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April 8, 2019

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April 8, 2019
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Ms. Cynthia T. Brown
Chief, Section of Administration
Office of Proceedings
Surface Transportation Board
385 E Street, S.W., Room 1034
Washington, DC 20424

Re: Docket No. FD No. 35087 (Sub-No. 8), Canadian National Railway
Company and Grand Trunk Corporation—Control—EJ&E West
Company

Dear Ms. Brown:

Enclosed for filing in the above-captioned proceeding is a Petition to
Reopen Based on New Evidence and Materially Changed Circumstances. The
petition is filed by the Village of Barrington, Illinois pursuant to the Board's
Governing Regulations. The filing consists of the Petition, a Verified Statement
of Karen A. Darch, three attachments and the certificate of service. A waiver of
filing fees is requested pursuant to 49 C.F.R. § 1002.2(e).

Should you have any questions or need additional information regarding
this matter, please feel free to contract me at 202-363-2011.

Yours truly,

/s/ Richard H. Streeter

Richard H. Streeter
Attorney for the
Village of Barrington, Illinois

RHS:rs

FILING FEE WAIVED

Before the
SURFACE TRANSPORTATION BOARD

Finance Docket No. 35087 (Sub-No. 8)

CANADIAN NATIONAL RAILWAY COMPANY AND GRAND TRUNK
CORPORATION – CONTROL – EJ&E WEST COMPANY

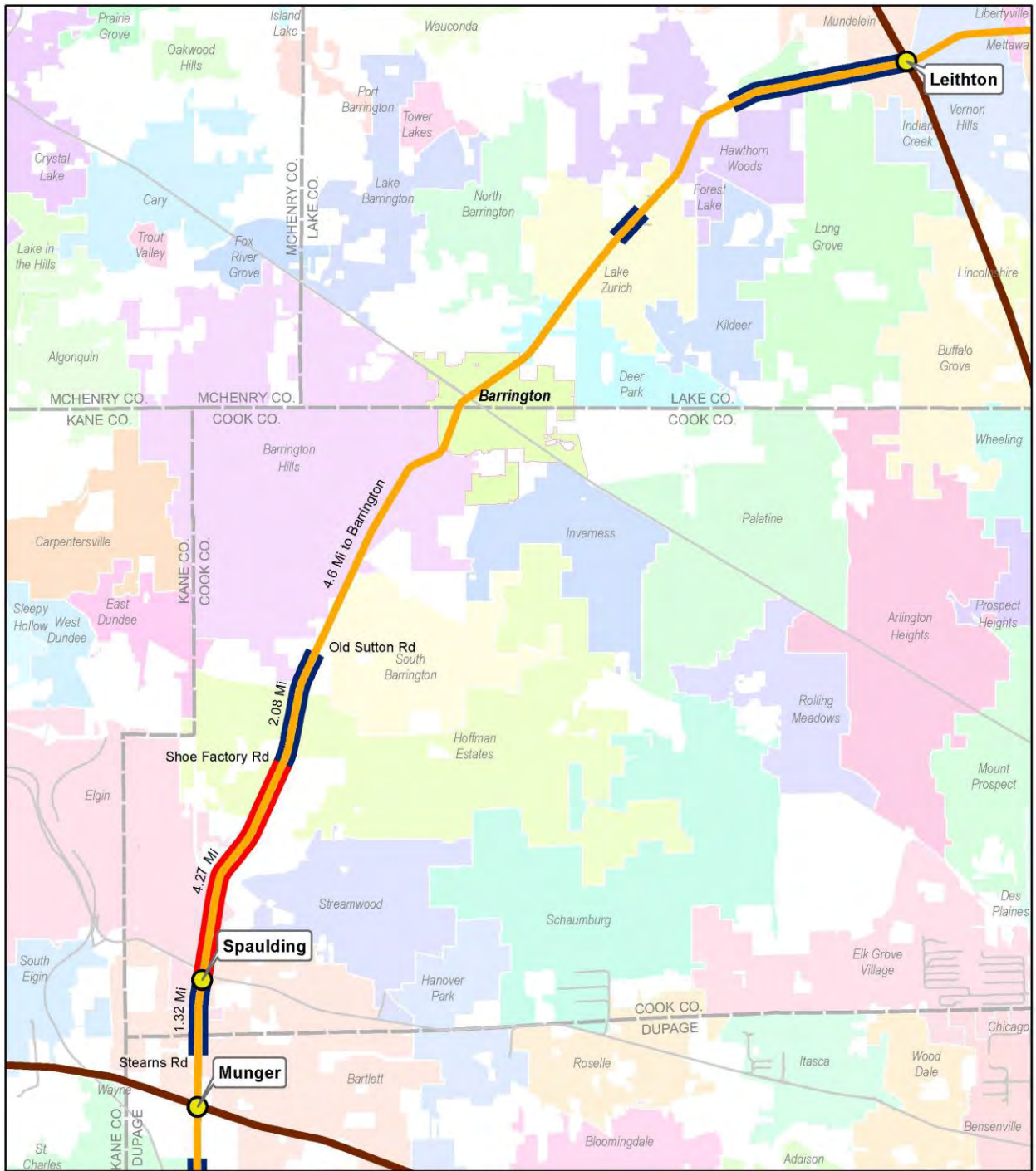
PETITION TO REOPEN
BASED ON NEW EVIDENCE AND
MATERIALLY CHANGED CIRCUMSTANCES
PURSUANT TO THE BOARD'S
GOVERNING REGULATIONS

The Village of Barrington, Illinois (Barrington), by and through counsel, respectfully files this Petition seeking reopening pursuant to 49 U.S.C. § 722(c) and 49 C.F.R. § 1115.4, which provide that a petition for reopening “must state in detail the respects in which the proceeding involves ... new evidence, or substantially changed circumstances and must include a request that the Board make such a determination.” Barrington requests this action to enable the Board to consider new evidence of double tracking near Barrington and new projections of nine (9) additional daily trains that contradicts previous sworn testimony of Canadian National Railway Company (CN) executives. This sworn testimony not only caused the Board to deny Barrington relief, but also caused the United States Court of Appeals to defer to the Board’s judgment in *Village of Barrington, IL v. STB*, 892 F.3d 252 (7th Circuit 2018).

As Barrington has recently learned, CN, contrary to positions taken before the Board and the Seventh Circuit, has submitted a Permit Application¹ to the United States Army Corps of Engineers (USACE) requesting approval to build a second mainline track for 4.27 miles within its right-of-way running between Shoe Factory Road and Spaulding Road just to the south of Barrington. This new second mainline track will join an existing double track that extends to approximately 4.6 miles south of Barrington. Construction of the double track will allow the nine (9) additional daily trains to pass through Barrington. This segment of track is located within the Leithton to Spaulding Segment 14 of the former EJ&E Line and was included within the Board's 2008 NEPA analysis and mitigation orders in this proceeding. As the map on the following page reflects, the only intersecting Subdivisions along this track are at Leithton north of Barrington and Munger south of Barrington. The additional 9 trains represent a 50% increase above the average of 18.1 trains that moved through Barrington in 2016.²

¹See Attachment A, USACE Permit Application – LRC-2018-00651.

² The cumulative projected volume of 29.3 daily trains reflects an increase in the number of daily trains moving through Barrington of nearly 453% since 2007.



- EJ&E Rail Line
- CN Rail Line
- Other Rail Line
- Existing Multi Track
- Proposed CN USACE Double Tracking

CN USACE Double Tracking Project



0 1 2 Miles

Disclaimer of Liability:
GIS maps and related data contained therein ("maps and data") made available by the Village of Barrington are intended for reference purposes only. The Village provides such maps and data AS IS without any implied or expressed warranties as to its accuracy and completeness. Such maps and data are believed to be accurate, but accuracy is not in any way guaranteed and modifications are made to such maps and data on an ongoing basis as new information becomes available. Any use and/or application of such maps and data is done solely at the user's own risk.

Source: VoB GIS, IDOT
Date: 4/3/2019

The Permit Application does not mention that every single one of the nine new trains will pass through Barrington on a daily basis. Because the Board in the instant proceeding has consistently denied Barrington grade-separation mitigation at the U.S. Hwy. 14 crossing based on its 2008 projection that a maximum of 20.3 trains per day will pass through Barrington, there is no avoiding the reality that this constitutes new evidence of substantially changed circumstances. When the recently disclosed project is completed in 2020, the number of daily trains operated by WCL over the former EJ&E Line that will pass through Barrington will average 29.3 trains. As a result, the Board's previous conclusion that Barrington's new evidence would not materially alter its 2008 decision must be reconsidered and set aside.

The USACE Permit Application, which was recently released for public comment to a limited number of recipients, was filed in the name of Wisconsin Central Ltd. (WCL), CN's subsidiary that has operated over the former EJ&E Line since it was acquired by CN in 2009.³ As explained in the Permit Application, the purpose of this proposed work

is to add a second main line railroad within the existing Wisconsin Central Ltd. (WCL) right-of-way in the designated project area. The WCL Leithton Subdivision is one of the *primary north-south main line tracks along the WCL corridor that transports vital customer train traffic between Winnipeg, Canada and Chicago*. Currently forecasted capacity for 2020 includes *a growth of approximately 9 trains per day along this Subdivision*. The *completion of the second main line track in the proposed*

³ Barrington was not served with a copy of the Permit Application and only learned of it from a citizen of a neighboring community. V.S. Karen Darch at 1.

location will help improve fluidity and resilience for northbound and southbound traffic flows.

As the record reflects, since 2014, Barrington has raised the issue of double tracking and has supported its position by introducing a Request for Proposal (RFP) issued by CN in 2016 involving double-tracking on the Leithton to Spaulding Segment 14 of the former EJ&E. In response to Barrington, on January 30, 2017, John Orr, CN's Senior Vice President and Chief Transportation Officer emphatically testified in his sworn statement signed under penalty of perjury as follows:

Let me be clear: based on our current traffic projections and the existing capacity of the line, CN has no need and no current plans to install double track through or near Barrington. The lack of sufficient traffic and existence of higher priority projects means the expected return on investment would be insufficient to justify such a project. Accordingly, CN has not designed or allocated money for a second track in or *near* Barrington. Nor is it likely to do so any time in the near future.⁴

Mr. Orr further testified:

The cited RFP was issued as part of CN's regular assessment of capacity and fluidity on its network. We asked various engineering firms to estimate the cost of double tracking various portions of the Winnipeg to Chicago corridor, so our capacity analysts could then use their computer modeling and simulation tools to identify those projects that would have the greatest impact on fluidity and capacity. Such a routine assessment does not mean that traffic growth is imminent or expected in the foreseeable future. Rather, it is simply prudential planning to enable CN to identify which possible capital investments would provide it with the greatest return on investment. As noted above, given existing capacity and current and projected traffic levels, we concluded that double tracking *in and around* Barrington would not be worthwhile.

⁴ Verified Statement of John Orr at 8 (emphasis added).

Accordingly, in September 2016, CN notified bidders it would not proceed with any double tracking project on the EJ&E line.⁵

Based on their understanding that CN planned to reissue a new RFP post-2016, the Illinois Department of Transportation (IDOT) and Barrington requested the Board to require CN to supply the original “RFP used for its ‘prudential planning’ and the September 2016 letter CN used to notify ‘bidders it would not proceed with any double tracking project on the EJ&E line.’”⁶ The Board did not do so.

In his Reply Verified Statement, dated March 15, 2017, Mr. Orr, after disclaiming any knowledge of any plan or proposal for another RFP, repeated his prior sworn testimony that “CN has no plans to install double-track in or near Barrington.”⁷ Because the recently disclosed application first surfaced 18 months later explicitly involves double-tracking the EJ&E mainline at a location that is unquestionably near Barrington, it appears that CN was less than candid with the Board and ultimately the Seventh Circuit Court of Appeals.⁸

In affirming the Board’s April 2017 decision, the Court of Appeals determined that Barrington’s introduction of the RFP involved new evidence, even though Barrington had previously raised the double-tracking issue in

⁵ *Id.* at 8-9 (emphasis added).

⁶ February 23, 2017, Motion for Leave to file Comments in Response to Reply filed by CN, at 12.

⁷ Orr Reply V.S. at 2.

⁸ Although dated in December 2018, certain of the maps show that they were created as early as July 5, 2018. Moreover, the environmental work began in early July as well.

2014.⁹ In finding that the Board had not abused its discretion, the court reasoned as follows:

However, the Board did not abuse its discretion by determining that CN “has no need and no current plans to double-track the line in or near Barrington.” This finding was supported by a CN executive’s verified statement that “[t]he cited RFP was issued as part of CN’s regular assessment of capacity and fluidity on its network” in order to “identify those projects that would have the greatest impact on fluidity and capacity.” From this assessment, CN concluded that “the expected return on investment would be insufficient to justify such a project.” As a result, “CN has not designed or allocated money for a second track in or near Barrington” and would be unlikely to do so in the near future.¹⁰

Shortly after Barrington filed its petition for review in December 2017, CN was well on the way to double-tracking the EJ&E Line near Barrington. As stated in a CN press release dated January 23, 2018:

“CN is investing more than ever before in the safety, efficiency and resiliency of our network,” said Luc Jobin, CN president and chief executive officer. “These record investments, a substantial portion of which will go to new capacity and growth projects, will improve our network fluidity, allowing us to deliver superior service to meet our customers’ growing freight volumes.”

As was also noted in the press release:

Approximately C\$400 million is expected to be spent on equipment, including the acquisition of new high horsepower locomotives. A further C\$800 million is targeted towards initiatives to increase capacity and enable growth, such as track infrastructure expansion, investments in yards and in intermodal terminals; and on

⁹ “Like the PPR expansion, the Village raised the issue of double-tracking in 2014. However, the Village supported the claim in its 2017 petitions with a new Request for Proposal (“RFP”) issued by CN in 2016 for double-tracking on the EJ&E line. This sufficiently constitutes new evidence.” *Village of Barrington, IL v. STB*, 892 F.3d at 272.

¹⁰ *Id.*

information technology to improve safety performance, operational efficiency and customer service.

More specifically, major capacity and equipment investments include:

Sixty new GE locomotives, the first deliveries from a three-year order of 200 new units

Double track and siding extensions in the West Coast to Chicago corridors

Intermodal equipment and infrastructure in Toronto, Memphis, Tenn., Joliet, Ill., and other terminals.¹¹

Although the foregoing announcement did not signal in bold letters that the double tracking would involve the Leithton Subdivision near Barrington, the mention of the major capacity and equipment investments in Memphis, Tennessee and Joliet, Illinois is extremely significant. Such investments clearly reflect CN's awareness of the dramatic growth in containerized traffic moving through the Port of Prince Rupert. Prince Rupert's Fairview Container Terminal opened in 2007 and handled about 182,000 containers in its first full year of operation. Thereafter, its capacity was extended to about 1.35 million TEUs. That expansion was completed by August 29, 2017.¹²

Furthermore, as Shaun Stevenson, President and CEO of the Port of Prince Rupert, has noted, the environmental assessment process for yet another expansion had already been completed prior to the end of 2018.¹³ It is a foregone conclusion that the executive team at CN has been aware that the

¹¹ See Attachment B, CN targeting record C\$3.2 billion capital program in 2018.

¹² <https://www.rupertport.com/future/fairview-terminal-phase-2>

¹³ Brian Cross, *Prince Rupert optimistic about ag handlings*, The Western Producer, January 24, 2019.

further extension of that terminal will expand its capacity to around 1.8 million TEUs by 2022, with all of this additional traffic being destined to move over CN's network.¹⁴ That CN has directly linked the increased number of trains with the expansion of the intermodal terminals in Memphis and Joliet also demonstrates the relationship between the continued expansion of the Port of Prince Rupert facilities and the direct material impact on Barrington.¹⁵

Furthermore, the statement in the USACE Permit Application that the double tracking will occur on one of CN's primary north-south main line that transports vital customer train traffic between Winnipeg and Chicago unquestionably demonstrates that Barrington will be further materially impacted by these new train movements. This new evidence also demonstrates the need to question the 2017 sworn testimony of Keith Reardon, CN's Vice President Intermodal Services. In the first place, the comment in his Verified

¹⁴ <http://trn.trains.com/news/news-wire/2018/06/20-prince-rupert-container-port-expansion-to-boost-canadian-national-intermodal-traffic>, dated June 20, 2018; *"Canadian National will get another intermodal boost from the fast-growing Port of Prince Rupert, which on Tuesday announced a container port expansion that should be complete in 2022. ... "Together with our supply chain partners, this expansion, combined with CN's investments in B.C. and across its rail network, positions us to drive this unique trade gateway success story forward," Jean-Jacques Ruest, CN's interim CEO, said in a statement.... Ruest has said that CN expects the expanded container port to hit maximum capacity this year, at least two years ahead of schedule. He has vowed that CN will add enough capacity to stay ahead of traffic growth."*

¹⁵ The impact on Barrington is also confirmed by more recent news articles. See Bill Stephens, *Canadian National details Western Canada capacity projects for 2019*, Train Industry Newsletter, dated February 1, 2019, "[t]he line to Prince Rupert – the fastest-growing port in North America – will receive three new miles of double track, along with a new siding" and that about "two-thirds of the international containers that land at Vancouver and Prince Rupert wind up in Chicago." Also, in 2018, "CN spent \$400 million to add 60 miles of double track and seven new or extended passing sidings in Western Canada, along with a section of double track and two passing sidings on the Winnipeg-Chicago corridor" *Id.*

Statement of January 30, 2017 that “[w]hether Phase II of the Fairview Container Terminal will be completed and precisely when is uncertain” was specious. Although the Board in its April 26, 2017 decision chose to accept Reardon’s baseless suggestion that the expansion of the Fairview Terminal was uncertain, his testimony was effectively rebutted the previous day by Jean-Jacques Ruest, who was then CN’s CMO and Executive Vice-President.¹⁶ As Barrington noted in its Petition for Reconsideration, filed May 16, 2017, during CN’s April 25, 2017 Earnings Call, Mr. Ruest stated as follows:

By the time we get to summer, Delta port and Dubai Port and Rupert will have their expansion come in. So you’re roughly talking in both cases 0.5 million TEU rail capacity in both cases available for us to go and grow. Along that, we are expanding our terminal in Memphis, the one in Detroit, and we’re also expanding Joliet.

Despite the reality that the Board never acknowledged this obvious contradiction, it is respectfully submitted that Mr. Ruest’s statement shows that CN was already aware that the expansion of the PPR intermodal terminals was going to increase the number of trains that would move through Barrington. The January 23, 2018 press release and the new evidence recently disclosed in the USACE Permit Application are clearly consistent with Mr. Ruest’s comments. They also reveal the misleading nature of Mr. Reardon’s testimony upon which the Board relied in its April 26, 2017 Decision.¹⁷

¹⁶ In July 2018, Mr. Ruest became President and CEO of CN.

¹⁷ In the Board’s October 30, 2017 decision, there is no mention of Mr. Ruest’s statement. Nor was there any attempt to assess the implications of the completion of the expansion of the Fairview terminal. Instead, the Board brushed aside Barrington’s evidence regarding the anticipated increase in rail traffic attributed to the expansion of the Fairview Terminal with the comment that “other factors unrelated to the

Simply put, the projected movement of nine additional trains through Barrington cannot be squared with Mr. Reardon's statement that:

our best estimate is that the project expansion will result in 4 additional loaded trains and 4 additional empty trains per week. Of this total, we estimate that 2 additional southbound loaded trains and 2 additional northbound trains each week, equivalent to about 0.5 total additional trains per day (all intermodal), will move through Barrington.¹⁸

Plainly, Mr. Reardon's "best estimate" as well as his speculative claim about whether the Fairview Terminal "will be completed" have proven to be baseless. Because CN's new evidence projects the movement of 9 additional trains through Barrington, there is no denying that Mr. Reardon's "best estimate" that a total of 0.5 additional trains will pass through Barrington per day has been eclipsed by a whopping 8.5 daily trains.

The significance of the material difference between sworn testimony presented to the Board and the information in the USACE Permit Application cannot be overstated. In denying Barrington's petition for review of the Board's denial of its 2017 Petition to Reopen, the Court of Appeals stated that:

the Village did not show that rail volume specifically moving through Barrington has been materially impacted. Substantial evidence supported this finding. A senior CN executive provided a verified statement that only a portion of PPR traffic moves through Barrington, and that future port expansions would result in only 0.5 additional trains per day traveling across U.S. 14. This, along with the fact that the overall number of trains still falls below 2015

transaction, such as changes in industry, economic growth, and energy prices, are now just as likely to play a role in future fluctuations in rail traffic." Slip op. at 10. Given the projections in the Permit Application, the impact of the continuing expansion of PPR terminal facilities on the 2008 projections must be acknowledged.

¹⁸ Verified Statement of Keith Reardon at 2.

projections, is sufficient to sustain the Board's conclusion that the Village's PPR evidence would not materially alter its 2008 decision.¹⁹

Given the Seventh Circuit's reliance on Mr. Reardon's testimony regarding the addition of "only 0.5 additional trains per day traveling across U.S. 14," and "the fact that the overall number of trains still fell below 2015 projections,"²⁰ the materiality of this new evidence regarding the projected 9 additional trains, the continued expansion of the Fairview Container Terminal, and the resultant need to double track the Leighton to Spaulding Segment near Barrington cannot be ignored. As Ruest also revealed, after CN acquired the EJ&E, it took about one-third of the yard in Joliet, IL, which was then used for manufacturing-related merchandise, and "turned it into a container terminal. It's now two-thirds container."²¹ To pretend that this new evidence is not directly and inextricably linked to CN's acquisition of the EJ&E is irrational as it would be necessary to ignore the fact that the EJ&E rail line had been a single mainline track since its incorporation in 1887. CN has now admitted that it needs to double track key segments of the line to improve fluidity and resilience of the EJ&E line so that it can meet its customers' growing freight volumes that move through Barrington.

The continuing expansion of intermodal traffic, which reflects CN's recognition of the future importance of consumer goods, is not the only factor

¹⁹ 892 F.3d at 272.

²⁰ *Id.*

²¹ <https://www.railwayage.com/freight/railroader-of-the-year-cns-jj-ruest/?RAchannel=home>

that corroborates CN's new evidence that nine additional trains a day will move through Barrington beginning in 2020. In addition, there has been a significant increase in the shipments of crude-by-rail between Alberta and the Gulf Coast refineries since the beginning of 2017. In his comments that are reported in the January issue of *Railway Age*, Mr. Ruest also pointed to the increased crude being transported from Edmonton "via the CN all the way to Louisiana, to Geismar and/or Baton Rouge."²² As he further explained, "[i]n order to use rail, you need the railcars, but you need the network. You need the double-track and sidings and the crews and the locomotives." This plainly includes the need to double track the rail network near Barrington.

As CN acknowledged in its Earnings Call on January 29, 2019, CN moved an average 230,000 barrels a day in the fourth quarter of 2018 and about 130,000 barrels in the third quarter. In this regard, it is noted that the movement of 230,000 barrels per day exceeds the total amount of Canadian crude oil exports by rail that was exported prior to May of 2013.²³ Moreover, the 230,000 barrels per day moved by CN in the fourth Quarter of 2018 was 67% of the total amount of Canadian crude oil exports by rail. CN's strong crude-by-rail business from Alberta is also reflected in the following presentation slide prepared earlier this year by CN:

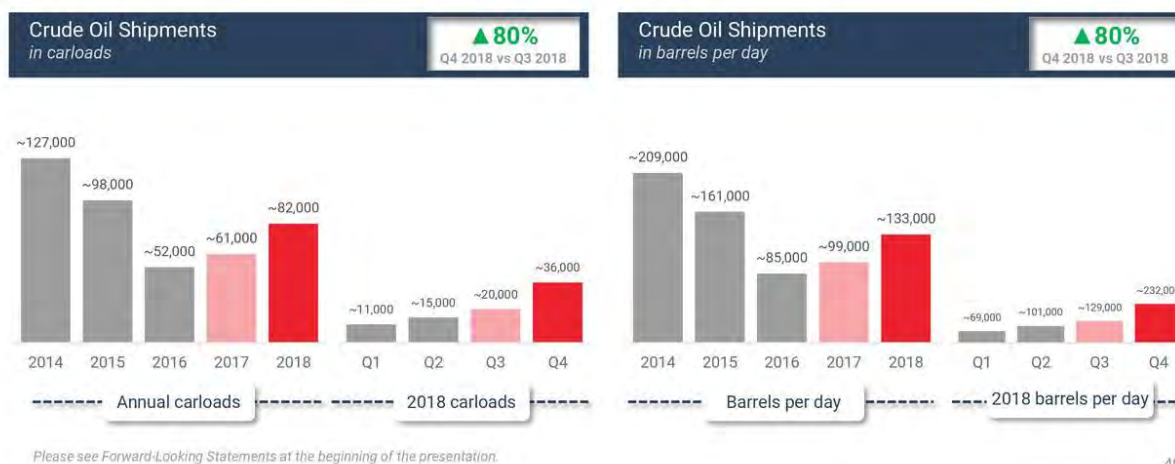
²² *Id.*

²³ *Canadian Crude Oil Exports by Rail – Monthly Data.* <https://www.neb-one.gc.ca/nrg/sttstc/crdlndptrlmprdct/stt/cndncrdlxprtsrl-eng.html>. Attachment C.

Crude oil: CN network supports growing crude oil shipments in Western Canada



- Significant ramp-up in crude volumes in H2 2018
- Volumes in Q1 2019 impacted by temporary production curtailments imposed by Alberta government
- Overall Alberta crude exports remain strong
- Negotiations ongoing to start shipping crude by rail for Alberta government by end of 2019 / early 2020



Given that certain of the maps that are included in the Permit Application filed with Corps of Engineers are dated as early as July 5, 2018, which is only 24 days after the Seventh Circuit's opinion was issued, it is respectfully submitted that the decision to double track the line near Barrington was not a spur of the moment decision. Given a basic understanding of how capital expenditure decisions are made by Class I railroads, it is unreasonable to assume that the required planning and analysis of all aspects of the double-tracking project was not begun before the close of the administrative proceeding in late 2017, and at the latest, well before the beginning of the appellate process. Indeed, the issuance of the RFP in 2016 is

proof that consideration was being given to double tracking despite what CN's executives stated to the Board and the Seventh Circuit.

That CN would cover up its intent by temporarily shelving the RFP is easily understood. Rather than disclosing its intention to double track near Barrington in 2017, it could avoid further scrutiny by Barrington and the Board during the oversight period by downgrading the anticipated amount of intermodal traffic that would be moved through Barrington following the further expansion of the Port of Prince Rupert container facilities as well as the intermodal terminals in Memphis and Joliet.

In this respect, the Board is reminded that because CN's 2015 projection of 20.3 trains per day was based on the traffic handled by CN and EJ&E in 2006, it did not involve consideration of any containerized shipments that moved through the Port of Prince Rupert. Nor did that projection account for shipments of crude-by-rail that now move through Barrington to the Gulf Coast on a daily basis that are rebounding because, among other reasons, the Canadian government is not approving new pipeline projects.

Given the additional 9 trains per day that are projected to move in 2020, the validity of the original 20.3 daily train project is immaterial and irrelevant in terms of the impact on Barrington. Hence, the Board should reopen the proceeding in order to reconsider that impact in light of the new projection found in CN's USACE Permit Application that estimates 29.3 daily trains in 2020. This new evidence, which reflects a materially changed circumstance related to the underlying transaction that was not considered by the Board or

the Court of Appeals, demands that the Board reassess its outdated conclusion regarding “the major source of congestion” at U.S. Hwy. 14.

As Board counsel stated during the May 22, 2018 argument before the Seventh Circuit, when asked how Barrington could bring a changed condition to the Board:

the regulatory standard for reopening applies regardless of when the transaction was approved, and therefore, if they were able to come to us with such, with new evidence or changed circumstances that warranted re-opening, we would consider it even though the oversight period had ended.

While it may be that other changes in industry, economic growth, and energy prices that are unrelated to the transaction may play a role in future fluctuations in rail traffic, the new evidence disclosed in the USACE Permit Application regarding the double tracking project near Barrington cannot be divorced from the transaction. In short, highly relevant material facts submitted to the Army Corps of Engineers by CN cannot be ignored in a proceeding before this Board.

The material adverse impact that will flow from the additional increase of nine daily trains has not yet been felt by the thousands of commuters and residents of Barrington whose lives are already being repeatedly disrupted by the fallout from the CN’s acquisition of the EJ&E. The nine additional trains will also raise additional safety concerns and increase the potential life-threatening instances when all at-grade crossings in Barrington are simultaneously blocked by an increased volume of moving or stopped trains. Given that CN has conceded the nexus between the increase of nine (9)

additional trains in excess of the current 20.3 trains and the need to double track near Barrington, the Board is urged to reopen and reassess the implications of this new evidence.

Because the recently disclosed new evidence suggests that CN has once again manipulated the situation by withholding highly relevant evidence from Barrington, the Board, and the Seventh Circuit, a further inquiry by the Board is well warranted. The Board is fully aware that CN's lack of candor is not new. The situation that has now come to light through CN's USACE Permit Application is reminiscent of CN's failure in 2010 to disclose that there were 1,443 instances of 10-minute or more crossing blockages, rather than the 14 which CN had deceptively reported to the Board.²⁴ It was only after the Board undertook its own investigation (at the request of local communities) that CN was forced to disclose the data that proved that it had grossly unreported instances of blockages of greater than 10 minutes.

In its brief filed before the Seventh Circuit, CN argued that "Barrington's claim that CN planned double-tracking on the EJ&E was unsupported and contradicted by CN's sworn testimony."²⁵ As is plainly evident from the Court's

²⁴ On December 20, 2010, the Board levied a fine of \$250,000 on CN because it had misrepresented the number of blocked crossings being experienced by communities along the EJ&E/Wisconsin Central rail line. In its Decision No. 27, the Board recognized that "[w]hile CN November and December 2009 operating reports filed with the Board stated that 14 street crossing blockages of 10 minutes or more had occurred as a result of stopped CN trains, CN's RTU data for that same time frame showed an additional 1,443 unreported instances wherein the crossing signal system was activated and the gates were in the down position for 10 minutes or more."

²⁵ Brief of Intervenor Canadian National Railway Company and Grand Trunk Corporation at 12.

June 11, 2018 Decision, the Court was unquestionably influenced by Mr. Orr's and Mr. Reardon's *sworn written testimony*. There is good reason to question whether the Board would have made the decision it made or whether the Court would have deferred to the Board's decision if it had known of CN's plans to double track that are outlined in the USACE Permit Application.

Moreover, based on this new evidence that establishes CN's intent to install double-track near Barrington, the Board should reopen the proceeding and, after assessing the impact of the projected increase of nine daily trains on Barrington, order CN to pay a substantial percentage of the cost of the grade separation that has been necessitated solely by the total number of trains that will move through Barrington in 2020. Such relief is consistent with the relief previously granted to Aurora and Lynwood. The primary difference is that Barrington, in seeking \$37 million to cover CN's share of remaining construction costs, is only asking CN to pay a smaller percentage of the cost of construction than the railroad was ordered to pay to these other communities.

As Barrington makes this request, a federal investigation is going on into the reasons behind two Boeing 737 MAX jet crashes. According to an investigative feature in the March 30-31 *Wall Street Journal*: "*The Justice Department and other U.S. Federal agencies are investigating whether Boeing provided incomplete or misleading information to regulators and airline customers.*" The Board is urged to undertake a similar investigation. Simply put, the integrity of the administrative process and judicial review is threatened by situations such as this where, without notice, sworn testimony is repudiated

by evidence presented to an unrelated agency of government. There is no place for false and misleading testimony in Board proceedings.

Respectfully submitted,

/s/ Richard H. Streeter

Richard H. Streeter
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Washington, D.C. 20016
202-363-2011
rhstreeter@gmail.com
Counsel for the Village of Barrington, IL

Dated: April 8, 2019

BEFORE THE
SURFACE TRANSPORTATION BOARD

STB Finance Docket No. 35087 (Sub-No. 8)

CANADIAN NATIONAL RAILWAY COMPANY
AND GRAND TRUNK CORPORATION
- CONTROL -
EJ&E WEST COMPANY

VERIFIED STATEMENT OF KAREN DARCH

My name is Karen Darch and I am the Village President of Barrington, Illinois and authorized to make this statement.

On March 15, 2019, a resident of Elgin, Illinois contacted the Village of Barrington website to alert the Village to a notice he had received from the United States Army Corps of Engineers (USACE) regarding application number LRC-2018-00651 filed by Wisconsin Central Ltd. Railroad.

I replied to said Elgin resident on March 16, 2019 and he forwarded the notice and attachments wherein Canadian National (CN) Railroad's plans to double track its Wisconsin Central rail line south of Barrington were outlined.

Neither CN nor the USACE notified Barrington of the proposed double track work from Elgin to Hoffman Estates even though the proposed project application forecasts nine additional daily trains by next year through Barrington, a tremendous increase in rail traffic and impact.

All of Barrington's roadway crossings of the CN/WCL rail line are at grade. Barrington has requested that CN mitigate the impact of its increased freight traffic on the community by partially funding a grade separation at the US Highway 14 crossing of the rail line.

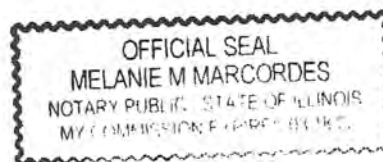
Barrington's request of funding for a grade separation is consistent with mitigation the STB ordered CN to pay for grade separations at US Route 30 (Lynwood) and US Route 34 (Aurora).

Karen Y Darch
Karen Y. Darch, Village President
Village of Barrington
April 5, 2019
Date

SUBSCRIBED AND SWORN TO
Before me this 5th day of April, 2019

Melanie M. Marcordes
Notary Public

My Commission Expires 3/18/22



Attachment A

Petition to Reopen

FD 35087 Sub-No. 8

**USACE INDIVIDUAL
PERMIT (IP) APPLICATION
LRC-2018-00651**



PROJECT SITE:

**Spaulding to South Sutton
Leighton Subdivision
New Main Track
MP 37.59 to MP 41.86
Cook County, Illinois**

PREPARED FOR:

**Wisconsin Central Ltd.
17641 S. Ashland Ave.
Homewood, Illinois 60430**

PREPARED BY:

**V3 Companies
7325 Janes Avenue
Woodridge, Illinois 60517
630.724.9200**

December 20, 2018



December 20, 2018

Mr. Soren Hall
U.S. Army Corps of Engineers
Chicago District, Regulatory Branch
231 South LaSalle Street, Suite 1500
Chicago, Illinois 60604

RE: USACE Individual Permit Application
Wisconsin Central Ltd.
Spaulding to South Sutton Leighton Subdivision New Main Track
MP 37.59 to MP 41.86
Cook County, Illinois
LRC-2018-00651

Dear Mr. Hall:

This letter and enclosed materials constitute an application for a U.S. Army Corps of Engineers (USACE) Individual Permit (IP) submitted on behalf of Wisconsin Central Ltd (Applicant), for the Spaulding to South Sutton Leighton Subdivision New Main Track Extension MP 37.59 to MP 41.86 project located in, Cook County, Illinois. A pre-application meeting for the project occurred with you on November 8, 2018.

The 4.27-mile project corridor is located north of Spaulding Road, south of Shoe Factory Road, east of Rohrssen Road, and west of Route 59/Sutton Road, Cook County, Illinois (Sections 9, 16, 17, 20, and 29 T41N, R9E; 42.037327°N, -88.220691°W, Figure 1, Appendix 2).

Project Description. The basic purpose of the project is to add a second main line railroad track within the existing WCL right-of-way in the designated project area. The WCL Leighton Subdivision is one of the primary north-south main line tracks along the WCL corridor that transports vital customer train traffic between Winnipeg, Canada and Chicago. Currently forecasted capacity for 2020 includes a growth of approximately nine (9) trains per day along this Subdivision. The completion of the second main line track in the proposed location will help improve fluidity and resilience for northbound and southbound traffic flows.

