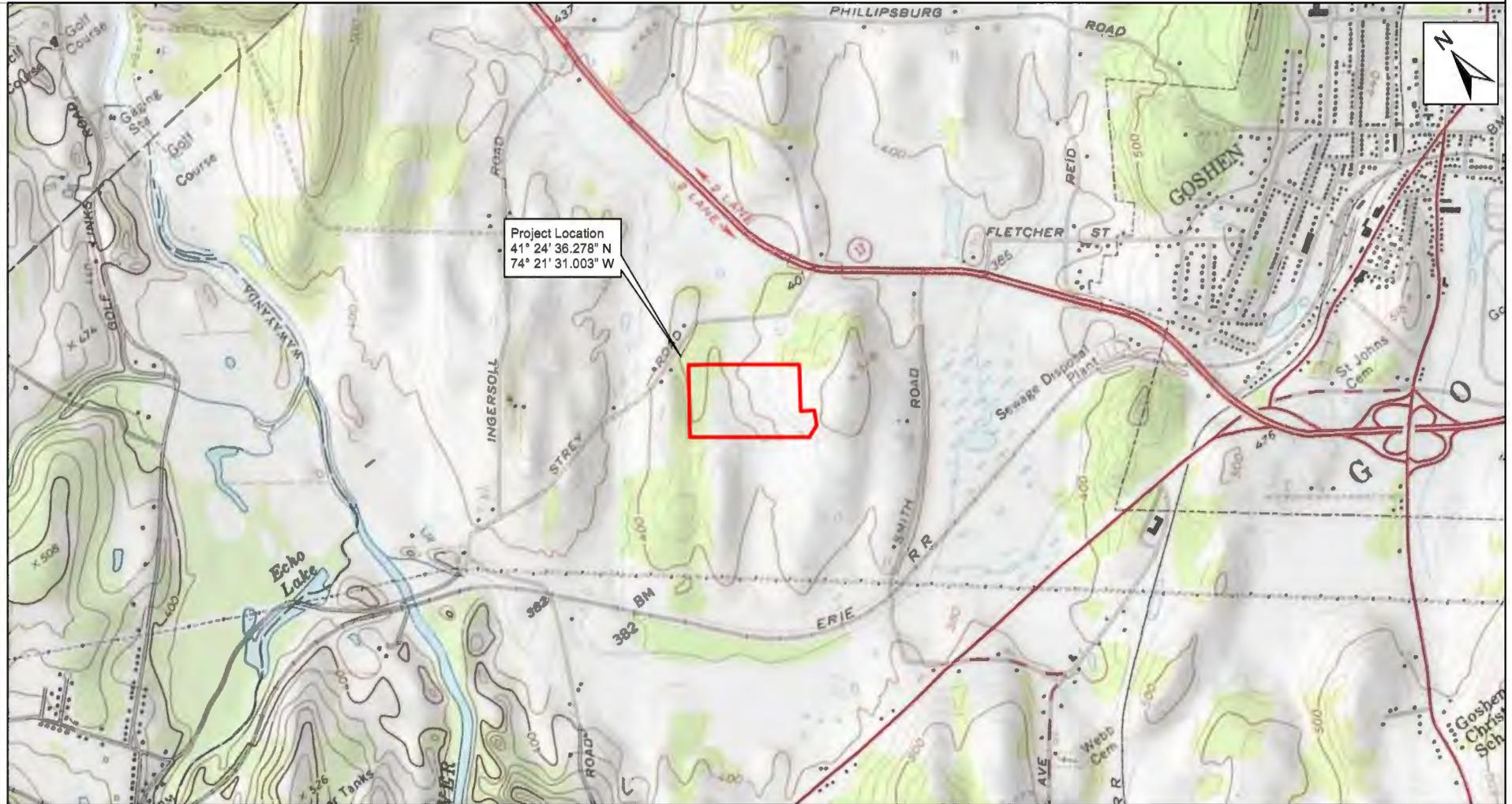
 <b>LOUIS BERGER</b> 20 CORPORATE WOODS BOULEVARD ALBANY, NEW YORK 12211-2370	
DESIGNED BY: T.J.L. DRAWN BY: T.J.L. REVIEWED BY: DF/CH DATE: JUNE 2015	<small>IT IS A VIOLATION OF EDUCATION LAW ARTICLE 145 SECTION 7209 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY.</small>

SHEET TITLE  <b>TYPICAL CULVERT/HEADWALL RECONSTRUCTION DETAIL</b>
--

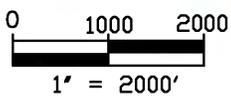
PROJECT  ORANGE COUNTY AIRPORT RUNWAY 3-21 RSA IMPROVEMENTS / OBSTRUCTION REMOVAL TOWN OF MONTGOMERY COUNTY OF ORANGE STATE OF NEW YORK
---

APPLICANT  ORANGE COUNTY, NY
------------------------------------

DRAWING NO.  <b>FIGURE 17</b>
SHEET 17 OF 34



Project Location  
 41° 24' 36.278" N  
 74° 21' 31.003" W

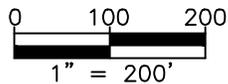
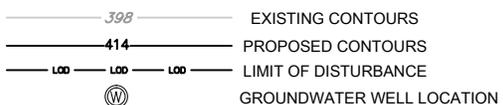
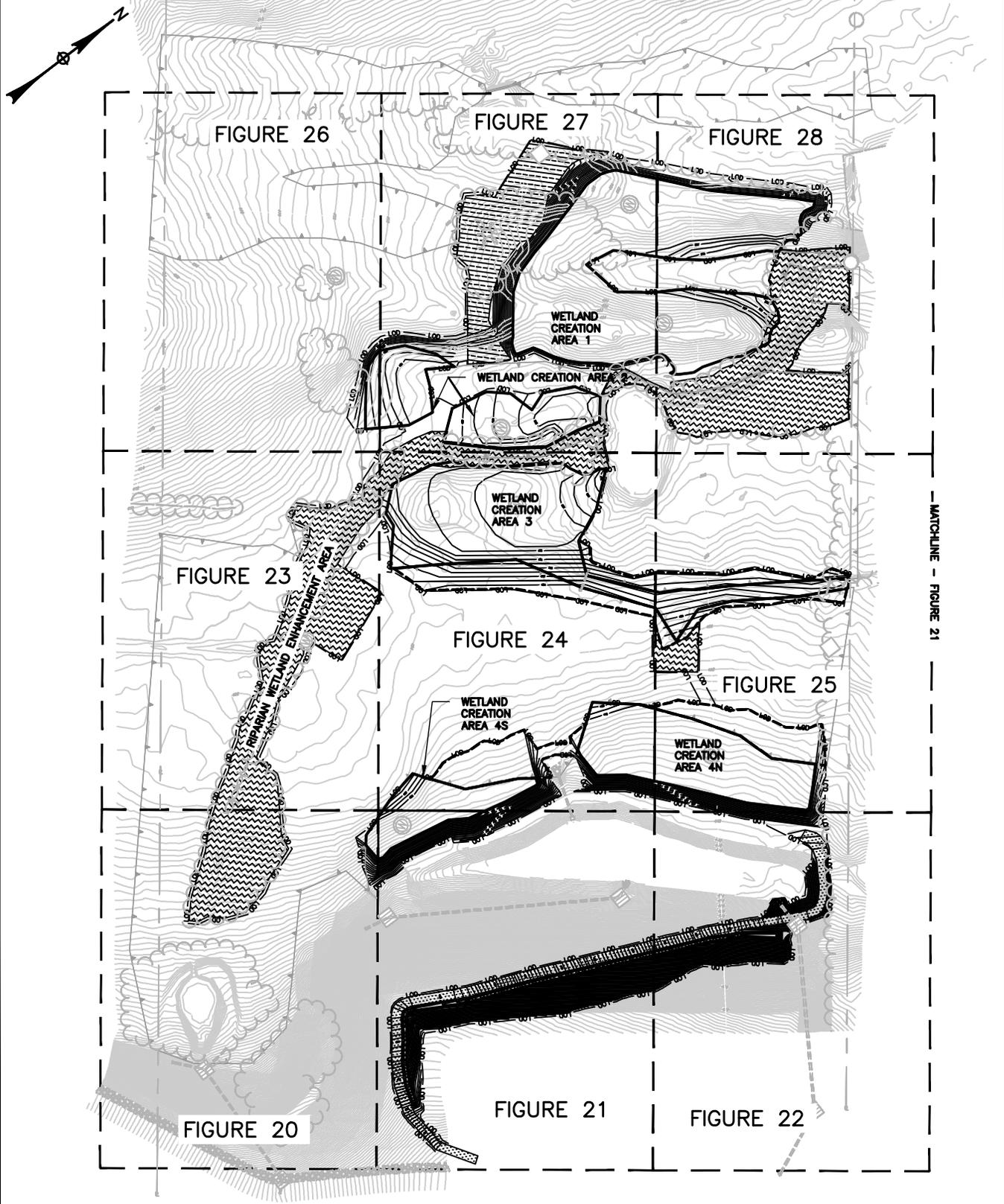


 **LOUIS BERGER**  
 20 CORPORATE WOODS BOULEVARD  
 ALBANY, NEW YORK 12211-2370

DESIGNED BY: AV / SA  
 DRAWN BY: AV  
 REVIEWED BY: ES / BB  
 DATE: JUNE 2015

IT IS A VIOLATION OF EDUCATION LAW  
 ARTICLE 145 SECTION 7209 FOR ANY  
 PERSON, UNLESS HE IS ACTING UNDER  
 THE DIRECTION OF A LICENSED  
 PROFESSIONAL ENGINEER OR LAND  
 SURVEYOR, TO ALTER AN ITEM IN ANY  
 WAY.