The proposed project consists of extending the existing siding track located north of Shoe Factory Road with 4.27 miles of new main line track in order to create a 6.1-mile long double track. The purpose and need of the proposed track extension is to allow for uninterrupted flow of freight traffic by allowing northbound and southbound trains to pass freely without stopping and/or slowing down. Adding a second main line track will reduce vehicle delays at grade crossings (Shoe Factory Road) as southbound trains currently stage to the north of the intersection to wait for northbound trains to pass. Gate crossing delays can be extensive as staged trains take a long time to get up to speed and pass through the intersection. The proposed project could also positively affect commuter rail traffic on the Milwaukee District West line that intersects the current main line and proposed second main line track at the southern end of the proposed project.

The proposed double track construction to the west of the current mainline track will include grading, bridge construction, including widening of the bridge over Poplar Creek, culvert extensions, and relocation of channelized Waters of the U.S.

The proposed project will result in unavoidable impacts to 1.24 acres of low-quality wetland/Waters of the U.S., including minimal impacts to Poplar Creek (Area 8, 0.01 acre) and the Railroad Tributary to Poplar Creek (Area 1, 0.95 acre; Area 6, 0.28 acre). Impacts are occurring due to both filling (0.59 acres) and excavation (0.65 acres). The excavation is occurring due to the relocation of the waterways, which will partially occur within the existing wetland/waters limits.

The bridge construction over Poplar Creek will have temporary wetland impacts due to equipment pads adjacent to the new bridge footings. In addition, the contractor may also choose to build a causeway for crossing Poplar Creek to access both bridge abutments without crossing over the existing bridge as part of their means and methods for performing the work.

The impacted low-quality wetland/Waters of the U.S. will be mitigated at a ratio of 1.5:1 (1.86 acres) at an USACE approved wetland mitigation bank. The applicant will purchase 1.86 acres of wetland mitigation credits to satisfy the mitigation criteria. All of the impacted wetland/Waters of the U.S. are low quality wetlands that lack floristic diversity and do not qualify as high quality aquatic resources (HQAR).

The water quality and conveyance functions of the Railroad Tributary (Areas 1 and 6) will be replaced within the partially relocated waterways, which total 1.9 acres. The waterway slopes will be enhanced with native vegetation, which will be an overall improvement from the existing eroded banks and low quality vegetation. The slopes of all ditches which drain to all waters of the US will also be planted with native vegetation as Best Management Practices (BMP's).

There are no practicable alternatives to the proposed project due to the linear nature of railroad lines and pre-existing infrastructure. Due to the presence of the existing mainline track within the project limits the only alternatives are to build the second main line track to either the east or west of this existing mainline track. The preferred alternative is to construct the second main line track on the west side of the existing main as the siding that will be extended to create the second main exists on the west side at the northern extent of the project limits (Shoe Factory Rd.). A second constraint to constructing a second main line track on the east side of the existing mainline track is the presence of Poplar Creek Forest Preserve that directly abuts the railroad right of way for the majority of the northern project limits. The Shoe Factory Road Prairie Nature Preserve is located within the Forest Preserve. This Nature Preserve is identified on the Illinois Natural Heritage Database and construction on the east side would likely result in greater impacts to natural resources versus the proposed construction on the west side.

The following information was provided via a November 30, 2018 email to the Forest Preserve District of Cook County for their review and comment: Wetland Delineation and Assessment Report, USACE Jurisdictional Determination, 90% Engineering Plans, dated November 21, 2018. The Forest Preserve District provided initial comment in a December 14, 2018 email.

Although no practicable alternatives to the proposed project exist, WCL did consider overall environmental impacts throughout the design of the track project. Specifically, impacts to waters of the

US and wetlands have been minimized around Poplar Creek and its tributary with the proposed construction of 1,281 linear feet of retaining walls. These retaining walls allow for limits of grading adjacent to Poplar Creek and the Railroad Tributary to be minimized to the greatest extent practicable, and avoid significant adverse impacts to the waterway. Additionally, land disturbance as a whole has been limited to only that needed to build the new track embankment, new transportation signals and affiliated stormwater management controls; thereby reducing the overall construction footprint and environmental impact.

The following information is provided in this submittal.

- a. The completed and signed Joint Application Form is enclosed in Appendix 1. The list of adjoining property owners to the regulated Waters of the US will be provided under separate cover.
- b. The Wetland Delineation and Assessment Report, dated November 20, 2018, is provided in Appendix 2, and is summarized below.
 - The 4.27 mile long project area was investigated by V3 Companies (V3) on July 16, 18, and 23 to determine the presence, extent and quality of any wetlands or other areas under U.S. Army Corps of Engineers (USACE) and/or Metropolitan Water Reclamation District (MWRD) jurisdiction. The delineated boundaries of Areas 1 – 13 were field verified by Mr. Mike Machalek of USACE and Ms. Alicia Metzger and Mr. Dan Jablonski of V3 on September 20, 2018.
 - A USACE Jurisdictional Determination, dated October 26, 2018 (Appendix VI), determined that Areas 2, 3, 4, 5, 9, 10, 11, 12 and 13 are exempt railroad ditches that are not subject to USACE or MWRD jurisdiction. Areas 1, 6, 6A and 8 are non-HQAR Waters of the U.S./wetlands subject to USACE jurisdiction, as summarized below.
 - Area 1 (1.09 acres within ROW; 0.78+ acres outside ROW) is the Railroad Tributary to Poplar Creek with associated wetland located in the northwestern portion of the project area. Area 1 is on the west side of the railroad tracks, south of Shoe Factory Road and continues off-site to the north and southwest.
 - Area 6 (0.54 acres within ROW; 0.84+ acres outside ROW) consists of a southern extension of the Railroad Tributary to Poplar Creek with associated wetland. Area 6 is located on the west side of the railroad tracks south of Golf Road, and connects to Poplar Creek (Area 6A) through a culvert under the railroad tracks. Area 6 continues off-site to the west of the ROW.
 - Area 6A (0.05 acres within ROW; 1.83+ acres outside ROW) consists of Poplar Creek, a Waters of the U.S., with associated wetland. Area 6A is located on the east side of the railroad tracks south of Golf Road, and connects to Area 6 through a culvert under the railroad tracks. Area 6A continues off-site to the east and south.
 - Area 8 (0.18 acres within ROW; 0.03+ acres outside ROW) consists of Poplar Creek, a Waters of the U.S., with associated wetland where it crosses under the railroad tracks north of E. Chicago Street. Poplar Creek extends off-site to the east and west.

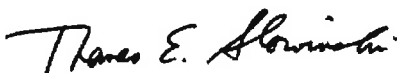
- c. Engineering Plans (90% Design Review) for the proposed project dated December 19, 2018 prepared by HDR, are included in Appendix 3 of this submittal. A USACE Wetland/Waters Impact Exhibits, which summarizes the proposed wetland/Waters of the U.S. impacts, is provided in Appendix 4. The proposed project will directly impact 1.24 acres of wetland/Waters of the U.S. (Areas: 1, 6, 6A, and 8). Erosion control details are provided on the Engineering Plans.
- d. A copy of the U.S. Fish and Wildlife Service Section 7 Consultation review, dated July 25, 2018, is contained in Appendix 5 and states that "species and critical habitat are not present" within the project area.
- e. Appendix 5 also contains the IDNR EcoCAT consultation termination letter dated August 8, 2018 which is relative to State Threatened & Endangered Species.
- f. In response to a November 14, 2018 email from Mr. Hall, a Phase I Archeological Survey was conducted in the project area on December 5, 2018. The December 12, 2018 report, "Phase I Archeological Survey of 2.24 km of WCL Railroad Corridor Near Elgin, Cook County, Illinois" prepared by Archeology and Geomorphology Services, was provided under separate cover on December 12, 2018. No new archeological sites were identified during the investigation and project clearance has been recommended.

By copy of this letter, the permit application is being concurrently submitted to Illinois EPA for Individual Section 404 Water Quality Certification.

If you have any questions or require any additional information, please call me at (630) 729-6285.

Sincerely,

V3 COMPANIES, LTD.



Thomas E. Slowinski, PWS
Technical Director, Wetlands & Ecology
Natural Resources Division

Enclosures

cc: Illinois EPA
Kari Harris, WCL w/encl.
Danny Krause, WCL w/o encl.
Nick Stadem, HDR w/o encl.

APPENDIX 1

JOINT APPLICATION FORM

JOINT APPLICATION FORM FOR ILLINOIS

ITEMS 1 AND 2 FOR AGENCY USE

1. Application Number	2. Date Received
-----------------------	------------------

3. and 4. (SEE SPECIAL INSTRUCTIONS) NAME, MAILING ADDRESS AND TELEPHONE NUMBERS

3a. Applicant's Name: Mr. Chad Anderson Company Name (if any): Wisconsin Central Ltd Address: 17641 South Ashland Ave. Homewood, IL. 60430 Email Address: chad.anderson@cn.ca	3b. Co-Applicant/Property Owner Name (if needed or if different from applicant): Company Name (if any): Address: Email Address:	4. Authorized Agent (an agent is not required): V3 Companies, Ltd. Company Name (if any): Tom Slowinski Address: 7325 Janes Avenue Woodridge, Illinois 60517 Email Address: tslowinski@v3co.com
Applicant's Phone Nos. w/area code Business: 708-332-4383 Residence: Cell: 708-710-8857 Fax:	Applicant's Phone Nos. w/area code Business: Residence: Cell: Fax:	Agent's Phone Nos. w/area code Business: 630-729-6285 Residence: Cell: 630-330-0035 Fax: 630-724-9202

STATEMENT OF AUTHORIZATION

I hereby authorize, V3 Companies, Ltd. to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

Applicant's Signature

12/14/18
 Date

5. ADJOINING PROPERTY OWNERS (Upstream and Downstream of the water body and within Visual Reach of Project)

Name	Mailing Address	Phone No. w/area code
a.	To be provided under separate cover.	
b.		
c.		
d.		

6. PROJECT TITLE:

Spaulding to South Sutton Leighton New Main Track MP 37.59 to 41.86, Cook County, Illinois

7. PROJECT LOCATION:

Cook County, Illinois

LATITUDE: 42.03733 °N LONGITUDE: -88.22069 °W	UTM's Northing: Easting:				
STREET, ROAD, OR OTHER DESCRIPTIVE LOCATION 4.27-mile project corridor is located north of Spaulding Road, south of Shoe Factory Road, east of Rohrssen Road, and west of Route 59/Sutton Road	LEGAL DESCRIPT	QUARTER N/A	SECTION 9,16,17,20	TOWNSHIP NO. 41N	RANGE 9E
☐ IN OR ☒ NEAR CITY OF TOWN (check appropriate box) Municipality Name Hoffman Estates and Elgin		WATERWAY Poplar Creek			RIVER MILE (If applicable)
COUNTY Cook	STATE IL	ZIP CODE 60192			

Revised 2010

☒ Corps of Engineers

☐ IL Dep't of Natural Resources

☒ IL Environmental Protection Agency

☐ Applicant's Copy

8. PROJECT DESCRIPTION (Include all features):

The proposed project consists of installing 4.27 miles of railroad main line track to connect to the existing track north of the project boundary (Shoe Factory Road). The track will connect to existing main track at Shoe Factory Road and extend south to Spaulding Road. The extension will consist of widening ballast within the right of way and bridge/culvert extensions over road and waterways. The proposed project will result in unavoidable impacts to 1.24 acres of low-quality wetland/Waters of the U.S., including Poplar Creek (Area 8) and the Railroad Tributary (Area 1 & 6). The impacted low-quality wetland/Waters of the U.S. will be mitigated at a ratio of 1.5:1 (1.86 acres) at a USACE approved wetland mitigation bank.

9. PURPOSE AND NEED OF PROJECT:

The proposed project consists of installing 4.27 miles of railroad main track to connect to the existing main track north of the project boundary (Shoe Factory Road). The purpose of the proposed main track extension is to allow for uninterrupted flow of freight traffic by allowing north and southbound train to pass freely without stopping and/or slowing down. Extending the main track will reduce vehicle delays at grade crossings (Shoe Factory Road) as southbound trains currently stage to the north of the intersection to wait for northbound trains to pass. The proposed project could also positively affect commuter rail traffic on the Milwaukee District West line that intersects the current main line and proposed second main track at the southern end of the proposed project.

COMPLETE THE FOLLOWING FOUR BLOCKS IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

10. REASON(S) FOR DISCHARGE:

Filling of 0.59 acres and related excavation within 0.65 acres of wetland/waters of the US for addition of second main line track within railroad right of way and required partial relocation of existing waterways.

11. TYPE(S) OF MATERIAL BEING DISCHARGED AND THE AMOUNT OF EACH TYPE IN CUBIC YARDS FOR WATERWAYS:

TYPE: Clean fill, stone, concrete/culverts.

AMOUNT IN CUBIC YARDS:

12. SURFACE AREA IN ACRES OF WETLANDS OR OTHER WATERS FILLED (See instructions)

1.24 acres of low quality wetland/Waters of the U.S.

13. DESCRIPTION OF AVOIDANCE, MINIMIZATION AND COMPENSATION (See instructions)

Provided in information submitted with this application form.

14. Date activity is proposed to commence
Summer 2019

Date activity is expected to be completed
Spring 2020

15. Is any portion of the activity for which authorization is sought now complete? ☐ Yes ☒ No
Month and Year the activity was completed

NOTE: If answer is "YES" give reasons in the Project Description and Remarks section. Indicate the existing work on drawings

16. List all approvals or certification and denials received from other Federal, interstate, state, or local agencies for structures, construction, discharges or other activities described in this application.

Issuing Agency

IDNR
USACE
IHPA

Type of Approval

EcoCat- State T&E
Jurisdictional Determination

Identification No.

1900628
LRC-2018-00851

Date of Application

July 19, 2018
August 9, 2018

Date of Approval

August 8, 2018
October 26, 2018

Date of Denial

17. CONSENT TO ENTER PROPERTY LISTED IN PART 7 ABOVE IS HEREBY GRANTED

Yes ☒ No

18. APPLICATION VERIFICATION (SEE SPECIAL INSTRUCTIONS)

Application is hereby made for the activities described herein. I certify that I am familiar with the information contained in the application, and that to the best of my knowledge and belief, such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities.



Signature of Applicant or Authorized Agent



Date

Signature of Applicant or Authorized Agent

Date

Signature of Applicant or Authorized Agent

Date

☒ Corps of Engineers
Revised 2010

☐ IL Dep't of Natural Resources

☒ IL Environmental Protection
Agency

☐ Applicant's Copy

SEE INSTRUCTIONS FOR ADDRESS

APPENDIX 2

WETLAND DELINEATION REPORT

&

USACE JURISDICTIONAL DETERMINATION



WETLAND DELINEATION AND ASSESSMENT REPORT

PROJECT SITE:

**Spaulding to South Sutton
Leithton New Siding
MP 37.59 to MP 41.86
Cook County, Illinois**

PREPARED FOR:

**Wisconsin Central Ltd.
17641 S. Ashland Avenue
Homewood, Illinois 60430**

PREPARED BY:

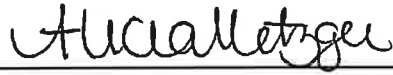
**V3 Companies, Ltd.
7325 Janes Avenue
Woodridge, Illinois 60517
630.724.9200**

August 6, 2018

REVISED November 20, 2018

We hereby certify that this Wetland Delineation and Assessment Report has been prepared by V3 Companies for use by Wisconsin Central Ltd., their affiliates, lenders, and assignees.

Project Staff:



Alicia Metzger, PWS
Soil Scientist



Daniel Jablonski
Wetland Scientist

Approved by:



Scott J. Brejcha, PWS
Wetland Consulting Group Leader
Natural Resources Division



Thomas E. Slowinski, PWS
Technical Director, Wetlands and Ecology
Natural Resources Division

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- APPENDIX IV** — **DELINEATION METHODS AND FLORISTIC ANALYSIS**
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FIGURES

EXECUTIVE SUMMARY

The 4.0 mile long project area was investigated by V3 Companies (V3) on July 16th, 18th, and 23rd, 2018 to determine the presence, extent and quality of any wetlands or other areas under U.S. Army Corps of Engineers (USACE) and/or Metropolitan Water Reclamation District (MWRD) jurisdiction.

The delineated boundaries of Areas 2 – 13 were field verified by Mr. Robb Roos of Cardno, a MWRD field representative, and Ms. Alicia Metzger and Mr. Dan Jablonski of V3 on September 6, 2018. The delineated boundaries of Areas 1 – 13 were field verified by Mr. Mike Machalek of USACE and Ms. Alicia Metzger and Mr. Dan Jablonski of V3 on September 20, 2018.

A Jurisdictional Determination from the USACE, dated October 26, 2018 (**Appendix VI**), determined that Areas 2, 3, 4, 5, 9, 10, 11, 12 and 13 are exempt railroad ditches that are not subject to USACE or MWRD jurisdiction. Areas 1, 6, 6A and 8 are non-HQAR Waters of the U.S./wetlands subject to USACE jurisdiction.

The thirteen areas (Areas 1 – 13) delineated in the project area are summarized below. A summary of the identified areas is provided in Table 1 and a summary of the data points is provided in Table 2.

- Area 1 (1.09 acres within ROW; 0.78+ acres outside ROW) is the Railroad Tributary to Poplar Creek with associated wetland located in the northwestern portion of the project area. Area 1 is on the west side of the railroad tracks, south of Shoe Factory Road and continues off-site to the north and southwest.
- Area 2 (0.27 acres within ROW; 0.10 acres outside ROW) is an exempt railroad ditch that satisfies the three wetland criteria. Area 2 is located along the toe slope of the railroad ballast in the northeastern portion of the project area on the east side of the railroad tracks, south of Shoe Factory Road.
- Area 3 (0.19 acres within ROW; 0.18 acres outside ROW) is an exempt railroad ditch that satisfies the three wetland criteria. Area 3 is located along the toe slope of the railroad ballast on the east side of the railroad tracks, south of Shoe Factory Road.
- Area 4 (0.31 acres within ROW; 0.02 acres outside ROW) is an exempt railroad ditch that satisfies the three wetland criteria. Area 4 is located along the toe slope of the railroad ballast on the east side of the railroad tracks, south of Area 3.
- Area 5 (0.004 acres within ROW) is an exempt roadside ditch that satisfies the three wetland criteria located under the bridge of the elevated railroad track, on the north side of Golf Road.
- Area 6 (0.54 acres within ROW; 0.84+ acres outside ROW) consists of a southern extension of the Railroad Tributary to Poplar Creek with associated wetland. Area 6 is located on the west side of the railroad tracks south of Golf Road, and connects to Poplar Creek (Area 6A) through a culvert under the railroad tracks. Area 6 continues off-site to the west of the ROW.
- Area 6A (0.05 acres within ROW; 1.83+ acres outside ROW) consists of Poplar Creek, a Waters of the U.S., with associated wetland. Area 6A is located on the east side of the railroad tracks south of Golf Road, and connects to Area 6 through a culvert under the railroad tracks. Area 6A continues off-site to the east and south.

- Area 8 (0.18 acres within ROW; 0.03+ acres outside ROW) consists of Poplar Creek, a Waters of the U.S., with associated wetland where it crosses under the railroad tracks north of E. Chicago Street. Poplar Creek extends off-site to the east and west.
- Area 9 (0.05 acres within ROW; 0.03 acres outside ROW) is an exempt railroad ditch located between the railroad and a sound wall that satisfies the three wetland criteria located on the west side of the railroad tracks south of E. Chicago Street.
- Area 10 (0.01 acres within ROW) is an exempt railroad ditch located between the railroad and a sound wall that satisfies the three wetland criteria located on the west side of the railroad tracks, south of Area 9.
- Area 13 (0.17 acres within ROW) is an exempt railroad ditch located between the railroad and a sound wall that satisfies the three wetland criteria. Area 13 is located south of Area 10 on the west side of the railroad tracks. Area 13 receives stormwater from a culvert that is draining an off-site residential area.
- Area 11 (0.03 acres within ROW) is an exempt railroad ditch located between the railroad and a sound wall that satisfies the three wetland criteria. Area 11 is located south of Area 13 on the west side of the railroad tracks, north of Lake Street.
- Area 12 (0.20 acres within ROW) is an exempt railroad ditch that satisfies the three wetland criteria. Area 12 is located on the west side of the railroad tracks just north of the railroad diamond at Spaulding Street.

Regulatory Summary.

Pursuant to Section 404 of the Clean Water Act, the U. S. Army Corps of Engineers (USACE) has jurisdiction over the placement of fill or dredged material in all jurisdictional waters of the United States. Jurisdictional areas include rivers, streams, tributary waterways, lakes, natural ponds and wetlands adjacent to these areas. A Section 404 permit must be obtained before placing any fill material within a jurisdictional area.

Wetlands that lack a continuous surface connection through a relatively permanent tributary to traditionally navigable waters are considered isolated wetlands and are not regulated under the Clean Water Act.¹ To be considered relatively permanent, a tributary must have continuous flow at least seasonally (typically at least three months). Swales and erosional features are generally not considered to be tributaries or waters of the United States. Ditches excavated wholly in and draining only uplands and that do not carry a relatively permanent flow are also generally not waters of the U. S. Wetlands adjacent to tributaries and ditches that do not have a relatively continuous flow will be regulated only if they have a significant nexus to traditionally navigable waters. A significant nexus determination will be based on hydrologic and ecological factors.

¹ December 2, 2008, USEPA and Department of the Army Joint Memorandum, Clean Water Act Jurisdiction Following the U. S. Supreme Court Decision in *Rapanos v. United States* and *Carabell v. United States*.

If less than 0.10 acre of impact to USACE Jurisdictional wetlands are proposed, the project would likely qualify for a Regional Permit from the USACE without wetland mitigation. If wetland impacts are between 0.10 acre and 1.0 acre of wetland, a Regional Permit would still be possible, but compensatory mitigation will be required at a minimum ratio of 1.5:1. Mitigation at a higher ratio (typically 3:1 or greater) would be required for impacts to High Quality Aquatic Resources (HQAR). Wetland impacts greater than 1.0 acre will require an Individual Permit, with a public comment period and additional regulatory scrutiny. Required buffer widths under the Regional Permit Program are shown in Table 1. If a permit from the USACE is not required, then the USACE buffer requirements are not applicable.

On May 1, 2014, the Metropolitan Water Reclamation District (MWRD) implemented the Cook County Watershed Management Ordinance (WMO) which regulates isolated wetlands and isolated "waters" within Cook County. The Cook County WMO requires a Watershed Management Permit for any proposed impacts to isolated wetlands and/or isolated "waters" of Cook County resulting from regulated development activities.

The USACE and MWRD buffer requirements, which are dependent on the quality and size of the waterway, are shown in Table 1.

Table 1. Wetland/Waters Summary Table.

Area	Within ROW	Outside ROW	Native Mean Conservatism (NMC)*	Floristic Quality Index (FQI)*	Quality**	USACE Jurisdiction	Buffer Required
1	1.09	0.78+	1.94	11.32	Non-HQAR	Y	50'
6	0.54	0.84+	2.86	15.41	Non-HQAR	Y	50'
6A	0.05	1.83+	2.40	9.30	Non-HQAR	Y	50'
8	0.18	0.03+	1.67	2.89	Non-HQAR	Y	50'
Total	1.86	3.48+					

* Based on the Floristic Quality Assessment (FQA) methodology in *Plants of the Chicago Region* (Swink and Wilhelm, 1994).

**Non-HQAR= Non High Quality Aquatic Resource (NMC $\leq$ 3.5 or FQI $\leq$ 20, USACE jurisdiction); HQAR= High Quality Aquatic Resource (NMC $\geq$ 3.5 or FQI $\geq$ 20, USACE jurisdiction); WOUS= Waters of the United States (USACE jurisdiction)

Table 2. Data Point Summary Table.

Area	Data Point	Hydrophytic Vegetation?	Hydric Soils?	Wetland Hydrology?	Wetland (Y/N)	Status
1	X01	Y	Y	Y	Y	Waters of U.S.
	X03	Y	Y	Y		
2	X05	Y	Y	Y	Y	Exempt Railroad Ditch
3	X07	Y	Y	Y	Y	Exempt Railroad Ditch
4	X08	Y	Y	Y	Y	Exempt Railroad Ditch
5	X09	Y	Y	Y	Y	Exempt Road Side Ditch
6	X13	Y	Y	Y	Y	Waters of U.S.
	X14	Y	Y	Y		
6A	X11	Y	Y	Y	Y	Waters of U.S.
8	X27	Y	Y	Y	Y	Waters of U.S.
9	X18	Y	Y	Y	Y	Exempt Railroad Ditch
10	X19	Y	Y	Y	Y	Exempt Railroad Ditch
11	X20	Y	Y	Y	Y	Exempt Railroad Ditch
12	X26	Y	Y	Y	Y	Exempt Railroad Ditch
13	X28	Y	Y	Y	Y	Exempt Railroad Ditch
14	X02	Y	Y	N	N	Upland
	X04	N	N	N		Upland
15	X06	N	N	N	N	Upland
16	X10	N	N	N	N	Upland
17	X12	N	N	N	N	Upland
18	X15	N	N	N	N	Upland
19	X16	N	N	N	N	Upland
20	X17	N	N	N	N	Upland
21	X21	N	N	N	N	Upland
	X22	N	N	N		Upland
22	X23	N	N	N	N	Upland
	X24	Y	N	N		Upland
	X25	Y	N	N		Upland

INTRODUCTION AND BACKGROUND

The 4.0 mile long project area was investigated by V3 Companies (V3) on July 16th, 18th, and 23rd, 2018 to determine the presence, extent and quality of any wetlands or other areas under U.S. Army Corps of Engineers (USACE) and/or Metropolitan Water Reclamation District (MWRD) jurisdiction. Any identified wetland boundaries are marked in the field using pink wire flags labeled “Wetland Delineation” and numbered consecutively from beginning to end. This report summarizes the results of the field investigation and provides technical documentation for all investigated areas.

The delineated boundaries of Areas 2 – 13 were field verified by Mr. Robb Roos of Cardno, a MWRD field representative, and Ms. Alicia Metzger and Mr. Dan Jablonski of V3 on September 6, 2018. The delineated boundaries of Areas 1 – 13 were field verified by Mr. Mike Machalek of USACE and Ms. Alicia Metzger and Mr. Dan Jablonski of V3 on September 20, 2018.

The project area is located north of Spaulding Road, south of Shoe Factory Road, east of Rohrssen Road and west of Route 59/Sutton Road in Hoffman Estates, Elgin and unincorporated Cook County, Illinois (Sections 9, 16, 17, 20 and 29, T41N, R9E; 42.037327°N, -88.220691°W; Streamwood quadrangle, Figure 1).

Five wetland areas associated with Poplar Creek are identified within the project area on the National Wetlands Inventory (NWI) Map (Figure 2). The wetlands are classified as riverine, unknown perennial, unconsolidated bottom, permanently flooded (R5UBH); palustrine, emergent, persistent, seasonally flooded (PEM1C); and palustrine, broad-leaved deciduous forested, seasonally flooded (PFO1C) and are located throughout the northern portion of the project area.

The USGS Hydrologic Atlas (Figure 3) shows the presence of Poplar Creek and the Railroad Tributary throughout the northern portion of the project area.

The 12-Digit Hydrologic Unit Code (HUC) Map (Figure 4) shows that the project area lies within the Poplar Creek sub watershed (Hydrologic Unit 071200061205), which is associated with the larger Upper Fox River watershed and the Brewster Creek subwatershed (071200070101), which is associated with the larger Lower Fox River watershed.

The FEMA Flood Insurance Rate Map (FIRM) (Figure 5) shows flood zone throughout the northern portion of the project area associated with Poplar Creek.

The Flood Zones of Cook County, Illinois Map (Figure 6) shows flood zones A, AE and AE, floodway associated with Poplar Creek throughout the northern portion of the project area.

Twenty soil series are mapped within the project area on the Soil Survey of Cook County, Illinois (2015) Map (Figure 7). The soil series include the following:

- Harpster silty clay loam (67A)
- Elliott silt loam (146A)
- Drummer silty clay loam (152A)
- Ashkum silty clay loam (232A)

- Warsaw silt loam (290B)
- Andres silt loam (293A)
- Lorenzo loam (318D2)
- Will silty clay loam (329A)
- Peotone silty clay loam (330A)
- Waupecan silt loam (369B)
- Mundelein silt loam (442A)
- Ozaukee silt loam (530C2 / 530F)
- Markham silt loam (531B / 531C2 / 531D2)
- Zurich silt loam (696B)
- Orthents, loamy (802B)
- Pits, gravel (865)
- Muskego and Houghton mucks (903A)
- Casco-Rodman complex (969E2 / 969F)
- Peotone silty clay loam, undrained (1330A)
- Sawmill silty clay loam, frequently flooded (3107A)

Harpster silty clay loam (67A), Drummer silty clay loam (152A), Ashkum silty clay loam (232A), Will silty clay loam (329A), Peotone silty clay loam (330A), Muskego and Houghton mucks (903A), Peotone silty clay loam, undrained (1330A) and Sawmill silty clay loam, frequently flooded (3107A) are listed as hydric soils in Illinois.

Figures 8A-F, a DigitalGlobe aerial photograph (2017), show the location of all data points and the locations of the delineated wetlands and Waters as collected via a handheld GPS unit.

WETLAND DELINEATION METHODS

Wetland delineations are conducted following the methods given in the *Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Midwest Region*. Under the delineation procedures in this manual, an area must exhibit characteristic hydrophytic vegetation, hydric soils, and wetland hydrology to be considered a wetland. If field investigation determines that any of the three parameters are not satisfied, the area usually does not qualify as wetland. Moreover, drainage ditches excavated in dry land are generally not considered jurisdictional waters of the United States by the Corps of Engineers (preamble to 33 CFR Parts 320 through 330, *Federal Register* Vol. 56, No. 219, 41217).

As part of a delineation report, data forms and technical information are required by the U.S. Army Corps of Engineers, to document the three parameters for any area determined to be wetland. Data forms for wetlands identified at the project area are provided in **Appendix I**. The vegetation data calculated on the data forms reflects the changes made to the National Wetland Plant List as of May 1, 2016. Representative photographs of delineated wetlands are provided in **Appendix II**. A brief description of the field methods used and a description of the three wetland parameters are provided in **Appendix IV**.

Plant species lists are compiled for each area identified, focusing on the plant communities within each identified wetland area. This accumulated floristic data is analyzed using the Floristic Quality Assessment (FQA) methodology, which is an assessment technique for a rapid quality evaluation of vegetation in a

defined area. Technical names in the FQA and this report follow the nomenclature of *The National Wetland Plant List: 2014 Update of Wetland Ratings* (Lichvar et. al., 2014). A detailed explanation of the Floristic Quality Assessment method is provided in **Appendix IV**.

As part of the wetland delineation assessment, Illinois Department of Natural Resources (IDNR) and US Fish and Wildlife Service (USFWS) threatened and endangered species evaluations were conducted (**Appendix V**).

The IDNR EcoCAT report shows the following protected resources may be within the vicinity of the project area:

- Bluff Springs Fen Class III Groundwater Site/INAI Site/Fen Nature Preserve
- Shoe Factory Road Prairie INAI Site/Nature Preserve
- Prairie Bush Clover (*Lespedeza leptostachya*)
- Rusty Patched Bumble Bee (*Bombus affinis*)
- Slippershell (*Alasmidonta viridis*)
- Woolly Milkweed (*Asclepias lanuginosa*)
- Yellow-Headed Blackbird (*Xanthocephalus xanthocephalus*)

The IDNR identified habitat for the Rusty-patched bumble bee (*Bombus affinis*) in the vicinity of the project area and recommends work that disturbs the ground or may removing flowering plants be done between October 1st and April 1st to avoid potential impacts. If work must be conducted outside these dates there is a chance the project could disturb a nest, in which case, the IDNR suggest a field visit be performed by a qualified individual (biologist, entomologist, or others who have been trained accordingly) to look for rusty-patched bumble bee nests sites.

Additionally, a portion of the project area is within the Bluff Springs Fen Class III Groundwater recharge area, which protects the integrity of the Bluff Springs Fen Nature Preserve. The Department recommends that BMPs be implemented to ensure that the quality and quantity of groundwater not be adversely affected to avoid potential liability on the part of the applicant. Refer to **Appendix V** for a copy of the correspondence letter from IDNR.

The USFWS Section 7 consultation did not find species or critical habitat present on the project area. A copy of the USFWS Section 7 consultation is included in **Appendix V**.

RESULTS OF THE FIELD INVESTIGATION

JURISDICTIONAL AREAS

Area 1 – Waters of the U.S. with Associated Wetland

Data Points X01 and X03

Area 1 (1.09 acres within ROW; 0.78+ acres outside ROW) is the Railroad Tributary to Poplar Creek with associated wetland located in the northwestern portion of the project area. Area 1 is on the west side of the railroad tracks, south of Shoe Factory Road and continues off-site to the north and southwest.

Summary:

- Waters of the U.S. with Associated Wetland
- Jurisdiction: USACE
- Quality: Non-HQAR
- Vegetated Buffer Required: 50'

Vegetation:

- The dominant plant species at Data Point X01 are silver maple (*Acer saccharinum*), common buckthorn (*Rhamnus cathartica*), reed canary grass (*Phalaris arundinacea*) and floating pondweed (*Potamogeton natans*). 100% of the dominant species are hydrophytic, so the vegetation criterion is satisfied at Data Point X01.
- The dominant plant species at Data Point X03 are river club-rush (*Schoenoplectus fluviatilis*), reed canary grass (*Phalaris arundinacea*) and uptight sedge (*Carex stricta*). 100% of the dominant species are hydrophytic, so the vegetation criterion is satisfied at Data Point X03.

The floristic quality data and plant species inventory for Area 1 are provided below.