SHEET TITLE	PROJECT	APPLICANT	DRAWING NO.
VICINITY MAP	ORANGE COUNTY AIRPORT RUNWAY 3-21 RSA IMPROVEMENTS / OBSTRUCTION REMOVAL GOSHEN WETLAND MITIGATION SITE TOWN OF GOSHEN COUNTY OF ORANGE STATE OF NEW YORK	ORANGE COUNTY, NY	FIGURE 18  SHEET 18 OF 34



 <b>LOUIS BERGER</b> 20 CORPORATE WOODS BOULEVARD ALBANY, NEW YORK 12211-2370	
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DRAWN BY: AV	
REVIEWED BY: ES / BB	
DATE: JUNE 2015	

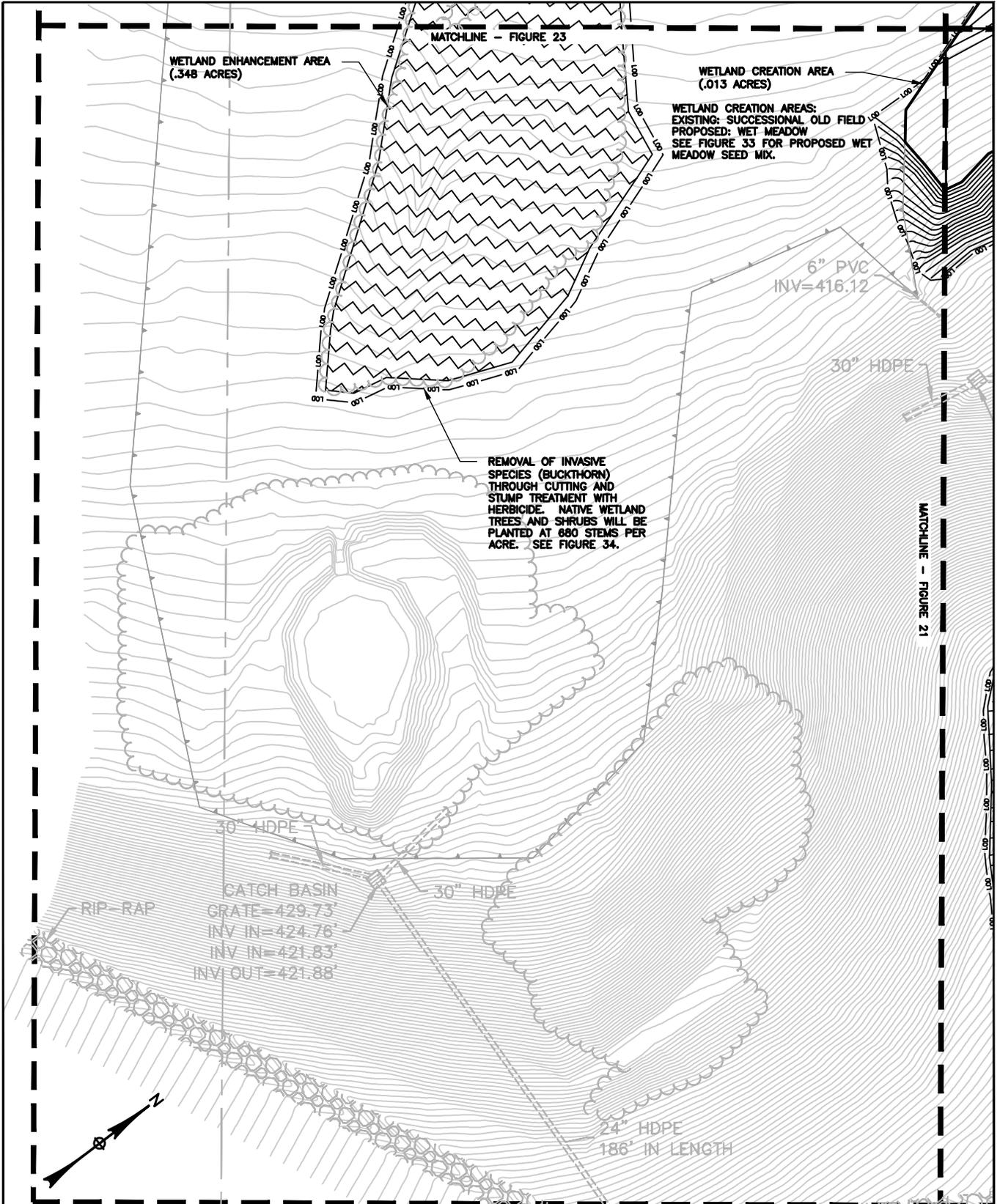
SHEET TITLE
EXISTING AND PROPOSED CONDITIONS KEY PLAN

PROJECT
ORANGE COUNTY AIRPORT RUNWAY 3-21 RSA IMPROVEMENTS / OBSTRUCTION REMOVAL GOSHEN WETLAND MITIGATION SITE TOWN OF GOSHEN COUNTY OF ORANGE STATE OF NEW YORK

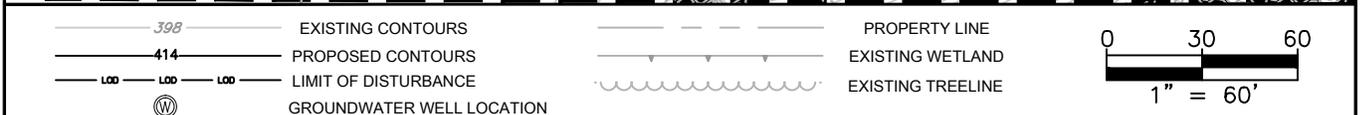
APPLICANT
ORANGE COUNTY, NY

DRAWING NO.
FIGURE 19
SHEET 19 OF 34

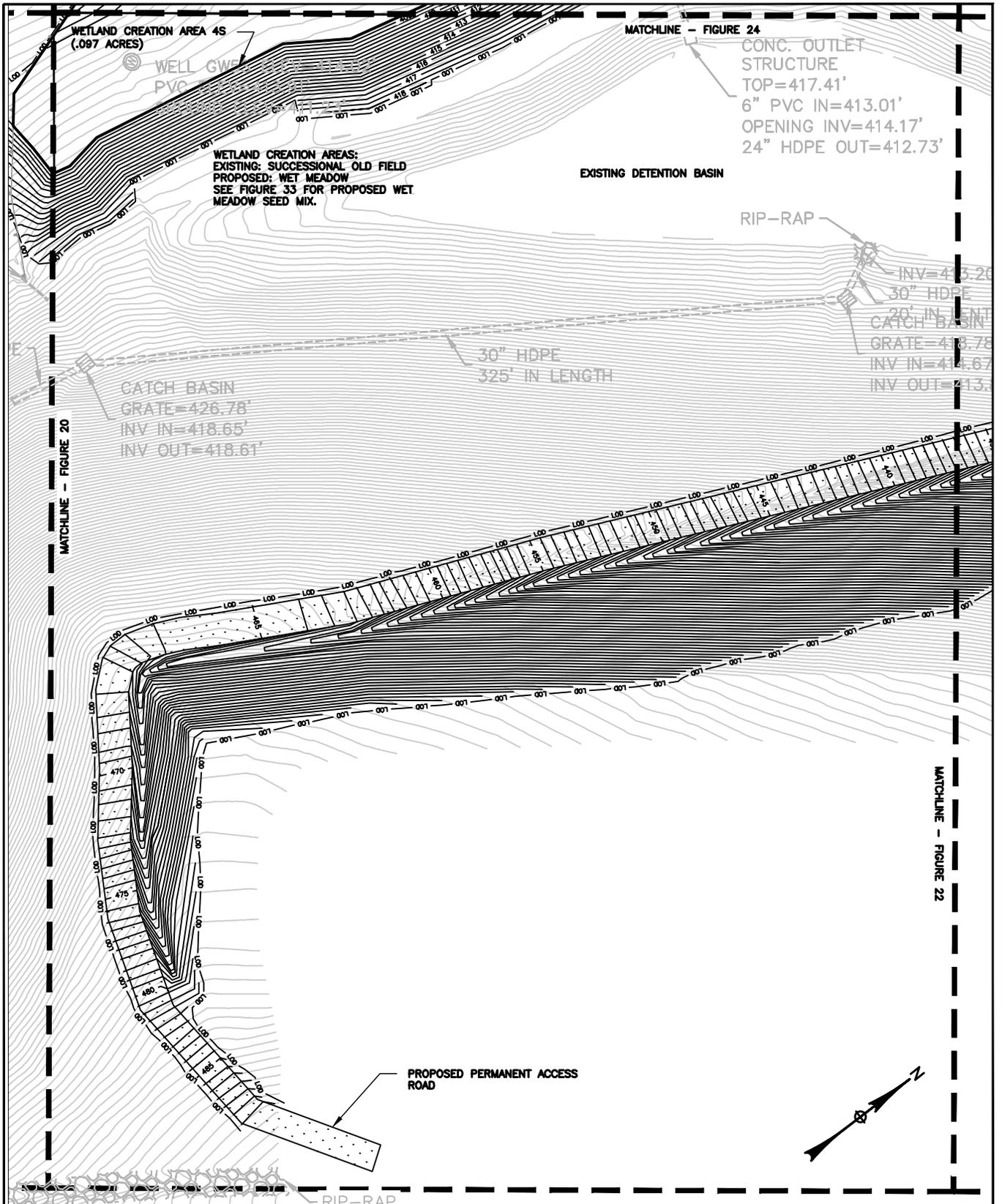
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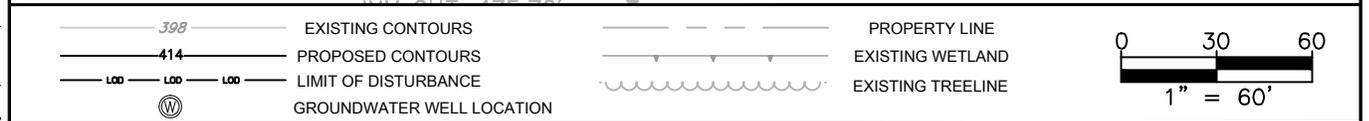
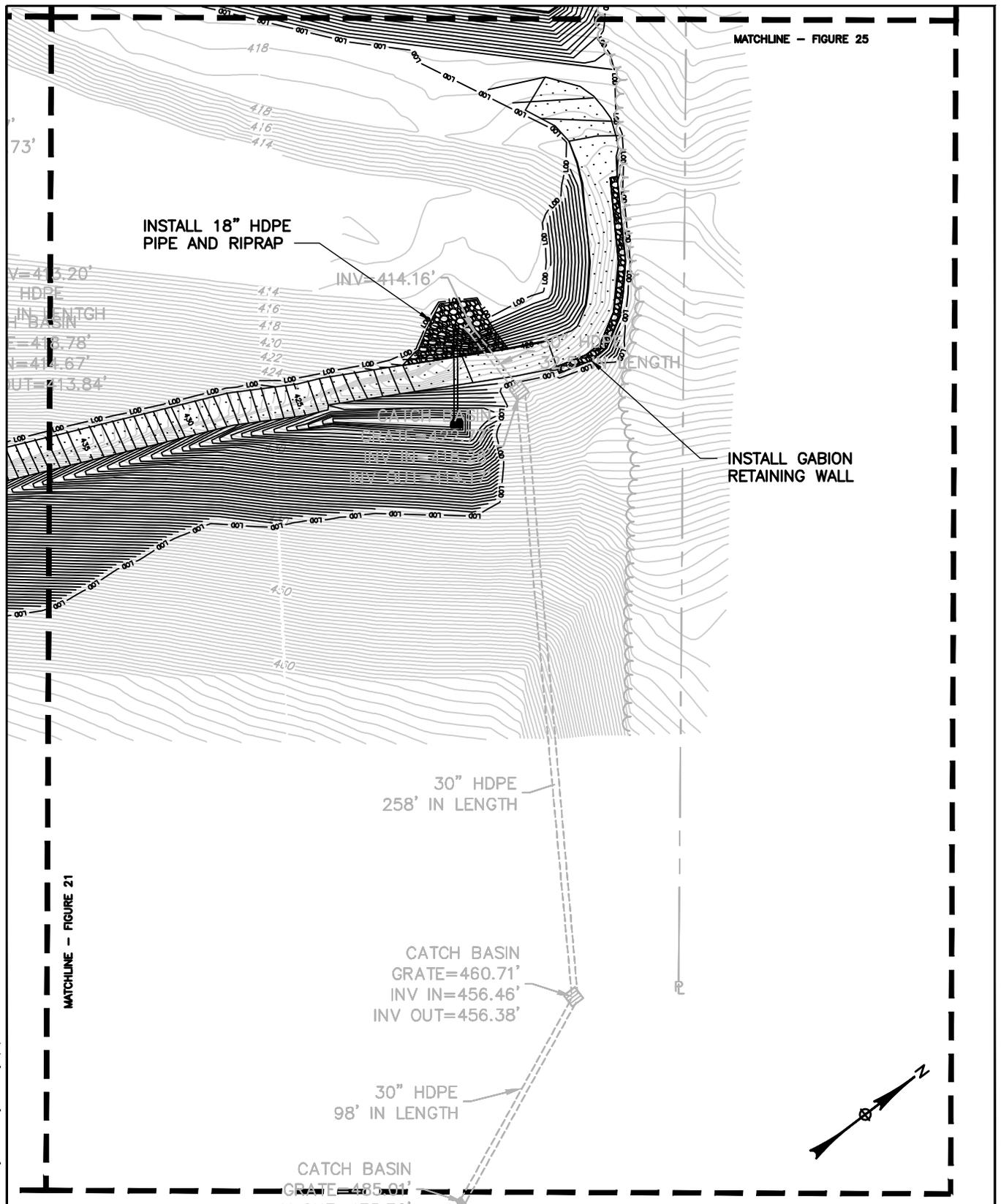