Conservatism-Based Metrics		Additional Metrics	
Mean C (native species)	1.94	Species Richness (all)	34
Mean C (all species)	2.20	Species Richness (native)	26
Mean C (native trees)	2.50	% Non-native	24%
Mean C (native shrubs)	2.65	Wet Indicator (all)	-0.35
Mean C (native herbaceous)	12.94	Wet Indicator (native)	-0.42
FQAI (native species)	11.32	% hydrophyte (Midwest)	71%
FQAI (all species)	22.20	% native perennial	68%
Adjusted FQAI	41%	% native annual	9%
% C value 0	29%	% annual	12%
% C Value 1-3	26%	% perennial	82%
% C value 4-6	3%		
% C value 7-10	1.94		

Species Acronym	Species Name (NWPL/Mohlenbrock)	Species(Synonym)	Common Name	C Value	Midwest WET indicator	WET indicator (numeric)	Habit	Duration	Nativity
aceneg	Acer negundo	Acer negundo var. violaceum	Ash-Leaf Maple	0	FAC	0	Tree	Perennial	Native
acesai	Acer saccharinum	Acer saccharinum	Silver Maple	1	FACW	-1	Tree	Perennial	Native
ambtri	Ambrosia trifida	Ambrosia trifida	Great Ragweed	0	FAC	0	Forb	Annual	Native
ascsy	Asclepias syriaca	Asclepias syriaca	Common Milkweed	0	FACU	1	Forb	Perennial	Native
cxstri	Carex stricta	Carex stricta	Uptight Sedge	5	OBL	-2	Sedge	Perennial	Native
cirarv	Cirsium arvense	CIRSIIUM ARVENSE	Canadian Thistle	0	FACU	1	Forb	Perennial	Adventive
corrac	Cornus racemosa	Cornus racemosa	Gray Dogwood	1	FAC	0	Shrub	Perennial	Native
dipful	Dipsacus fullonum	DIPSACUS SYLVESTRIS	Fuller's Teasel	0	FACU	1	Forb	Biennial	Adventive

eupalt	Eupatorium altissimum	Eupatorium altissimum	Tall Boneset	0	UPL	2	Forb	Perennial	Native
helgro	Helianthus grosseserratus	Helianthus grosseserratus	Saw-Tooth Sunflower	4	FACW	-1	Forb	Perennial	Native
myoaqu	Myosoton aquaticum	MYOSOTON AQUATICUM	Giant-Chickweed	0	FACW	-1	Forb	Perennial	Adventive
oxastr	Oxalis stricta	Oxalis europaea	Upright Yellow Wood-Sorrel	0	FACU	1	Forb	Perennial	Native
parqui	Parthenocissus quinquefolia	Parthenocissus quinquefolia	Virginia-Creeper	4	FACU	1	Vine	Perennial	Native
passat	Pastinaca sativa	PASTINACA SATIVA	Parsnip	0	UPL	2	Forb	Biennial	Adventive
polhyd	Persicaria hydropiper	Polygonum hydropiper	Mild Water-Pepper	2	OBL	-2	Forb	Annual	Native
polper	Persicaria maculosa	POLYGONUM PERSICARIA	Lady's-Thumb	0	FACW	-1	Forb	Annual	Adventive
phaaru	Phalaris arundinacea	PHALARIS ARUNDINACEA	Reed Canary Grass	0	FACW	-1	Grass	Perennial	Adventive
pilpum	Pilea pumila	Pilea pumila	Canadian Clearweed	2	FACW	-1	Forb	Annual	Native
popdel	Populus deltoides	Populus deltoides	Eastern Cottonwood	0	FAC	0	Tree	Perennial	Native
potnat	Potamogeton natans	Potamogeton natans	Floating Pondweed	8	OBL	-2	Forb	Perennial	Native
rumcri	Rumex crispus	RUMEX CRISPUS	Curly Dock	0	FAC	0	Forb	Perennial	Adventive
salnig	Salix nigra	Salix nigra	Black Willow	5	OBL	-2	Tree	Perennial	Native
samcan	Sambucus nigra ssp. canadensis	Sambucus canadensis	Black Elder	4	FAC	-1	Shrub	Perennial	Native
sciflu	Schoenoplectus fluviatilis	Scirpus fluviatilis; Bolboschoenus fluviatilis	River Club-Rush	4	OBL	-2	Sedge	Perennial	Native
sciatv	Scirpus atrovirens	Scirpus atrovirens	Dark-Green Bulrush	4	OBL	-2	Sedge	Perennial	Native
solalt	Solidago altissima	Solidago altissima	Tall Goldenrod	1	FACU	1	Forb	Perennial	Native
astsim	Symphotrichum lanceolatum	Aster simplex	White Panicked American-Aster	3	FAC	0	Forb	Perennial	Native
thadas	Thalictrum dasycarpum	Thalictrum dasycarpum hypoglaucum	Purple Meadow-Rue	6	FACW	-1	Forb	Perennial	Native
tilame	Tilia americana	Tilia americana	American Basswood	5	FACU	1	Tree	Perennial	Native
traohi	Tradescantia ohiensis	Tradescantia ohiensis	Bluejacket	3	FACU	1	Forb	Perennial	Native
typang	Typha angustifolia	TYPHA ANGUSTIFOLIA	Narrow-Leaf Cat-Tail	0	OBL	-2	Forb	Perennial	Adventive
urtgra	Urtica dioica ssp. gracilis	Urtica procera; Urtica gracilis	Tall Nettle	1	FACW	-1	Forb	Perennial	Native
verurt	Verbena urticifolia	Verbena urticifolia var. leiocarpa	White Vervain	2	FAC	0	Forb	Perennial	Native
vitrip	Vitis riparia	Vitis riparia var. syrticola	River-Bank Grape	1	FACW	-1	Vine	Perennial	Native

Soils:

- The soil profile at Data Point X01 was too saturated to retrieve and could not be classified. However, inundation of the area strongly suggests the presence of hydric soil indicators, so the soils criterion is satisfied.
- The soil profile at Data Point X03 consisted of 0-12 inches of black (10YR 2/1) silty clay loam mixed fill with 5% dark yellowish brown (10YR 4/6) redoximorphic concentrations and 5% gray (10YR 5/1) redoximorphic depletions. This profile exhibits hydric soil field indicator F6, Redox Dark Surface, and satisfies the soils criterion.

Hydrology:

- The area at Data Point X01 was inundated to a depth of 6 inches, so the hydrology criterion is satisfied.
- The presence of primary wetland hydrology indicator B4, Algal Mat or Crust, satisfies the hydrology criteria at Data Point X03.

Conclusion: Data Points X01 and X03 satisfy all three criteria; therefore Area 1 qualifies Waters of the US with associated wetland.

Area 6 – Waters of the U.S. with Associated Wetland

Data Point X13

Area 6 (0.54 acres within ROW; 0.84+ acres outside ROW) consists of a southern extension of the Railroad Tributary to Poplar Creek with associated wetland. Area 6 is located on the west side of the railroad tracks south of Golf Road, and connects to Poplar Creek (Area 6A) through a culvert under the railroad tracks. Area 6 continues off-site to the west of the ROW.

Summary:

- Waters of the U.S. with Associated Wetland
- Jurisdiction: USACE
- Quality: Non-HQAR
- Vegetated Buffer Required: 50'

Vegetation: The dominant plant species at Data Point X13 are box elder (*Acer negundo*) and hairy-fruit sedge (*Carex trichocarpa*). 100% of the dominant species are hydrophytic, so the vegetation criterion is satisfied at Data Point X13. The floristic quality data and plant species inventory for Area 6 are provided below.

Conservatism-Based Metrics		Additional Metrics	
Mean C (native species)	2.86	Species Richness (all)	38
Mean C (all species)	2.18	Species Richness (native)	29
Mean C (native trees)	1.75	% Non-native	24%
Mean C (native shrubs)	2.67	Wet Indicator (all)	-0.68
Mean C (native herbaceous)	3.21	Wet Indicator (native)	-0.83
FQAI (native species)	15.41	% hydrophyte (Midwest)	84%
FQAI (all species)	13.46	% native perennial	61%

Adjusted FQAI	25.00	% native annual	16%
% C value 0	37%	% annual	18%
% C Value 1-3	34%	% perennial	79%
% C value 4-6	26%		
% C value 7-10	3%		

Species Acronym	Species Name (NWPL/Mohlenbrock)	Species(Synonym)	Common Name	C Value	Midwest WET indicator	WET indicator (numeric)	Habit	Duration	Nativity
aceneg	Acer negundo	Acer negundo var. violaceum	Ash-Leaf Maple	0	FAC	0	Tree	Perennial	Native
allpet	Alliaria petiolata	ALLIARIA PETIOLATA	Garlic-Mustard	0	FAC	0	Forb	Biennial	Adventive
ambtri	Ambrosia trifida	Ambrosia trifida	Great Ragweed	0	FAC	0	Forb	Annual	Native
angatr	Angelica atropurpurea	Angelica atropurpurea	Purple-Stem Angelica	7	OBL	-2	Forb	Perennial	Native
bidfro	Bidens frondosa	Bidens frondosa	Devil's-Pitchfork	1	FACW	-1	Forb	Annual	Native
cxcomo	Carex comosa	Carex comosa	Bearded Sedge	5	OBL	-2	Sedge	Perennial	Native
cxtric	Carex trichocarpa	Carex trichocarpa	Hairy-Fruit Sedge	5	OBL	-2	Sedge	Perennial	Native
chatai	Chaerophyllum tainturieri	CHAEROPHYLLUM TAINTURIERI	Hairy-Fruit Chervil	0	FACU	1	Forb	Annual	Adventive
cirlut	Circaea canadensis	Circaea lutetiana canadensis	Broad-Leaf Enchanter's-Nightshade	3	FACU	1	Forb	Perennial	Native
cirarv	Cirsium arvense	CIRSIIUM ARVENSE	Canadian Thistle	0	FACU	1	Forb	Perennial	Adventive
epicol	Epilobium coloratum	Epilobium coloratum	Purple-Leaf Willowherb	3	OBL	-2	Forb	Perennial	Native
equarv	Equisetum arvense	Equisetum arvense	Field Horsetail	0	FAC	0	Fern	Perennial	Native
eupmac	Eutrochium maculatum	Eupatorium maculatum	Spotted Trumpetweed	5	OBL	-2	Forb	Perennial	Native
frapen	Fraxinus pennsylvanica	Fraxinus pennsylvanica subintegerrima; Fraxinus lanceolata	Green Ash	4	FACW	-1	Tree	Perennial	Native
geulac	Geum laciniatum	Geum laciniatum	Rough Aven	3	FACW	-1	Forb	Perennial	Native
hermax	Heracleum maximum	Heracleum maximum	American Cow-Parsnip	5	FACW	-1	Forb	Perennial	Native
hesmat	Hesperis matronalis	HESPERIS MATRONALIS	Mother-of-the-Evening	0	FACU	1	Forb	Perennial	Adventive
impcap	Impatiens capensis	Impatiens capensis	Spotted Touch-Me-Not	3	FACW	-1	Forb	Annual	Native
iripse	Iris pseudacorus	IRIS PSEUDACORUS	Pale-Yellow Iris	0	OBL	-2	Forb	Perennial	Adventive
lemmio	Lemna minor	Lemna minor	Common Duckweed	5	OBL	-2	Forb	Annual	Native
pandic	Panicum dichotomiflorum	Panicum dichotomiflorum	Fall Panic Grass	0	FACW	-1	Grass	Annual	Native

parqui	Parthenocissus quinquefolia	Parthenocissus quinquefolia	Virginia-Creeper	4	FACU	1	Vine	Perennial	Native
phrausu	Phragmites australis ssp. australis	PHRAGMITES AUSTRALIS	Common Reed	0	FACW	-1	Grass	Perennial	Adventive
pilpum	Pilea pumila	Pilea pumila	Canadian Clearweed	2	FACW	-1	Forb	Annual	Native
popdel	Populus deltoides	Populus deltoides	Eastern Cottonwood	0	FAC	0	Tree	Perennial	Native
rhacat	Rhamnus cathartica	RHAMNUS CATHARTICA	European Buckthorn	0	FAC	0	Shrub	Perennial	Adventive
ribmis	Ribes missouriense	Ribes missouriense	Missouri Gooseberry	2	UPL	2	Shrub	Perennial	Native
salint	Salix interior	Salix interior	Sandbar Willow	2	FACW	-1	Shrub	Perennial	Native
samcan	Sambucus nigra ssp. canadensis	Sambucus canadensis	Black Elder	4	FAC	-1	Shrub	Perennial	Native
sciatv	Scirpus atrovirens	Scirpus atrovirens	Dark-Green Bulrush	4	OBL	-2	Sedge	Perennial	Native
soldul	Solanum dulcamara	SOLANUM DULCAMARA	Climbing Nightshade	0	FAC	0	Vine	Perennial	Adventive
teucan	Teucrium canadense	Teucrium canadense	American Germander	3	FACW	-1	Forb	Perennial	Native
toxrad	Toxicodendron radicans	Rhus radicans	Eastern Poison-Ivy	2	FAC	0	Vine	Perennial	Native
typang	Typha angustifolia	TYPHA ANGUSTIFOLIA	Narrow-Leaf Cat-Tail	0	OBL	-2	Forb	Perennial	Adventive
typlat	Typha latifolia	Typha latifolia	Broad-Leaf Cat-Tail	5	OBL	-2	Forb	Perennial	Native
ulmame	Ulmus americana	Ulmus americana	American Elm	3	FACW	-1	Tree	Perennial	Native
verurt	Verbena urticifolia	Verbena urticifolia var. leiocarpa	White Vervain	2	FAC	0	Forb	Perennial	Native
vitrip	Vitis riparia	Vitis riparia var. syrticola	River-Bank Grape	1	FACW	-1	Vine	Perennial	Native

Soils: The soil profile at Data Point X13 consisted of 0-8 inches of very dark grayish brown (10YR 3/2) silty clay loam with 5% dark yellowish brown (10YR 5/6) redoximorphic concentrations. This profile exhibits hydric soil field indicator F6, Redox Dark Surface, and satisfies the soils criterion.

Hydrology: The presence of two secondary wetland hydrology indicators D2, Geomorphic Position and D5, FAC-neutral Test, satisfies the hydrology criterion at Data Point X13.

Conclusion: Data Point X13 satisfies all three criteria; therefore Area 6 qualifies as Waters of the US with wetland fringe.

Area 6A – Poplar Creek with Associated Wetland

Data Point X11

Area 6A (0.05 acres within ROW; 1.83+ acres outside ROW) consists of Poplar Creek, a Waters of the U.S., with associated wetland. Area 6A is located on the east side of the railroad tracks south of Golf Road, and connects to Area 6 through a culvert under the railroad tracks. Area 6A continues off-site to the east and south.

Summary:

- Waters of the U.S. with Associated Wetland
- Jurisdiction: USACE
- Quality: Non-HQAR
- Vegetated Buffer Required: 50'

Vegetation: The dominant plant species at Data Point X11 are eastern cottonwood (*Populus deltoides*), box elder (*Acer negundo*), reed canary grass (*Phalaris arundinacea*) and orange jewelweed (*Impatiens capensis*). 100% of the dominant species are hydrophytic, so the vegetation criterion is satisfied at Data Point X11. The floristic quality data and plant species inventory for Area 6A are provided below.

Conservatism-Based Metrics		Additional Metrics	
Mean C (native species)	2.40	Species Richness (all)	17
Mean C (all species)	2.12	Species Richness (native)	15
Mean C (native trees)	1.60	% Non-native	12%
Mean C (native shrubs)	n/a	Wet Indicator (all)	-0.29
Mean C (native herbaceous)	2.75	Wet Indicator (native)	-0.27
FQAI (native species)	9.30	% hydrophyte (Midwest)	76%
FQAI (all species)	8.73	% native perennial	82%
Adjusted FQAI	22.54	% native annual	6%
% C value 0	29%	% annual	6%
% C value 1-3	47%	% perennial	94%
% C value 4-6	24%		
% C value 7-10	0%		

Species Acronym	Species Name (NWPL/Mohlenbrock)	Species(Synonym)	Common Name	C Value	Midwest WET indicator	WET indicator (numeric)	Habit	Duration	Nativity
aceneg	Acer negundo	Acer negundo var. violaceum	Ash-Leaf Maple	0	FAC	0	Tree	Perennial	Native
acesai	Acer saccharinum	Acer saccharinum	Silver Maple	1	FACW	-1	Tree	Perennial	Native
cirlut	Circaea canadensis	Circaea lutetiana canadensis	Broad-Leaf Enchanter's-Nightshade	3	FACU	1	Forb	Perennial	Native
frapen	Fraxinus pennsylvanica	Fraxinus pennsylvanica subintegerrima; Fraxinus lanceolata	Green Ash	4	FACW	-1	Tree	Perennial	Native
germac	Geranium maculatum	Geranium maculatum	Spotted Crane's-Bill	5	FACU	1	Forb	Perennial	Native
geulac	Geum laciniatum	Geum laciniatum	Rough Avens	3	FACW	-1	Forb	Perennial	Native
glystr	Glyceria striata	Glyceria striata var. stricta	Fowl Manna Grass	4	OBL	-2	Grass	Perennial	Native
impcap	Impatiens capensis	Impatiens capensis	Spotted Touch-Me-Not	3	FACW	-1	Forb	Annual	Native
oxastr	Oxalis stricta	Oxalis europaea	Upright Yellow Wood-Sorrel	0	FACU	1	Forb	Perennial	Native

parqui	Parthenocissus quinquefolia	Parthenocissus quinquefolia	Virginia-Creeper	4	FACU	1	Vine	Perennial	Native
phaaru	Phalaris arundinacea	PHALARIS ARUNDINACEA	Reed Canary Grass	0	FACW	-1	Grass	Perennial	Adventive
popdel	Populus deltoides	Populus deltoides	Eastern Cottonwood	0	FAC	0	Tree	Perennial	Native
soldul	Solanum dulcamara	SOLANUM DULCAMARA	Climbing Nightshade	0	FAC	0	Vine	Perennial	Adventive
toxrad	Toxicodendron radicans	Rhus radicans	Eastern Poison-Ivy	2	FAC	0	Vine	Perennial	Native
ulmame	Ulmus americana	Ulmus americana	American Elm	3	FACW	-1	Tree	Perennial	Native
urtgra	Urtica dioica ssp. gracilis	Urtica procera; Urtica gracilis	Tall Nettle	1	FACW	-1	Forb	Perennial	Native
viosor	Viola sororia	Viola priceana	Hooded Blue Violet	3	FAC	0	Forb	Perennial	Native

Soils: The soil profile at Data Point X11 consisted of 0-6 inches of black (10YR 2/1) silty clay loam with 5% yellowish brown (10YR 5/8) redoximorphic concentrations and 10% gravel. This profile exhibits hydric soil field indicator F6, Redox Dark Surface, and satisfies the soils criterion.

Hydrology: The presence of primary wetland hydrology indicator B9, Water Stained Leaves, satisfies the hydrology criterion at Data Point X11.

Conclusion: Data Point X11 satisfies all three criteria; therefore Area 6A qualifies as Waters of the US with wetland fringe.

Area 8 – Poplar Creek with Associated Wetland

Data Point X27

Area 8 (0.18 acres within ROW; 0.03+ acres outside ROW) consists of Poplar Creek, a Waters of the U.S., with associated wetland where it crosses under the railroad tracks north of E. Chicago Street. Poplar Creek extends off-site to the east and west.

Summary:

- Waters of the U.S. with Associated Wetland
- Jurisdiction: USACE
- Quality: Non-HQAR
- Vegetated Buffer Required: 50'

Vegetation: The dominant plant species at Data Point X27 are eastern cottonwood (*Populus deltoides*), common buckthorn (*Rhamnus cathartica*) and reed canary grass (*Phalaris arundinacea*). 100% of the dominant species are hydrophytic, so the vegetation criterion is satisfied at Data Point X27. The floristic quality data and plant species inventory for Area 8 are provided below.

Conservatism-Based Metrics		Additional Metrics	
Mean C (native species)	1.67	Species Richness (all)	5
Mean C (all species)	1.00	Species Richness (native)	3
Mean C (native trees)	1.67	% Non-native	0.40
Mean C (native shrubs)	0.00	Wet Indicator (all)	-0.60
Mean C (native herbaceous)	n/a	Wet Indicator (native)	-0.67
FQAI (native species)	2.89	% hydrophyte (Midwest)	1.00
FQAI (all species)	2.24	% native perennial	0.60
Adjusted FQAI	12.91	% native annual	0.00
% C value 0	0.80	% annual	0.00
% C Value 1-3	0.00	% perennial	1.00
% C value 4-6	0.20		
% C value 7-10	0.00		

Species Acronym	Species Name (NWPL/Mohlenbrock)	Species(Synonym)	Common Name	C Value	Midwest WET indicator	WET indicator (numeric)	Habit	Duration	Nativity
aceneg	Acer negundo	Acer negundo var. violaceum	Ash-Leaf Maple	0	FAC	0	Tree	Perennial	Native
phaaru	Phalaris arundinacea	PHALARIS ARUNDINACEA	Reed Canary Grass	0	FACW	-1	Grass	Perennial	Adventive
popdel	Populus deltoides	Populus deltoides	Eastern Cottonwood	0	FAC	0	Tree	Perennial	Native
rhacat	Rhamnus cathartica	RHAMNUS CATHARTICA	European Buckthorn	0	FAC	0	Shrub	Perennial	Adventive
salnig	Salix nigra	Salix nigra	Black Willow	5	OBL	-2	Tree	Perennial	Native

Soils: Access to this location was unsafe and it was too difficult to obtain a soil sample. However, this area is mapped as poorly drained (Sawmill silty clay loam (3107A), a hydric soil, by NRCS and exhibits hydrophytic vegetation and wetland hydrology. Therefore, the soils criterion is satisfied.

Hydrology: The soil was saturated at the surface which satisfies the hydrology criteria at Data Point X27.

Conclusion: Data Point X27 satisfies all three criteria; therefore Area 8 qualifies as Waters of the US with wetland fringe.

ADDITIONAL AREAS INVESTIGATED

Area 2 – Exempt Railroad Ditch

Data Point X05

Area 2 (0.27 acres within ROW; 0.10 acres outside ROW) is an exempt railroad ditch that satisfies the three wetland criteria. Area 2 is located along the toe slope of the railroad ballast in the northeastern portion of the project area on the east side of the railroad tracks, south of Shoe Factory Road.

Vegetation: The dominant plant species at Data Point X05 are eastern cottonwood (*Populus deltoides*), common buckthorn (*Rhamnus cathartica*) and reed canary grass (*Phalaris arundinacea*). 100% of the dominant species are hydrophytic, so the vegetation criterion is satisfied at Data Point X05. The floristic quality data and plant species inventory for Area 2 are provided below.

Soils: The soil profile at Data Point X05 consisted of 0-13 inches of black (10YR 2/1) silty clay loam with 10% brown (10YR 4/4) redoximorphic concentrations. This profile exhibits hydric soil field indicator F6, Redox Dark Surface, and satisfies the soils criterion.

Hydrology: The presence of primary wetland hydrology indicator B4, Algal Mat or Crust, satisfies the hydrology criteria at Data Point X05.

Conclusion: Data Point X05 satisfies all three criteria; therefore Area 2 qualifies as wetland. However, Area 2 is an exempt railroad ditch not subject to jurisdiction.

Area 3 – Exempt Railroad Ditch

Data Point X07

Area 3 (0.19 acres within ROW; 0.18 acres outside ROW) is an exempt railroad ditch that satisfies the three wetland criteria. Area 3 is located along the toe slope of the railroad ballast on the east side of the railroad tracks, south of Shoe Factory Road.

Vegetation: The dominant plant species at Data Point X07 are eastern cottonwood (*Populus deltoides*), silver maple (*Acer saccharinum*), common buckthorn (*Rhamnus cathartica*) and reed canary grass (*Phalaris arundinacea*). 100% of the dominant species are hydrophytic, so the vegetation criterion is satisfied at Data Point X07. The floristic quality data and plant species inventory for Area 3 are provided below.

Soils: The soil profile at Data Point X07 consisted of 0-18 inches of black (10YR 2/1) silty clay loam. This profile exhibits hydric soil field indicator A12, Thick Dark Surface, and satisfies the soils criterion.

Hydrology: The presence of three secondary wetland hydrology indicators B6, Surface Soil Cracks, C8, Crayfish Burrows, and D5, FAC-neutral Test, satisfies the hydrology criterion.

Conclusion: Data Point X07 satisfies all three criteria; therefore Area 3 qualifies as wetland. However, Area 3 is an exempt railroad ditch not subject to jurisdiction.

Area 4 – Exempt Railroad Ditch

Data Point X08

Area 4 (0.31 acres within ROW; 0.02 acres outside ROW) is an exempt railroad ditch that satisfies the three wetland criteria. Area 4 is located along the toe slope of the railroad ballast on the east side of the railroad tracks, south of Area 3.

Vegetation: The dominant plant species at Data Point X08 are eastern cottonwood (*Populus deltoides*), common buckthorn (*Rhamnus cathartica*) and reed canary grass (*Phalaris arundinacea*). 100% of the dominant species are hydrophytic, so the vegetation criterion is satisfied at Data Point X08.

Soils: The soil profile at Data Point X08 consisted of 0-13 inches of black (10YR 2/1) silty clay loam underlain by 3 inches, to a depth of 16 inches below the surface, of very dark gray (10YR 3/1) silty clay loam with 10% yellowish brown (10YR 5/6) redoximorphic concentrations. This profile exhibits hydric soil field indicator A12, Thick Dark Surface, and satisfies the soils criterion.

Hydrology: The presence of primary wetland hydrology indicator B4, Algal Mat or Crust, satisfies the hydrology criteria at Data Point X08.

Conclusion: Data Point X08 satisfies all three criteria; therefore Area 4 qualifies as wetland. However, Area 4 is an exempt railroad ditch not subject to jurisdiction.

Area 5 – Exempt Roadside Ditch

Data Point X09

Area 5 (0.004 acres within ROW) is an exempt roadside ditch that satisfies the three wetland criteria located under the bridge of the elevated railroad track, on the north side of Golf Road.

Vegetation: The dominant plant species at Data Point X09 are box elder (*Acer negundo*), narrow-leaved cattail (*Typha angustifolia*), reed canary grass (*Phalaris arundinacea*) and common spike-rush (*Eleocharis palustris*). 100% of the dominant species are hydrophytic, so the vegetation criterion is satisfied at Data Point X09. The floristic quality data and plant species inventory for Area 5 are provided below.

Soils: The soil profile at Data Point X09 consisted of 0-10 inches of black (10YR 2/1) silty clay loam with 5% yellowish brown (10YR 5/8) redoximorphic concentrations. This profile exhibits hydric soil field indicator F6, Redox Dark Surface, and satisfies the soils criterion.

Hydrology: The presence of primary wetland hydrology indicator A3, Saturation at the surface, satisfies the hydrology criterion at Data Point X09.

Conclusion: Data Point X09 satisfies all three criteria; therefore Area 5 qualifies as wetland. However, Area 5 is an exempt roadside ditch not subject to jurisdiction.

Area 9 – Exempt Railroad Ditch

Data Point X18

Area 9 (0.05 acres within ROW; 0.03 acres outside ROW) is an exempt railroad ditch located between the railroad and a sound wall that satisfies the three wetland criteria located on the west side of the railroad tracks south of E. Chicago Street.

Vegetation: The dominant plant species at Data Point X18 are American elm (*Ulmus americana*), black elder (*Sambucus nigra*) and reed canary grass (*Phalaris arundinacea*). 100% of the dominant species are hydrophytic, so the vegetation criterion is satisfied at Data Point X18. The floristic quality data and plant species inventory for Area 9 are provided below.

Soils: The soil profile at Data Point X18 consisted of 0-10 inches of black (10YR 2/1) silty clay loam with 20% dark yellowish brown (10YR 4/6) redoximorphic concentrations. This profile exhibits hydric soil field indicator F6, Redox Dark Surface, and satisfies the soils criterion.

Hydrology: The presence of a primary wetland hydrology indicator B4, Algal Mat or Crust, satisfies the hydrology criterion at Data Point X18.

Conclusion: Data Point X18 satisfies all three criteria; therefore Area 9 qualifies as wetland. However, Area 9 is an exempt railroad ditch not subject to jurisdiction.

Area 10 – Exempt Railroad Ditch

Data Point X19

Area 10 (0.01 acres within ROW) is an exempt railroad ditch located between the railroad and a sound wall that satisfies the three wetland criteria located on the west side of the railroad tracks, south of Area 9.

Vegetation: The dominant plant species at Data Point X19 are black elder (*Sambucus nigra*), reed canary grass (*Phalaris arundinacea*) and Virginia creeper (*Parthenocissus quinquefolia*). 66.7% of the dominant species are hydrophytic, so the vegetation criterion is satisfied at Data Point X19. The floristic quality data and plant species inventory for Area 10 are provided below.

Soils: The soil profile at Data Point X19 consisted of 0-19 inches of black (10YR 2/1) silty clay loam with yellowish brown (10YR 5/6) redoximorphic concentrations. This profile exhibits hydric soil field indicator F6, Redox Dark Surface, and satisfies the soils criterion.

Hydrology: The presence of two secondary wetland hydrology indicators D2, Geomorphic Position and D5, FAC-neutral Test, satisfies the hydrology criterion at Data Point X19.

Conclusion: Data Point X19 satisfies all three criteria; therefore Area 10 qualifies as wetland. However, Area 10 is an exempt railroad ditch not subject to jurisdiction.

Area 13 – Exempt Railroad Ditch

Data Point X28

Area 13 (0.17 acres within ROW) is an exempt railroad ditch located between the railroad and a sound wall that satisfies the three wetland criteria. Area 13 is located south of Area 10 on the west side of the railroad tracks. Area 13 receives stormwater from a culvert that is draining an off-site residential area.

Vegetation: The dominant plant species at Data Point X28 are box elder (*Acer negundo*), wild black cherry (*Prunus serotina*), common buckthorn (*Rhamnus cathartica*), rough avens (*Geum laciniatum*) and riverbank grape (*Vitis riparia*). 80% of the dominant species are hydrophytic, so the vegetation criterion is satisfied at Data Point X28. The floristic quality data and plant species inventory for Area 13 are provided below.

Soils: The soil profile at Data Point X28 consisted of 0-10 inches of black (10YR 2/1) silty clay loam with 5% dark yellowish brown (10YR 4/6) redoximorphic concentrations. This profile exhibits hydric soil field indicator F6, Redox Dark Surface, and satisfies the soils criterion.

Hydrology: The area at Data Point X28 was inundated to a depth of 1 inch, so the hydrology criterion is satisfied.

Conclusion: Data Point X28 satisfies all three criteria; therefore Area 13 qualifies as wetland. However, Area 13 is an exempt railroad ditch not subject to jurisdiction.

Area 11 – Exempt Railroad Ditch

Data Point X20

Area 11 (0.03 acres within ROW) is an exempt railroad ditch located between the railroad and a sound wall that satisfies the three wetland criteria. Area 11 is located south of Area 13 on the west side of the railroad tracks, north of Lake Street.

Vegetation: The dominant plant species at Data Point X20 are American elm (*Ulmus americana*), box elder (*Acer negundo*) and common buckthorn (*Rhamnus cathartica*). 100% of the dominant species are hydrophytic, so the vegetation criterion is satisfied at Data Point X20. The floristic quality data and plant species inventory for Area 11 are provided below.

Soils: The soil profile at Data Point X20 consisted of 0-3 inches of very dark grayish brown (10YR 3/2) silty clay loam mixed fill underlain by 7 inches, to a depth of 10 inches below the surface, of black (10YR 2/1) silty clay loam with 10% dark yellowish brown (10YR 4/6) redoximorphic concentrations. This profile exhibits hydric soil field indicator F6, Redox Dark Surface, and satisfies the soils criterion.

Hydrology: The soil was saturated at the surface which satisfies the hydrology criterion at Data Point X20.

Conclusion: Data Point X20 satisfies all three criteria; therefore Area 11 qualifies as wetland. However, Area 11 is an exempt railroad ditch not subject to jurisdiction.

Area 12 – Exempt Railroad Ditch

Data Point X26

Area 12 (0.20 acres within ROW) is an exempt railroad ditch that satisfies the three wetland criteria. Area 12 is located on the west side of the railroad tracks just north of the railroad diamond at Spaulding Street.

Vegetation: The dominant plant species at Data Point X26 are soft-stem club-rush (*Schoenoplectus tabernaemontani*), common reed (*Phragmites australis*) and reed canary grass (*Phalaris arundinacea*). 100% of the dominant species are hydrophytic, so the vegetation criterion is satisfied at Data Point X26. The floristic quality data and plant species inventory for Area 12 are provided below.

Soils: The soil profile at Data Point X26 consisted of 0-15 inches of black (10YR 2/1) silty clay loam with 15% dark yellowish brown (10YR 4/6) redoximorphic concentrations. This profile exhibits hydric soil field indicator F6, Redox Dark Surface, and satisfies the soils criterion.

Hydrology: The area at Data Point X26 was inundated to a depth of 6 inches, so the hydrology criterion is satisfied.

Conclusion: Data Point X26 satisfies all three criteria; therefore Area 12 qualifies as wetland. However, Area 12 is an exempt railroad ditch not subject to jurisdiction.

Area 14 – Upland

Data Points X02 and X04

Area 14 consists of the upland area on the west side of the railroad tracks around Area 1.

Vegetation:

- The dominant plant species at Data Point X02 are box elder (*Acer negundo*), white mulberry (*Morus alba*), sandbar willow (*Salix interior*), field horsetail (*Equisetum arvense*), Queen Anne's lace (*Daucus carota*), wild parsnip (*Pastinaca sativa*) and black raspberry (*Rubus occidentalis*). 57.1% of the dominant species were hydrophytic, so the vegetation criterion is satisfied at Data Point X02.
- The dominant plant species at Data Point X04 are Tatarian honeysuckle (*Lonicera tatarica*), tall goldenrod (*Solidago altissima*) and black raspberry (*Rubus occidentalis*). None of the dominant species are hydrophytic, so the vegetation criterion is not satisfied at Data Point X04.

Soils:

- The soil profile at Data Point X02 consisted of 0-12 inches of black (10YR 2/1) silty clay loam mixed fill underlain by 4 inches of dark grayish brown (10YR 4/2) silty clay loam with 5% yellowish brown (10YR 5/6) redoximorphic concentrations. This profile exhibits hydric soil field indicator A12, Thick Dark Surface, and satisfies the soils criterion.
- The soil profile at Data Point X04 consisted of railroad ballast and does not satisfy the soils criterion.

Hydrology:

- The presence of one secondary wetland hydrology indicator B6, Surface Soil Cracks, is not enough to satisfy the hydrology criterion at Data Point X02.
- Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied at Data Point X04.

Conclusion: Data Point X02 fails to satisfy the hydrology criterion and Data Point X04 fails to satisfy all three criteria; therefore Area 14 does not qualify as wetland.

Area 15 – Upland

Data Point X06

Area 15 consists of the upland area on the east side of the railroad tracks around Area 2.

Vegetation: The dominant plant species at Data Point X06 are upland boneset (*Eupatorium sessilifolium*), reed canary grass (*Phalaris arundinacea*) and tall goldenrod (*Solidago altissima*). Only 33.3% of the dominant species are hydrophytic, so the vegetation criterion is not satisfied.

Soils: The soil profile at Data Point X06 consisted of 0-8 inches of black (10YR 2/1) silty clay loam mixed fill underlain by 2 inches of mixed fill comprised of 50% black (10YR 2/1) and 50% yellowish brown (10YR 5/4) silty clay loam. The soil in this location does not meet a hydric soil indicator, so the soils criterion is not satisfied.

Hydrology: Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied at Data Point X06.

Conclusion: Data Point X06 fails to satisfy all three criteria; therefore Area 15 does not qualify as wetland.

Area 16 – Upland

Data Point X10

Area 16 consists of upland on the east side of the railroad tracks north of Golf Road.

Vegetation: The dominant plant species at Data Point X10 are Siberian elm (*Ulmus pumila*), wild bergamot (*Monarda fistulosa*) and reed canary grass (*Phalaris arundinacea*). Only 33.3% of the dominant species are hydrophytic, so the vegetation criterion is not satisfied.

Soils: The soil profile at Data Point X10 consisted of 0-3 inches of black (10YR 2/1) silty clay loam mixed fill underlain by 3 inches of yellowish brown (10YR 5/4) silty clay loam mixed fill. The soil profile was impenetrable below 6 inches due to the presence of railroad ballast. The soil in this location does not meet a hydric soil indicator, so the soils criterion is not satisfied.

Hydrology: Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied at Data Point X10.

Conclusion: Data Point X10 fails to satisfy all three criteria; therefore Area 16 does not qualify as wetland.

Area 17 – Upland

Data Point X12

Area 17 consists of upland on the east side of the railroad tracks south of Golf Road.

Vegetation: The dominant plant species at Data Point X12 are Siberian elm (*Ulmus pumila*), box elder (*Acer negundo*) and common buckthorn (*Rhamnus cathartica*). Only 50% of the dominant species are hydrophytic and the prevalence index is greater than 3.0, so the vegetation criterion is not satisfied.

Soils: The soil profile at Data Point X12 consisted of 0-6 inches of black (10YR 2/1) silty clay loam. Below 6 inches the soil profile was impenetrable railroad ballast. The soil in this location does not meet a hydric soil indicator, so the soils criterion is not satisfied.

Hydrology: Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied at Data Point X12.

Conclusion: Data Point X12 fails to satisfy all three criteria; therefore Area 17 does not qualify as wetland.

Area 18 – Upland

Data Point X15

Area 18 consists of upland area on the west side of the railroad tracks around Area 6.

Vegetation: The dominant plant species at Data Point X15 are black walnut (*Juglans nigra*), reed canary grass (*Phalaris arundinacea*) and eastern daisy fleabane (*Erigeron annuus*). Only 33.3% of the dominant species are hydrophytic, so the vegetation criterion is not satisfied.

Soils: The soil profile at Data Point X15 consisted of 0-10 inches of yellowish brown (10YR 5/4) silty clay loam. The soil in this location does not meet a hydric soil indicator, so the soils criterion is not satisfied.

Hydrology: Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied at Data Point X15.

Conclusion: Data Point X15 fails to satisfy all three criteria; therefore Area 18 does not qualify as wetland.

Area 19 – Upland

Data Point X16

Area 19 consists of the upland area on the east side of the railroad tracks, north of Area 8.

Vegetation: The dominant plant species at Data Point X16 are common buckthorn (*Rhamnus cathartica*), whorled milkweed (*Asclepias verticillata*) and spotted knapweed (*Centaurea maculosa*). Only 33.3% of the dominant species are hydrophytic, so the vegetation criterion is not satisfied.

Soils: The soil profile at Data Point X16 consisted of 0-10 inches of black (10YR 2/1) silty clay loam. The soil in this location does not meet a hydric soil indicator, so the soils criterion is not satisfied.