<b>LOUIS BERGER</b> 20 CORPORATE WOODS BOULEVARD ALBANY, NEW YORK 12211-2370	SHEET TITLE		PROJECT	APPLICANT	DRAWING NO.
	EXISTING AND PROPOSED CONDITIONS PLAN (SHEET 1 OF 9)		ORANGE COUNTY AIRPORT RUNWAY 3-21 RSA IMPROVEMENTS / OBSTRUCTION REMOVAL GOSHEN WETLAND MITIGATION SITE TOWN OF GOSHEN COUNTY OF ORANGE STATE OF NEW YORK	ORANGE COUNTY, NY	FIGURE 20
DESIGNED BY: AV / SA DRAWN BY: AV REVIEWED BY: ES / BB DATE: JUNE 2015	<small>IT IS A VIOLATION OF EDUCATION LAW ARTICLE 145 SECTION 7209 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY.</small>				SHEET 20 OF 34



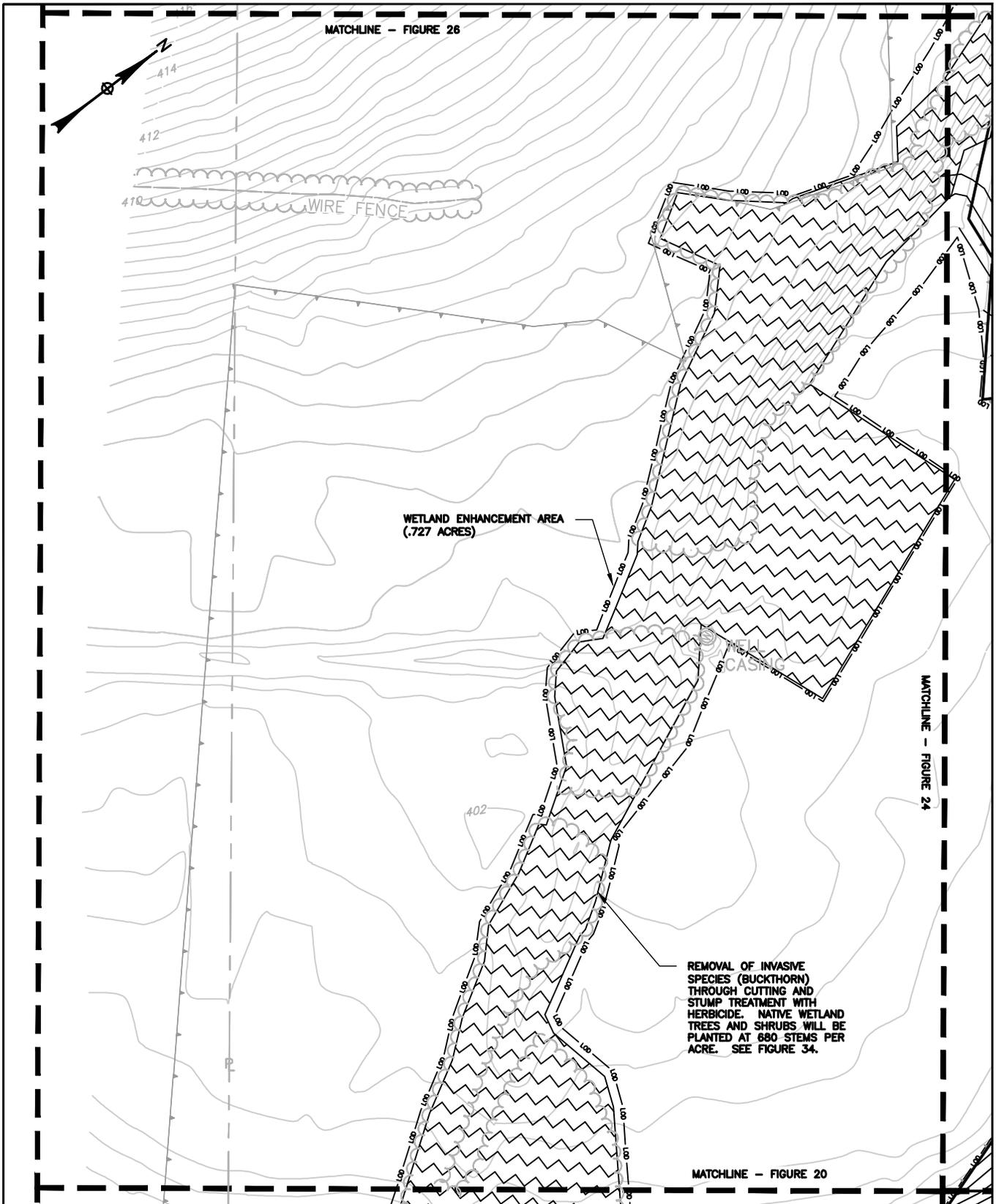
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<p>398 — EXISTING CONTOURS</p> <p>414 — PROPOSED CONTOURS</p> <p>L00 L00 L00 — LIMIT OF DISTURBANCE</p> <p>(W) — GROUNDWATER WELL LOCATION</p>	<p>--- — PROPERTY LINE</p> <p>--- — EXISTING WETLAND</p> <p>--- — EXISTING TREELINE</p>	<p>0 30 60</p> <p>1" = 60'</p>	
<p><b>LOUIS BERGER</b> 20 CORPORATE WOODS BOULEVARD ALBANY, NEW YORK 12211-2370</p> <p>DESIGNED BY: AV / SA DRAWN BY: AV REVIEWED BY: ES / BB DATE: JUNE 2015</p> <p>IT IS A VIOLATION OF EDUCATION LAW ARTICLE 145 SECTION 7209 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY.</p>	<p>SHEET TITLE</p> <p>EXISTING AND PROPOSED CONDITIONS PLAN (SHEET 2 OF 9)</p>	<p>PROJECT</p> <p>ORANGE COUNTY AIRPORT RUNWAY 3-21 RSA IMPROVEMENTS / OBSTRUCTION REMOVAL GOSHEN WETLAND MITIGATION SITE TOWN OF GOSHEN COUNTY OF ORANGE STATE OF NEW YORK</p>	<p>APPLICANT</p> <p>ORANGE COUNTY, NY</p> <p>DRAWING NO.</p> <p>FIGURE 21</p> <p>SHEET 21 OF 34</p>

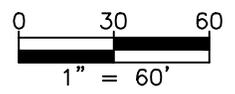


<b>LOUIS BERGER</b> 20 CORPORATE WOODS BOULEVARD ALBANY, NEW YORK 12211-2370	SHEET TITLE		PROJECT	APPLICANT	DRAWING NO.
	EXISTING AND PROPOSED CONDITIONS PLAN (SHEET 3 OF 9)		ORANGE COUNTY AIRPORT RUNWAY 3-21 RSA IMPROVEMENTS / OBSTRUCTION REMOVAL GOSHEN WETLAND MITIGATION SITE TOWN OF GOSHEN COUNTY OF ORANGE STATE OF NEW YORK	ORANGE COUNTY, NY	FIGURE 22
DESIGNED BY: AV / SA DRAWN BY: AV REVIEWED BY: ES / BB DATE: JUNE 2015	<small>IT IS A VIOLATION OF EDUCATION LAW ARTICLE 145 SECTION 7209 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY.</small>		SHEET 22 OF 34		

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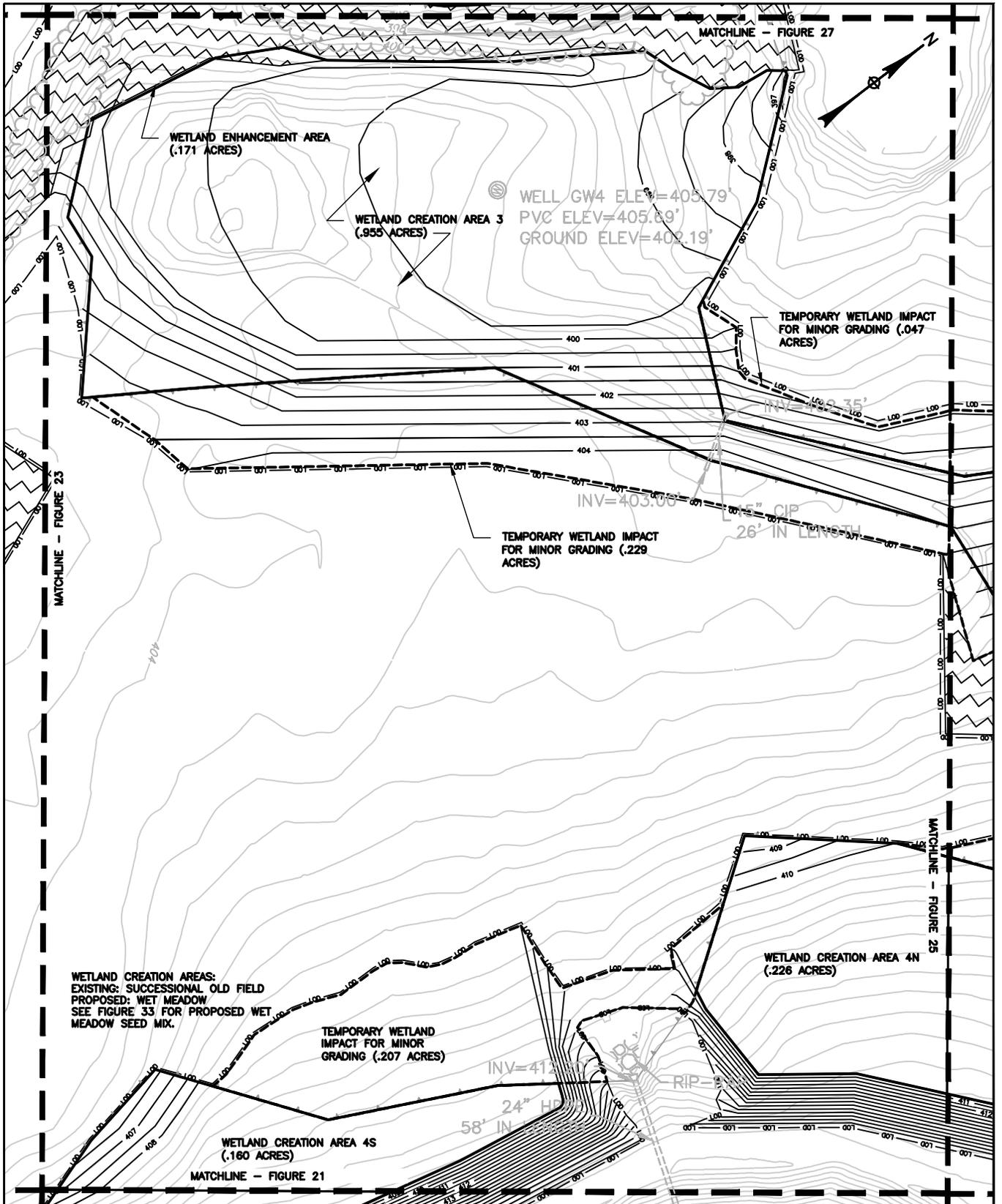


	EXISTING CONTOURS		PROPERTY LINE
	PROPOSED CONTOURS		EXISTING WETLAND
	LIMIT OF DISTURBANCE		EXISTING TREELINE
	GROUNDWATER WELL LOCATION		

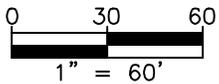


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<b>LOUIS BERGER</b> 20 CORPORATE WOODS BOULEVARD ALBANY, NEW YORK 12211-2370	SHEET TITLE		PROJECT	APPLICANT	DRAWING NO.
	EXISTING AND PROPOSED CONDITIONS PLAN (SHEET 4 OF 9)		ORANGE COUNTY AIRPORT RUNWAY 3-21 RSA IMPROVEMENTS / OBSTRUCTION REMOVAL GOSHEN WETLAND MITIGATION SITE TOWN OF GOSHEN COUNTY OF ORANGE STATE OF NEW YORK	ORANGE COUNTY, NY	FIGURE 23
DESIGNED BY: AV / SA DRAWN BY: AV REVIEWED BY: ES / BB DATE: JUNE 2015	<small>IT IS A VIOLATION OF EDUCATION LAW ARTICLE 145 SECTION 7209 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY.</small>				SHEET 23 OF 34

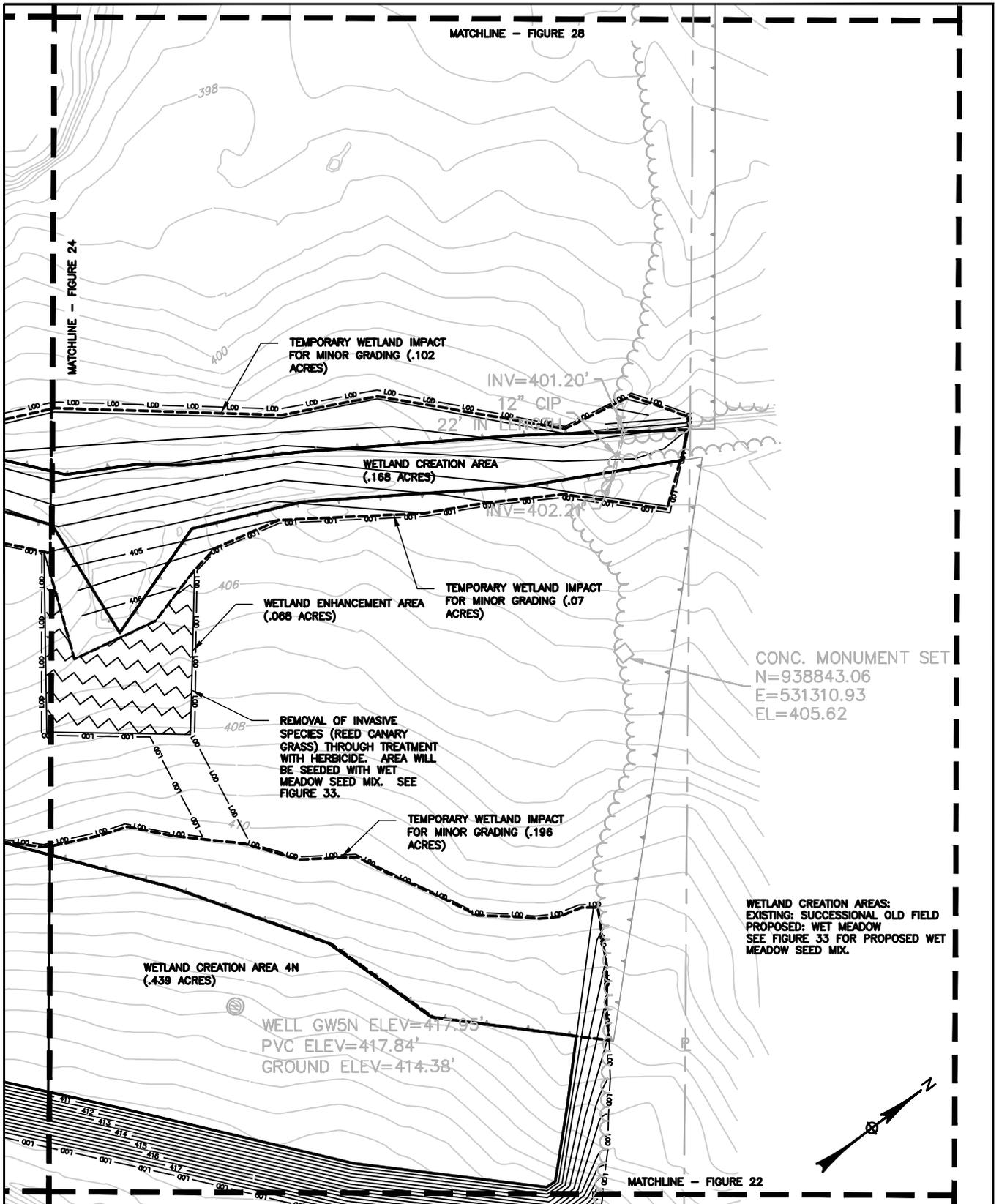


WETLAND CREATION AREAS:  
 EXISTING: SUCCESSIONAL OLD FIELD  
 PROPOSED: WET MEADOW  
 SEE FIGURE 33 FOR PROPOSED WET  
 MEADOW SEED MIX.