Hydrology: Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied at Data Point X16.

Conclusion: Data Point X16 fails to satisfy all three criteria; therefore Area 19 does not qualify as wetland.

Area 20 – Upland

Data Point X17

Area 20 consists of the upland areas on the west side of the railroad tracks, south of E. Chicago Street.

Vegetation: The dominant plant species at Data Point X17 are Siberian elm (*Ulmus pumila*), cut-leaved teasel (*Dipsacus laciniatus*) and Indiangrass (*Sorghastrum nutans*). None of the dominant species are hydrophytic, so the vegetation criterion is not satisfied.

Soils: The soil profile at Data Point X17 consisted of 0-2 inches of dark brown (10YR 3/3) silty clay loam mixed fill. Below 2 inches, the soil profile was impenetrable railroad ballast. The soil in this location does not meet a hydric soil indicator, so the soils criterion is not satisfied.

Hydrology: Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied at Data Point X17.

Conclusion: Data Point X17 fails to satisfy all three criteria; therefore Area 20 does not qualify as wetland.

Area 21 – Upland

Data Points X21 and X22

Area 21 consists of the upland areas on the west side of the railroad tracks south of Lake Street.

Vegetation:

- The dominant plant species at Data Point X21 are tree of heaven (*Ailanthis altissima*), Queen Anne's lace (*Daucus carota*), crownvetch (*Coronilla varia*) and cut-leaved teasel (*Dipsacus laciniatus*). None of the dominant species are hydrophytic, so the vegetation criterion is not satisfied at Data Point X21.
- The dominant plant species at Data Point X22 are sandbar willow (*Salix interior*), cut-leaved teasel (*Dipsacus laciniatus*), crownvetch (*Coronilla varia*) and reed canary grass (*Phalaris arundinacea*). Only 50% of the dominant species are hydrophytic, so the vegetation criterion is not satisfied at Data Point X22.

Soils:

- The soil profile at Data Point X21 consisted of railroad ballast and does not satisfy the soils criterion.
- The soil profile at Data Point X22 consisted of railroad ballast and does not satisfy the soils criterion.

Hydrology:

- Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied at Data Point X21.
- Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied at Data Point X22.

Conclusion: Data Points X21 and X22 fail to satisfy all three criteria; therefore Area 21 does not qualify as wetland.

Area 22 – Upland

Data Points X23, X24 and X25

Area 22 consists of the upland areas on the west side of the railroad tracks just north of Area 12.

Vegetation:

- The dominant plant species at Data Point X23 are crownvetch (*Coronilla varia*), wild parsnip (*Pastinaca sativa*) and black elder (*Sambucus nigra*). Only 33.3% of the dominant species are hydrophytic, so the vegetation criterion is not satisfied at Data Point X23.
- The dominant plant species at Data Point X24 are black elder (*Sambucus nigra*), reed canary grass (*Phalaris arundinacea*), scouring-rush horsetail (*Equisetum hyemale*) and Ohio spiderwort (*Tradescantia ohiensis*). 75% of the dominant species are hydrophytic, so the vegetation criterion is satisfied at Data Point X24.

- The dominant plant species at Data Point X25 are common buckthorn (*Rhamnus cathartica*), reed canary grass (*Phalaris arundinacea*) and common blackberry (*Rubus allegheniensis*). 66.7% of the dominant species are hydrophytic, so the vegetation criterion is satisfied at Data Point X25.

Soils:

- The soil profile at Data Point X23 consisted of railroad ballast and does not satisfy the soils criterion.
- The soil profile at Data Point X24 consisted of 1 inch of black (10YR 2/1) silt loam over railroad ballast and does not satisfy the soils criterion.
- The soil profile at Data Point X25 consisted of railroad ballast and does not satisfy the soils criterion.

Hydrology:

- Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied at Data Point X23.
- The presence of one secondary wetland hydrology indicator D5, FAC-neutral Test, is not enough to satisfy the hydrology criterion at Data Point X24.
- Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied at Data Point X25.

Conclusion: Data Points X23 fails to satisfy all three criteria and Data Points X24 and X25 fail to satisfy the soils and hydrology criteria; therefore Area 22 does not qualify as wetland.

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APPENDIX I

DATA FORMS

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Spaulding to South Sutton MP 37.80 to MP 41.80 City/County: Hoffman Estates/Cook Sampling Date: 16-Jul-18
 Applicant/Owner: Wisconsin Central Ltd. State: IL Sampling Point: X01
 Investigator(s): Alicia Metzger/Daniel Jablonski Section, Township, Range: S 9 T 41N R 9E
 Landform (hillslope, terrace, etc.): Channel (active) Local relief (concave, convex, none): flat
 Slope: 0.0% / 0.0° Lat.: 42.060071 Long.: -88.206399 Datum: NAD1983
 Soil Map Unit Name: Ashkum silty clay loam (232A) NWI classification: R5UBH

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	
Remarks: This location satisfies all three criteria and qualifies as wetland.		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
1. <u>Acer saccharinum</u>	<u>10</u>	☒ 100.0%	<u>FACW</u>	
2. _____	<u>0</u>	☐ 0.0%	_____	
3. _____	<u>0</u>	☐ 0.0%	_____	
4. _____	<u>0</u>	☐ 0.0%	_____	
5. _____	<u>0</u>	☐ 0.0%	_____	
		<u>10</u> = Total Cover		
Prevalence Index worksheet:				
Total % Cover of: Multiply by:				
OBL species <u>70</u> x 1 = <u>70</u>				
FACW species <u>40</u> x 2 = <u>80</u>				
FAC species <u>40</u> x 3 = <u>120</u>				
FACU species <u>0</u> x 4 = <u>0</u>				
UPL species <u>0</u> x 5 = <u>0</u>				
Column Totals: <u>150</u> (A) <u>270</u> (B)				
Prevalence Index = B/A = <u>1.800</u>				
Hydrophytic Vegetation Indicators:				
☐ 1 - Rapid Test for Hydrophytic Vegetation				
☒ 2 - Dominance Test is > 50%				
☒ 3 - Prevalence Index is ≤ 3.0 ¹				
☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)				
☐ Problematic Hydrophytic Vegetation ¹ (Explain)				
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
Hydrophytic Vegetation Present? Yes ☒ No ☐				
Remarks: (Include photo numbers here or on a separate sheet.) All of the dominant species are hydrophytic, so the vegetation criterion is satisfied.				

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X01**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining. M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)

- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ Coast Prairie Redox (A16)
☐ Dark Surface (S7)
☐ Iron Manganese Masses (F12)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

The soil in this location was too saturated to retrieve and could not be classified. However, inundation of the area strongly suggests the presence of hydric soil indicators, so the soils criterion is satisfied.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- | | |
|--|---|
| ☒ Surface Water (A1) | ☐ Water-Stained Leaves (B9) |
| ☐ High Water Table (A2) | ☐ Aquatic Fauna (B13) |
| ☐ Saturation (A3) | ☐ True Aquatic Plants (B14) |
| ☐ Water Marks (B1) | ☐ Hydrogen Sulfide Odor (C1) |
| ☐ Sediment Deposits (B2) | ☐ Oxidized Rhizospheres on Living Roots (C3) |
| ☐ Drift Deposits (B3) | ☐ Presence of Reduced Iron (C4) |
| ☐ Algal Mat or Crust (B4) | ☐ Recent Iron Reduction in Tilled Soils (C6) |
| ☐ Iron Deposits (B5) | ☐ Thin Muck Surface (C7) |
| ☐ Inundation Visible on Aerial Imagery (B7) | ☐ Gauge or Well Data (D9) |
| ☐ Sparsely Vegetated Concave Surface (B8) | ☐ Other (Explain in Remarks) |

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☒ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches): 6

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? Yes ☐ No ☒ Depth (inches): _____

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

The area was inundated to a depth of 6 inches, so the hydrology criterion is satisfied.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Spaulding to South Sutton MP 37.80 to MP 41.80 City/County: Hoffman Estates/Cook Sampling Date: 16-Jul-18
 Applicant/Owner: Wisconsin Central Ltd. State: IL Sampling Point: X02
 Investigator(s): Alicia Metzger/Daniel Jablonski Section, Township, Range: S 9 T 41N R 9E
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): flat
 Slope: 0.0% / 0.0° Lat.: 42.059469 Long.: -88.206675 Datum: NAD1983
 Soil Map Unit Name: Ashkum silty clay loam (232A) NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☐ No ☒	
Remarks: This location fails the hydrology criterion and does not qualify as wetland.		

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status															
Tree Stratum (Plot size: <u>30</u>)																		
1. <u>Acer negundo</u>	<u>20</u>	☒ 50.0%	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>57.1%</u> (A/B)														
2. <u>Morus alba</u>	<u>20</u>	☒ 50.0%	<u>FAC</u>															
3. _____	<u>0</u>	☐ 0.0%	_____															
4. _____	<u>0</u>	☐ 0.0%	_____															
5. _____	<u>0</u>	☐ 0.0%	_____															
			<u>40</u> = Total Cover															
Sapling/Shrub Stratum (Plot size: <u>15</u>)																		
1. <u>Salix interior</u>	<u>30</u>	☒ 100.0%	<u>FACW</u>	Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>30</u></td> <td>x 2 = <u>60</u></td> </tr> <tr> <td>FAC species <u>70</u></td> <td>x 3 = <u>210</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>80</u></td> <td>x 5 = <u>400</u></td> </tr> <tr> <td>Column Totals: <u>180</u> (A)</td> <td><u>670</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.722</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>30</u>	x 2 = <u>60</u>	FAC species <u>70</u>	x 3 = <u>210</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>80</u>	x 5 = <u>400</u>	Column Totals: <u>180</u> (A)	<u>670</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>30</u>	x 2 = <u>60</u>																	
FAC species <u>70</u>	x 3 = <u>210</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>80</u>	x 5 = <u>400</u>																	
Column Totals: <u>180</u> (A)	<u>670</u> (B)																	
2. _____	<u>0</u>	☐ 0.0%	_____															
3. _____	<u>0</u>	☐ 0.0%	_____															
4. _____	<u>0</u>	☐ 0.0%	_____															
5. _____	<u>0</u>	☐ 0.0%	_____															
			<u>30</u> = Total Cover															
Herb Stratum (Plot size: <u>5</u>)																		
1. <u>Equisetum arvense</u>	<u>30</u>	☒ 33.3%	<u>FAC</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is > 50% ☐ 3 - Prevalence Index is ≤ 3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Daucus carota</u>	<u>40</u>	☒ 44.4%	<u>UPL</u>															
3. <u>Pastinaca sativa</u>	<u>20</u>	☒ 22.2%	<u>UPL</u>															
4. _____	<u>0</u>	☐ 0.0%	_____															
5. _____	<u>0</u>	☐ 0.0%	_____															
6. _____	<u>0</u>	☐ 0.0%	_____															
7. _____	<u>0</u>	☐ 0.0%	_____															
8. _____	<u>0</u>	☐ 0.0%	_____															
9. _____	<u>0</u>	☐ 0.0%	_____															
10. _____	<u>0</u>	☐ 0.0%	_____															
			<u>90</u> = Total Cover															
Woody Vine Stratum (Plot size: <u>5</u>)																		
1. <u>Rubus occidentalis</u>	<u>20</u>	☐ 100.0%	<u>UPL</u>	Hydrophytic Vegetation Present? Yes ☒ No ☐														
2. _____	<u>0</u>	☐ 0.0%	_____															
			<u>20</u> = Total Cover															

Remarks: (Include photo numbers here or on a separate sheet.)
 Greater than 50% of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

¹Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X02**

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)				
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☒ Surface Soil Cracks (B6)		
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)		
☐ Saturation (A3)	☐ True Aquatic Plants (B14)	☐ Dry Season Water Table (C2)		
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Crayfish Burrows (C8)		
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Saturation Visible on Aerial Imagery (C9)		
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Stunted or Stressed Plants (D1)		
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Geomorphic Position (D2)		
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ FAC-Neutral Test (D5)		
☐ Inundation Visible on Aerial Imagery (B7)	☐ Gauge or Well Data (D9)			
☐ Sparsely Vegetated Concave Surface (B8)	☐ Other (Explain in Remarks)			
Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): _____ Water Table Present? Yes ☐ No ☒ Depth (inches): _____ Saturation Present? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)			Wetland Hydrology Present? Yes ☐ No ☒	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				
The presence of one secondary wetland hydrology indicator is not enough to satisfy the hydrology criterion.				

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Spaulding to South Sutton MP 37.80 to MP 41.80 City/County: Hoffman Estates/Cook Sampling Date: 16-Jul-18
 Applicant/Owner: Wisconsin Central Ltd. State: IL Sampling Point: X03
 Investigator(s): Alicia Metzger/Daniel Jablonski Section, Township, Range: S 9 T 41N R 9E
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): flat
 Slope: 0.0% / 0.0 ° Lat.: 42.05902 Long.: -88.206883 Datum: NAD1983
 Soil Map Unit Name: Ashkum silty clay loam (232A) NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	
Remarks: This location satisfies all three criteria and qualifies as wetland.		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species? Rel. Strat. Cover	Indicator Status
1. _____	0	☐ 0.0%	_____
2. _____	0	☐ 0.0%	_____
3. _____	0	☐ 0.0%	_____
4. _____	0	☐ 0.0%	_____
5. _____	0	☐ 0.0%	_____
0 = Total Cover			
Sapling/Shrub Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	_____
2. _____	0	☐ 0.0%	_____
3. _____	0	☐ 0.0%	_____
4. _____	0	☐ 0.0%	_____
5. _____	0	☐ 0.0%	_____
0 = Total Cover			
Herb Stratum (Plot size: 5 _____)			
1. <u>Schoenoplectus fluviatilis</u>	60	☒ 60.0%	OBL
2. <u>Phalaris arundinacea</u>	20	☒ 20.0%	FACW
3. <u>Carex stricta</u>	20	☒ 20.0%	OBL
4. _____	0	☐ 0.0%	_____
5. _____	0	☐ 0.0%	_____
6. _____	0	☐ 0.0%	_____
7. _____	0	☐ 0.0%	_____
8. _____	0	☐ 0.0%	_____
9. _____	0	☐ 0.0%	_____
10. _____	0	☐ 0.0%	_____
100 = Total Cover			
Woody Vine Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	_____
2. _____	0	☐ 0.0%	_____
0 = Total Cover			

Dominance Test worksheet:
 Number of Dominant Species That are OBL, FACW, or FAC: 3 (A)
 Total Number of Dominant Species Across All Strata: 3 (B)
 Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species <u>80</u>	x 1 =	<u>80</u>
FACW species <u>20</u>	x 2 =	<u>40</u>
FAC species <u>0</u>	x 3 =	<u>0</u>
FACU species <u>0</u>	x 4 =	<u>0</u>
UPL species <u>0</u>	x 5 =	<u>0</u>
Column Totals: <u>100</u>	(A)	<u>120</u> (B)

 Prevalence Index = B/A = 1.200

Hydrophytic Vegetation Indicators:
☒ 1 - Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is > 50%
☒ 3 - Prevalence Index is ≤ 3.0¹
☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
☐ Problematic Hydrophytic Vegetation¹ (Explain)
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks: (Include photo numbers here or on a separate sheet.)
 All of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X03**

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)				
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☒ Surface Soil Cracks (B6)		
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)		
☐ Saturation (A3)	☐ True Aquatic Plants (B14)	☐ Dry Season Water Table (C2)		
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Crayfish Burrows (C8)		
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Saturation Visible on Aerial Imagery (C9)		
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Stunted or Stressed Plants (D1)		
☒ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Geomorphic Position (D2)		
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☒ FAC-Neutral Test (D5)		
☐ Inundation Visible on Aerial Imagery (B7)	☐ Gauge or Well Data (D9)			
☐ Sparsely Vegetated Concave Surface (B8)	☐ Other (Explain in Remarks)			
Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): _____ Water Table Present? Yes ☐ No ☒ Depth (inches): _____ Saturation Present? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)			Wetland Hydrology Present? Yes ☒ No ☐	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				
The presence of a primary wetland hydrology indicator satisfies the hydrology criterion.				

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Spaulding to South Sutton MP 37.80 to MP 41.80 City/County: Hoffman Estates/Cook Sampling Date: 16-Jul-18
 Applicant/Owner: Wisconsin Central Ltd. State: IL Sampling Point: X04
 Investigator(s): Alicia Metzger/Daniel Jablonski Section, Township, Range: S 9 T 41N R 9E
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): flat
 Slope: 0.0% / 0.0° Lat.: 42.055913 Long.: -88.208786 Datum: NAD1983
 Soil Map Unit Name: Ashkum silty clay loam (232A) NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐ No ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	
Remarks: This location fails all three criteria and does not qualify as wetland.		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)																								
1. _____	0	☐ 0.0%																										
2. _____	0	☐ 0.0%																										
3. _____	0	☐ 0.0%																										
4. _____	0	☐ 0.0%																										
5. _____	0	☐ 0.0%		Prevalence Index worksheet: <table border="1"> <thead> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> <th></th> </tr> </thead> <tbody> <tr> <td>OBL species <u>0</u></td> <td>x 1 =</td> <td><u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 =</td> <td><u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 =</td> <td><u>0</u></td> </tr> <tr> <td>FACU species <u>50</u></td> <td>x 4 =</td> <td><u>200</u></td> </tr> <tr> <td>UPL species <u>20</u></td> <td>x 5 =</td> <td><u>100</u></td> </tr> <tr> <td>Column Totals: <u>70</u> (A)</td> <td></td> <td><u>300</u> (B)</td> </tr> <tr> <td colspan="3">Prevalence Index = B/A = <u>4.286</u></td> </tr> </tbody> </table>	Total % Cover of:	Multiply by:		OBL species <u>0</u>	x 1 =	<u>0</u>	FACW species <u>0</u>	x 2 =	<u>0</u>	FAC species <u>0</u>	x 3 =	<u>0</u>	FACU species <u>50</u>	x 4 =	<u>200</u>	UPL species <u>20</u>	x 5 =	<u>100</u>	Column Totals: <u>70</u> (A)		<u>300</u> (B)	Prevalence Index = B/A = <u>4.286</u>		
Total % Cover of:	Multiply by:																											
OBL species <u>0</u>	x 1 =	<u>0</u>																										
FACW species <u>0</u>	x 2 =	<u>0</u>																										
FAC species <u>0</u>	x 3 =	<u>0</u>																										
FACU species <u>50</u>	x 4 =	<u>200</u>																										
UPL species <u>20</u>	x 5 =	<u>100</u>																										
Column Totals: <u>70</u> (A)		<u>300</u> (B)																										
Prevalence Index = B/A = <u>4.286</u>																												
= Total Cover																												
Saolina/Shrub Stratum (Plot size: 15 _____)																												
1. Lonicera tatarica	20	☒ 100.0%	FACU																									
2. _____	0	☐ 0.0%																										
3. _____	0	☐ 0.0%																										
4. _____	0	☐ 0.0%																										
5. _____	0	☐ 0.0%																										
= Total Cover																												
Herb Stratum (Plot size: _____)																												
1. Solidago altissima	30	☒ 100.0%	FACU																									
2. _____	0	☐ 0.0%																										
3. _____	0	☐ 0.0%																										
4. _____	0	☐ 0.0%																										
5. _____	0	☐ 0.0%																										
6. _____	0	☐ 0.0%																										
7. _____	0	☐ 0.0%																										
8. _____	0	☐ 0.0%																										
9. _____	0	☐ 0.0%																										
10. _____	0	☐ 0.0%																										
= Total Cover																												
Woody Vine Stratum (Plot size: _____)																												
1. Rubus occidentalis	20	☐ 100.0%	UPL																									
2. _____	0	☐ 0.0%																										
= Total Cover																												

Hydrophytic Vegetation Indicators:
☐ 1 - Rapid Test for Hydrophytic Vegetation
☐ 2 - Dominance Test is > 50%
☐ 3 - Prevalence Index is ≤ 3.0¹
☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
☐ Problematic Hydrophytic Vegetation¹ (Explain)
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks: (Include photo numbers here or on a separate sheet.)
 None of the dominant species are hydrophytic, so the vegetation criterion is not satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X04**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)

- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ Coast Prairie Redox (A16)
☐ Dark Surface (S7)
☐ Iron Manganese Masses (F12)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? Yes ☐ No ☒

Remarks:

Sample within railroad ballast; the soils criterion is not satisfied.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- | | |
|--|---|
| ☐ Surface Water (A1) | ☐ Water-Stained Leaves (B9) |
| ☐ High Water Table (A2) | ☐ Aquatic Fauna (B13) |
| ☐ Saturation (A3) | ☐ True Aquatic Plants (B14) |
| ☐ Water Marks (B1) | ☐ Hydrogen Sulfide Odor (C1) |
| ☐ Sediment Deposits (B2) | ☐ Oxidized Rhizospheres on Living Roots (C3) |
| ☐ Drift Deposits (B3) | ☐ Presence of Reduced Iron (C4) |
| ☐ Algal Mat or Crust (B4) | ☐ Recent Iron Reduction in Tilled Soils (C6) |
| ☐ Iron Deposits (B5) | ☐ Thin Muck Surface (C7) |
| ☐ Inundation Visible on Aerial Imagery (B7) | ☐ Gauge or Well Data (D9) |
| ☐ Sparsely Vegetated Concave Surface (B8) | ☐ Other (Explain in Remarks) |

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☒

Depth (inches): _____

Water Table Present? Yes ☐ No ☒

Depth (inches):

Saturation Present? Yes ☐ No ☒
(includes capillary fringe)

Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Spaulding to South Sutton MP 37.80 to MP 41.80 City/County: Hoffman Estates/Cook Sampling Date: 16-Jul-18
 Applicant/Owner: Wisconsin Central Ltd. State: IL Sampling Point: X05
 Investigator(s): Alicia Metzger/Daniel Jablonski Section, Township, Range: S 9 T 41N R 9E
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): flat
 Slope: 0.0% / 0.0 ° Lat.: 42.060447 Long.: -88.205766 Datum: NAD1983
 Soil Map Unit Name: Ashkum silty clay loam (232A) NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	
Remarks: This location satisfies all three criteria and qualifies as wetland. However, this area is an exempt railroad ditch.		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																												
1. <u>Populus deltoides</u>	10	☒ 100.0%	FAC																													
2. _____	0	☐ 0.0%																														
3. _____	0	☐ 0.0%																														
4. _____	0	☐ 0.0%																														
5. _____	0	☐ 0.0%																														
10 = Total Cover																																
Sapling/Shrub Stratum (Plot size: 15)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Prevalence Index worksheet: <table border="0"> <tr> <td colspan="2">Total % Cover of:</td> <td colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td>0</td> <td>x 1 =</td> <td>0</td> </tr> <tr> <td>FACW species</td> <td>70</td> <td>x 2 =</td> <td>140</td> </tr> <tr> <td>FAC species</td> <td>30</td> <td>x 3 =</td> <td>90</td> </tr> <tr> <td>FACU species</td> <td>0</td> <td>x 4 =</td> <td>0</td> </tr> <tr> <td>UPL species</td> <td>0</td> <td>x 5 =</td> <td>0</td> </tr> <tr> <td>Column Totals:</td> <td>100</td> <td>(A)</td> <td>230 (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.300</u>	Total % Cover of:		Multiply by:		OBL species	0	x 1 =	0	FACW species	70	x 2 =	140	FAC species	30	x 3 =	90	FACU species	0	x 4 =	0	UPL species	0	x 5 =	0	Column Totals:	100	(A)	230 (B)
Total % Cover of:		Multiply by:																														
OBL species	0	x 1 =	0																													
FACW species	70	x 2 =	140																													
FAC species	30	x 3 =	90																													
FACU species	0	x 4 =	0																													
UPL species	0	x 5 =	0																													
Column Totals:	100	(A)	230 (B)																													
1. <u>Rhamnus cathartica</u>	20	☒ 100.0%	FAC																													
2. _____	0	☐ 0.0%																														
3. _____	0	☐ 0.0%																														
4. _____	0	☐ 0.0%																														
5. _____	0	☐ 0.0%																														
20 = Total Cover																																
Herb Stratum (Plot size: 5)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Hydrophytic Vegetation Indicators: ☒ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is > 50% ☒ 3 - Prevalence Index is ≤ 3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																												
1. <u>Phalaris arundinacea</u>	60	☒ 85.7%	FACW																													
2. <u>Phragmites australis</u>	10	☐ 14.3%	FACW																													
3. _____	0	☐ 0.0%																														
4. _____	0	☐ 0.0%																														
5. _____	0	☐ 0.0%																														
6. _____	0	☐ 0.0%																														
7. _____	0	☐ 0.0%																														
8. _____	0	☐ 0.0%																														
9. _____	0	☐ 0.0%																														
10. _____	0	☐ 0.0%																														
70 = Total Cover																																
Woody Vine Stratum (Plot size:)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Hydrophytic Vegetation Present? Yes ☒ No ☐																												
1. _____	0	☐ 0.0%																														
2. _____	0	☐ 0.0%																														
0 = Total Cover																																

Remarks: (Include photo numbers here or on a separate sheet.)
 All of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

¹Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X05**

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that apply)		
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☒ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)
☐ Saturation (A3)	☐ True Aquatic Plants (B14)	☐ Dry Season Water Table (C2)
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Crayfish Burrows (C8)
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Stunted or Stressed Plants (D1)
☒ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Geomorphic Position (D2)
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☒ FAC-Neutral Test (D5)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Gauge or Well Data (D9)	
☐ Sparsely Vegetated Concave Surface (B8)	☐ Other (Explain in Remarks)	
Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): _____ Water Table Present? Yes ☐ No ☒ Depth (inches): _____ Saturation Present? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)		
Wetland Hydrology Present? Yes ☒ No ☐		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		
The presence of a primary wetland hydrology indicator satisfies the hydrology criterion.		

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Spaulding to South Sutton MP 37.80 to MP 41.80 City/County: Hoffman Estates/Cook Sampling Date: 16-Jul-18
Applicant/Owner: Wisconsin Central Ltd. State: _____ Sampling Point: X06
Investigator(s): Alicia Metzger/Daniel Jablonski Section, Township, Range: S 9 T 41N R 9E
Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): flat
Slope: 0.0% / 0.0 ° Lat.: 42.05957 Long.: -88.206276 Datum: NAD1983
Soil Map Unit Name: Markham silt loam (531B) NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐	No ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present?	Yes ☐	No ☒	
Wetland Hydrology Present?	Yes ☐	No ☒	
Remarks: This location fails all three criteria and does not qualify as wetland.			

VEGETATION - Use scientific names of plants.

	Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	_____
2. _____	0	☐ 0.0%	_____
3. _____	0	☐ 0.0%	_____
4. _____	0	☐ 0.0%	_____
5. _____	0	☐ 0.0%	_____
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	_____
2. _____	0	☐ 0.0%	_____
3. _____	0	☐ 0.0%	_____
4. _____	0	☐ 0.0%	_____
5. _____	0	☐ 0.0%	_____
	0	= Total Cover	
Herb Stratum (Plot size: 5 _____)			
1. Eupatorium sessilifolium	30	☒ 33.3%	UPL
2. Phalaris arundinacea	30	☒ 33.3%	FACW
3. Solidago altissima	30	☒ 33.3%	FACU
4. _____	0	☐ 0.0%	_____
5. _____	0	☐ 0.0%	_____
6. _____	0	☐ 0.0%	_____
7. _____	0	☐ 0.0%	_____
8. _____	0	☐ 0.0%	_____
9. _____	0	☐ 0.0%	_____
10. _____	0	☐ 0.0%	_____
	90	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	_____
2. _____	0	☐ 0.0%	_____
	0	= Total Cover	

Dominance Test worksheet:			
Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)	
Total Number of Dominant Species Across All Strata:	3	(B)	
Percent of dominant Species That Are OBL, FACW, or FAC:	33.3%	(A/B)	

Prevalence Index worksheet:			
Total % Cover of:	Multiply by:		
OBL species	0	x 1 =	0
FACW species	30	x 2 =	60
FAC species	0	x 3 =	0
FACU species	30	x 4 =	120
UPL species	30	x 5 =	150
Column Totals:	90	(A)	330 (B)
Prevalence Index = B/A = <u>3.667</u>			

Hydrophytic Vegetation Indicators:	
☐ 1 - Rapid Test for Hydrophytic Vegetation	
☐ 2 - Dominance Test is > 50%	
☐ 3 - Prevalence Index is ≤ 3.0 ¹	
☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
☐ Problematic Hydrophytic Vegetation ¹ (Explain)	
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	

Hydrophytic Vegetation Present?	Yes ☐ No ☒
--	---

Remarks: (Include photo numbers here or on a separate sheet.)
Less than 50% of the dominant species are hydrophytic, so the vegetation criterion is not satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X06**

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that apply) ☐ Surface Water (A1) ☐ High Water Table (A2) ☐ Saturation (A3) ☐ Water Marks (B1) ☐ Sediment Deposits (B2) ☐ Drift Deposits (B3) ☐ Algal Mat or Crust (B4) ☐ Iron Deposits (B5) ☐ Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) ☐ Water-Stained Leaves (B9) ☐ Aquatic Fauna (B13) ☐ True Aquatic Plants (B14) ☐ Hydrogen Sulfide Odor (C1) ☐ Oxidized Rhizospheres on Living Roots (C3) ☐ Presence of Reduced Iron (C4) ☐ Recent Iron Reduction in Tilled Soils (C6) ☐ Thin Muck Surface (C7) ☐ Gauge or Well Data (D9) ☐ Other (Explain in Remarks) Secondary Indicators (minimum of two required) ☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Dry Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ FAC-Neutral Test (D5)		
Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): _____ Water Table Present? Yes ☐ No ☒ Depth (inches): _____ Saturation Present? Yes ☐ No ☒ Depth (inches): _____ Wetland Hydrology Present? Yes ☐ No ☒		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied.		

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Spaulding to South Sutton MP 37.80 to MP 41.80 City/County: Hoffman Estates/Cook Sampling Date: 16-Jul-18
 Applicant/Owner: Wisconsin Central Ltd. State: IL Sampling Point: X07
 Investigator(s): Alicia Metzger/Daniel Jablonski Section, Township, Range: S 9 T 41N R 9E
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): flat
 Slope: 0.0% / 0.0 ° Lat.: 42.058648 Long.: -88.206849 Datum: NAD1983
 Soil Map Unit Name: Ashkum silty clay loam (232A) NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	
Remarks: This location satisfies all three criteria and qualifies as wetland. However, this area is an exempt railroad ditch.		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <u>Populus deltoides</u>	10	☒ 50.0%	FAC
2. <u>Acer saccharinum</u>	10	☒ 50.0%	FACW
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
	20	= Total Cover	
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <u>Rhamnus cathartica</u>	220	☒ 100.0%	FAC
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
	220	= Total Cover	
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <u>Phalaris arundinacea</u>	80	☒ 100.0%	FACW
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
	80	= Total Cover	
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:
 Number of Dominant Species That are OBL, FACW, or FAC: 4 (A)
 Total Number of Dominant Species Across All Strata: 4 (B)
 Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>90</u>	x 2 = <u>180</u>
FAC species <u>230</u>	x 3 = <u>690</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>320</u> (A)	<u>870</u> (B)

 Prevalence Index = B/A = 2.719

Hydrophytic Vegetation Indicators:
☐ 1 - Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is > 50%
☒ 3 - Prevalence Index is ≤ 3.0¹
☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
☐ Problematic Hydrophytic Vegetation¹ (Explain)
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks: (Include photo numbers here or on a separate sheet.)
 All of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X07**

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that apply) ☐ Surface Water (A1) ☐ High Water Table (A2) ☐ Saturation (A3) ☐ Water Marks (B1) ☐ Sediment Deposits (B2) ☐ Drift Deposits (B3) ☐ Algal Mat or Crust (B4) ☐ Iron Deposits (B5) ☐ Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) ☐ Water-Stained Leaves (B9) ☐ Aquatic Fauna (B13) ☐ True Aquatic Plants (B14) ☐ Hydrogen Sulfide Odor (C1) ☐ Oxidized Rhizospheres on Living Roots (C3) ☐ Presence of Reduced Iron (C4) ☐ Recent Iron Reduction in Tilled Soils (C6) ☐ Thin Muck Surface (C7) ☐ Gauge or Well Data (D9) ☐ Other (Explain in Remarks)		
Secondary Indicators (minimum of two required) ☒ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Dry Season Water Table (C2) ☒ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☒ FAC-Neutral Test (D5)		
Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): _____ Water Table Present? Yes ☐ No ☒ Depth (inches): _____ Saturation Present? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe) Wetland Hydrology Present? Yes ☒ No ☐		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: The presence of two secondary wetland hydrology indicators satisfies the hydrology criterion.		

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Spaulding to South Sutton MP 37.80 to MP 41.80 City/County: Hoffman Estates/Cook Sampling Date: 16-Jul-18
 Applicant/Owner: Wisconsin Central Ltd. State: IL Sampling Point: X08
 Investigator(s): Alicia Metzger/Daniel Jablonski Section, Township, Range: S 9 T 41N R 9E
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): flat
 Slope: 0.0% / 0.0 ° Lat.: 42.056665 Long.: -88.208076 Datum: NAD1983
 Soil Map Unit Name: Ashkum silty clay loam (232A) NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	
Remarks: This location satisfies all three criteria and qualifies as wetland. However, this area is an exempt railroad ditch.		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species? Rel. Strat. Cover	Indicator Status	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
1. <u>Populus deltoides</u>	20	☒ 100.0%	FAC	
2. _____	0	☐ 0.0%		
3. _____	0	☐ 0.0%		
4. _____	0	☐ 0.0%		
5. _____	0	☐ 0.0%		
	20	= Total Cover		
Prevalence Index worksheet:				
Total % Cover of: Multiply by:				
OBL species <u>0</u> x 1 = <u>0</u>				
FACW species <u>90</u> x 2 = <u>180</u>				
FAC species <u>30</u> x 3 = <u>90</u>				
FACU species <u>0</u> x 4 = <u>0</u>				
UPL species <u>0</u> x 5 = <u>0</u>				
Column Totals: <u>120</u> (A) <u>270</u> (B)				
Prevalence Index = B/A = <u>2.250</u>				
Hydrophytic Vegetation Indicators:				
☐ 1 - Rapid Test for Hydrophytic Vegetation				
☒ 2 - Dominance Test is > 50%				
☒ 3 - Prevalence Index is ≤ 3.0 ¹				
☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)				
☐ Problematic Hydrophytic Vegetation ¹ (Explain)				
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
Hydrophytic Vegetation Present? Yes ☒ No ☐				
Remarks: (Include photo numbers here or on a separate sheet.) All of the dominant species are hydrophytic, so the vegetation criterion is satisfied.				