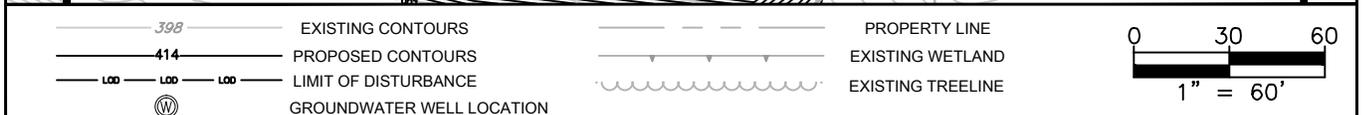


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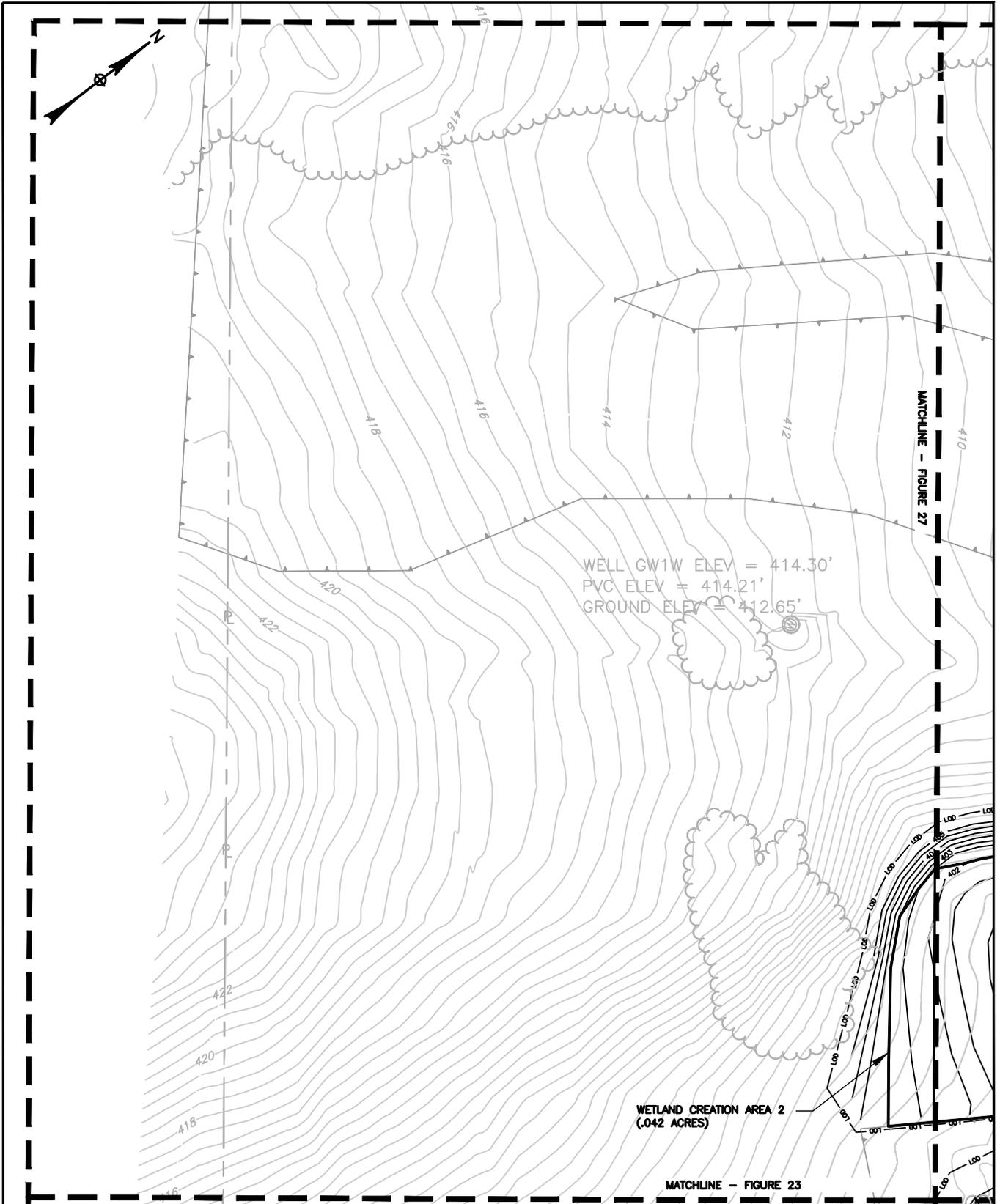
<b>LOUIS BERGER</b> 20 CORPORATE WOODS BOULEVARD ALBANY, NEW YORK 12211-2370	SHEET TITLE		PROJECT	APPLICANT	DRAWING NO.
	EXISTING AND PROPOSED CONDITIONS PLAN (SHEET 5 OF 9)		ORANGE COUNTY AIRPORT RUNWAY 3-21 RSA IMPROVEMENTS / OBSTRUCTION REMOVAL GOSHEN WETLAND MITIGATION SITE TOWN OF GOSHEN COUNTY OF ORANGE STATE OF NEW YORK	ORANGE COUNTY, NY	FIGURE 24
DESIGNED BY: AV / SA DRAWN BY: AV REVIEWED BY: ES / BB DATE: JUNE 2015	<small>IT IS A VIOLATION OF EDUCATION LAW ARTICLE 145 SECTION 7209 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY.</small>				SHEET 24 OF 34



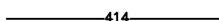
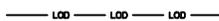
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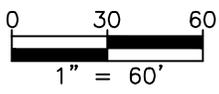


<b>LOUIS BERGER</b> 20 CORPORATE WOODS BOULEVARD ALBANY, NEW YORK 12211-2370	SHEET TITLE		PROJECT	APPLICANT	DRAWING NO.
	EXISTING AND PROPOSED CONDITIONS PLAN (SHEET 6 OF 9)		ORANGE COUNTY AIRPORT RUNWAY 3-21 RSA IMPROVEMENTS / OBSTRUCTION REMOVAL GOSHEN WETLAND MITIGATION SITE TOWN OF GOSHEN COUNTY OF ORANGE STATE OF NEW YORK	ORANGE COUNTY, NY	FIGURE 25
DESIGNED BY: AV / SA DRAWN BY: AV REVIEWED BY: ES / BB DATE: JUNE 2015	<small>IT IS A VIOLATION OF EDUCATION LAW ARTICLE 145 SECTION 7209 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY.</small>				SHEET 25 OF 34

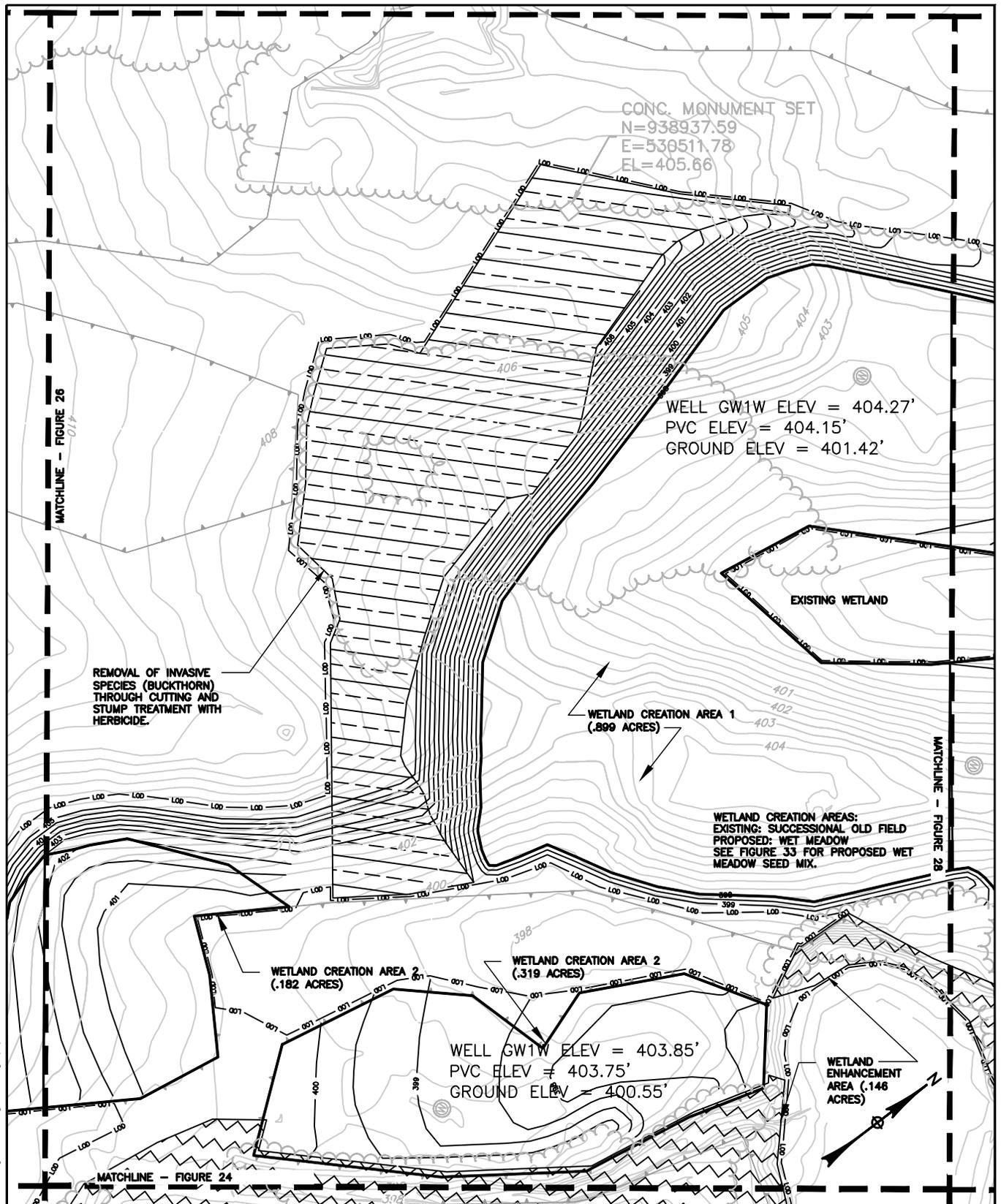


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	EXISTING CONTOURS		PROPERTY LINE
	PROPOSED CONTOURS		EXISTING WETLAND
	LIMIT OF DISTURBANCE		EXISTING TREELINE
	GROUNDWATER WELL LOCATION		



 <b>LOUIS BERGER</b> 20 CORPORATE WOODS BOULEVARD ALBANY, NEW YORK 12211-2370	SHEET TITLE		PROJECT	APPLICANT	DRAWING NO.
	EXISTING AND PROPOSED CONDITIONS PLAN (SHEET 7 OF 9)		ORANGE COUNTY AIRPORT RUNWAY 3-21 RSA IMPROVEMENTS / OBSTRUCTION REMOVAL GOSHEN WETLAND MITIGATION SITE TOWN OF GOSHEN COUNTY OF ORANGE STATE OF NEW YORK	ORANGE COUNTY, NY	FIGURE 26
DESIGNED BY: AV / SA DRAWN BY: AV REVIEWED BY: ES / BB DATE: JUNE 2015	<small>IT IS A VIOLATION OF EDUCATION LAW ARTICLE 145 SECTION 7209 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY.</small>				
					SHEET 26 OF 34



MATCHLINE - FIGURE 26

MATCHLINE - FIGURE 28

REMOVAL OF INVASIVE SPECIES (BUCKTHORN) THROUGH CUTTING AND STUMP TREATMENT WITH HERBICIDE.

WELL GW1W ELEV = 404.27'  
PVC ELEV = 404.15'  
GROUND ELEV = 401.42'

WETLAND CREATION AREA 1  
(.899 ACRES)

WETLAND CREATION AREAS:  
EXISTING: SUCCESSIONAL OLD FIELD  
PROPOSED: WET MEADOW  
SEE FIGURE 33 FOR PROPOSED WET MEADOW SEED MIX.