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: X08

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|--|---|
| ☐ Histosol (A1) | ☐ Sandy Gleyed Matrix (S4) |
| ☐ Histic Epipedon (A2) | ☐ Sandy Redox (S5) |
| ☐ Black Histic (A3) | ☐ Stripped Matrix (S6) |
| ☐ Hydrogen Sulfide (A4) | ☐ Loamy Mucky Mineral (F1) |
| ☐ Stratified Layers (A5) | ☐ Loamy Gleyed Matrix (F2) |
| ☐ 2 cm Muck (A10) | ☐ Depleted Matrix (F3) |
| ☐ Depleted Below Dark Surface (A11) | ☐ Redox Dark Surface (F6) |
| ☒ Thick Dark Surface (A12) | ☐ Depleted Dark Surface (F7) |
| ☐ Sandy Muck Mineral (S1) | ☐ Redox Depressions (F8) |
| ☐ 5 cm Mucky Peat or Peat (S3) | |

Indicators for Problematic Hydric Soils³:

- ☐ Coast Prairie Redox (A16)
☐ Dark Surface (S7)
☐ Iron Manganese Masses (F12)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

This profile exhibits hydric soil field indicator A12, Thick Dark Surface, and satisfies the soils criterion.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- | | |
|--|---|
| ☐ Surface Water (A1) | ☐ Water-Stained Leaves (B9) |
| ☐ High Water Table (A2) | ☐ Aquatic Fauna (B13) |
| ☐ Saturation (A3) | ☐ True Aquatic Plants (B14) |
| ☐ Water Marks (B1) | ☐ Hydrogen Sulfide Odor (C1) |
| ☐ Sediment Deposits (B2) | ☐ Oxidized Rhizospheres on Living Roots (C3) |
| ☐ Drift Deposits (B3) | ☐ Presence of Reduced Iron (C4) |
| ☒ Algal Mat or Crust (B4) | ☐ Recent Iron Reduction in Tilled Soils (C6) |
| ☐ Iron Deposits (B5) | ☐ Thin Muck Surface (C7) |
| ☐ Inundation Visible on Aerial Imagery (B7) | ☐ Gauge or Well Data (D9) |
| ☐ Sparsely Vegetated Concave Surface (B8) | ☐ Other (Explain in Remarks) |

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☒ Geomorphic Position (D2)
- ☒ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): _____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? Yes ☐ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

The presence of a primary wetland hydrology indicator satisfies the hydrology criterion.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Spaulding to South Sutton MP 37.80 to MP 41.80 City/County: Hoffman Estates/Cook Sampling Date: 18-Jul-18
 Applicant/Owner: Wisconsin Central Ltd. State: IL Sampling Point: X09
 Investigator(s): Alicia Metzger/Daniel Jablonski Section, Township, Range: S 9 T 41N R 9E
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): flat
 Slope: 0.0% / 0.0 ° Lat.: 42.045094 Long.: -88.21512 Datum: NAD1983
 Soil Map Unit Name: Sawmill silty clay loam (3107A) NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	
Remarks: This location satisfies all three criteria and qualifies as wetland. However, this area is an exempt roadside ditch.		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
1. <u>Acer negundo</u>	<u>20</u>	☒ 100.0%	FAC	
2. _____	<u>0</u>	☐ 0.0%		
3. _____	<u>0</u>	☐ 0.0%		
4. _____	<u>0</u>	☐ 0.0%		Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>60</u> x 1 = <u>60</u> FACW species <u>40</u> x 2 = <u>80</u> FAC species <u>20</u> x 3 = <u>60</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>120</u> (A) <u>200</u> (B) Prevalence Index = B/A = <u>1.667</u>
5. _____	<u>0</u>	☐ 0.0%		
<u>20</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	<u>0</u>	☐ 0.0%		Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is > 50% ☒ 3 - Prevalence Index is ≤ 3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	<u>0</u>	☐ 0.0%		
3. _____	<u>0</u>	☐ 0.0%		
4. _____	<u>0</u>	☐ 0.0%		
5. _____	<u>0</u>	☐ 0.0%		Hydrophytic Vegetation Present? Yes ☒ No ☐
6. _____	<u>0</u>	☐ 0.0%		
7. _____	<u>0</u>	☐ 0.0%		
8. _____	<u>0</u>	☐ 0.0%		
9. _____	<u>0</u>	☐ 0.0%		Remarks: (Include photo numbers here or on a separate sheet.) All of the dominant species are hydrophytic, so the vegetation criterion is satisfied.
10. _____	<u>0</u>	☐ 0.0%		
<u>0</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	<u>0</u>	☐ 0.0%		
2. _____	<u>0</u>	☐ 0.0%		
<u>0</u> = Total Cover				

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X09**

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)				
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)		
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)		
☒ Saturation (A3)	☐ True Aquatic Plants (B14)	☐ Dry Season Water Table (C2)		
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Crayfish Burrows (C8)		
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Saturation Visible on Aerial Imagery (C9)		
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Stunted or Stressed Plants (D1)		
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Geomorphic Position (D2)		
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☒ FAC-Neutral Test (D5)		
☐ Inundation Visible on Aerial Imagery (B7)	☐ Gauge or Well Data (D9)			
☐ Sparsely Vegetated Concave Surface (B8)	☐ Other (Explain in Remarks)			
Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): <u>0</u> Water Table Present? Yes ☐ No ☒ Depth (inches): <u> </u> Saturation Present? Yes ☒ No ☐ Depth (inches): <u> </u> (includes capillary fringe)			Wetland Hydrology Present? Yes ☒ No ☐	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				
The soil was saturated at the surface which satisfies the hydrology criterion.				

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Spaulding to South Sutton MP 37.80 to MP 41.80 City/County: Hoffman Estates/Cook Sampling Date: 18-Jul-18
 Applicant/Owner: Wisconsin Central Ltd. State: IL Sampling Point: X10
 Investigator(s): Alicia Metzger/Daniel Jablonski Section, Township, Range: S 9 T 41N R 9E
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): flat
 Slope: 0.0% / 0.0° Lat.: 42.047345 Long.: -88.213741 Datum: NAD1983
 Soil Map Unit Name: Will silty clay loam (329A) NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐ No ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	
Remarks: This location fails all three criteria and does not qualify as wetland.		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>33.3%</u> (A/B)
1. <u>Ulmus pumila</u>	10	☒ 100.0%	UPL	
2. _____	0	☐ 0.0%		
3. _____	0	☐ 0.0%		
4. _____	0	☐ 0.0%		
5. _____	0	☐ 0.0%		
	10	= Total Cover		
Sapling/Shrub Stratum (Plot size: _____)				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>30</u> x 2 = <u>60</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>40</u> x 4 = <u>160</u> UPL species <u>10</u> x 5 = <u>50</u> Column Totals: <u>80</u> (A) <u>270</u> (B) Prevalence Index = B/A = <u>3.375</u>
1. _____	0	☐ 0.0%		
2. _____	0	☐ 0.0%		
3. _____	0	☐ 0.0%		
4. _____	0	☐ 0.0%		
5. _____	0	☐ 0.0%		
	0	= Total Cover		
Herb Stratum (Plot size: 5)				
1. <u>Monarda fistulosa</u>	30	☒ 42.9%	FACU	
2. <u>Phalaris arundinacea</u>	30	☒ 42.9%	FACW	
3. <u>Asclepias syriaca</u>	10	☐ 14.3%	FACU	
4. _____	0	☐ 0.0%		
5. _____	0	☐ 0.0%		
6. _____	0	☐ 0.0%		
7. _____	0	☐ 0.0%		
8. _____	0	☐ 0.0%		
9. _____	0	☐ 0.0%		
10. _____	0	☐ 0.0%		
	70	= Total Cover		
Woody Vine Stratum (Plot size: _____)				
1. _____	0	☐ 0.0%		
2. _____	0	☐ 0.0%		
	0	= Total Cover		

Hydrophytic Vegetation Indicators:
☐ 1 - Rapid Test for Hydrophytic Vegetation
☐ 2 - Dominance Test is > 50%
☐ 3 - Prevalence Index is ≤ 3.0¹
☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
☐ Problematic Hydrophytic Vegetation¹ (Explain)
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks: (Include photo numbers here or on a separate sheet.)
 Less than 50% of the dominant species are hydrophytic, so the vegetation criterion is not satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X10**

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)
☐ Saturation (A3)	☐ True Aquatic Plants (B14)	☐ Dry Season Water Table (C2)
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Crayfish Burrows (C8)
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Stunted or Stressed Plants (D1)
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Geomorphic Position (D2)
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ FAC-Neutral Test (D5)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Gauge or Well Data (D9)	
☐ Sparsely Vegetated Concave Surface (B8)	☐ Other (Explain in Remarks)	

Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): _____ Water Table Present? Yes ☐ No ☒ Depth (inches): _____ Saturation Present? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)			Wetland Hydrology Present? Yes ☐ No ☒
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied.			

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Spaulding to South Sutton MP 37.80 to MP 41.80 City/County: Hoffman Estates/Cook Sampling Date: 18-Jul-18
 Applicant/Owner: Wisconsin Central Ltd. State: IL Sampling Point: X11
 Investigator(s): Enter Investigator Section, Township, Range: S 9 T 41N R 9E
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): flat
 Slope: 0.0% / 0.0° Lat.: 42.044605 Long.: -88.21526 Datum: NAD1983
 Soil Map Unit Name: Sawmill silty clay loam (3107A) NWI classification: R5UBH

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	
Remarks: This location satisfies all three criteria and qualifies as wetland.		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <u>Populus deltoides</u>	10	☒ 25.0%	FAC
2. <u>Acer negundo</u>	30	☒ 75.0%	FAC
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
	40	= Total Cover	
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: <u>5</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <u>Phalaris arundinacea</u>	40	☒ 50.0%	FACW
2. <u>Impatiens capensis</u>	40	☒ 50.0%	FACW
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
	80	= Total Cover	
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>80</u>	x 2 = <u>160</u>
FAC species <u>40</u>	x 3 = <u>120</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>120</u> (A)	<u>280</u> (B)
Prevalence Index = B/A = <u>2.333</u>	

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☒ 2 - Dominance Test is > 50%

☒ 3 - Prevalence Index is ≤ 3.0¹

☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks: (Include photo numbers here or on a separate sheet.)

All of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: X11

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)				
☐ Surface Water (A1)	☒ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)		
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)		
☐ Saturation (A3)	☐ True Aquatic Plants (B14)	☐ Dry Season Water Table (C2)		
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Crayfish Burrows (C8)		
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Saturation Visible on Aerial Imagery (C9)		
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Stunted or Stressed Plants (D1)		
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Geomorphic Position (D2)		
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☒ FAC-Neutral Test (D5)		
☐ Inundation Visible on Aerial Imagery (B7)	☐ Gauge or Well Data (D9)			
☐ Sparsely Vegetated Concave Surface (B8)	☐ Other (Explain in Remarks)			
Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): _____ Water Table Present? Yes ☐ No ☒ Depth (inches): _____ Saturation Present? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)			Wetland Hydrology Present? Yes ☒ No ☐	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				
The presence of a primary wetland hydrology indicator satisfies the hydrology criterion.				

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Spaulding to South Sutton MP 37.80 to MP 41.80 City/County: Hoffman Estates/Cook Sampling Date: 18-Jul-18
 Applicant/Owner: Wisconsin Central Ltd. State: IL Sampling Point: X12
 Investigator(s): Alicia Metzger/Daniel Jablonski Section, Township, Range: S 9 T 41N R 9E
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): flat
 Slope: 0.0% / 0.0 ° Lat.: 42.044168 Long.: -88.215576 Datum: NAD1983
 Soil Map Unit Name: Sawmill silty clay loam (3107A) NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐ No ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	
Remarks: This location fails all three criteria and does not qualify as wetland.		

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status																						
Tree Stratum (Plot size: <u>30</u>)																									
1. <u>Ulmus pumila</u>	<u>40</u>	☒ <u>57.1%</u>	<u>UPL</u>	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)																					
2. <u>Acer negundo</u>	<u>30</u>	☒ <u>42.9%</u>	<u>FAC</u>																						
3. _____	<u>0</u>	☐ <u>0.0%</u>	_____																						
4. _____	<u>0</u>	☐ <u>0.0%</u>	_____																						
5. _____	<u>0</u>	☐ <u>0.0%</u>	_____																						
<u>70</u> = Total Cover				Prevalence Index worksheet: <table border="1"> <thead> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> <th></th> </tr> </thead> <tbody> <tr> <td>OBL species <u>0</u></td> <td>x 1 =</td> <td><u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 =</td> <td><u>0</u></td> </tr> <tr> <td>FAC species <u>30</u></td> <td>x 3 =</td> <td><u>90</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 =</td> <td><u>0</u></td> </tr> <tr> <td>UPL species <u>40</u></td> <td>x 5 =</td> <td><u>200</u></td> </tr> <tr> <td>Column Totals: <u>70</u></td> <td>(A)</td> <td><u>290</u> (B)</td> </tr> </tbody> </table> Prevalence Index = B/A = <u>4.143</u>	Total % Cover of:	Multiply by:		OBL species <u>0</u>	x 1 =	<u>0</u>	FACW species <u>0</u>	x 2 =	<u>0</u>	FAC species <u>30</u>	x 3 =	<u>90</u>	FACU species <u>0</u>	x 4 =	<u>0</u>	UPL species <u>40</u>	x 5 =	<u>200</u>	Column Totals: <u>70</u>	(A)	<u>290</u> (B)
Total % Cover of:	Multiply by:																								
OBL species <u>0</u>	x 1 =	<u>0</u>																							
FACW species <u>0</u>	x 2 =	<u>0</u>																							
FAC species <u>30</u>	x 3 =	<u>90</u>																							
FACU species <u>0</u>	x 4 =	<u>0</u>																							
UPL species <u>40</u>	x 5 =	<u>200</u>																							
Column Totals: <u>70</u>	(A)	<u>290</u> (B)																							
Sapling/Shrub Stratum (Plot size: <u>15</u>)																									
1. <u>Rhamnus cathartica</u>	<u>0</u>	☐ <u>0.0%</u>	<u>FAC</u>																						
2. _____	<u>0</u>	☐ <u>0.0%</u>	_____																						
3. _____	<u>0</u>	☐ <u>0.0%</u>	_____																						
4. _____	<u>0</u>	☐ <u>0.0%</u>	_____																						
5. _____	<u>0</u>	☐ <u>0.0%</u>	_____																						
<u>0</u> = Total Cover																									
Herb Stratum (Plot size: _____)																									
1. _____	<u>0</u>	☐ <u>0.0%</u>	_____																						
2. _____	<u>0</u>	☐ <u>0.0%</u>	_____																						
3. _____	<u>0</u>	☐ <u>0.0%</u>	_____																						
4. _____	<u>0</u>	☐ <u>0.0%</u>	_____																						
5. _____	<u>0</u>	☐ <u>0.0%</u>	_____																						
6. _____	<u>0</u>	☐ <u>0.0%</u>	_____																						
7. _____	<u>0</u>	☐ <u>0.0%</u>	_____																						
8. _____	<u>0</u>	☐ <u>0.0%</u>	_____																						
9. _____	<u>0</u>	☐ <u>0.0%</u>	_____																						
10. _____	<u>0</u>	☐ <u>0.0%</u>	_____																						
<u>0</u> = Total Cover																									
Woody Vine Stratum (Plot size: _____)																									
1. _____	<u>0</u>	☐ <u>0.0%</u>	_____																						
2. _____	<u>0</u>	☐ <u>0.0%</u>	_____																						
<u>0</u> = Total Cover																									
Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is > 50% ☐ 3 - Prevalence Index is ≤ 3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																									
Hydrophytic Vegetation Present? Yes ☐ No ☒																									

Remarks: (Include photo numbers here or on a separate sheet.)

Only 50% of the dominant species are hydrophytic and the prevalence index is >3.0, so the vegetation criterion is not satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X12**

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☐ Saturation (A3)	☐ True Aquatic Plants (B14)	☐ Dry Season Water Table (C2)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Crayfish Burrows (C8)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Stunted or Stressed Plants (D1)	
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Geomorphic Position (D2)	
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ FAC-Neutral Test (D5)	
☐ Inundation Visible on Aerial Imagery (B7)	☐ Gauge or Well Data (D9)		
☐ Sparsely Vegetated Concave Surface (B8)	☐ Other (Explain in Remarks)		
Field Observations: Surface Water Present? Yes ☐ No ☒ Water Table Present? Yes ☐ No ☒ Saturation Present? Yes ☐ No ☒ (includes capillary fringe)		Depth (inches): _____ Depth (inches): _____ Depth (inches): _____ Wetland Hydrology Present? Yes ☐ No ☒	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			
Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied.			

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Spaulding to South Sutton MP 37.80 to MP 41.80 City/County: Hoffman Estates/Cook Sampling Date: 18-Jul-18
 Applicant/Owner: Wisconsin Central Ltd. State: IL Sampling Point: X13
 Investigator(s): Alicia Metzger/Daniel Jablonski Section, Township, Range: S 9 T 41N R 9E
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): flat
 Slope: 0.0% / 0.0 ° Lat.: 42.044373 Long.: -88.215977 Datum: NAD1983
 Soil Map Unit Name: Sawmill silty clay loam (3107A) NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	
Remarks: This location satisfies all three criteria and qualifies as wetland.		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
1. <u>Acer negundo</u>	<u>40</u>	☒ 100.0%	<u>FAC</u>	
2. _____	<u>0</u>	☐ 0.0%	_____	
3. _____	<u>0</u>	☐ 0.0%	_____	
4. _____	<u>0</u>	☐ 0.0%	_____	
5. _____	<u>0</u>	☐ 0.0%	_____	
<u>40</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	<u>0</u>	☐ 0.0%	_____	Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>60</u> x 1 = <u>60</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>40</u> x 3 = <u>120</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>100</u> (A) <u>180</u> (B) Prevalence Index = B/A = <u>1.800</u>
2. _____	<u>0</u>	☐ 0.0%	_____	
3. _____	<u>0</u>	☐ 0.0%	_____	
4. _____	<u>0</u>	☐ 0.0%	_____	
5. _____	<u>0</u>	☐ 0.0%	_____	
6. _____	<u>0</u>	☐ 0.0%	_____	
<u>0</u> = Total Cover				
Herb Stratum (Plot size: _____)				
1. <u>Carex trichocarpa</u>	<u>60</u>	☒ 100.0%	<u>OBL</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is > 50% ☒ 3 - Prevalence Index is ≤ 3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	<u>0</u>	☐ 0.0%	_____	
3. _____	<u>0</u>	☐ 0.0%	_____	
4. _____	<u>0</u>	☐ 0.0%	_____	
5. _____	<u>0</u>	☐ 0.0%	_____	
6. _____	<u>0</u>	☐ 0.0%	_____	
7. _____	<u>0</u>	☐ 0.0%	_____	
8. _____	<u>0</u>	☐ 0.0%	_____	
9. _____	<u>0</u>	☐ 0.0%	_____	
10. _____	<u>0</u>	☐ 0.0%	_____	
<u>60</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	<u>0</u>	☐ 0.0%	_____	Hydrophytic Vegetation Present? Yes ☒ No ☐
2. _____	<u>0</u>	☐ 0.0%	_____	
<u>0</u> = Total Cover				

Remarks: (Include photo numbers here or on a separate sheet.)
 All of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

¹Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X13**

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)				
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)		
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)		
☐ Saturation (A3)	☐ True Aquatic Plants (B14)	☐ Dry Season Water Table (C2)		
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Crayfish Burrows (C8)		
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Saturation Visible on Aerial Imagery (C9)		
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Stunted or Stressed Plants (D1)		
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☒ Geomorphic Position (D2)		
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☒ FAC-Neutral Test (D5)		
☐ Inundation Visible on Aerial Imagery (B7)	☐ Gauge or Well Data (D9)			
☐ Sparsely Vegetated Concave Surface (B8)	☐ Other (Explain in Remarks)			
Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): _____ Water Table Present? Yes ☐ No ☒ Depth (inches): _____ Saturation Present? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)			Wetland Hydrology Present? Yes ☒ No ☐	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				
The presence of two secondary wetland hydrology indicators satisfies the hydrology criterion.				

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Spaulding to South Sutton MP 37.80 to MP 41.80 City/County: Hoffman Estates/Cook Sampling Date: 18-Jul-18
 Applicant/Owner: Wisconsin Central Ltd. State: IL Sampling Point: X14
 Investigator(s): Alicia Metzger/Daniel Jablonski Section, Township, Range: S 9 T 41N R 9E
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): flat
 Slope: 0.0% / 0.0° Lat.: 42.037436 Long.: -88.221024 Datum: NAD1983
 Soil Map Unit Name: Grays silt loam (698B) NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	
Remarks: This location satisfies all three criteria and qualifies as wetland.		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)														
1. <u>Salix nigra</u>	<u>20</u>	☒ 100.0%	<u>OBL</u>															
2. _____	<u>0</u>	☐ 0.0%	_____															
3. _____	<u>0</u>	☐ 0.0%	_____															
4. _____	<u>0</u>	☐ 0.0%	_____	Prevalence Index worksheet: <table border="1"> <thead> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> </thead> <tbody> <tr> <td>OBL species <u>20</u></td> <td>x 1 = <u>20</u></td> </tr> <tr> <td>FACW species <u>90</u></td> <td>x 2 = <u>180</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>110</u> (A)</td> <td><u>200</u> (B)</td> </tr> </tbody> </table> Prevalence Index = B/A = <u>1.818</u>	Total % Cover of:	Multiply by:	OBL species <u>20</u>	x 1 = <u>20</u>	FACW species <u>90</u>	x 2 = <u>180</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>110</u> (A)	<u>200</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>20</u>	x 1 = <u>20</u>																	
FACW species <u>90</u>	x 2 = <u>180</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>110</u> (A)	<u>200</u> (B)																	
5. _____	<u>0</u>	☐ 0.0%	_____															
<u>20</u> = Total Cover																		
Sapling/Shrub Stratum (Plot size: _____)																		
1. _____	<u>0</u>	☐ 0.0%	_____															
2. _____	<u>0</u>	☐ 0.0%	_____															
3. _____	<u>0</u>	☐ 0.0%	_____															
4. _____	<u>0</u>	☐ 0.0%	_____															
5. _____	<u>0</u>	☐ 0.0%	_____															
<u>0</u> = Total Cover																		
Herb Stratum (Plot size: <u>5</u>)																		
1. <u>Phragmites australis</u>	<u>90</u>	☒ 100.0%	<u>FACW</u>															
2. _____	<u>0</u>	☐ 0.0%	_____															
3. _____	<u>0</u>	☐ 0.0%	_____															
4. _____	<u>0</u>	☐ 0.0%	_____															
5. _____	<u>0</u>	☐ 0.0%	_____															
6. _____	<u>0</u>	☐ 0.0%	_____															
7. _____	<u>0</u>	☐ 0.0%	_____															
8. _____	<u>0</u>	☐ 0.0%	_____															
9. _____	<u>0</u>	☐ 0.0%	_____															
10. _____	<u>0</u>	☐ 0.0%	_____															
<u>90</u> = Total Cover																		
Woody Vine Stratum (Plot size: _____)																		
1. _____	<u>0</u>	☐ 0.0%	_____															
2. _____	<u>0</u>	☐ 0.0%	_____															
<u>0</u> = Total Cover																		

Hydrophytic Vegetation Indicators:
☒ 1 - Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is > 50%
☒ 3 - Prevalence Index is ≤ 3.0¹
☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
☐ Problematic Hydrophytic Vegetation¹ (Explain)
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks: (Include photo numbers here or on a separate sheet.)
 All of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X14**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining. M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)

- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☒ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ Coast Prairie Redox (A16)
☐ Dark Surface (S7)
☐ Iron Manganese Masses (F12)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? Yes ☒ No ☐

Remarks:

This profile exhibits hydric soil field indicator F6, Redox Dark Surface, and satisfies the soils criterion.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- | | |
|--|---|
| ☐ Surface Water (A1) | ☐ Water-Stained Leaves (B9) |
| ☐ High Water Table (A2) | ☐ Aquatic Fauna (B13) |
| ☐ Saturation (A3) | ☐ True Aquatic Plants (B14) |
| ☐ Water Marks (B1) | ☐ Hydrogen Sulfide Odor (C1) |
| ☐ Sediment Deposits (B2) | ☐ Oxidized Rhizospheres on Living Roots (C3) |
| ☐ Drift Deposits (B3) | ☐ Presence of Reduced Iron (C4) |
| ☐ Algal Mat or Crust (B4) | ☐ Recent Iron Reduction in Tilled Soils (C6) |
| ☐ Iron Deposits (B5) | ☐ Thin Muck Surface (C7) |
| ☐ Inundation Visible on Aerial Imagery (B7) | ☐ Gauge or Well Data (D9) |
| ☐ Sparsely Vegetated Concave Surface (B8) | ☐ Other (Explain in Remarks) |

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☒ Geomorphic Position (D2)
- ☒ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☒

Depth (inches):

Water Table Present? Yes ☐ No ☒

Depth (inches):

Saturation Present? (includes capillary fringe) Yes ☐ No ☒

Depth (inches):

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

The presence of two secondary wetland hydrology indicators satisfies the hydrology criterion.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Spaulding to South Sutton MP 37.80 to MP 41.80 City/County: Hoffman Estates/Cook Sampling Date: 18-Jul-18
 Applicant/Owner: Wisconsin Central Ltd. State: IL Sampling Point: X15
 Investigator(s): Alicia Metzger/Daniel Jablonski Section, Township, Range: S 9 T 41N R 9E
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): flat
 Slope: 0.0% / 0.0 ° Lat.: 42.037097 Long.: -88.22137 Datum: NAD1983
 Soil Map Unit Name: Muskego and Houghton mucks (903A) NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐ No ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	
Remarks: This location fails all three criteria and does not qualify as wetland.		

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status															
Tree Stratum (Plot size: <u>30</u>)																		
1. <u>Juglans nigra</u>	<u>40</u>	☒ 100.0%	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>33.3%</u> (A/B)														
2. _____	<u>0</u>	☐ 0.0%	_____															
3. _____	<u>0</u>	☐ 0.0%	_____															
4. _____	<u>0</u>	☐ 0.0%	_____															
5. _____	<u>0</u>	☐ 0.0%	_____															
	<u>40</u>	= Total Cover																
Sapling/Shrub Stratum (Plot size: _____)																		
1. _____	<u>0</u>	☐ 0.0%	_____	Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>40</u></td> <td>x 2 = <u>80</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>60</u></td> <td>x 4 = <u>240</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>320</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.200</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>40</u>	x 2 = <u>80</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>60</u>	x 4 = <u>240</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>320</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>40</u>	x 2 = <u>80</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>60</u>	x 4 = <u>240</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>100</u> (A)	<u>320</u> (B)																	
2. _____	<u>0</u>	☐ 0.0%	_____															
3. _____	<u>0</u>	☐ 0.0%	_____															
4. _____	<u>0</u>	☐ 0.0%	_____															
5. _____	<u>0</u>	☐ 0.0%	_____															
	<u>0</u>	= Total Cover																
Herb Stratum (Plot size: _____)																		
1. <u>Phalaris arundinacea</u>	<u>40</u>	☒ 66.7%	<u>FACW</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is > 50% ☐ 3 - Prevalence Index is ≤ 3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Erigeron annuus</u>	<u>20</u>	☒ 33.3%	<u>FACU</u>															
3. _____	<u>0</u>	☐ 0.0%	_____															
4. _____	<u>0</u>	☐ 0.0%	_____															
5. _____	<u>0</u>	☐ 0.0%	_____															
6. _____	<u>0</u>	☐ 0.0%	_____															
7. _____	<u>0</u>	☐ 0.0%	_____															
8. _____	<u>0</u>	☐ 0.0%	_____															
9. _____	<u>0</u>	☐ 0.0%	_____															
10. _____	<u>0</u>	☐ 0.0%	_____															
	<u>60</u>	= Total Cover																
Woody Vine Stratum (Plot size: _____)																		
1. _____	<u>0</u>	☐ 0.0%	_____	Hydrophytic Vegetation Present? Yes ☐ No ☒														
2. _____	<u>0</u>	☐ 0.0%	_____															
	<u>0</u>	= Total Cover																

Remarks: (Include photo numbers here or on a separate sheet.)
 Less than 50% of the dominant species are hydrophytic, so the vegetation criterion is not satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X15**

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)
☐ Saturation (A3)	☐ True Aquatic Plants (B14)	☐ Dry Season Water Table (C2)
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Crayfish Burrows (C8)
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Stunted or Stressed Plants (D1)
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Geomorphic Position (D2)
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ FAC-Neutral Test (D5)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Gauge or Well Data (D9)	
☐ Sparsely Vegetated Concave Surface (B8)	☐ Other (Explain in Remarks)	
Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): _____ Water Table Present? Yes ☐ No ☒ Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____ Wetland Hydrology Present? Yes ☐ No ☒		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied.		

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Spaulding to South Sutton MP 37.80 to MP 41.80 City/County: Hoffman Estates/Cook Sampling Date: 18-Jul-18
 Applicant/Owner: Wisconsin Central Ltd. State: IL Sampling Point: X16
 Investigator(s): Alicia Metzger/Daniel Jablonski Section, Township, Range: S 9 T 41N R 9E
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): flat
 Slope: 0.0% / 0.0 ° Lat.: 42.034558 Long.: -88.223829 Datum: NAD1983
 Soil Map Unit Name: Ozaukee silt loam (530F) NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐ No ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	
Remarks: This location fails all three criteria and does not qualify as wetland.		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>33.3%</u> (A/B)
1. _____	0	☐ 0.0%	_____	
2. _____	0	☐ 0.0%	_____	
3. _____	0	☐ 0.0%	_____	
4. _____	0	☐ 0.0%	_____	
5. _____	0	☐ 0.0%	_____	
0 = Total Cover				
Prevalence Index worksheet:				
Total % Cover of: Multiply by:				
OBL species <u>0</u> x 1 = <u>0</u>				
FACW species <u>0</u> x 2 = <u>0</u>				
FAC species <u>20</u> x 3 = <u>60</u>				
FACU species <u>30</u> x 4 = <u>120</u>				
UPL species <u>20</u> x 5 = <u>100</u>				
Column Totals: <u>70</u> (A) <u>280</u> (B)				
Prevalence Index = B/A = <u>4.000</u>				
Hydrophytic Vegetation Indicators:				
☐ 1 - Rapid Test for Hydrophytic Vegetation				
☐ 2 - Dominance Test is > 50%				
☐ 3 - Prevalence Index is ≤ 3.0 ¹				
☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)				
☐ Problematic Hydrophytic Vegetation ¹ (Explain)				
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
Hydrophytic Vegetation Present? Yes ☐ No ☒				
Remarks: (Include photo numbers here or on a separate sheet.) Less than 50% of the dominant species are hydrophytic, so the vegetation criterion is not satisfied.				

¹Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X16**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)

- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ Coast Prairie Redox (A16)
☐ Dark Surface (S7)
☐ Iron Manganese Masses (F12)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type:

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks:

The soil in this location does not meet a hydric soil indicator, so the soils criterion is not satisfied.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- | | |
|--|---|
| ☐ Surface Water (A1) | ☐ Water-Stained Leaves (B9) |
| ☐ High Water Table (A2) | ☐ Aquatic Fauna (B13) |
| ☐ Saturation (A3) | ☐ True Aquatic Plants (B14) |
| ☐ Water Marks (B1) | ☐ Hydrogen Sulfide Odor (C1) |
| ☐ Sediment Deposits (B2) | ☐ Oxidized Rhizospheres on Living Roots (C3) |
| ☐ Drift Deposits (B3) | ☐ Presence of Reduced Iron (C4) |
| ☐ Algal Mat or Crust (B4) | ☐ Recent Iron Reduction in Tilled Soils (C6) |
| ☐ Iron Deposits (B5) | ☐ Thin Muck Surface (C7) |
| ☐ Inundation Visible on Aerial Imagery (B7) | ☐ Gauge or Well Data (D9) |
| ☐ Sparsely Vegetated Concave Surface (B8) | ☐ Other (Explain in Remarks) |

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☒

Depth (inches): _____

Water Table Present? Yes ☐ No ☒

Depth (inches): _____

Saturation Present? Yes ☐ No ☒
(includes capillary fringe)

Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Spaulding to South Sutton MP 37.80 to MP 41.80 City/County: Hoffman Estates/Cook Sampling Date: 18-Jul-18
 Applicant/Owner: Wisconsin Central Ltd. State: IL Sampling Point: X17
 Investigator(s): Alicia Metzger/Daniel Jablonski Section, Township, Range: S 9 T 41N R 9E
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): flat
 Slope: 0.0% / 0.0° Lat.: 42.022942 Long.: -88.228846 Datum: NAD1983
 Soil Map Unit Name: Warsaw silt loam (290B) NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☐ No ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	
Remarks: This location fails all three criteria and does not qualify as wetland.	

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
1. <u>Ulmus pumila</u>	<u>20</u>	☒ 100.0%	<u>UPL</u>	
2. _____	<u>0</u>	☐ 0.0%		
3. _____	<u>0</u>	☐ 0.0%		
4. _____	<u>0</u>	☐ 0.0%		
5. _____	<u>0</u>	☐ 0.0%		
	<u>20</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	<u>0</u>	☐ 0.0%		Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>20</u> x 4 = <u>80</u> UPL species <u>70</u> x 5 = <u>350</u> Column Totals: <u>90</u> (A) <u>430</u> (B) Prevalence Index = B/A = <u>4.778</u>
2. _____	<u>0</u>	☐ 0.0%		
3. _____	<u>0</u>	☐ 0.0%		
4. _____	<u>0</u>	☐ 0.0%		
5. _____	<u>0</u>	☐ 0.0%		
	<u>0</u>	= Total Cover		
Herb Stratum (Plot size: <u>5</u>)				
1. <u>Dipsacus laciniatus</u>	<u>50</u>	☒ 71.4%	<u>UPL</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is > 50% ☐ 3 - Prevalence Index is ≤ 3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Sorghastrum nutans</u>	<u>20</u>	☒ 28.6%	<u>FACU</u>	
3. _____	<u>0</u>	☐ 0.0%		
4. _____	<u>0</u>	☐ 0.0%		
5. _____	<u>0</u>	☐ 0.0%		
6. _____	<u>0</u>	☐ 0.0%		
7. _____	<u>0</u>	☐ 0.0%		
8. _____	<u>0</u>	☐ 0.0%		
9. _____	<u>0</u>	☐ 0.0%		
10. _____	<u>0</u>	☐ 0.0%		
	<u>70</u>	= Total Cover		
Woody Vine Stratum (Plot size: _____)				
1. _____	<u>0</u>	☐ 0.0%		Hydrophytic Vegetation Present? Yes ☐ No ☒
2. _____	<u>0</u>	☐ 0.0%		
	<u>0</u>	= Total Cover		

Remarks: (Include photo numbers here or on a separate sheet.)
 None of the dominant species are hydrophytic, so the vegetation criterion is not satisfied.

¹Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X17**

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ High Water Table (A2)	☐ Saturation (A3)	☐ Water Marks (B1)	☐ Sediment Deposits (B2)	☐ Drift Deposits (B3)	☐ Algal Mat or Crust (B4)
☐ Iron Deposits (B5)	☐ Inundation Visible on Aerial Imagery (B7)	☐ Sparsely Vegetated Concave Surface (B8)	☐ Water-Stained Leaves (B9)	☐ Aquatic Fauna (B13)	☐ True Aquatic Plants (B14)	☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Presence of Reduced Iron (C4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Thin Muck Surface (C7)	☐ Gauge or Well Data (D9)	☐ Other (Explain in Remarks)	
☐ Surface Soil Cracks (B6)	☐ Drainage Patterns (B10)	☐ Dry Season Water Table (C2)	☐ Crayfish Burrows (C8)	☐ Saturation Visible on Aerial Imagery (C9)	☐ Stunted or Stressed Plants (D1)	☐ Geomorphic Position (D2)
☐ FAC-Neutral Test (D5)						
Field Observations:						
Surface Water Present?	Yes ☐ No ☒	Depth (inches): _____				
Water Table Present?	Yes ☐ No ☒	Depth (inches): _____				
Saturation Present? (includes capillary fringe)	Yes ☐ No ☒	Depth (inches): _____				
			Wetland Hydrology Present? Yes ☐ No ☒			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:						
Remarks:						
Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied.						

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Spaulding to South Sutton MP 37.80 to MP 41.80 City/County: Hoffman Estates/Cook Sampling Date: 18-Jul-18
 Applicant/Owner: Wisconsin Central Ltd. State: IL Sampling Point: X18
 Investigator(s): Alicia Metzger/Daniel Jablonski Section, Township, Range: S 9 T 41N R 9E
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): flat
 Slope: 0.0% / 0.0° Lat.: 42.028527 Long.: -88.229682 Datum: NAD1983
 Soil Map Unit Name: Peatone silty clay loam (330A) NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	
Remarks: This location satisfies all three criteria and qualifies as wetland. However, this area is an exempt railroad ditch.		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <u>Ulmus americana</u>	<u>30</u>	☒ 100.0%	<u>FACW</u>
2. _____	<u>0</u>	☐ 0.0%	_____
3. _____	<u>0</u>	☐ 0.0%	_____
4. _____	<u>0</u>	☐ 0.0%	_____
5. _____	<u>0</u>	☐ 0.0%	_____
	<u>30</u>	= Total Cover	
Dominance Test worksheet:			
Number of Dominant Species That are OBL, FACW, or FAC:		<u>3</u>	(A)
Total Number of Dominant Species Across All Strata:		<u>3</u>	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:		<u>100.0%</u>	(A/B)
Prevalence Index worksheet:			
Total % Cover of:		Multiply by:	
OBL species	<u>0</u>	x 1 =	<u>0</u>
FACW species	<u>70</u>	x 2 =	<u>140</u>
FAC species	<u>0</u>	x 3 =	<u>0</u>
FACU species	<u>0</u>	x 4 =	<u>0</u>
UPL species	<u>0</u>	x 5 =	<u>0</u>
Column Totals:	<u>70</u>	(A)	<u>140</u> (B)
Prevalence Index = B/A =		<u>2.000</u>	
Hydrophytic Vegetation Indicators:			
☒ 1 - Rapid Test for Hydrophytic Vegetation			
☒ 2 - Dominance Test is > 50%			
☒ 3 - Prevalence Index is ≤ 3.0 ¹			
☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
☐ Problematic Hydrophytic Vegetation ¹ (Explain)			
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
Hydrophytic Vegetation Present? Yes ☒ No ☐			
Sapling/Shrub Stratum (Plot size: _____)			
1. <u>Sambucus nigra ssp. canadensis</u>	<u>20</u>	☒ 100.0%	<u>FACW</u>
2. _____	<u>0</u>	☐ 0.0%	_____
3. _____	<u>0</u>	☐ 0.0%	_____
4. _____	<u>0</u>	☐ 0.0%	_____
5. _____	<u>0</u>	☐ 0.0%	_____
	<u>20</u>	= Total Cover	
Herb Stratum (Plot size: _____)			
1. <u>Phalaris arundinacea</u>	<u>20</u>	☒ 100.0%	<u>FACW</u>
2. _____	<u>0</u>	☐ 0.0%	_____
3. _____	<u>0</u>	☐ 0.0%	_____
4. _____	<u>0</u>	☐ 0.0%	_____
5. _____	<u>0</u>	☐ 0.0%	_____
6. _____	<u>0</u>	☐ 0.0%	_____
7. _____	<u>0</u>	☐ 0.0%	_____
8. _____	<u>0</u>	☐ 0.0%	_____
9. _____	<u>0</u>	☐ 0.0%	_____
10. _____	<u>0</u>	☐ 0.0%	_____
	<u>20</u>	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1. _____	<u>0</u>	☐ 0.0%	_____
2. _____	<u>0</u>	☐ 0.0%	_____
	<u>0</u>	= Total Cover	

Remarks: (Include photo numbers here or on a separate sheet.)
 All of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X18**

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)				
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)		
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)		
☐ Saturation (A3)	☐ True Aquatic Plants (B14)	☐ Dry Season Water Table (C2)		
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Crayfish Burrows (C8)		
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Saturation Visible on Aerial Imagery (C9)		
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Stunted or Stressed Plants (D1)		
☒ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☒ Geomorphic Position (D2)		
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☒ FAC-Neutral Test (D5)		
☐ Inundation Visible on Aerial Imagery (B7)	☐ Gauge or Well Data (D9)			
☐ Sparsely Vegetated Concave Surface (B8)	☐ Other (Explain in Remarks)			
Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): _____ Water Table Present? Yes ☐ No ☒ Depth (inches): _____ Saturation Present? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)			Wetland Hydrology Present? Yes ☒ No ☐	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks: The presence of a primary wetland hydrology indicator satisfies the hydrology criterion.				

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Spaulding to South Sutton MP 37.80 to MP 41.80 City/County: Hoffman Estates/Cook Sampling Date: 18-Jul-18
 Applicant/Owner: Wisconsin Central Ltd. State: IL Sampling Point: X19
 Investigator(s): Alicia Metzger/Daniel Jablonski Section, Township, Range: S 9 T 41N R 9E
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): flat
 Slope: 0.0% / 0.0° Lat.: 42.027721 Long.: -88.229916 Datum: NAD1983
 Soil Map Unit Name: Warsaw silt loam (290B) NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	
Remarks: This location satisfies all three criteria and qualifies as wetland. However, this area is an exempt railroad ditch.		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species? Rel. Strat. Cover	Indicator Status	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>66.7%</u> (A/B)
1. _____	0	☐ 0.0%		
2. _____	0	☐ 0.0%		
3. _____	0	☐ 0.0%		
4. _____	0	☐ 0.0%		
5. _____	0	☐ 0.0%		
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 _____)				
1. <i>Sambucus nigra</i> ssp. <i>canadensis</i>	20	☒ 100.0%	FACW	Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>110</u> x 2 = <u>220</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>20</u> x 4 = <u>80</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>130</u> (A) <u>300</u> (B) Prevalence Index = B/A = <u>2.308</u>
2. _____	0	☐ 0.0%		
3. _____	0	☐ 0.0%		
4. _____	0	☐ 0.0%		
5. _____	0	☐ 0.0%		
	20	= Total Cover		
Herb Stratum (Plot size: 5 _____)				
1. <i>Phalaris arundinacea</i>	90	☒ 100.0%	FACW	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is > 50% ☒ 3 - Prevalence Index is ≤ 3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	0	☐ 0.0%		
3. _____	0	☐ 0.0%		
4. _____	0	☐ 0.0%		
5. _____	0	☐ 0.0%		
6. _____	0	☐ 0.0%		
7. _____	0	☐ 0.0%		
8. _____	0	☐ 0.0%		
9. _____	0	☐ 0.0%		
10. _____	0	☐ 0.0%		
	90	= Total Cover		
Woody Vine Stratum (Plot size: 5 _____)				
1. <i>Parthenocissus quinquefolia</i>	20	☐ 100.0%	FACU	Hydrophytic Vegetation Present? Yes ☒ No ☐
2. _____	0	☐ 0.0%		
	20	= Total Cover		

Remarks: (Include photo numbers here or on a separate sheet.)
 Greater than 50% of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

¹Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X19**

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)
☐ Saturation (A3)	☐ True Aquatic Plants (B14)	☐ Dry Season Water Table (C2)
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Crayfish Burrows (C8)
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Stunted or Stressed Plants (D1)
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☒ Geomorphic Position (D2)
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☒ FAC-Neutral Test (D5)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Gauge or Well Data (D9)	
☐ Sparsely Vegetated Concave Surface (B8)	☐ Other (Explain in Remarks)	
Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): _____ Water Table Present? Yes ☐ No ☒ Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____ Wetland Hydrology Present? Yes ☒ No ☐		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		
The presence of two secondary wetland hydrology indicators satisfies the hydrology criterion.		

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Spaulding to South Sutton MP 37.80 to MP 41.80 City/County: Hoffman Estates/Cook Sampling Date: 18-Jul-18
 Applicant/Owner: Wisconsin Central Ltd. State: IL Sampling Point: X20
 Investigator(s): Alicia Metzger/Daniel Jablonski Section, Township, Range: S 9 T 41N R 9E
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): flat
 Slope: 0.0% / 0.0° Lat.: 42.023207 Long.: -88.231014 Datum: NAD1983
 Soil Map Unit Name: Warsaw silt loam (290B) NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	
Remarks: This location satisfies all three criteria and qualifies as wetland. However, this area is an exempt railroad ditch.		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:	
1. <i>Ulmus americana</i>	60	☒ 60.0%	FACW		Number of Dominant Species That are OBL, FACW, or FAC: <u>3</u> (A)
2. <i>Acer negundo</i>	40	☒ 40.0%	FAC	Total Number of Dominant Species Across All Strata: <u>3</u> (B)	
3. _____	0	☐ 0.0%		Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)	
4. _____	0	☐ 0.0%			
5. _____	0	☐ 0.0%			
	100	= Total Cover			
Sapling/Shrub Stratum (Plot size: 15)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Prevalence Index worksheet:	
1. <i>Rhamnus cathartica</i>	20	☒ 100.0%	FAC		Total % Cover of: Multiply by:
2. _____	0	☐ 0.0%		OBL species <u>0</u> x 1 = <u>0</u>	
3. _____	0	☐ 0.0%		FACW species <u>60</u> x 2 = <u>120</u>	
4. _____	0	☐ 0.0%		FAC species <u>60</u> x 3 = <u>180</u>	
5. _____	0	☐ 0.0%		FACU species <u>0</u> x 4 = <u>0</u>	
	20	= Total Cover		UPL species <u>0</u> x 5 = <u>0</u>	
Herb Stratum (Plot size:)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Column Totals: <u>120</u> (A) <u>300</u> (B)	
1. _____	0	☐ 0.0%		Prevalence Index = B/A = <u>2.500</u>	
2. _____	0	☐ 0.0%			
3. _____	0	☐ 0.0%			
4. _____	0	☐ 0.0%			
5. _____	0	☐ 0.0%			
6. _____	0	☐ 0.0%			
7. _____	0	☐ 0.0%			
8. _____	0	☐ 0.0%			
9. _____	0	☐ 0.0%			
10. _____	0	☐ 0.0%			
	0	= Total Cover			
Woody Vine Stratum (Plot size:)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Hydrophytic Vegetation Indicators:	
1. _____	0	☐ 0.0%			☐ 1 - Rapid Test for Hydrophytic Vegetation
2. _____	0	☐ 0.0%			☒ 2 - Dominance Test is > 50%
	0	= Total Cover		☒ 3 - Prevalence Index is ≤ 3.0 ¹	
				☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
				☐ Problematic Hydrophytic Vegetation ¹ (Explain)	
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
				Hydrophytic Vegetation Present? Yes ☒ No ☐	

Remarks: (Include photo numbers here or on a separate sheet.)
 All of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X20**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth (inches)	Matrix		Redox Features				Texture	Remarks	
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²			
0-3	10YR	3/2					Silty Clay Loam		
3-10	10YR	2/1	90	10YR	4/6	10	Silty Clay Loam		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining. M=Matrix.

Hydric Soil Indicators: ☐ Histosol (A1) ☐ Histic Epipedon (A2) ☐ Black Histic (A3) ☐ Hydrogen Sulfide (A4) ☐ Stratified Layers (A5) ☐ 2 cm Muck (A10) ☐ Depleted Below Dark Surface (A11) ☐ Thick Dark Surface (A12) ☐ Sandy Muck Mineral (S1) ☐ 5 cm Mucky Peat or Peat (S3)	☐ Sandy Gleyed Matrix (S4) ☐ Sandy Redox (S5) ☐ Stripped Matrix (S6) ☐ Loamy Mucky Mineral (F1) ☐ Loamy Gleyed Matrix (F2) ☐ Depleted Matrix (F3) ☒ Redox Dark Surface (F6) ☐ Depleted Dark Surface (F7) ☐ Redox Depressions (F8)	Indicators for Problematic Hydric Soils³: ☐ Coast Prairie Redox (A16) ☐ Dark Surface (S7) ☐ Iron Manganese Masses (F12) ☐ Very Shallow Dark Surface (TF12) ☐ Other (Explain in Remarks)
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³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes ☒ No ☐
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Remarks:
This profile exhibits hydric soil field indicator F6, Redox Dark Surface, and satisfies the soils criterion.

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)			Secondary Indicators (minimum of two required)		
☐ Surface Water (A1) ☐ High Water Table (A2) ☒ Saturation (A3) ☐ Water Marks (B1) ☐ Sediment Deposits (B2) ☐ Drift Deposits (B3) ☐ Algal Mat or Crust (B4) ☐ Iron Deposits (B5) ☐ Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8)	☐ Water-Stained Leaves (B9) ☐ Aquatic Fauna (B13) ☐ True Aquatic Plants (B14) ☐ Hydrogen Sulfide Odor (C1) ☐ Oxidized Rhizospheres on Living Roots (C3) ☐ Presence of Reduced Iron (C4) ☐ Recent Iron Reduction in Tilled Soils (C6) ☐ Thin Muck Surface (C7) ☐ Gauge or Well Data (D9) ☐ Other (Explain in Remarks)	☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Dry Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☒ FAC-Neutral Test (D5)			

Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): _____ Water Table Present? Yes ☐ No ☒ Depth (inches): _____ Saturation Present? Yes ☒ No ☐ Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes ☒ No ☐
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
The soil was saturated at the surface which satisfies the hydrology criterion.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Spaulding to South Sutton MP 37.80 to MP 41.80 City/County: Hoffman Estates/Cook Sampling Date: 23-Jul-18
 Applicant/Owner: Wisconsin Central Ltd. State: IL Sampling Point: X21
 Investigator(s): Alicia Metzger/Daniel Jablonski Section, Township, Range: S 9 T 41N R 9E
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): flat
 Slope: 0.0% / 0.0 ° Lat.: 42.016039 Long.: -88.232472 Datum: NAD1983
 Soil Map Unit Name: Orthents, loamy (802B) NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐ No ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	
Remarks: This location fails all three criteria and does not qualify as wetland.		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species? Rel. Strat. Cover	Indicator Status	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)														
1. _____	0	☐ 0.0%																
2. _____	0	☐ 0.0%																
3. _____	0	☐ 0.0%																
4. _____	0	☐ 0.0%																
5. _____	0	☐ 0.0%																
0 = Total Cover																		
Sapling/Shrub Stratum (Plot size: 15)																		
1. <u>Ailanthus altissima</u>	30	☒ 100.0%	FACU	Prevalence Index worksheet: <table border="1"> <thead> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> </thead> <tbody> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>30</u></td> <td>x 4 = <u>120</u></td> </tr> <tr> <td>UPL species <u>100</u></td> <td>x 5 = <u>500</u></td> </tr> <tr> <td>Column Totals: <u>130</u></td> <td>(A) <u>620</u> (B)</td> </tr> </tbody> </table> Prevalence Index = B/A = <u>4.769</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>30</u>	x 4 = <u>120</u>	UPL species <u>100</u>	x 5 = <u>500</u>	Column Totals: <u>130</u>	(A) <u>620</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>30</u>	x 4 = <u>120</u>																	
UPL species <u>100</u>	x 5 = <u>500</u>																	
Column Totals: <u>130</u>	(A) <u>620</u> (B)																	
2. _____	0	☐ 0.0%																
3. _____	0	☐ 0.0%																
4. _____	0	☐ 0.0%																
5. _____	0	☐ 0.0%																
0 = Total Cover																		
Herb Stratum (Plot size: 5)																		
1. <u>Daucus carota</u>	40	☒ 40.0%	UPL	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is > 50% ☐ 3 - Prevalence Index is ≤ 3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Coronilla varia</u>	30	☒ 30.0%	UPL															
3. <u>Dipsacus laciniatus</u>	30	☒ 30.0%	UPL															
4. _____	0	☐ 0.0%																
5. _____	0	☐ 0.0%																
6. _____	0	☐ 0.0%																
7. _____	0	☐ 0.0%																
8. _____	0	☐ 0.0%																
9. _____	0	☐ 0.0%																
10. _____	0	☐ 0.0%																
100 = Total Cover																		
Woody Vine Stratum (Plot size: 5)																		
1. _____	0	☐ 0.0%		Hydrophytic Vegetation Present? Yes ☐ No ☒														
2. _____	0	☐ 0.0%																
0 = Total Cover																		

Remarks: (Include photo numbers here or on a separate sheet.)
 None of the dominant species are hydrophytic, so the vegetation criterion is not satisfied.

¹Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X21**

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that apply)		
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	
☐ Saturation (A3)	☐ True Aquatic Plants (B14)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	
☐ Inundation Visible on Aerial Imagery (B7)	☐ Gauge or Well Data (D9)	
☐ Sparsely Vegetated Concave Surface (B8)	☐ Other (Explain in Remarks)	
Secondary Indicators (minimum of two required)		
☐ Surface Soil Cracks (B6)		
☐ Drainage Patterns (B10)		
☐ Dry Season Water Table (C2)		
☐ Crayfish Burrows (C8)		
☐ Saturation Visible on Aerial Imagery (C9)		
☐ Stunted or Stressed Plants (D1)		
☐ Geomorphic Position (D2)		
☐ FAC-Neutral Test (D5)		
Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): _____ Water Table Present? Yes ☐ No ☒ Depth (inches): _____ Saturation Present? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)		
Wetland Hydrology Present? Yes ☐ No ☒		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		
Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied.		

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Spaulding to South Sutton MP 37.80 to MP 41.80 City/County: Hoffman Estates/Cook Sampling Date: 23-Jul-18
 Applicant/Owner: Wisconsin Central Ltd. State: IL Sampling Point: X22
 Investigator(s): Alicia Metzger/Daniel Jablonski Section, Township, Range: S 9 T 41N R 9E
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): flat
 Slope: 0.0% / 0.0 ° Lat.: 42.015024 Long.: -88.232710 Datum: NAD1983
 Soil Map Unit Name: Orthents, loamy (802B) NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐ No ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	
Remarks: This location fails all three criteria and does not qualify as wetland.		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)
1. _____	0	☐ 0.0%	_____	
2. _____	0	☐ 0.0%	_____	
3. _____	0	☐ 0.0%	_____	
4. _____	0	☐ 0.0%	_____	
5. _____	0	☐ 0.0%	_____	
0 = Total Cover				
Sapling/Shrub Stratum (Plot size: 15)				
1. <u>Salix interior</u>	50	☒ 100.0%	FACW	Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>70</u> x 2 = <u>140</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>80</u> x 5 = <u>400</u> Column Totals: <u>150</u> (A) <u>540</u> (B) Prevalence Index = B/A = <u>3.600</u>
2. _____	0	☐ 0.0%	_____	
3. _____	0	☐ 0.0%	_____	
4. _____	0	☐ 0.0%	_____	
5. _____	0	☐ 0.0%	_____	
0 = Total Cover				
Herb Stratum (Plot size: 5)				
1. <u>Dipsacus laciniatus</u>	40	☒ 40.0%	UPL	
2. <u>Coronilla varia</u>	40	☒ 40.0%	UPL	
3. <u>Phalaris arundinacea</u>	20	☒ 20.0%	FACW	
4. _____	0	☐ 0.0%	_____	
5. _____	0	☐ 0.0%	_____	
6. _____	0	☐ 0.0%	_____	
7. _____	0	☐ 0.0%	_____	
8. _____	0	☐ 0.0%	_____	
9. _____	0	☐ 0.0%	_____	
10. _____	0	☐ 0.0%	_____	
100 = Total Cover				
Woody Vine Stratum (Plot size: 5)				
1. _____	0	☐ 0.0%	_____	Hydrophytic Vegetation Present? Yes ☐ No ☒
2. _____	0	☐ 0.0%	_____	
0 = Total Cover				

Remarks: (Include photo numbers here or on a separate sheet.)

Only 50% of the dominant species are hydrophytic, so the vegetation criterion is not satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X22**

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)				
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)		
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)		
☐ Saturation (A3)	☐ True Aquatic Plants (B14)	☐ Dry Season Water Table (C2)		
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Crayfish Burrows (C8)		
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Saturation Visible on Aerial Imagery (C9)		
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Stunted or Stressed Plants (D1)		
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Geomorphic Position (D2)		
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ FAC-Neutral Test (D5)		
☐ Inundation Visible on Aerial Imagery (B7)	☐ Gauge or Well Data (D9)			
☐ Sparsely Vegetated Concave Surface (B8)	☐ Other (Explain in Remarks)			
Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): _____ Water Table Present? Yes ☐ No ☒ Depth (inches): _____ Saturation Present? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)			Wetland Hydrology Present? Yes ☐ No ☒	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				
Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied.				

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Spaulding to South Sutton MP 37.80 to MP 41.80 City/County: Hoffman Estates/Cook Sampling Date: 23-Jul-18
 Applicant/Owner: Wisconsin Central Ltd. State: IL Sampling Point: X23
 Investigator(s): Alicia Metzger/Daniel Jablonski Section, Township, Range: S 9 T 41N R 9E
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): flat
 Slope: 0.0% / 0.0 ° Lat.: 42.008985 Long.: -88.233959 Datum: NAD1983
 Soil Map Unit Name: Pits, gravel (865) NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐ No ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	
Remarks:		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	☐ 0.0%	_____	
2. _____	0	☐ 0.0%	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____	0	☐ 0.0%	_____	Percent of dominant Species That Are OBL, FACW, or FAC: <u>33.3%</u> (A/B)
4. _____	0	☐ 0.0%	_____	
5. _____	0	☐ 0.0%	_____	
0 = Total Cover				
Prevalence Index worksheet:				
Total % Cover of: Multiply by:				
OBL species <u>0</u> x 1 = <u>0</u>				
FACW species <u>50</u> x 2 = <u>100</u>				
FAC species <u>0</u> x 3 = <u>0</u>				
FACU species <u>20</u> x 4 = <u>80</u>				
UPL species <u>80</u> x 5 = <u>400</u>				
Column Totals: <u>150</u> (A) <u>580</u> (B)				
Prevalence Index = B/A = <u>3.867</u>				
Hydrophytic Vegetation Indicators:				
☐ 1 - Rapid Test for Hydrophytic Vegetation				
☐ 2 - Dominance Test is > 50%				
☐ 3 - Prevalence Index is ≤ 3.0 ¹				
☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)				
☐ Problematic Hydrophytic Vegetation ¹ (Explain)				
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
Hydrophytic Vegetation Present? Yes ☐ No ☒				
Remarks: (Include photo numbers here or on a separate sheet.)				
Less than 50% of the dominant species are hydrophytic, so the vegetation criterion is not satisfied.				

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X23**

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)
☐ Saturation (A3)	☐ True Aquatic Plants (B14)	☐ Dry Season Water Table (C2)
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Crayfish Burrows (C8)
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Stunted or Stressed Plants (D1)
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Geomorphic Position (D2)
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ FAC-Neutral Test (D5)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Gauge or Well Data (D9)	
☐ Sparsely Vegetated Concave Surface (B8)	☐ Other (Explain in Remarks)	
Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): _____ Water Table Present? Yes ☐ No ☒ Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____ Wetland Hydrology Present? Yes ☐ No ☒		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied.		

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Spaulding to South Sutton MP 37.80 to MP 41.80 City/County: Hoffman Estates/Cook Sampling Date: 23-Jul-18
 Applicant/Owner: Wisconsin Central Ltd. State: IL Sampling Point: X24
 Investigator(s): Alicia Metzger/Daniel Jablonski Section, Township, Range: S 9 T 41N R 9E
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): flat
 Slope: 0.0% / 0.0° Lat.: 42.007995 Long.: -88.234197 Datum: NAD1983
 Soil Map Unit Name: Pits, gravel (865) NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	
Remarks: This location fails the soils and hydrology criterion and does not qualify as wetland.		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>75.0%</u> (A/B)
1. _____	0	☐ 0.0%	_____	
2. _____	0	☐ 0.0%	_____	
3. _____	0	☐ 0.0%	_____	
4. _____	0	☐ 0.0%	_____	
5. _____	0	☐ 0.0%	_____	
0 = Total Cover				
Prevalence Index worksheet:				
Saoling/Shrub Stratum (Plot size: 15)		Total % Cover of: Multiply by:		
1. <u>Sambucus nigra ssp. canadensis</u>	40	☒ 100.0%	FACW	OBL species <u>0</u> x 1 = <u>0</u>
2. _____	0	☐ 0.0%	_____	FACW species <u>120</u> x 2 = <u>240</u>
3. _____	0	☐ 0.0%	_____	FAC species <u>0</u> x 3 = <u>0</u>
4. _____	0	☐ 0.0%	_____	FACU species <u>50</u> x 4 = <u>200</u>
5. _____	0	☐ 0.0%	_____	UPL species <u>0</u> x 5 = <u>0</u>
40 = Total Cover		Column Totals: <u>170</u> (A) <u>440</u> (B)		
Herb Stratum (Plot size: 5)		Prevalence Index = B/A = <u>2.588</u>		
1. <u>Phalaris arundinacea</u>	40	☒ 30.8%	FACW	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is > 50% ☒ 3 - Prevalence Index is ≤ 3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Equisetum hyemale</u>	40	☒ 30.8%	FACW	
3. <u>Tradescantia ohiensis</u>	50	☒ 38.5%	FACU	
4. _____	0	☐ 0.0%	_____	
5. _____	0	☐ 0.0%	_____	
6. _____	0	☐ 0.0%	_____	
7. _____	0	☐ 0.0%	_____	
8. _____	0	☐ 0.0%	_____	
9. _____	0	☐ 0.0%	_____	
10. _____	0	☐ 0.0%	_____	
130 = Total Cover				
Woody Vine Stratum (Plot size: 5)				
1. _____	0	☐ 0.0%	_____	Hydrophytic Vegetation Present? Yes ☒ No ☐
2. _____	0	☐ 0.0%	_____	
0 = Total Cover				

Remarks: (Include photo numbers here or on a separate sheet.)
 Greater than 50% of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

¹Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: X24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that apply) ☐ Surface Water (A1) ☐ High Water Table (A2) ☐ Saturation (A3) ☐ Water Marks (B1) ☐ Sediment Deposits (B2) ☐ Drift Deposits (B3) ☐ Algal Mat or Crust (B4) ☐ Iron Deposits (B5) ☐ Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) ☐ Water-Stained Leaves (B9) ☐ Aquatic Fauna (B13) ☐ True Aquatic Plants (B14) ☐ Hydrogen Sulfide Odor (C1) ☐ Oxidized Rhizospheres on Living Roots (C3) ☐ Presence of Reduced Iron (C4) ☐ Recent Iron Reduction in Tilled Soils (C6) ☐ Thin Muck Surface (C7) ☐ Gauge or Well Data (D9) ☐ Other (Explain in Remarks) Secondary Indicators (minimum of two required) ☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Dry Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☒ FAC-Neutral Test (D5)		
Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): _____ Water Table Present? Yes ☐ No ☒ Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____ Wetland Hydrology Present? Yes ☐ No ☒		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		
The presence of one secondary wetland hydrology indicator is not enough to satisfy the hydrology criterion.		

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Spaulding to South Sutton MP 37.80 to MP 41.80 City/County: Hoffman Estates/Cook Sampling Date: 23-Jul-18
 Applicant/Owner: Wisconsin Central Ltd. State: IL Sampling Point: X25
 Investigator(s): Alicia Metzger/Daniel Jablonski Section, Township, Range: S 9 T 41N R 9E
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): flat
 Slope: 0.0% / 0.0° Lat.: 42.006970 Long.: -88.234415 Datum: NAD1983
 Soil Map Unit Name: Pits, gravel (865) NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	
Remarks: This location fails the soils and hydrology criterion and does not qualify as wetland.		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species? Rel. Strat. Cover	Indicator Status
1. _____	0	☐ 0.0%	_____
2. _____	0	☐ 0.0%	_____
3. _____	0	☐ 0.0%	_____
4. _____	0	☐ 0.0%	_____
5. _____	0	☐ 0.0%	_____
0 = Total Cover			
Sapling/Shrub Stratum (Plot size: 15)	Absolute % Cover	Dominant Species? Rel. Strat. Cover	Indicator Status
1. <u>Rhamnus cathartica</u>	30	☒ 100.0%	FAC
2. _____	0	☐ 0.0%	_____
3. _____	0	☐ 0.0%	_____
4. _____	0	☐ 0.0%	_____
5. _____	0	☐ 0.0%	_____
30 = Total Cover			
Herb Stratum (Plot size: 5)	Absolute % Cover	Dominant Species? Rel. Strat. Cover	Indicator Status
1. <u>Phalaris arundinacea</u>	70	☒ 63.6%	FACW
2. <u>Rubus allegheniensis</u>	40	☒ 36.4%	FACU
3. _____	0	☐ 0.0%	_____
4. _____	0	☐ 0.0%	_____
5. _____	0	☐ 0.0%	_____
6. _____	0	☐ 0.0%	_____
7. _____	0	☐ 0.0%	_____
8. _____	0	☐ 0.0%	_____
9. _____	0	☐ 0.0%	_____
10. _____	0	☐ 0.0%	_____
110 = Total Cover			
Woody Vine Stratum (Plot size: 5)	Absolute % Cover	Dominant Species? Rel. Strat. Cover	Indicator Status
1. _____	0	☐ 0.0%	_____
2. _____	0	☐ 0.0%	_____
0 = Total Cover			

Dominance Test worksheet:
 Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)
 Total Number of Dominant Species Across All Strata: 3 (B)
 Percent of dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>70</u>	x 2 = <u>140</u>
FAC species <u>30</u>	x 3 = <u>90</u>
FACU species <u>40</u>	x 4 = <u>160</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>140</u> (A)	<u>390</u> (B)

 Prevalence Index = B/A = 2.786

Hydrophytic Vegetation Indicators:
☐ 1 - Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is > 50%
☒ 3 - Prevalence Index is ≤ 3.0 ¹
☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
☐ Problematic Hydrophytic Vegetation ¹ (Explain)
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks: (Include photo numbers here or on a separate sheet.)
 Greater than 50% of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X25**

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)
☐ Saturation (A3)	☐ True Aquatic Plants (B14)	☐ Dry Season Water Table (C2)
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Crayfish Burrows (C8)
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Stunted or Stressed Plants (D1)
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Geomorphic Position (D2)
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ FAC-Neutral Test (D5)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Gauge or Well Data (D9)	
☐ Sparsely Vegetated Concave Surface (B8)	☐ Other (Explain in Remarks)	
Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): _____ Water Table Present? Yes ☐ No ☒ Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____ Wetland Hydrology Present? Yes ☐ No ☒		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied.		

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Spaulding to South Sutton MP 37.80 to MP 41.80 City/County: Hoffman Estates/Cook Sampling Date: 23-Jul-18
 Applicant/Owner: Wisconsin Central Ltd. State: IL Sampling Point: X26
 Investigator(s): Alicia Metzger/Daniel Jablonski Section, Township, Range: S 9 T 41N R 9E
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): concave
 Slope: 0.0% / 0.0° Lat.: 42.004813 Long.: -88.234879 Datum: NAD1983
 Soil Map Unit Name: Pits, gravel (865) NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	
Remarks: This location satisfies all three criteria and qualifies as wetland. However, this area is an exempt railroad ditch.		

VEGETATION - Use scientific names of plants.

Stratum	Plot size	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:																												
Tree Stratum (Plot size: 30)					Number of Dominant Species That are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																												
1.		0	☐ 0.0%																														
2.		0	☐ 0.0%																														
3.		0	☐ 0.0%																														
4.		0	☐ 0.0%																														
5.		0	☐ 0.0%																														
= Total Cover					Prevalence Index worksheet: <table border="1"> <thead> <tr> <th colspan="2">Total % Cover of:</th> <th colspan="2">Multiply by:</th> </tr> </thead> <tbody> <tr> <td>OBL species</td> <td>20</td> <td>x 1 =</td> <td>20</td> </tr> <tr> <td>FACW species</td> <td>50</td> <td>x 2 =</td> <td>100</td> </tr> <tr> <td>FAC species</td> <td>0</td> <td>x 3 =</td> <td>0</td> </tr> <tr> <td>FACU species</td> <td>0</td> <td>x 4 =</td> <td>0</td> </tr> <tr> <td>UPL species</td> <td>0</td> <td>x 5 =</td> <td>0</td> </tr> <tr> <td>Column Totals:</td> <td>70</td> <td>(A)</td> <td>120 (B)</td> </tr> </tbody> </table> Prevalence Index = B/A = <u>1.714</u>	Total % Cover of:		Multiply by:		OBL species	20	x 1 =	20	FACW species	50	x 2 =	100	FAC species	0	x 3 =	0	FACU species	0	x 4 =	0	UPL species	0	x 5 =	0	Column Totals:	70	(A)	120 (B)
Total % Cover of:		Multiply by:																															
OBL species	20	x 1 =	20																														
FACW species	50	x 2 =	100																														
FAC species	0	x 3 =	0																														
FACU species	0	x 4 =	0																														
UPL species	0	x 5 =	0																														
Column Totals:	70	(A)	120 (B)																														
Sapling/Shrub Stratum (Plot size: 15)																																	
1.		0	☐ 0.0%																														
2.		0	☐ 0.0%																														
3.		0	☐ 0.0%																														
4.		0	☐ 0.0%																														
5.		0	☐ 0.0%																														
= Total Cover																																	
Herb Stratum (Plot size: 5)																																	
1. <i>Schoenoplectus tabernaemontani</i>		20	☒ 28.6%	OBL																													
2. <i>Phragmites australis</i>		30	☒ 42.9%	FACW																													
3. <i>Phalaris arundinacea</i>		20	☒ 28.6%	FACW																													
4.		0	☐ 0.0%																														
5.		0	☐ 0.0%																														
6.		0	☐ 0.0%																														
7.		0	☐ 0.0%																														
8.		0	☐ 0.0%																														
9.		0	☐ 0.0%																														
10.		0	☐ 0.0%																														
= Total Cover																																	
Woody Vine Stratum (Plot size: 5)																																	
1.		0	☐ 0.0%																														
2.		0	☐ 0.0%																														
= Total Cover																																	
Hydrophytic Vegetation Indicators: ☒ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is > 50% ☒ 3 - Prevalence Index is ≤ 3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																	
Hydrophytic Vegetation Present? Yes ☒ No ☐																																	

Remarks: (Include photo numbers here or on a separate sheet.)
 All of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

¹Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X26**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)

- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☒ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ Coast Prairie Redox (A16)
☐ Dark Surface (S7)
☐ Iron Manganese Masses (F12)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? Yes ☒ No ☐

Remarks:

This profile exhibits hydric soil field indicator F6, Redox Dark Surface, and satisfies the soils criterion.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☒ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)

- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☒ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☒ No ☐

Depth (inches): 6

Water Table Present? Yes ☐ No ☒

Depth (inches):

Saturation Present? Yes ☐ No ☒
(includes capillary fringe)

Depth (inches): _____

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

The area was inundated to a depth of 6 inches, so the hydrology criterion is satisfied.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Spaulding to South Sutton MP 37.80 to MP 41.80 City/County: Hoffman Estates/Cook Sampling Date: 16-Jul-18
 Applicant/Owner: Wisconsin Central Ltd. State: IL Sampling Point: X27
 Investigator(s): Alicia Metzger/Daniel Jablonski Section, Township, Range: S 9 T 41N R 9E
 Landform (hillslope, terrace, etc.): Shoreline Local relief (concave, convex, none): flat
 Slope: 0.0% / 0.0 ° Lat.: 42.032722 Long.: -88.225732 Datum: NAD1983
 Soil Map Unit Name: Sawmill silty clay loam (3107A) NWI classification: PFO1C

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	
Remarks: This location satisfies all three criteria and qualifies as wetland.		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																																
1. <u>Populus deltoides</u>	<u>10</u>	☒ 100.0%	<u>FAC</u>																																	
2. _____	<u>0</u>	☐ 0.0%																																		
3. _____	<u>0</u>	☐ 0.0%																																		
4. _____	<u>0</u>	☐ 0.0%		Prevalence Index worksheet: <table border="0"> <tr> <td colspan="2">Total % Cover of:</td> <td colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td><u>0</u></td> <td>x 1 =</td> <td><u>0</u></td> </tr> <tr> <td>FACW species</td> <td><u>100</u></td> <td>x 2 =</td> <td><u>200</u></td> </tr> <tr> <td>FAC species</td> <td><u>30</u></td> <td>x 3 =</td> <td><u>90</u></td> </tr> <tr> <td>FACU species</td> <td><u>0</u></td> <td>x 4 =</td> <td><u>0</u></td> </tr> <tr> <td>UPL species</td> <td><u>0</u></td> <td>x 5 =</td> <td><u>0</u></td> </tr> <tr> <td>Column Totals:</td> <td><u>130</u></td> <td>(A)</td> <td><u>290</u> (B)</td> </tr> <tr> <td colspan="4">Prevalence Index = B/A = <u>2.231</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>0</u>	x 1 =	<u>0</u>	FACW species	<u>100</u>	x 2 =	<u>200</u>	FAC species	<u>30</u>	x 3 =	<u>90</u>	FACU species	<u>0</u>	x 4 =	<u>0</u>	UPL species	<u>0</u>	x 5 =	<u>0</u>	Column Totals:	<u>130</u>	(A)	<u>290</u> (B)	Prevalence Index = B/A = <u>2.231</u>			
Total % Cover of:		Multiply by:																																		
OBL species	<u>0</u>	x 1 =	<u>0</u>																																	
FACW species	<u>100</u>	x 2 =	<u>200</u>																																	
FAC species	<u>30</u>	x 3 =	<u>90</u>																																	
FACU species	<u>0</u>	x 4 =	<u>0</u>																																	
UPL species	<u>0</u>	x 5 =	<u>0</u>																																	
Column Totals:	<u>130</u>	(A)	<u>290</u> (B)																																	
Prevalence Index = B/A = <u>2.231</u>																																				
5. _____	<u>0</u>	☐ 0.0%																																		
<u>10</u> = Total Cover																																				
Sapling/Shrub Stratum (Plot size: <u>15</u>)																																				
1. <u>Rhamnus cathartica</u>	<u>20</u>	☒ 100.0%	<u>FAC</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is > 50% ☒ 3 - Prevalence Index is ≤ 3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
2. _____	<u>0</u>	☐ 0.0%																																		
3. _____	<u>0</u>	☐ 0.0%																																		
4. _____	<u>0</u>	☐ 0.0%																																		
5. _____	<u>0</u>	☐ 0.0%		Hydrophytic Vegetation Present? Yes ☒ No ☐																																
6. _____	<u>0</u>	☐ 0.0%																																		
7. _____	<u>0</u>	☐ 0.0%																																		
8. _____	<u>0</u>	☐ 0.0%																																		
9. _____	<u>0</u>	☐ 0.0%		Hydrophytic Vegetation Present? Yes ☒ No ☐																																
10. _____	<u>0</u>	☐ 0.0%																																		
<u>20</u> = Total Cover																																				
Herb Stratum (Plot size: <u>5</u>)																																				
1. <u>Phalaris arundinacea</u>	<u>100</u>	☒ 100.0%	<u>FACW</u>	Hydrophytic Vegetation Present? Yes ☒ No ☐																																
2. _____	<u>0</u>	☐ 0.0%																																		
3. _____	<u>0</u>	☐ 0.0%																																		
4. _____	<u>0</u>	☐ 0.0%																																		
5. _____	<u>0</u>	☐ 0.0%		Hydrophytic Vegetation Present? Yes ☒ No ☐																																
6. _____	<u>0</u>	☐ 0.0%																																		
7. _____	<u>0</u>	☐ 0.0%																																		
8. _____	<u>0</u>	☐ 0.0%																																		
9. _____	<u>0</u>	☐ 0.0%		Hydrophytic Vegetation Present? Yes ☒ No ☐																																
10. _____	<u>0</u>	☐ 0.0%																																		
<u>100</u> = Total Cover																																				
Woody Vine Stratum (Plot size: _____)																																				
1. _____	<u>0</u>	☐ 0.0%		Hydrophytic Vegetation Present? Yes ☒ No ☐																																
2. _____	<u>0</u>	☐ 0.0%																																		
3. _____	<u>0</u>	☐ 0.0%																																		
4. _____	<u>0</u>	☐ 0.0%																																		

Remarks: (Include photo numbers here or on a separate sheet.)
 All of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X27**

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)				
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)		☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)		☐ Drainage Patterns (B10)	
☒ Saturation (A3)	☐ True Aquatic Plants (B14)		☐ Dry Season Water Table (C2)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)		☐ Crayfish Burrows (C8)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)		☐ Saturation Visible on Aerial Imagery (C9)	
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)		☐ Stunted or Stressed Plants (D1)	
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)		☒ Geomorphic Position (D2)	
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)		☒ FAC-Neutral Test (D5)	
☐ Inundation Visible on Aerial Imagery (B7)	☐ Gauge or Well Data (D9)			
☐ Sparsely Vegetated Concave Surface (B8)	☐ Other (Explain in Remarks)			
Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): _____ Water Table Present? Yes ☐ No ☒ Depth (inches): _____ Saturation Present? Yes ☒ No ☐ Depth (inches): <u>0</u>			Wetland Hydrology Present? Yes ☒ No ☐	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks: The soil was saturated at the surface which satisfies the hydrology criterion.				