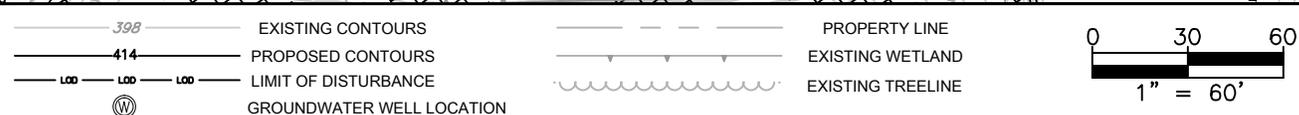
WETLAND CREATION AREA 2  
(.182 ACRES)

WETLAND CREATION AREA 2  
(.319 ACRES)

WELL GW1W ELEV = 403.85'  
PVC ELEV = 403.75'  
GROUND ELEV = 400.55'

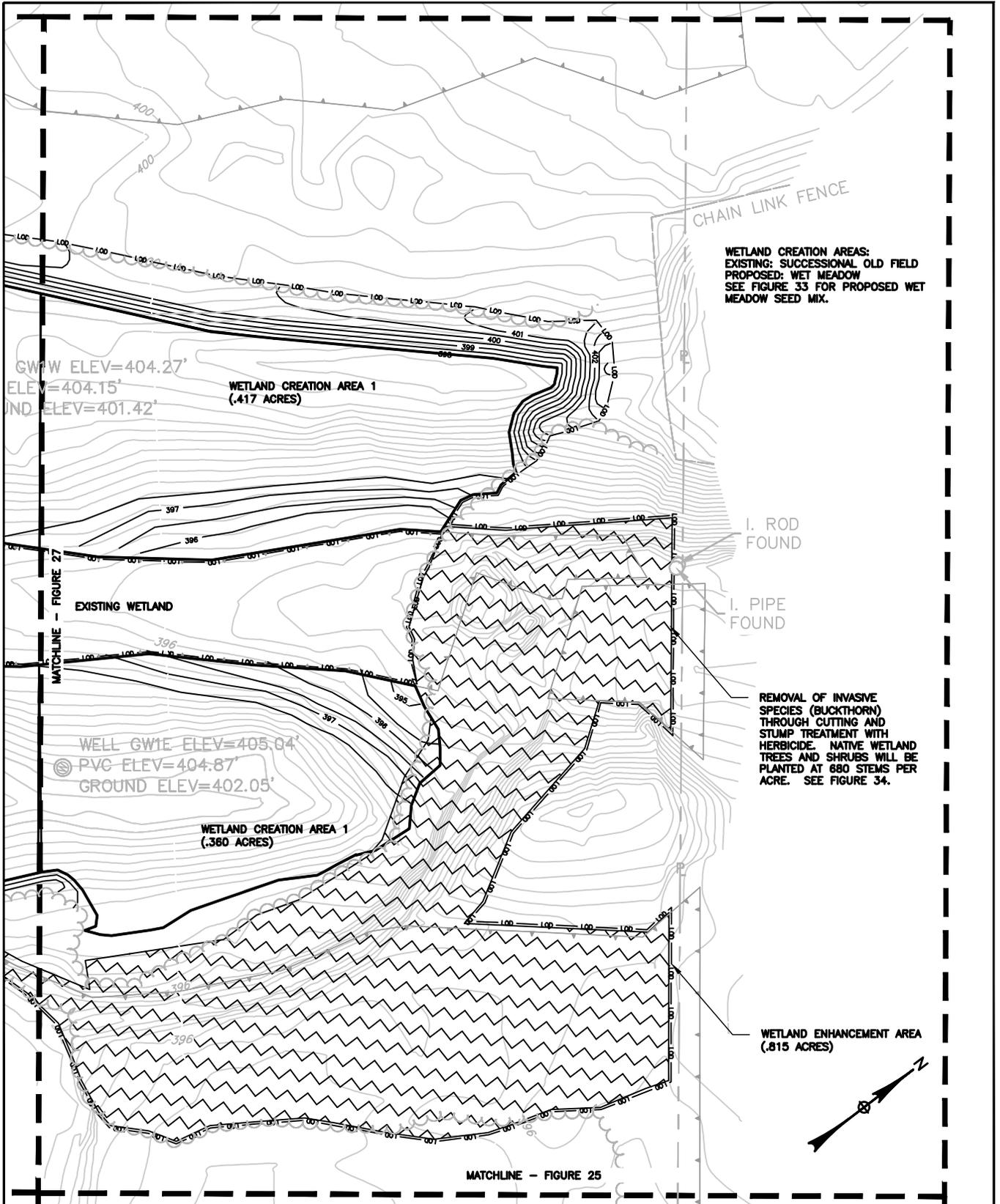
WETLAND ENHANCEMENT AREA  
(.146 ACRES)

MATCHLINE - FIGURE 24



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<b>LOUIS BERGER</b> 20 CORPORATE WOODS BOULEVARD ALBANY, NEW YORK 12211-2370	SHEET TITLE	PROJECT	APPLICANT	DRAWING NO.
	EXISTING AND PROPOSED CONDITIONS PLAN (SHEET 8 OF 9)	ORANGE COUNTY AIRPORT RUNWAY 3-21 RSA IMPROVEMENTS / OBSTRUCTION REMOVAL GOSHEN WETLAND MITIGATION SITE TOWN OF GOSHEN COUNTY OF ORANGE STATE OF NEW YORK	ORANGE COUNTY, NY	FIGURE 27 SHEET 27 OF 34
DESIGNED BY: AV / SA DRAWN BY: AV REVIEWED BY: ES / BB DATE: JUNE 2015	<small>IT IS A VIOLATION OF EDUCATION LAW ARTICLE 145 SECTION 7209 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY.</small>			



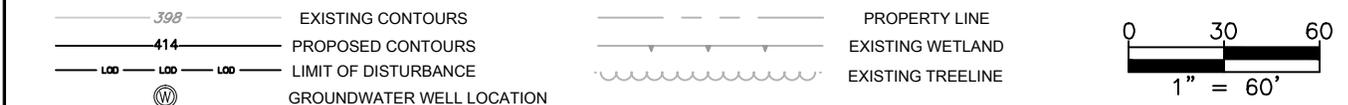
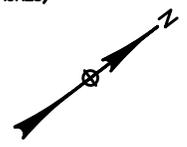
**WETLAND CREATION AREAS:**  
 EXISTING: SUCCESSIONAL OLD FIELD  
 PROPOSED: WET MEADOW  
 SEE FIGURE 33 FOR PROPOSED WET MEADOW SEED MIX.

I. ROD FOUND

I. PIPE FOUND

REMOVAL OF INVASIVE SPECIES (BUCKTHORN) THROUGH CUTTING AND STUMP TREATMENT WITH HERBICIDE. NATIVE WETLAND TREES AND SHRUBS WILL BE PLANTED AT 680 STEMS PER ACRE. SEE FIGURE 34.

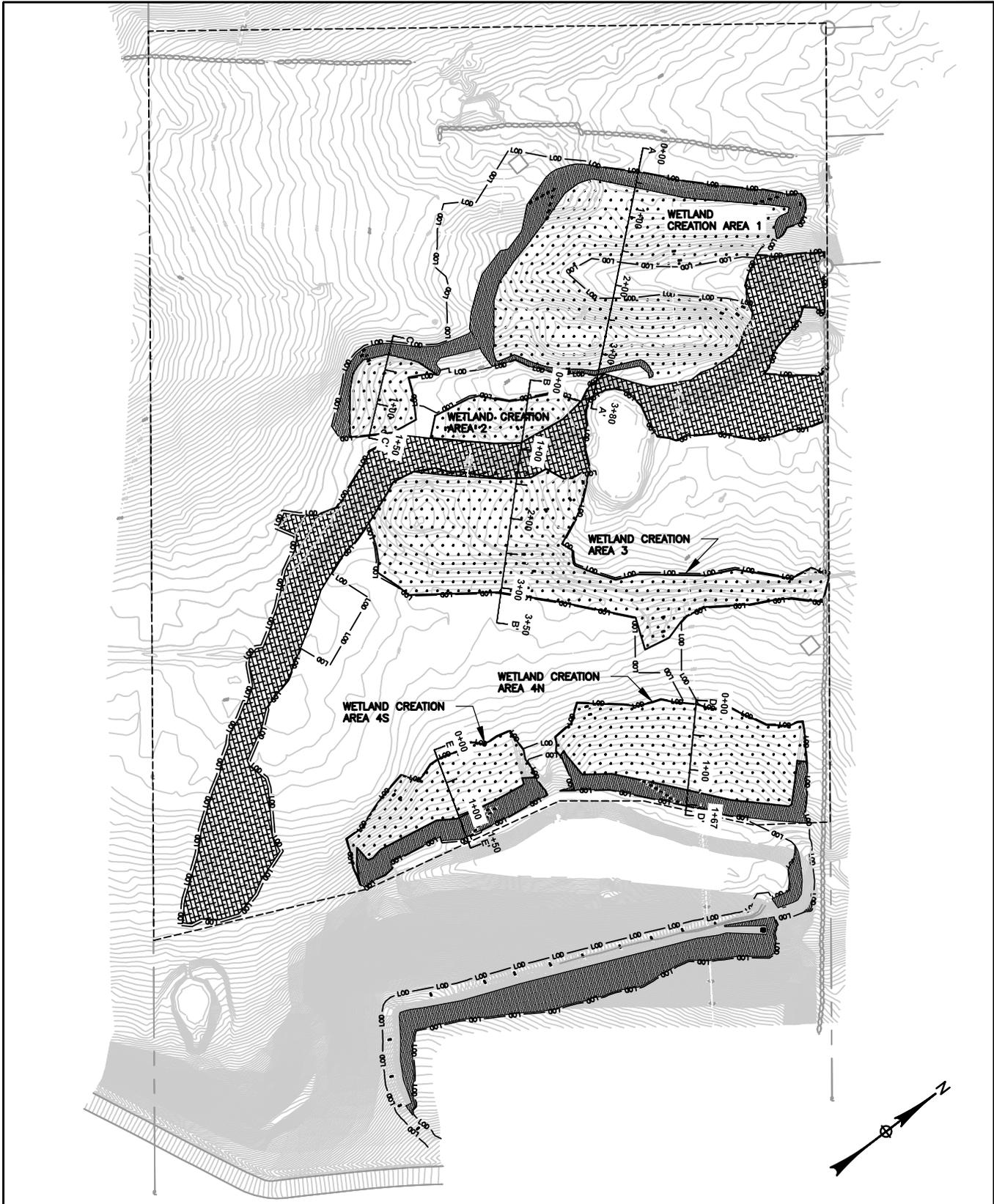
WETLAND ENHANCEMENT AREA (.815 ACRES)

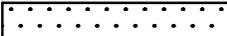


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 <b>LOUIS BERGER</b> 20 CORPORATE WOODS BOULEVARD ALBANY, NEW YORK 12211-2370	SHEET TITLE		PROJECT	APPLICANT	DRAWING NO.
	EXISTING AND PROPOSED CONDITIONS PLAN (SHEET 9 OF 9)		ORANGE COUNTY AIRPORT RUNWAY 3-21 RSA IMPROVEMENTS / OBSTRUCTION REMOVAL GOSHEN WETLAND MITIGATION SITE TOWN OF GOSHEN COUNTY OF ORANGE STATE OF NEW YORK	ORANGE COUNTY, NY	FIGURE 28
DESIGNED BY: AV / SA DRAWN BY: AV REVIEWED BY: ES / BB DATE: JUNE 2015	<small>IT IS A VIOLATION OF EDUCATION LAW ARTICLE 145 SECTION 7209 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY.</small>				
					SHEET 28 OF 34