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Spaulding to South Sutton MP 37.80 to MP 41.80 City/County: Hoffman Estates/Cook Sampling Date: 06-Sep-18
 Applicant/Owner: Wisconsin Central Ltd. State: IL Sampling Point: X28
 Investigator(s): Alicia Metzger/Daniel Jablonski Section, Township, Range: S 20 T 41N R 9E
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): concave
 Slope: 0.0% / 0.0 ° Lat.: 42.025074 Long.: -88.230539 Datum: NAD1983
 Soil Map Unit Name: Waupecan silt loam (369B) NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	
Remarks: This location satisfies all three criteria and qualifies as wetland. However, this area is an exempt railroad ditch.		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>80.0%</u> (A/B)
1. <u>Acer negundo</u>	20	☒ 50.0%	FAC	
2. <u>Prunus serotina</u>	20	☒ 50.0%	FACU	
3. _____	0	☐ 0.0%		
4. _____	0	☐ 0.0%		
5. _____	0	☐ 0.0%		
	40	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15)				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>40</u> x 2 = <u>80</u> FAC species <u>70</u> x 3 = <u>210</u> FACU species <u>20</u> x 4 = <u>80</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>130</u> (A) <u>370</u> (B) Prevalence Index = B/A = <u>2.846</u>
1. <u>Rhamnus cathartica</u>	50	☒ 100.0%	FAC	
2. _____	0	☐ 0.0%		
3. _____	0	☐ 0.0%		
4. _____	0	☐ 0.0%		
5. _____	0	☐ 0.0%		
	50	= Total Cover		
Herb Stratum (Plot size: 5)				
1. <u>Geum laciniatum</u>	20	☒ 100.0%	FACW	
2. _____	0	☐ 0.0%		
3. _____	0	☐ 0.0%		
4. _____	0	☐ 0.0%		
5. _____	0	☐ 0.0%		
6. _____	0	☐ 0.0%		
7. _____	0	☐ 0.0%		
8. _____	0	☐ 0.0%		
9. _____	0	☐ 0.0%		
10. _____	0	☐ 0.0%		
	20	= Total Cover		
Woody Vine Stratum (Plot size: 5)				
1. <u>Vitis riparia</u>	20	☐ 100.0%	FACW	
2. _____	0	☐ 0.0%		
	20	= Total Cover		
Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is > 50% ☒ 3 - Prevalence Index is ≤ 3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
Hydrophytic Vegetation Present? Yes ☒ No ☐				
Remarks: (Include photo numbers here or on a separate sheet.) Greater than 50% of the dominant species are hydrophytic, so the vegetation criterion is satisfied.				

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X28**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining. M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)

- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☒ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ Coast Prairie Redox (A16)
☐ Dark Surface (S7)
☐ Iron Manganese Masses (F12)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? Yes ☒ No ☐

Remarks:

This profile exhibits hydric soil field indicator F6, Redox Dark Surface, and satisfies the soils criterion.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- | | |
|--|---|
| ☒ Surface Water (A1) | ☐ Water-Stained Leaves (B9) |
| ☐ High Water Table (A2) | ☐ Aquatic Fauna (B13) |
| ☐ Saturation (A3) | ☐ True Aquatic Plants (B14) |
| ☐ Water Marks (B1) | ☐ Hydrogen Sulfide Odor (C1) |
| ☐ Sediment Deposits (B2) | ☐ Oxidized Rhizospheres on Living Roots (C3) |
| ☐ Drift Deposits (B3) | ☐ Presence of Reduced Iron (C4) |
| ☐ Algal Mat or Crust (B4) | ☐ Recent Iron Reduction in Tilled Soils (C6) |
| ☐ Iron Deposits (B5) | ☐ Thin Muck Surface (C7) |
| ☐ Inundation Visible on Aerial Imagery (B7) | ☐ Gauge or Well Data (D9) |
| ☐ Sparsely Vegetated Concave Surface (B8) | ☐ Other (Explain in Remarks) |

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☒ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☒ No ☐

Depth (inches): 1

Water Table Present? Yes ☐ No ☒

Depth (inches):

Saturation Present? (includes capillary fringe) Yes ☐ No ☒

Depth (inches):

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

The area was inundated to a depth of 1 inch, so the hydrology criterion is satisfied.

APPENDIX II
REPRESENTATIVE PHOTOGRAPHS



PHOTO 1

Date: 07/16/2018

View of Area 1 tributary to Poplar Creek at north end of project limits running under Shoe Factory Rd. facing north.



PHOTO 2

Date: 07/16/2018

View of Area 1 Poplar Creek tributary near Data Point X01, west side of tracks. Photo facing south.



PHOTO 3

Date: 07/16/2018

View of Area 14 upland near Data Point X02, facing south.



PHOTO 4

Date: 07/16/2018

View of Area 1 wetland fringe near Data Point X03, facing south.



PHOTO 5

Date: 07/16/2018

View of Area 14 upland area between tributary of Poplar Creek and tracks. Near Data Point X04, facing west.



PHOTO 6

Date: 07/16/2018

View of tributary to Poplar Creek flowing off-site to southwest of project limits. Photo facing east.



PHOTO 7

Date: 07/16/2018

View of Area 2 east side of tracks, near Data Point X05. Photo facing north east.



PHOTO 8

Date: 07/16/2018

View of Area 15 upland near Data Point X06, facing northeast.



PHOTO 9

Date: 07/16/2018

View of Area 3, near Data Point X07, facing south.



PHOTO 10

Date: 07/16/2018

View of north side of Area 4, near Data Point X08, facing northeast.



PHOTO 11

Date: 07/18/2018

View of Area 5, near Data Point X09, facing west.



PHOTO 12

Date: 07/18/2018

View of Area 16 upland, near Data Point X10, facing northwest.



PHOTO 13

Date: 07/18/2018

View of Area 6A with tributary to Poplar Creek, near Data Point X11, facing south.



PHOTO 14

Date: 07/18/2018

View of pipe connecting tributary of Poplar Creek from Area 6A to Area 6.



PHOTO 15

Date: 07/18/2018

View of Area 17 upland, near Data Point X12, facing south.



PHOTO 16

Date: 07/18/2018

View of Area 6 north side,
near Data Point X13, facing
southwest.



PHOTO 17

Date: 07/18/2018

View of tributary to Poplar
Creek running through
central portion of Area 6,
facing south.



PHOTO 18

Date: 07/18/2018

View of Area 6, near Data
Point X14, facing south.



PHOTO 19

Date: 07/18/2018

View of upland areas on east and west side of track, facing south towards Data Points X15 & X16.



PHOTO 20

Date: 07/18/2018

View of Area 8, Poplar Creek running under tracks, near Data Point X27, facing south.



PHOTO 21

Date: 07/18/2018

View of Area 20 upland, near Data Point X17, facing south.



PHOTO 22

Date: 07/18/2018

View of Area 9, near Data Point X18, facing north.



PHOTO 23

Date: 07/18/2018

View of Area 10, near Data Point X19, facing west.



PHOTO 24

Date: 07/18/2018

View of Area 13, near Data Point X28, facing north.



PHOTO 25

Date: 07/23/2018

View of Area 11, near Data Point X20, facing south. Culvert located in northwest corner of wetland.



PHOTO 26

Date: 07/23/2018

View of Area 22, upland, near Data Point X24, facing south.

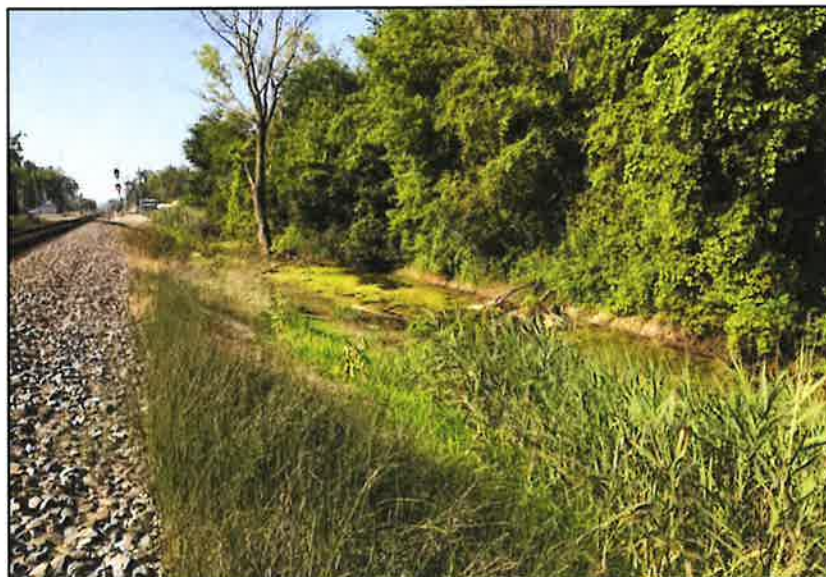


PHOTO 27

Date: 07/23/2018

View of Area 12, near Data Point X26, facing south.

APPENDIX III

REGULATORY INFORMATION

REGULATORY REQUIREMENTS

U.S. ARMY CORPS OF ENGINEERS

Pursuant to Section 404 of the Clean Water Act, the U. S. Army Corps of Engineers (USACE) has jurisdiction over the placement of fill or dredged material in all jurisdictional waters of the United States. Jurisdictional areas include rivers, streams, tributary waterways, lakes, natural ponds, and wetlands adjacent to these areas. A Section 404 permit must be obtained before placing any fill material within a jurisdictional area.

Wetlands that lack a continuous surface connection through a relatively permanent tributary to traditionally navigable waters are considered isolated wetlands and are not regulated under the Clean Water Act.¹ To be considered relatively permanent a tributary must have continuous flow at least seasonally (typically at least three months). Swales and erosional features are generally not considered to be tributaries or waters of the United States. Ditches excavated wholly in and draining only uplands and that do not carry a relatively permanent flow are also generally not waters of the U. S. Wetlands adjacent to tributaries and ditches that do not have a relatively continuous flow will be regulated only if they have a significant nexus to traditionally navigable waters. A significant nexus determination will be based on hydrologic and ecological factors.

General permits, including nationwide and regional permits, are designed to expedite the processing of permits for minor non-controversial projects that are similar in nature and of minimal environmental impact. Currently, 52 nationwide permits have been issued. They became effective on March 19, 2017, and will expire on March 18, 2022.

Within the boundaries of the Chicago District, USACE, most NWP's were replaced with the Regional Permit Program (RPP), which were reissued on April 1, 2012 and will expire on April 1, 2017. Category I RPP's will generally authorize impacts of 0.50 acres or less. Category II RPP's will authorize impacts of between 0.50 acres and 1.0 acre. Any projects proposing impacts to High Quality Aquatic Resources will be processed under Category II. Compensatory wetland mitigation, at a ratio of 1.5:1, is required for all projects that impact more than 0.10 acre. Mitigation for impacts to High Quality Aquatic Resources typically is required at a higher ratio (generally 3:1 or greater).

High Quality Aquatic Resources (HQARs) are aquatic areas considered to be regionally critical due to their uniqueness, scarcity, and/or value, and other wetlands considered to perform functions important to the public interest, as defined in 33 CFR 320.4(b)(2). These resources include Advanced Identification (ADID) sites, bogs, ephemeral pools, fens, forested wetlands, sedge meadows, seeps, streams rated Class A or B in the Illinois Biological Stream Characterization study, streamside marshes, wet prairies, wetlands supporting Federal or Illinois endangered or threatened species, and wetlands with a floristic quality index of 20 or greater, or mean C-value of 3.5 or greater. These areas generally are regarded as unsuitable for dredge or fill activities. See Appendix IV for definitions of the wetland types, and criteria used to evaluate the presence of HQARs during wetland delineations.

¹ December 2, 2008, USEPA and Department of the Army Joint Memorandum, Clean Water Act Jurisdiction Following the U. S. Supreme Court Decision in *Rapanos v. United States* and *Carabell v. United States*.

Wetland impacts greater than 1.0 acre will require authorization under an individual permit (IP), which requires greater scrutiny of the proposed project by the USACE and other concerned government agencies, and a comment period from the general public.

COOK COUNTY REQUIREMENTS

Beginning May 1, 2014, the Metropolitan Water Reclamation District (MWRD) will implement the Cook County Watershed Management Ordinance (WMO) which will regulate isolated wetlands and isolated "waters" within Cook County. The Cook County WMO will require a Watershed Management Permit from MWRD or an authorized municipality for any proposed impacts to isolated wetlands, wetland buffers and/or riparian environments resulting from regulated development activities.

Isolated Wetlands

Impacts to isolated wetlands of Cook County that are equal to or exceed 0.10 acre will require compensatory mitigation based on the quality of the area. Mitigation at a ratio of 1.5:1 is required for impacts to Standard Isolated Wetlands (SIW) and mitigation at a ratio of 3:1 is required for impacts to High Quality Isolated Wetlands (HQIW).

The following isolated wetland areas are exempt from the wetland requirements of the WMO:

- A) Wetlands in roadside ditches created by excavation in upland areas;
- B) Wetlands created by excavation or by other unfinished development activities in upland areas;
- C) Wetlands created by artificial hydrology including, but not limited to, irrigation or detention facility outlets which would revert to upland areas if irrigation were to cease;
- D) Wetlands created by the construction of stormwater facilities in upland areas, provided that the facility was not created for the purpose of wetland mitigation; and
- E) Wetlands created by the construction of ponds in upland areas.

Wetland delineation reports and investigations that identify isolated wetlands or waters of Cook County will require an on-site field verification by MWRD or an authorized municipality. A list of Authorized Municipalities will be provided by MWRD when the list is completed.

Buffers

Wetland buffers for isolated wetlands of Cook County shall be determined according to the functions of the wetland. Minimum isolated wetland buffer widths shall be as follows:

- A) Thirty (30) feet from the boundary of standard isolated wetlands greater than or equal to one-tenth of an acre (0.10 acre) and less than one-half of an acre (0.5 acre) in area;
- B) Fifty (50) feet from the boundary of standard isolated wetlands greater than or equal to

one-half of an acre (0.5 acre) in area; or

- C) One-hundred (100) feet from the boundary of high quality isolated wetlands.

The wetland buffer width for isolated wetlands of Cook County may be varied to a minimum of the greater of one-half the required buffer width or 30 feet, upon approval of either MWRD or an authorized municipality. Impacts to buffer areas shall be mitigated through the replacement or enhancement of impacted buffer functions.

Riparian Environments

Based on the WMO, a riparian environment is defined as:

“The vegetated area between aquatic and upland ecosystems adjacent to a waterway or body of water that provides flood management, habitat, and water quality enhancement or other amenities dependent upon the proximity to water.”

Any developments involving riparian environments shall identify the boundaries of those riparian environments. The Riparian Environment Determination is as follows:

- A) For any Jurisdictional Waters of the U.S. that does not qualify as a wetland, the riparian environment shall be fifty (50) feet from the Ordinary High Water Mark (OHWM).
- B) For any isolated Waters that do not qualify as a wetland, the riparian environment shall be thirty (30) feet from the Ordinary High Water Mark (OHWM).
- C) For any Jurisdictional Waters of the U.S. or for any Isolated Waters that does not qualify as a wetland identified as a Biologically Significant Stream (BSS), the riparian environment shall be one-hundred (100) feet from the Ordinary High Water Mark (OHWM).

The following Isolated Waters of Cook County are not considered to be riparian environments and shall be exempt from the riparian environment requirements of the WMO:

- A) Roadside ditches created by excavation for the purposes of stormwater conveyance;
- B) Channels or bodies of water created by unfinished development activities; or,
- C) Channels or bodies of water created by the construction of stormwater facilities for the purposes of stormwater management.

Proposed adverse impacts to a riparian environment will require approval from MWRD or an authorized municipality. Mitigation will also be required for adverse impacts or modification to the existing functions of a riparian environment.

APPENDIX IV
DELINEATION METHODS AND FQA

WETLAND DELINEATION METHODS

The site was field-inspected and plant species lists were recorded to document the vegetation types present. A wetland indicator status is assigned to each plant species based on a regional list published by the U.S. Army Corps of Engineers in 2016. The categories are based on the estimated probability that a species would be naturally encountered in a wetland. Under the *Interim Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Midwest Region*, the area is considered to be dominated by hydrophytic vegetation and representative of a wetland plant community by one of two methods, the dominance test or the prevalence index. The dominance test is satisfied if greater than 50% of the dominant plant species in a given area have a wetland indicator status of FAC, FACW, or OBL. The prevalence index assigns a numeric value to the wetland indicator status, and uses a weighted-average of the wetland indicator status of all plant species present in the sampling area. A wetland plant community is present if the prevalence index is less than 3.0.

Plant Wetland Indicator Status Categories

Indicator Category	Symbol	Indicator Definition
Obligate Wetland Plants	OBL	Plants that occur almost always (estimated probability greater than 99%) in wetlands under natural conditions, but which may also occur rarely in non-wetlands.
Facultative Wetland Plants	FACW	Plants that usually occur in wetlands (estimated probability 67% to 99%), but occasionally are found in non-wetlands.
Facultative Plants	FAC	Plants with a similar likelihood (estimated probability 33% to 67%) of occurring in both wetlands and non-wetlands.
Facultative Upland Plants	FACU	Plants that usually occur in non-wetlands (estimated probability 67% to 99%) but occasionally are found in wetlands.
Obligate Upland Plants	UPL	Plants that occur almost always (estimated probability greater than 99%) in non-wetlands under natural conditions, but which may also occur rarely in wetlands.

In addition to being dominated by hydrophytic vegetation, each suspect wetland must also exhibit hydric soils and wetland hydrology. As defined in the Federal Register (*Federal Register, Volume 59: July 13, 1994*), "A hydric soil is a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part." According to the National Technical Committee for Hydric Soils, documentation of the presence or absence of a hydric soil can only be determined through on-site investigation, not strictly by its classification of an area on soil survey maps. Soils are identified as hydric in the field if they possess certain indicators, as defined in the *Interim Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Midwest Region*. These field indicators are a regionally specific subset of the field indicators described in the *Field Indicators of Hydric Soils in the United States* (Version 8.0; NRCS, 2016). The absence of a field indicator in a soil does not exclude that soil from being classified as hydric. Soil series, soil color, the presence of mottling or gleying, and depth to water table are

determined and recorded in the field. These features, when present, may indicate a hydric soil when hydric soil field indicators are absent.

Determinations of hydrology are based on observations wetland hydrology indicators. There are two types of indicators, primary indicators and secondary indicators. A determination of wetland hydrology requires the presence of one primary indicator or two secondary indicators. Hydrology indicators are placed into four groups, these being observations of surface water or saturated soils, evidence of recent inundation, evidence of recent soil saturation, or evidence of other site conditions or data. A listing of the wetland hydrology indicators is provided in the table below.

Indicator	Category	
	Primary	Secondary
Group A – Observation of Surface Water or Saturated Soils		
A1 – Surface water	X	
A2 – High water table	X	
A3 – Saturation	X	
Group B – Evidence of Recent Inundation		
B1 – Water marks	X	
B2 – Sediment deposits	X	
B3 – Drift deposits	X	
B4 – Algal mat or crust	X	
B5 – Iron deposits	X	
B7 – Inundation visible on aerial imagery	X	
B8 – Sparsely vegetated concave surface	X	
B9 – Water-stained leaves	X	
B13 – Aquatic fauna	X	
B14 – True aquatic plants	X	
B6 – Surface soil cracks		X
B10 – Drainage patterns		X
Group C – Evidence of Current or Recent Soil Saturation		
C1 – Hydrogen sulfide odor	X	
C3 – Oxidized rhizospheres along living roots	X	
C4 – Presence of reduced iron	X	
C6 – Recent iron reduction in tilled soils	X	
C7 – Thin muck surface	X	
C2 – Dry-season water table		X
C8 – Crayfish burrows		X
C9 – Saturation visible on aerial imagery		X
Group D – Evidence from Other Site Conditions or Data		
D9 – Gauge or well data	X	
D1 – Stunted or stressed plants		X
D2 – Geomorphic position		X
D5 – FAC-neutral test		X

FLORISTIC QUALITY ASSESSMENT

Plant communities of the site were evaluated with the Floristic Quality Assessment (FQA) methodology, a widely-used technique used for rapid assessment of the floristic quality in a defined area or plant community. In using FQA, the presence of each plant species is recorded, generating a species inventory. This inventory is entered into computer software that was used to generate the species lists used in this report. Floristic quality calculations are also generated that provides a compilation of various floristic quality data, resulting in a determination of the floristic quality of the subject area.

The floristic quality data for an area partially indicates its quality as a natural area (i.e., relative to known or perceived pre-settlement or disturbance conditions). One indicator of the degree of disturbance or floristic quality in an area is the calculated Native Floristic Quality Index (Native FQI). A high Native FQI value indicates a high-quality natural area, but how high the Native FQI must be for an area to be of high quality is a subjective determination. In general, a wetland (or other defined area) with a Native FQI greater than 20.00 from a single observation may be considered a moderately high quality plant community. These areas have a high potential for containing more conservative or high-quality plant species. Therefore, adverse impacts to such areas, especially wetlands and subsequent proposals for compensatory mitigation, may be scrutinized carefully by the regulatory agencies.

A high number of native species with high coefficients of conservatism "C" (a subjective measure of quality based on habitat specificity and relative tolerance to disturbance; weedy species are highly disturbance tolerant, and are ranked lower) will result in a high Native FQI. The C value is based on the relative rarity of a species and/or the resiliency of a species following disturbance. Coefficients of conservatism for native plant species range from 0 for common, weedy species to 10 for rare, highly conservative species. Adventive species are not assigned a C value. Adventive species are non-native species that have entered the Chicago region since European settlement. These species generally do not lend themselves to increased floristic quality, but instead appear after a disturbance. Thus, a high proportion of these species in a given area or community may be an indication of a lower quality plant community.

The wetness coefficient (W, ranging from -5 to +5) refers to the corresponding wetland indicator status (e.g., OBL = obligate wetland species, -5; FAC = facultative species, 0; UPL = upland species, +5) for U.S. Fish and Wildlife Service Region 3 (Illinois, Michigan, Indiana, Missouri, Iowa, Wisconsin, and Minnesota). A wetland indicator status noted in brackets (e.g., [FACW]) is a modification of the Region 3 indicator status to apply locally in the 22-county Chicago region covered by *Plants of the Chicago Region*. The Wetness coefficient is useful in evaluating the general "wetness" affinity of a sampled plant community. If the average indicator status among all species present is in the FAC, FACW, or OBL classes, then the plant community may be considered hydrophytic.

HIGH QUALITY AQUATIC RESOURCES

U.S. Army Corps of Engineers, Chicago District Regional Permit Program

High Quality Aquatic Resources (HQARs) include Advanced Identification (ADID) sites (mapped in Kane, Lake and McHenry Counties), bogs, dune and swale complexes, ephemeral pools, fens, forested wetlands, sedge meadows, seeps, streams rated Class A or B in the Illinois Biological Stream Characterization study, wet prairies, wetlands supporting Federal or Illinois endangered or threatened species, and wetlands with a floristic quality index of 20 or greater, or mean C-value of 3.5 or greater. These definitions are listed below. If a given wetland meets one or more of these definitions, that wetland is considered a HQAR and a Category II Regional Permit or Individual Permit is required.

Advanced Identification (ADID) sites: Aquatic sites that have been identified by the Chicago District and U.S. Environmental Protection Agency, in advance of specific permit requests, as areas generally unsuitable for the disposal of dredged or fill material, because of a variety of factors, including high floristic values, water quality or storage functions, or similar wetland functions performed at elevated levels. ADID sites include various Waters of the U.S., including wetlands. An ADID map for the subject property is included with this report as Figure 3.

Bog: A low nutrient peatland, usually in a glacial depression, that is acidic in the surface stratum and often dominated at least in part by the genus *Sphagnum*.

Dune and Swale Complex: Areas usually parallel to the Lake Michigan shoreline and typified by sandy, linear, upland ridges alternating with low-relief wetland created over time during changes in the Lake Michigan's water levels.

Ephemeral pool: A seasonally inundated depression within a forested wetland or upland community, usually located on a moraine, glacial outwash plain, or in an area shallow to bedrock; also known locally as a "vernal pool." These areas may not be permanently vegetated.

Fen: A peatland, herbaceous (including calcareous floating mats) or wooded, with calcareous groundwater flow.

Forested wetland: A wetland dominated by native woody vegetation with at least one of the following species or genera present: *Carya* spp., *Cephalanthus occidentalis*, *Cornus alternifolia*, *Fraxinus nigra*, *Juglans cinerea*, *Nyssa sylvatica*, *Quercus* spp., *Thuja occidentalis*, *Betula nigra*, *Betula alleghaniensis*, *Betula papyrifera*, *Fagus grandifolia*.

Sedge meadow: A wetland dominated by at least one of the following genera: *Carex*, *Calamagrostis*, *Cladium*, *Deschampsia*, *Eleocharis*, *Rhynchospora*, *Scleria*, or *Eriophorum*.

Seep: A wetland, herbaceous or wooded, with saturated soil or inundation resulting from the diffuse flow of groundwater to the surface stratum. [Seeps typically occur on slopes because of blocked vertical infiltration.]

Streams rated A or B in the Illinois Biological Stream Characterization study: The historical Class A and B rating system was replaced with the new Illinois Department of Natural Resources stream classification system that can be found at:

<https://www.dnr.illinois.gov/conservation/BiologicalStreamratings/Pages/default.aspx>

Wet prairie: A wetland dominated by native graminoid species with a diverse indigenous forb component that is seasonally saturated and/or temporarily inundated and may resemble a fen in its best development. Species found in a high quality wet prairie include at least one of the following: *Calamagrostis canadensis*, *Spartina pectinata*, *Aster puniceus firmus*, *Beckmannia syzigachne*, *Chelone glabra*, *Eleocharis wolfii*, *Lysimachia quadrifolia*, *Oenothera perennis*, *Oenothera pilosella*, *Pedicularis lanceolata*, and *Solidago ohioensis*.

Wetlands Supporting Federal or Illinois Endangered or Threatened Species: An Agency Action Report is routinely requested from the Illinois Department of Natural Resources (IDNR) and from the U.S. Fish and Wildlife Service (USFWS) for wetland delineations. These reports indicate the likelihood of listed species (that is, those species considered legally protected as threatened or endangered) being found near or on a subject property, or possible encroachment into protected natural area reserves. If a listed species record is indicated for the site, an endangered and threatened species investigation may be required to evaluate the actual presence or absence of the species in question. This inquiry is preliminary and does not preclude the presence of otherwise unrecorded listed species.

Wetlands with a Floristic Quality Index of 20 or greater or a mean C-value of 3.5 or greater: Plant species inventories collected during wetland delineations are used to generate floristic quality values using the Floristic Quality Assessment method published in *Plants of the Chicago Region* (Swink and Wilhelm, 1994). These tables are included in this report for each of the areas identified as wetland.

STREAM CLASSIFICATION WITHIN THE CHICAGO DISTRICT

The historical Class A and B rating system was replaced with the new Illinois Department of Natural Resources stream classification system that can be found at:

<https://www.dnr.illinois.gov/conservation/BiologicalStreamratings/Pages/default.aspx>

APPENDIX V
T & E Species Review



Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov

Bruce Rauner, Governor
Wayne A. Rosenthal, Director

August 8, 2018

Mrs. Metzger
7325 Janes Avenue
Woodridge, IL 60517

**RE: CN Railroad Siding Project
Endangered Species Consultation Program
EcoCAT Review #1900628**

Dear Mrs. Metzger:

The Department has received your submission for this project for the purposes of consultation pursuant to the *Illinois Endangered Species Protection Act* [520 ILCS 10/11], the *Illinois Natural Areas Preservation Act* [525 ILCS 30/17], and Title 17 *Illinois Administrative Code* Part 1075. Additionally, the Department may offer advice and recommendations for species covered under the *Fish & Aquatic Life Code* [515 ILCS 5, *et seq.*]; the *Illinois Wildlife Code* [520 ILCS 5, *et seq.*]; and the *Herptiles-Herps Act* [510 ILCS 69].

The proposed action consists of CN Railroad adding side tracks at various points throughout the project corridor.

EcoCAT indicates a record of the **rusty-patched bumble bee** (*Bombus affinis*), which was federally-listed as endangered on March 21, 2017, in the vicinity of the project area. In accordance with State law, it was automatically placed on the *Illinois Endangered Species List*. The rusty-patched bumble bee is found in grasslands with flowering plants from April to October, and nests underground in abandoned rodent burrows or above ground in clumps of grass. The Department recommends work that disturbs the ground or may removing flowering plants be done between October 1st and April 1st to avoid potential impacts. If work must be conducted outside these dates there is a chance the project could disturb a nest, in which case, the Department suggest a field visit be performed by a qualified individual (biologist, entomologist, or others who have been trained accordingly) to look for rusty-patched bumble bee nests sites. This is not the only species of bee in the area, so a positive ID of the rusty-patched bumble bee is needed before coordination with the Department would need to be initiated. If the bee is discovered, the Department also recommends consultation with the US Fish & Wildlife Service regarding potential liability which may result from excavation.

The Department recommends the project proponent review the USFWS rusty-patched bumble bee website: <https://www.fws.gov/midwest/endangered/insects/rpbb/index.html> This site offers life history and bee surveyor/researcher information.

EcoCAT also indicates a portion of this project falls within the Buff Springs Fen Class III Groundwater recharge area, which protects the integrity of the Bluff Springs Fen Nature Preserve. Class III

Groundwaters are groundwaters that are particularly sensitive and ecologically vital. The modification of groundwater quality and quantity which may affect conditions within a Nature Preserve is prohibited. The Department recommends that BMPs be implemented to ensure that the quality and quantity of groundwater not be adversely affected to avoid potential liability on the part of the applicant.

Given the above recommendations are adopted, the Department has determined that impacts are unlikely. Please notify the Department if the project will be modified to include these recommendations.

Consultation on the part of the Department is closed, unless V3 Companies desires additional information or advice related to this proposal. Consultation for Part 1075 is valid for two years unless new information becomes available which was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the action has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal, and should not be regarded as a final statement on the project being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are unexpectedly encountered during the project's implementation, the applicant must comply with the applicable statutes and regulations.

Please contact me with any questions about this review.

Sincerely,

A handwritten signature in black ink, appearing to read "Bradley Hayes", with a stylized flourish at the end.

Bradley Hayes
Resource Planner
Impact Assessment Section
Department of Natural Resources
(217) 787-0031
bradley.hayes@illinois.gov

U.S. FISH AND WILDLIFE SERVICE: SECTION 7 CONSULTATION

Project: Spaulding to South Sutton Siding Extension/Double Track Project, MP 37.80 to MP 41.80, Hoffman Estates, Cook County, Illinois (#18252)

Analysis conducted by: Alicia Metzger, V3 Companies, July 25, 2018

Site Description: The project area consists of railroad tracks and adjacent right of way areas. Poplar Creek is located throughout the northern portion of the project area. The adjoining properties consist of forest preserve properties, residential homes, recreational parks and industrial and commercial properties.

SPECIES	STATUS	HABITAT	SUITABLE HABITAT PRESENT?	CONCLUSION
Rattlesnake-master borer moth (<i>Papaipema eryngii</i>)	Candidate	Undisturbed prairie and woodland openings containing their only food source, rattlesnake-master (<i>Eryngium yuccifolium</i>).	No, suitable habitat is not present. There are no prairies in the project area.	Species and habitat not present. No further consultation is required.
Eastern massasauga (<i>Sistrurus catenatus</i>)	Threatened	Wet areas including wet prairies, marshes, and low areas along rivers and lakes.	No, suitable habitat is not present. The Eastern massasauga is not found within Poplar Creek.	Species and habitat not present. No further consultation is required.
Eastern prairie fringed orchid (<i>Platanthera leucophaea</i>)	Threatened	Mesic prairies to wetlands such as sedge meadows, marsh edges, and bogs with full sun and little or no woody encroachment.	No, suitable habitat is not present. There are no prairies in the project area.	Species and habitat not present. No further consultation is required.
Mead's milkweed (<i>Asclepias meadii</i>)	Threatened	Mesic to dry mesic upland tallgrass prairie or glade habitat adapted to drought and fire. Persists in stable late-successional prairie.	No, suitable habitat is not present. There are no prairies in the project area.	Species and habitat not present. No further consultation is required.
Prairie bush clover (<i>Lespedeza leptostachya</i>)	Threatened	Dry to mesic prairies with gravelly soils.	No, suitable habitat is not present. There are no prairies in the project area.	Species and habitat not present. No further consultation is required.
Rufa Red knot (<i>Calidris canutus rufa</i>)	Threatened	Coastal areas and large wetland complexes during migratory window of May 1-September 30	No, suitable habitat is not present. There are no coastal areas or large wetland complexes in the project area.	Species and habitat not present. No further consultation is required.
Northern long-eared bat (<i>Myotis septentrionalis</i>)	Threatened	Small crevices and cavities in caves, mines, and under the bark of dead and live trees.	No, suitable habitat is not present. The trees within the project area would not support this species.	Species and habitat not present. No further consultation is required.
Piping plover (<i>Charadrius melodus</i>)	Endangered	Lakeshore beaches along Lake Michigan.	No, suitable habitat is not present. The project area is not located on Lake Michigan.	Species and habitat not present. No further consultation is required.