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	UPLAND TRANSITION PLANTING		EMERGENT WETLAND PLANTING	0 100 200 1" = 200'
	RIPARIAN ENHANCEMENT PLANTING		LIMIT OF DISTURBANCE	
			LIMIT OF MITIGATION SITE	

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 DATE: JUNE 2015

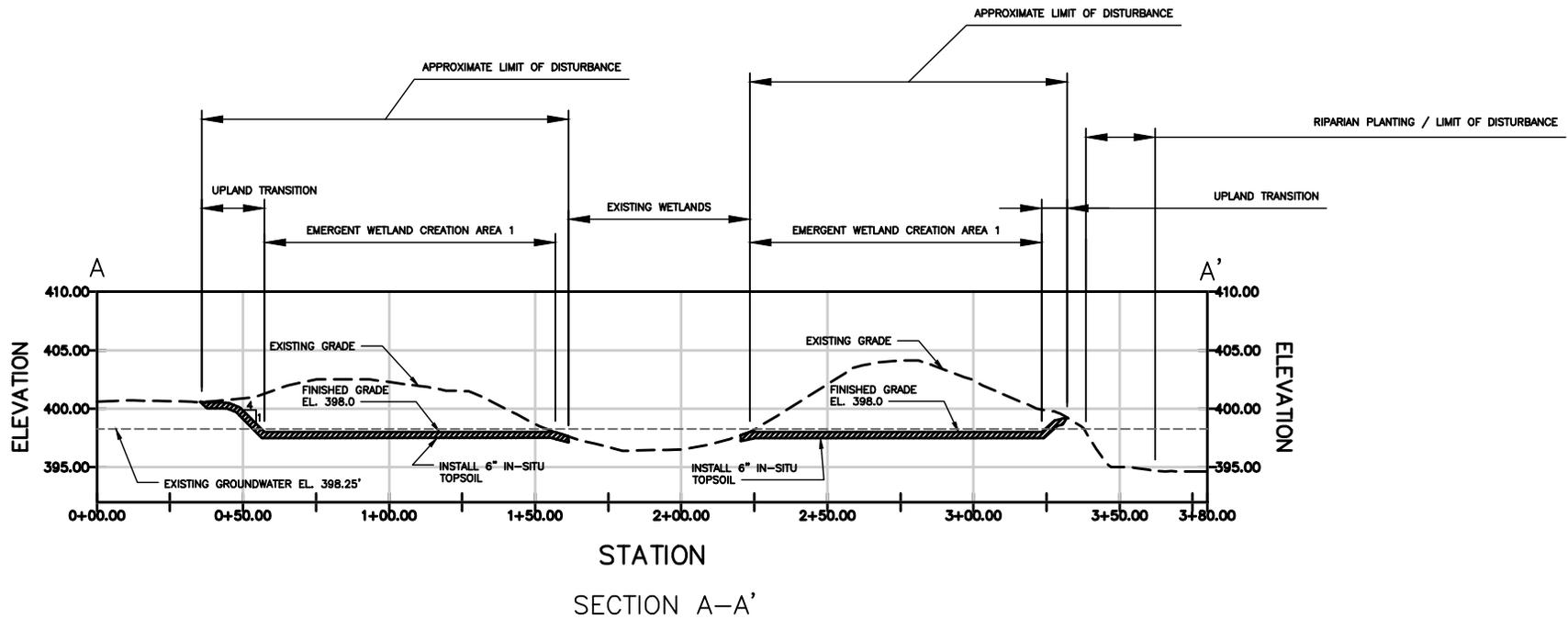
IT IS A VIOLATION OF EDUCATION LAW ARTICLE 145 SECTION 7209 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY.

SHEET TITLE  
**CROSS SECTIONS AND PLANTING PLAN (SHEET 1 OF 1)**

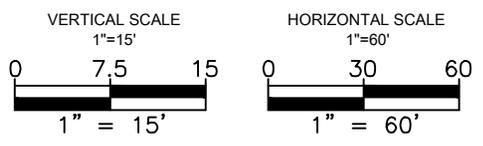
PROJECT  
**ORANGE COUNTY AIRPORT RUNWAY 3-21 RSA IMPROVEMENTS / OBSTRUCTION REMOVAL GOSHEN WETLAND MITIGATION SITE TOWN OF GOSHEN COUNTY OF ORANGE STATE OF NEW YORK**

APPLICANT  
**ORANGE COUNTY, NY**

DRAWING NO.  
**FIGURE 29**  
 SHEET 29 OF 34



SECTION A-A'

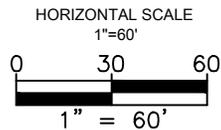
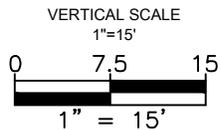
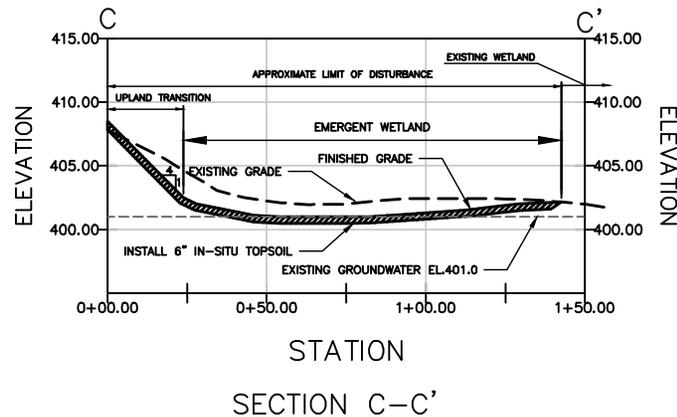
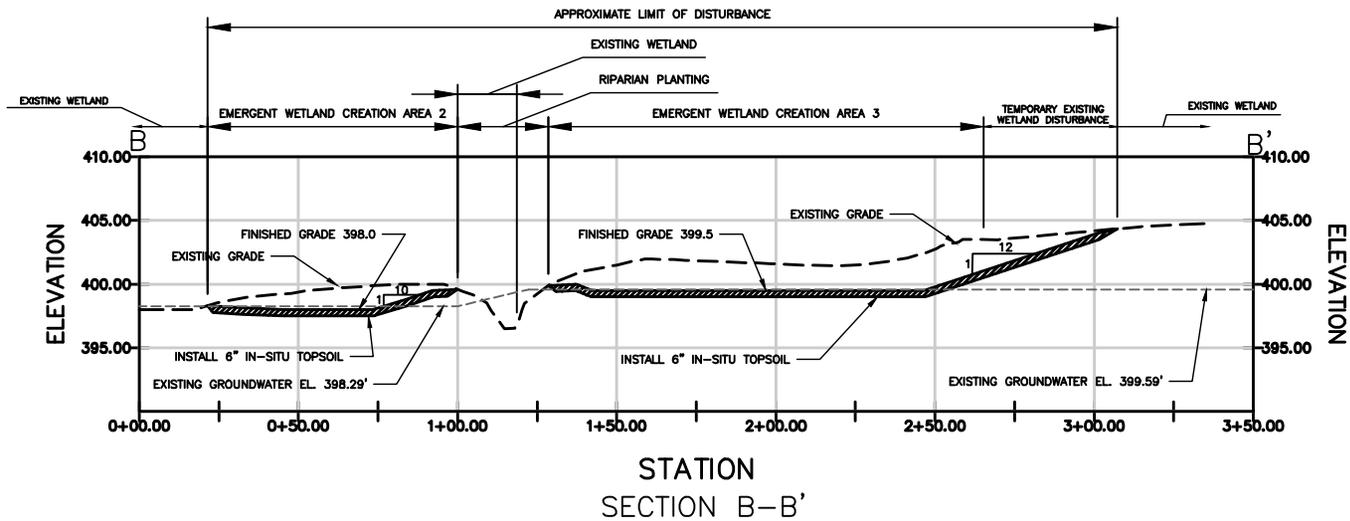


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SHEET TITLE	PROJECT	APPLICANT	DRAWING NO.
CROSS SECTION A-A'	ORANGE COUNTY AIRPORT RUNWAY 3-21 RSA IMPROVEMENTS / OBSTRUCTION REMOVAL GOSHEN WETLAND MITIGATION SITE TOWN OF GOSHEN COUNTY OF ORANGE STATE OF NEW YORK	ORANGE COUNTY, NY	FIGURE 30
			SHEET 30 OF 34

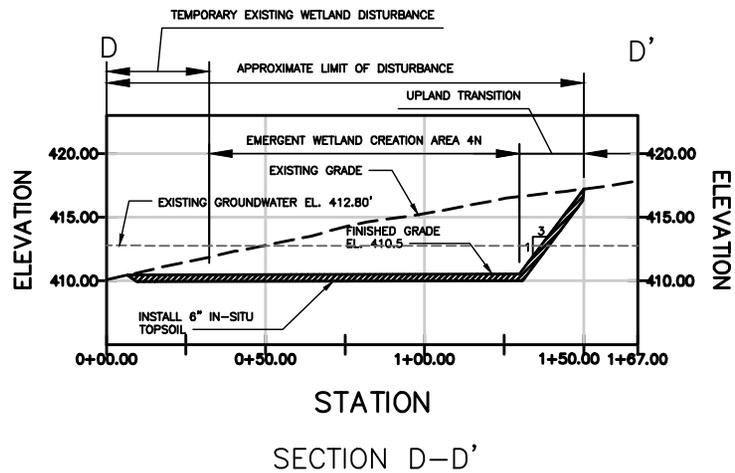


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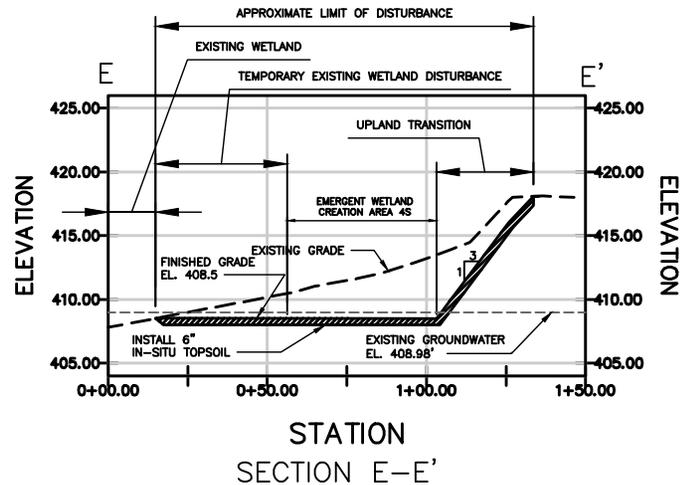
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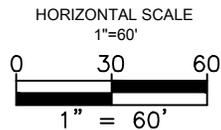
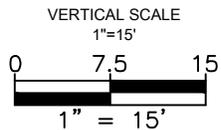
SHEET TITLE	PROJECT	APPLICANT	DRAWING NO.
CROSS SECTIONS B-B' AND C-C'	ORANGE COUNTY AIRPORT RUNWAY 3-21 RSA IMPROVEMENTS / OBSTRUCTION REMOVAL GOSHEN WETLAND MITIGATION SITE TOWN OF GOSHEN COUNTY OF ORANGE STATE OF NEW YORK	ORANGE COUNTY, NY	FIGURE 31
			SHEET 31 OF 34



SECTION D-D'



SECTION E-E'



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20 CORPORATE WOODS BOULEVARD  
ALBANY, NEW YORK 12211-2370

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SHEET TITLE  
**CROSS SECTIONS D-D' AND E-E'**

PROJECT  
**ORANGE COUNTY AIRPORT RUNWAY 3-21 RSA IMPROVEMENTS / OBSTRUCTION REMOVAL GOSHEN WETLAND MITIGATION SITE TOWN OF GOSHEN COUNTY OF ORANGE STATE OF NEW YORK**

APPLICANT  
**ORANGE COUNTY, NY**

DRAWING NO.  
**FIGURE 32**  
SHEET 32 OF 34

**NOTES**

1. EIGHT INCHES OF TOPSOIL IN EACH WETLAND CREATION AREA WILL BE STRIPPED AND PLACED FOR FINISHED GRADE PLANTING MEDIUM.

2. WETLAND CREATION AREAS SHALL BE ROUGH GRADED TO PROVIDE MICRO TOPOGRAPHY.

3. DEPTH OF EXCAVATION VARIES BASED ON OBSERVED DEPTH TO GROUNDWATER AND OUTPUT OF WATER BUDGET MODEL. PROPOSED WETLANDS WILL BE SUPPORTED BY A SEASONAL HIGH GROUNDWATER TABLE AND PRECIPITATION.

Wet Meadow Seed Mix - Seed Mix 1				
Planting Zones(s)	Total Quantity (Acres)	Species Name	Common Name	Percentage of Mixture as PLS
Emergent Wetland / Riparian Planting	7.51	<i>Andropogon gerardii</i>	Big Bluestem	15%
		<i>Panicum virgatum</i> var. Shelter	Switchgrass	15%
		<i>Echinochloa muricata</i>	Barnyard Grass	7%
		<i>Agrostis alba</i>	Redtop	6%
		<i>Lolium multiflorum</i>	Annual Rye	10%
		<i>Aster novae-angliae</i>	New England Aster	4%
		<i>Aster puniceus</i>	Purple-stemmed Aster	4%
		<i>Carex lurida</i>	Lurid sedge	4%
		<i>Carex stricta</i>	Tussock sedge	4%
		<i>Carex vulpinoidea</i>	Fox sedge	4%
		<i>Eupatorium perfoliatum</i>	Boneset	4%
		<i>Scirpus atrovirens</i>	Green Bulrush	4%
		<i>Scirpus cyperinus</i>	Wool grass	4%
		<i>Scirpus validus</i>	Soft Stem Bulrush	4%
		<i>Solidago graminifolia</i>	Grass-leaved goldenrod	3%
<i>Vernonia hastata</i>	Blue Vervain	4%		
<i>Vernonia noveboracensis</i>	New York Ironweed	4%		
				100%

1. The application rate for the native seed mix shall be at 30 pounds per acre or 0.7 pounds per 1,000 square feet.

Upland Meadow Seed Mix - Seed Mix 2				
Planting Zones(s)	Total Quantity	Species Name	Common Name	Percentage of Mixture as PLS
Upland Transition	3.81	<i>Andropogon gerardii</i>	Big Bluestem	16%
		<i>Panicum virgatum</i> var. Shelter	Switchgrass	16%
		<i>Lolium multiflorum</i>	Annual Rye	30%
		<i>Asclepias syriaca</i>	Common milkweed	10%
		<i>Aster novae-angliae</i>	New England Aster	8%
		<i>Chamaecrista fasciculata</i>	Partridge Pea	8%
		<i>Pycnanthemum incanum</i>	Hoary Mountain Mint	6%
		<i>Rudbeckia hirta</i>	Black-eyed Susan	6%
				100%

2. The application rate for the native seed mix shall be at 30 pounds per acre or 0.7 pounds per 1,000 square feet.

 <p><b>LOUIS BERGER</b> 20 CORPORATE WOODS BOULEVARD ALBANY, NEW YORK 12211-2370</p>	<p>IT IS A VIOLATION OF EDUCATION LAW ARTICLE 145 SECTION 7209 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY.</p>	SHEET TITLE	PROJECT	APPLICANT	DRAWING NO.
		PLANTING TABLE (SHEET 1 OF 2)	ORANGE COUNTY AIRPORT RUNWAY 3-21 RSA IMPROVEMENTS / OBSTRUCTION REMOVAL GOSHEN WETLAND MITIGATION SITE TOWN OF GOSHEN COUNTY OF ORANGE STATE OF NEW YORK	ORANGE COUNTY, NY	FIGURE 33
		DESIGNED BY: AV / SA			
		DRAWN BY: AV			
REVIEWED BY: ES / BB					
DATE: JUNE 2015					SHEET 33 OF 34

**Soils within Areas of Wetland Creation**

Three soil types are present within the area of excavation, and contain fragipans that allow a perched water table to sit atop, thus creating suitable hydrology for wetlands, once the overburden is removed. These soils include the Bath-Nassau channery silt loams, Erie gravelly silt loam, and the Mardin gravelly silt loam. Per the Soil Survey descriptions below and information noted in the table:

- **Bath-Nassau channery silt loams, 3 to 8 percent slopes (BnB).** The Bath-Nassau soil contains a perched water table above the fragipan.
- **Mardin gravelly silt loam, 3 to 8 percent slopes (MdB).** The Mardin soil has a dense fragipan in the subsoil, and the water table is perched above the fragipan early in spring and in other excessively wet periods.
- **Erie gravelly silt loam, 0 to 3 percent slopes (ErA).** The Erie soil contains a seasonal high water table that is perched above the fragipan in spring and other wet periods. Seasonal wetness and slow or very slow permeability in the fragipan are serious limitations for most urban and recreation uses.

The depth of soils to be removed is dependent on the presence of the confining layer noted during soil borings conducted at the site, and the depth to the seasonal high water table as determined through on-site groundwater monitoring and the development of a water budget to confirm the appropriate elevations to establish a seasonally saturated wetland hydroperiod. The confining layer (fragipan) was observed in soil borings at a depth of one to five feet. Subsoils at the depth in the 7 soil of excavation and above the restrictive layer include dark yellowish orange silt to moderate brown silt with traces of gravel, to grayish brown clayey silt with traces coarse to fine gravel. Within the creation areas the top 8 inches of topsoil will be stripped, stockpiled and replaced within each creation area to serve as the plant growth medium, and to take advantage of the existing seed bank.

**Water Budget/Hydrology**

The water budget analysis modeled the groundwater elevations of the proposed wetland parcels and predicts groundwater elevations during the growing season. The groundwater elevations describe the hydrologic conditions of the wetlands and are a factor in their long-term viability. As identified in the 1987 Corps of Engineers *Wetland Delineation Manual*, the minimum wetland hydrology design criteria for a seasonally saturated hydroperiod requires that a wetland be saturated at or near the surface (specifically, within 12 inches of the surface) for 12.5% of the growing season. Planned hydrology for the wetlands at the Goshen Wetland Mitigation Site was designed to meet this USACE hydrological requirement.

Hydrology model results were compared against groundwater elevations collected from the 7 ground water monitoring wells in the wetland mitigation site. The proposed grade elevations were determined from the model runs. The proposed grade/ground surface elevations were selected to be low enough so that the groundwater stays within the saturation zone for the duration specified by the USACE hydrological requirement noted above. The saturation period was analyzed for each wetland parcel. The wetland design satisfied the design criteria of being saturated for more than 26 days and for a consecutive 7 days within the growing season.

WETLAND ENHANCEMENT/RIPARIAN PLANTING AREAS					
PLANTING ZONE	TOTAL QUANTITY	SPACING (FT)	SCIENTIFIC/ COMMON NAME	MINIMUM SIZES	FORM
Riparian Wetland Planting (2.29 Acres)	263	19' Centers	Acer saccharinum (Silver Maple)	0.4 INCHES root collar diameter 12 -18 INCHES HEIGHT MIN.	Tublings/ Containers
	252	20' Centers	Quercus bicolor (Swamp White Oak)	0.4 INCHES root collar diameter 12 -18 INCHES HEIGHT MIN.	Tublings/ Containers
	252	20' Centers	Quercus palustris (Pin Oak)	0.4 INCHES root collar diameter 12 -18 INCHES HEIGHT MIN.	Tublings/ Containers
	218	21' Centers	Nyssa sylvatica (Tupelo)	0.4 INCHES root collar diameter 12 -18 INCHES HEIGHT MIN.	Tublings/ Containers
	183	23' Centers	Fraxinus pennsylvanica (Green Ash)	0.4 INCHES root collar diameter 12 -18 INCHES HEIGHT MIN.	Tublings/ Containers
	92	33' Centers	Vaccinium corymbosum (Highbush blueberry)	24 INCHES HEIGHT MIN.	Container
	115	30' Centers	Cornus amomium (Silky Dogwood)	24 INCHES HEIGHT MIN.	Container
	103	31' Centers	Amelanchier Canadensis (Canada serviceberry)	24 INCHES HEIGHT MIN.	Container
	80	35' Centers	Viburnum lentago (nannyberry)	24 INCHES HEIGHT MIN.	Container
TOTAL	1,557				

NOTE: THE OVERALL SPACING BETWEEN RIPARIAN PLANTINGS SHALL BE 8' ON CENTER

 <p>LOUIS BERGER 20 CORPORATE WOODS BOULEVARD ALBANY, NEW YORK 12211-2370</p>	SHEET TITLE		PROJECT	APPLICANT	DRAWING NO.
	PLANTING TABLE (SHEET 2 OF 2)		ORANGE COUNTY AIRPORT RUNWAY 3-21 RSA IMPROVEMENTS / OBSTRUCTION REMOVAL GOSHEN WETLAND MITIGATION SITE TOWN OF GOSHEN COUNTY OF ORANGE STATE OF NEW YORK	ORANGE COUNTY, NY	FIGURE 34
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