SPECIES	STATUS	HABITAT	SUITABLE HABITAT PRESENT?	CONCLUSION
Hine's emerald dragonfly (<i>Somatochlora hineana</i>)	Endangered	Spring fed wetlands, wet meadows, and marshes within the <u>Designated Critical Habitat</u> areas.	No, suitable habitat is not present. The project area is not within the Designated Critical Habitat area.	Species and habitat not present. No further consultation is required.
Leafy-prairie clover (<i>Dalea foliosa</i>)	Endangered	Prairie remnants with thin soil over limestone along the Des Plaines River.	No, suitable habitat is not present. There are no prairies in the project area.	Species and habitat not present. No further consultation is required.
Rusty patched bumble bee (<i>Bombus affinis</i>)	Endangered	Grasslands with flowering plants from April – October, underground rodent cavities or clumps of grasses above ground as nesting sites and undisturbed soil for hibernating queens to overwinter; <u>High Potential Zones</u>	No, suitable habitat is not present. The project area is not located within a High Potential Zone.	Species and habitat not present. No further consultation is required.

Conclusion: Species and critical habitat are not present. No further consultation is required.

Applicant: V3 Companies
Contact: Alicia Metzger
Address: 7325 Janes Avenue
Woodridge, IL 60517

IDNR Project Number: 1900628
Date: 07/19/2018
Alternate Number: 18252

Project: CN Railroad Siding Project
Address: Shoe Factory Road, Hoffman Estates

Description: CN Railroad proposes to add side tracks at various points throughout the project corridor.

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Bluff Springs Fen Class III Groundwater Site
Bluff Spring Fen INAI Site
Shoe Factory Road Prairie INAI Site
Bluff Spring Fen Nature Preserve
Shoe Factory Road Prairie Nature Preserve
Prairie Bush Clover (*Lespedeza leptostachya*)
Rusty Patched Bumble Bee (*Bombus affinis*)
Rusty Patched Bumble Bee (*Bombus affinis*)
Slippershell (*Alasmodonta viridis*)
Woolly Milkweed (*Asclepias lanuginosa*)
Yellow-Headed Blackbird (*Xanthocephalus xanthocephalus*)

An IDNR staff member will evaluate this information and contact you to request additional information or to terminate consultation if adverse effects are unlikely.

Location

The applicant is responsible for the accuracy of the location submitted for the project.



County: Cook

Township, Range, Section:

41N, 9E, 4
41N, 9E, 9
41N, 9E, 16
41N, 9E, 17
41N, 9E, 20
41N, 9E, 29

IL Department of Natural Resources
Contact
Bradley Hayes
217-785-5500
Division of Ecosystems & Environment

Government Jurisdiction
IL Environmental Protection Agency
Bureau of Water Quality
1021 N Grand Ave East
PO Box 19276
Springfield, Illinois 62794

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

Terms of Use

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1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.

2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.

3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

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Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

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APPENDIX VI

USACE Jurisdictional Determination



DEPARTMENT OF THE ARMY
CHICAGO DISTRICT, CORPS OF ENGINEERS
231 SOUTH LA SALLE STREET
CHICAGO, ILLINOIS 60604-1437

REPLY TO
ATTENTION OF:

October 26, 2018

Technical Services Division
Regulatory Branch
LRC-2018-00651

**SUBJECT: Jurisdictional Determination for the Spaulding to South Sutton Siding
Extension/Double Track Project in Hoffman Estates, Cook County, Illinois (Latitude 42.037327,
Longitude -88.220691)**

Kari Harris
Wisconsin Central Ltd. Railroad
17641 South Ashland Ave.
Homewood, Illinois 60430

Dear Ms. Harris:

This is in response to your request that the U.S. Army Corps of Engineers complete a jurisdictional determination for the above-referenced site submitted on your behalf by V3 Companies. The subject project has been assigned number LRC-2018-00651. Please reference this number in all future correspondence concerning this project.

Following a review of the information you submitted, this office has determined that the subject property contains "waters of the United States".

Areas 1, 6, 6A & 8 have been determined to be under the jurisdiction of this office and therefore, subject to Federal regulation.

Areas 2, 3, 4, 5, 9, 10, 11, 12 & 13 are water features Exempt from Federal regulation. Please be informed that this office does not concur with the boundaries of waters not subject to Federal regulation.

This office concurs with the submitted wetland delineation and wetland boundaries at the subject site. In the event an application is submitted for work within jurisdictional areas, a survey of the wetland boundary(s) stamped by a professional surveyor shall accompany the approved wetland delineation.

For a detailed description of our determination please refer to the enclosed decision document. This determination covers only your project as depicted in the Wetland Delineation and Assessment Report dated August 6, 2018, prepared by V3 Companies.

This determination is valid for a period of five (5) years from the date of the letter, unless new information warrants revision of the determination before the expiration date or a District Commander has identified, after public notice and comment, that specific geographic areas with rapidly changing environmental conditions merit re-verification on a more frequent basis.

This letter is considered an approved jurisdictional determination for your subject site. If you object to this determination, you may appeal, according to 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and a Request for Appeal (RFA) form. If you request to appeal the above determination, you must submit a completed RFA form to the Great Lakes/Ohio River Division Office at the following address:

Jacob Siegrist
Regulatory Appeals Review Officer
US Army Corps of Engineers
Great Lakes and Ohio River Division
550 Main Street, Room 10524
Cincinnati, Ohio 45202-3222
Phone: (513) 684-2699 Fax: (513) 684-2460

In order to be accepted, your RFA must be complete, meet the criteria for appeal and be received by the Division Office within sixty (60) days of the date of the NAP. If you concur with the determination in this letter, submittal of the RFA form to the Division office is not necessary.

This determination has been conducted to identify the limits of the Corps Clean Water Act jurisdiction for the particular site identified in this request. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

It is your responsibility to obtain any required state, county, or local approvals for impacts to wetland areas not under the Department of the Army jurisdiction. For projects located in unincorporated and unauthorized municipalities in Cook County, please contact the Metropolitan Water Reclamation District of Greater Chicago at (312) 751-3247. For projects in incorporated areas of Cook County, contact the authorized municipality for information related to the Watershed Management Ordinance.

Pursuant to Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers regulates the discharge of dredged or fill material into waters of the United States, including wetlands. A Department of the Army permit is required for any proposed work involving the discharge of dredged or fill material within the jurisdiction of this office. To initiate the permit process, please submit a joint permit application form along with detailed plans of the proposed work. Information concerning our program, including the application form and an application checklist, can be found at and downloaded from our website:
<http://www.lrc.usace.army.mil/Missions/Regulatory.aspx>

If you have any questions, please contact Mr. Michael J. Machalek of my staff by telephone at (312) 846-5534 or email at Mike.J.Machalek@usace.army.mil.

Sincerely,

Digitally signed by
CHERNICH.KATHLEEN.G.1230
365616

Date: 2018.10.26 16:31:52

-05'00'

Kathleen G. Chernich

Chief, East Section

Regulatory Branch

Enclosures

Copy Furnished w/out Enclosures

Cook County Building and Zoning (Donald Wlodarski)

Metropolitan Water Reclamation District of Greater Chicago (Dan Feltes)

V3 Companies (Tom Slowinski)

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Kari Harris, Wisconsin Central Ltd. Railroad	File Number: LRC-2018-00651	Date: October 26, 2018
Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of Permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of Permission)	B
	PERMIT DENIAL	C
X	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/CECW/Pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

A. INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit or a Letter of Permission (LOP), you may sign the permit document and return it to the district commander for final authorization. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district commander. Your objections must be received by the district commander within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district commander will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district commander will send you a proffered permit for your reconsideration, as indicated in Section B below.

B. PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit or a Letter of Permission (LOP), you may sign the permit document and return it to the district commander for final authorization. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division commander. This form must be received by the division commander within 60 days of the date of this notice.

C. PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division commander. This form must be received by the division commander within 60 days of the date of this notice.

D. APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division commander. This form must be received by the division commander within 60 days of the date of this notice.

E. PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

Regulatory Branch
Chicago District Corps of Engineers
231 South LaSalle Street, Suite 1500
Chicago, IL 60604-1437
Phone: (312) 846-5530
Fax: (312) 353-4110

If you only have questions regarding the appeal process you may also contact:

Jacob Siegrist
Regulatory Appeals Review Officer
US Army Corps of Engineers
Great Lakes and Ohio River Division
550 Main Street, Room 10524
Cincinnati, Ohio 45202-3222
Phone: (513) 684-2699 Fax: (513) 684-2460

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Commanders personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15-day notice of any site investigation, and will have the opportunity to participate in all site investigations.

 Signature of appellant or agent.	Date:	Telephone number:
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Regulatory Program



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INTERIM APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in the Interim Approved Jurisdictional Determination Form User Manual.

SECTION I: BACKGROUND INFORMATION

A. COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (AJD): October 18, 2018

B. ORM NUMBER IN APPROPRIATE FORMAT (e.g., HQ-2015-00001-SMJ): LRC-2018-651

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Illinois County/parish/borough: Cook City: Hoffman Estates

Center coordinates of site (lat/long in degree decimal format): Lat. 42.037327, Long. -88.220691.

Map(s)/diagram(s) of review area (including map identifying single point of entry (SPOE) watershed and/or potential jurisdictional areas where applicable) is/are: ☐ attached ☒ in report/map titled Wetland Delineation and Assessment Report dated August 6, 2018; prepared by V3 Companies.

☐ Other sites (e.g., offsite mitigation sites, disposal sites, etc.) are associated with this action and are recorded on a different jurisdictional determination (JD) form. List JD form ID numbers (e.g., HQ-2015-00001-SMJ-1):

D. REVIEW PERFORMED FOR SITE EVALUATION:

☐ Office (Desk) Determination Only. Date:

☒ Office (Desk) and Field Determination. Office/Desk Dates: October 3, 2018 Field Date(s): September 20, 2018.

SECTION II: DATA SOURCES

Check all that were used to aid in the determination and attach data/maps to this AJD form and/or references/citations in the administrative record, as appropriate.

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant. Title/Date: See above.

☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.

☒ Data sheets/delineation report are sufficient for purposes of AJD form. Title/Date: See above.

☐ Data sheets/delineation report are not sufficient for purposes of AJD form. Summarize rationale and include information on revised data sheets/delineation report that this AJD form has relied upon:

Revised Title/Date:

☐ Data sheets prepared by the Corps. Title/Date:

☐ Corps navigable waters study. Title/Date:

☐ CorpsMap ORM map layers. Title/Date:

☒ USGS Hydrologic Atlas. Title/Date: Streamwood.

☐ USGS, NHD, or WBD data/maps. Title/Date:

☒ USGS 8, 10 and/or 12 digit HUC maps. HUC number: Streamwood.

☒ USGS maps. Scale & quad name and date: Streamwood.

☒ USDA NRCS Soil Survey. Citation: Web Soil Survey.

☒ USFWS National Wetlands Inventory maps. Citation: Streamwood.

☐ State/Local wetland inventory maps. Citation:

☐ FEMA/FIRM maps. Citation:

☒ Photographs: ☒ Aerial. Citation: or ☐ Other. Citation:

☐ LiDAR data/maps. Citation:

☐ Previous JDs. File no. and date of JD letter:

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): Site visit on September 20, 2018 to walk entire rail line.

SECTION III: SUMMARY OF FINDINGS

Complete ORM "Aquatic Resource Upload Sheet" or Export and Print the Aquatic Resource Water Droplet Screen from ORM for All Waters and Features, Regardless of Jurisdictional Status – Required

A. RIVERS AND HARBORS ACT (RHA) SECTION 10 DETERMINATION OF JURISDICTION:

☐ "navigable waters of the U.S." within RHA jurisdiction (as defined by 33 CFR part 329) in the review area.

• **Complete Table 1 - Required**

NOTE: If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Section 10 navigable waters list, DO NOT USE THIS FORM TO MAKE THE DETERMINATION. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Section 10 RHA navigability determination.

B. CLEAN WATER ACT (CWA) SECTION 404 DETERMINATION OF JURISDICTION: "waters of the U.S." within CWA jurisdiction (as defined by 33 CFR part 328.3) in the review area. **Check all that apply.**

☐ (a)(1): All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide. (Traditional Navigable Waters (TNWs))

• **Complete Table 1 - Required**

☐ This AJD includes a case-specific (a)(1) TNW (Section 404 navigable-in-fact) determination on a water that has not previously been designated as such. Documentation required for this case-specific (a)(1) TNW determination is attached.

☐ (a)(2): All interstate waters, including interstate wetlands.

• **Complete Table 2 - Required**

☐ (a)(3): The territorial seas.

• **Complete Table 3 - Required**

☐ (a)(4): All impoundments of waters otherwise identified as waters of the U.S. under 33 CFR part 328.3.

• **Complete Table 4 - Required**

☒ (a)(5): All tributaries, as defined in 33 CFR part 328.3, of waters identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.

• **Complete Table 5 - Required**

☒ (a)(6): All waters adjacent to a water identified in paragraphs (a)(1)-(a)(5) of 33 CFR part 328.3, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters.

• **Complete Table 6 - Required**

☒ Bordering/Contiguous.

Neighboring:

☐ (c)(2)(i): All waters located within 100 feet of the ordinary high water mark (OHWM) of a water identified in paragraphs (a)(1)-(a)(5) of 33 CFR part 328.3.

☐ (c)(2)(ii): All waters located within the 100-year floodplain of a water identified in paragraphs (a)(1)-(a)(5) of 33 CFR part 328.3 and not more than 1,500 feet of the OHWM of such water.

☐ (c)(2)(iii): All waters located within 1,500 feet of the high tide line of a water identified in paragraphs (a)(1) or (a)(3) of 33 CFR part 328.3, and all waters within 1,500 feet of the OHWM of the Great Lakes.

☐ (a)(7): All waters identified in 33 CFR 328.3(a)(7)(i)-(v) where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.

• **Complete Table 7 for the significant nexus determination. Attach a map delineating the SPOE watershed boundary with (a)(7) waters identified in the similarly situated analysis. - Required**

☐ Includes water(s) that are geographically and physically adjacent per (a)(6), but are being used for established, normal farming, silviculture, and ranching activities (33 USC Section 1344(f)(1)) and therefore are not adjacent and require a case-specific significant nexus determination.

☐ (a)(8): All waters located within the 100-year floodplain of a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3 not covered by (c)(2)(ii) above and all waters located within 4,000 feet of the high tide line or OHWM of a water identified in paragraphs (a)(1)-(a)(5) of 33 CFR part 328.3 where they are determined on a case-specific basis to have a significant nexus to a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.

• **Complete Table 8 for the significant nexus determination. Attach a map delineating the SPOE watershed boundary with (a)(8) waters identified in the similarly situated analysis. - Required**

☐ Includes water(s) that are geographically and physically adjacent per (a)(6), but are being used for established, normal farming, silviculture, and ranching activities (33 USC Section 1344(f)(1)) and therefore are not adjacent and require a case-specific significant nexus determination.

C. NON-WATERS OF THE U.S. FINDINGS:

Check all that apply.

- ☐ The review area is comprised entirely of dry land.
- ☐ Potential-(a)(7) Waters: Waters that DO NOT have a significant nexus to a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.
- **Complete Table 9 and attach a map delineating the SPOE watershed boundary with potential (a)(7) waters identified in the similarly situated analysis. - Required**
- ☐ Includes water(s) that are geographically and physically adjacent per (a)(6), but are being used for established, normal farming, silviculture, and ranching activities (33 USC Section 1344(f)(1)) and therefore are not adjacent and require a case-specific significant nexus determination.
- ☐ Potential-(a)(8) Waters: Waters that DO NOT have a significant nexus to a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.
- **Complete Table 9 and attach a map delineating the SPOE watershed boundary with potential (a)(8) waters identified in the similarly situated analysis. - Required**
- ☐ Includes water(s) that are geographically and physically adjacent per (a)(6), but are being used for established, normal farming, silviculture, and ranching activities (33 USC Section 1344(f)(1)) and therefore are not adjacent and require a case-specific significant nexus determination.
- ☐ Excluded Waters (Non-Waters of U.S.), even where they otherwise meet the terms of paragraphs (a)(4)-(a)(8):
- **Complete Table 10 - Required**
- ☐ (b)(1): Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA.
- ☐ (b)(2): Prior converted cropland.
- ☐ (b)(3)(i): Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary.
- ☐ (b)(3)(ii): Ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands.
- ☒ (b)(3)(iii): Ditches that do not flow, either directly or through another water, into a water identified in paragraphs (a)(1)-(a)(3).
- ☐ (b)(4)(i): Artificially irrigated areas that would revert to dry land should application of water to that area cease.
- ☐ (b)(4)(ii): Artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, settling basins, fields flooded for rice growing, log cleaning ponds, or cooling ponds.
- ☐ (b)(4)(iii): Artificial reflecting pools or swimming pools created in dry land.¹
- ☐ (b)(4)(iv): Small ornamental waters created in dry land.¹
- ☐ (b)(4)(v): Water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water.
- ☐ (b)(4)(vi): Erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of tributary, non-wetland swales, and lawfully constructed grassed waterways.¹
- ☐ (b)(4)(vii): Puddles.¹
- ☐ (b)(5): Groundwater, including groundwater drained through subsurface drainage systems.¹
- ☐ (b)(6): Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.¹
- ☐ (b)(7): Wastewater recycling structures created in dry land; detention and retention basins built for wastewater recycling; groundwater recharge basins; percolation ponds built for wastewater recycling; and water distributary structures built for wastewater recycling.
- ☐ Other non-jurisdictional waters/features within review area that do not meet the definitions in 33 CFR 328.3 of (a)(1)-(a)(8) waters and are not excluded waters identified in (b)(1)-(b)(7).
- **Complete Table 11 - Required.**

D. ADDITIONAL COMMENTS TO SUPPORT AJD:

¹ In many cases these excluded features will not be specifically identified on the AJD form, unless specifically requested. Corps Districts may, in case-by-case instances, choose to identify some or all of these features within the review area.

Jurisdictional Waters of the U.S.

Table 1. (a)(1) Traditional Navigable Waters

(a)(1) Waters Name	(a)(1) Criteria	Rationale to Support (a)(1) Designation Include High Tide Line or Ordinary High Water Mark indicators, when applicable.
N/A	Choose an item.	N/A

Table 2. (a)(2) Interstate Waters

(a)(2) Waters Name	Rationale to Support (a)(2) Designation
N/A	N/A

Table 3. (a)(3) Territorial Seas

(a)(3) Waters Name	Rationale to Support (a)(3) Designation
N/A	N/A

Table 4. (a)(4) Impoundments

(a)(4) Waters Name	Rationale to Support (a)(4) Designation
N/A	N/A
N/A	N/A

Table 5. (a)(5) Tributaries

(a)(5) Waters Name	Flow Regime	(a)(1)-(a)(3) Water Name to which this (a)(5) Tributary Flows	Tributary Breaks	Rationale for (a)(5) Designation and Additional Discussion. Identify flowpath to (a)(1)-(a)(3) water or attach map identifying the flowpath; explain any breaks or flow through excluded/non-jurisdictional features, etc.
Area 8 (Poplar Creek)	Perennial	Fox River	No	Poplar Creek flows into the Fox River directly.
Area 1	Perennial	Fox River	No	Tributary of Poplar Creek, which flows directly into the Fox River.
Area 6	Perennial	Fox River	No	Tributary of Poplar Creek, which flows directly into the Fox River.
N/A	Choose an item.	N/A	Choose an item.	N/A

Table 6. (a)(6) Adjacent Waters

(a)(6) Waters Name	(a)(1)-(a)(5) Water Name to which this Water is Adjacent	Rationale for (a)(6) Designation and Additional Discussion. Identify the type of water and how the limits of jurisdiction were established (e.g., wetland, 87 Manual/Regional Supplement); explain how the 100-year floodplain and/or the distance threshold was determined; whether this water extends beyond a threshold; explain if the water is part of a mosaic, etc.
Area 6A	Area 6	Forested wetland directly abuts Area 6, which has perennial flow.
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Table 7. (a)(7) Waters

SPOE Name	(a)(7) Waters Name	(a)(1)-(a)(3) Water Name to which this Water has a Significant Nexus	Significant Nexus Determination Identify SPOE watershed; discuss whether any similarly situated waters were present and aggregated for SND; discuss data, provide analysis, and summarize how the waters have more than speculative or insubstantial effect on the physical, chemical, or biological integrity of the (a)(1)-(a)(3) water, etc.
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Table 8. (a)(8) Waters

SPOE Name	(a)(8) Waters Name	(a)(1)-(a)(3) Water Name to which this Water has a Significant Nexus	Significant Nexus Determination Identify SPOE watershed; explain how 100-yr floodplain and/or the distance threshold was determined; discuss whether waters were determined to be similarly situated to subject water and aggregated for SND; discuss data, provide analysis, and then summarize how the waters have more than speculative or insubstantial effect the on the physical, chemical, or biological integrity of the (a)(1)-(a)(3) water, etc.
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Non-Jurisdictional Waters

Table 9. Non-Waters/No Significant Nexus

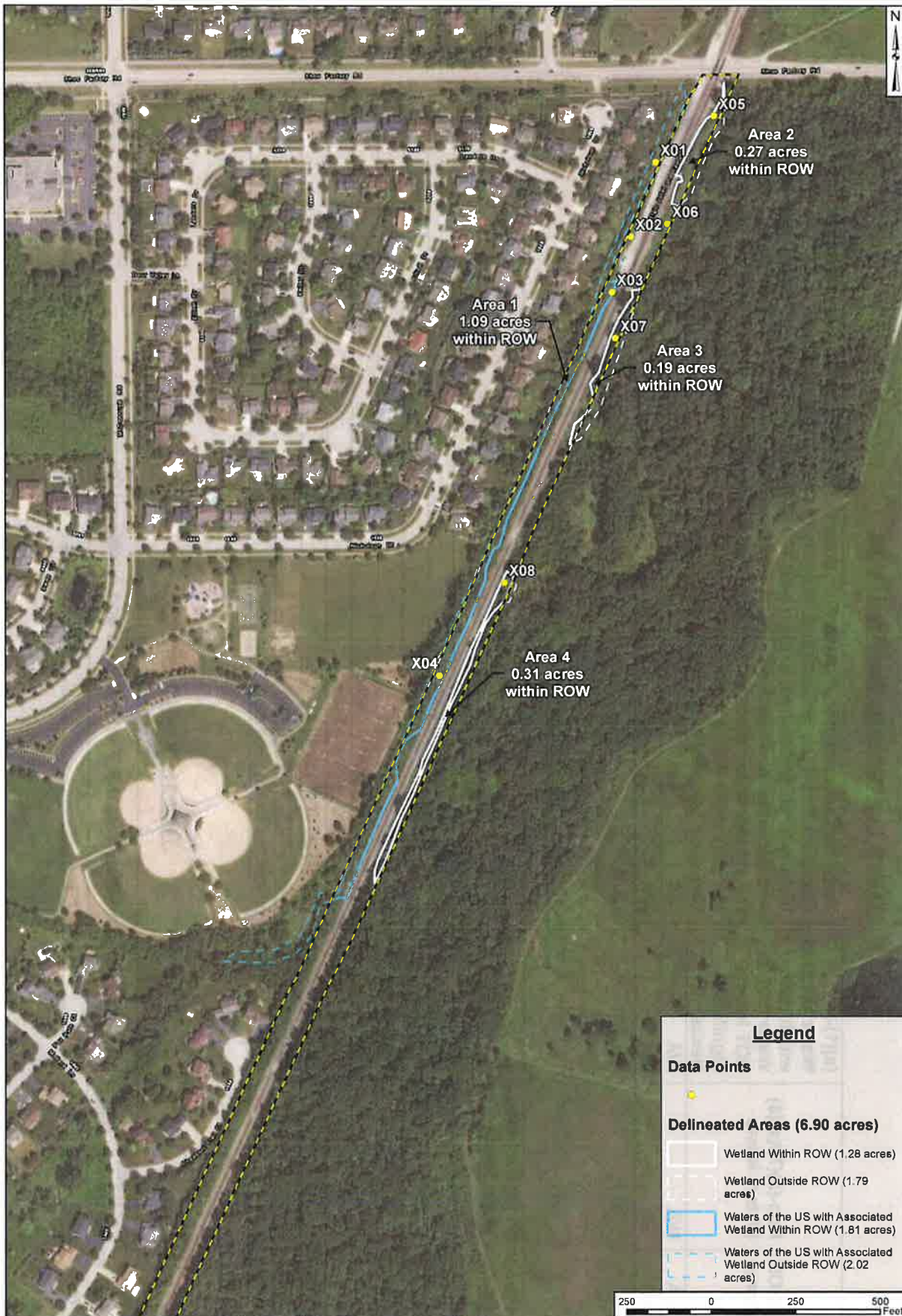
SPOE Name	Non-(a)(7)/(a)(8) Waters Name	(a)(1)-(a)(3) Water Name to which this Water DOES NOT have a Significant Nexus	Basis for Determination that the Functions DO NOT Contribute Significantly to the Chemical, Physical, or Biological Integrity of the (a)(1)-(a)(3) Water. Identify SPOE watershed; explain how 100-yr floodplain and/or the distance threshold was determined; discuss whether waters were determined to be similarly situated to the subject water; discuss data, provide analysis, and summarize how the waters did not have more than a speculative or insubstantial effect on the physical, chemical, or biological integrity of the (a)(1)-(a)(3) water.
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Table 10. Non-Waters/Excluded Waters and Features

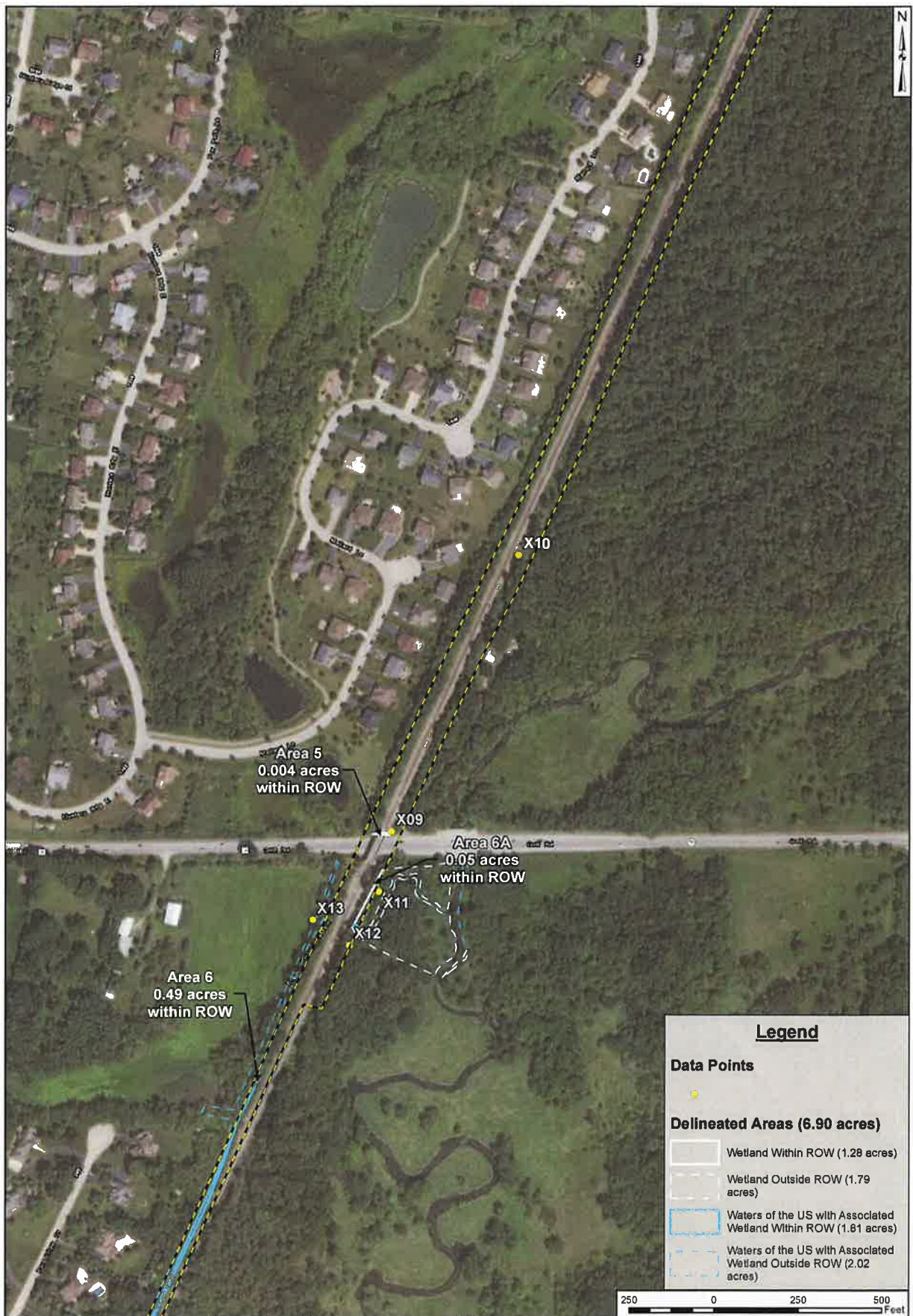
Paragraph (b) Excluded Feature/Water Name	Rationale for Paragraph (b) Excluded Feature/Water and Additional Discussion.
Area 2	Railroad ditch not connected to anything else.
Area 3	Railroad ditch not connected to anything else.
Area 4	Railroad ditch not connected to anything else.
Area 5	Upland roadside ditch.
Area 9	Railroad ditch not connected to anything else.
Area 10	Railroad ditch not connected to anything else.
Area 11	Railroad ditch not connected to anything else.
Area 12	Railroad ditch not connected to anything else.
Area 13	Railroad ditch not connected to anything else.

Table 11. Non-Waters/Other

Other Non-Waters of U.S. Feature/Water Name	Rationale for Non-Waters of U.S. Feature/Water and Additional Discussion.
N/A	N/A

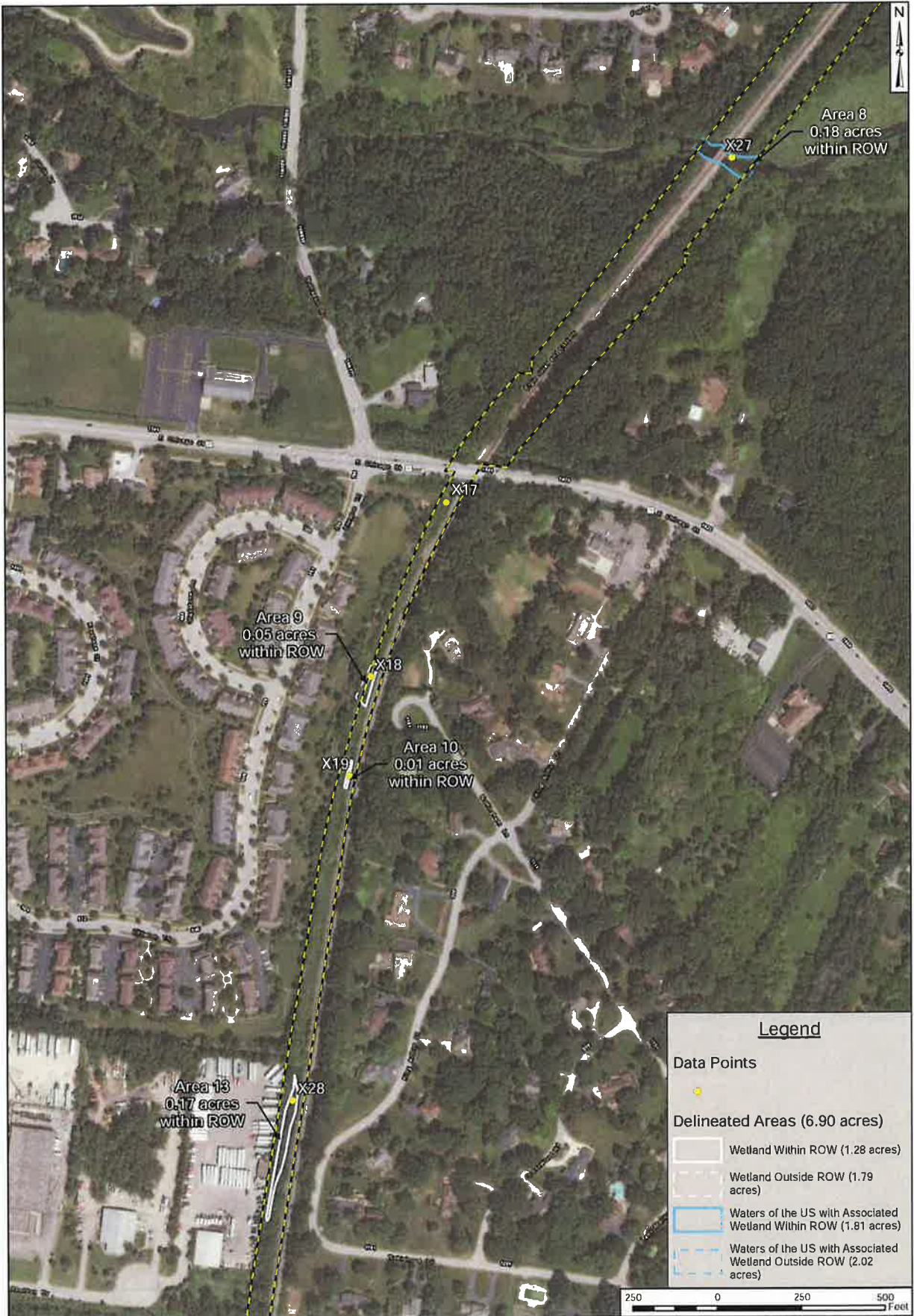


 V3 Companies 7325 Janes Avenue Woodridge, Illinois 60517 630.724.9200 phone 630.724.9202 fax www.v3co.com	PROJECT NO. 18252 CREATED BY AMM DATE 09/10/2018 SCALE See Scale Bar	CLIENT Wisconsin Central Ltd. 17641 S. Ashland Avenue Homewood, Illinois 60430 BASE LAYER DigitalGlobe Aerial Imagery (2017)	TITLE WETLAND DELINEATION MAP SITE Spaulding to South Sutton Siding Extension/Double Track Project MP 37.80 to MP 41.80 Cook County, Illinois	FIGURE 8 A
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 V3 Companies 7325 Janes Avenue Woodridge, Illinois 60517 630.724.9200 phone 630.724.9200 fax www.v3co.com	PROJECT NO. 18252 CREATED BY AMM DATE 09/10/2018 SCALE See Scale Bar	CLIENT Wisconsin Central Ltd. 17641 S. Ashland Avenue Homewood, Illinois 60430 BASE LAYER DigitalGlobe Aerial Imagery (2017)	TITLE WETLAND DELINEATION MAP Spaulding to South Sutton Siding Extension/Double Track Project MP 37.80 to MP 41.80 Cook County, Illinois	FIGURE 8 B
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 V3 Companies 7325 Janes Avenue Woodridge, Illinois 60517 630.724.9200 phone 630.724.9200 fax www.v3co.com	PROJECT NO: 18252 CREATED BY: AMM DATE: 09/10/2018 SCALE: See Scale Bar	CLIENT Wisconsin Central Ltd., 17641 S. Ashland Avenue Homewood, Illinois 60430 BASE LAYER DigitalGlobe Aerial Imagery (2017)	TITLE WETLAND DELINEATION MAP MP 37.80 to MP 41.80 Cook County, Illinois	FIGURE: 8 D
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 V3 Companies 7325 Janes Avenue Woodridge, Illinois 60517 630.724.9200 phone 630.724.9200 fax www.v3co.com	PROJECT NO: 18252 CREATED BY: AMM DATE: 09/10/2018 SCALE: See Scale Bar	CLIENT: Wisconsin Central Ltd. 17641 S. Ashland Avenue Homewood, Illinois 60430 BASE LAYER: DigitalGlobe Aerial Imagery (2017)	TITLE: WETLAND DELINEATION MAP FIGURE: 8 E	FIGURE: 8 E
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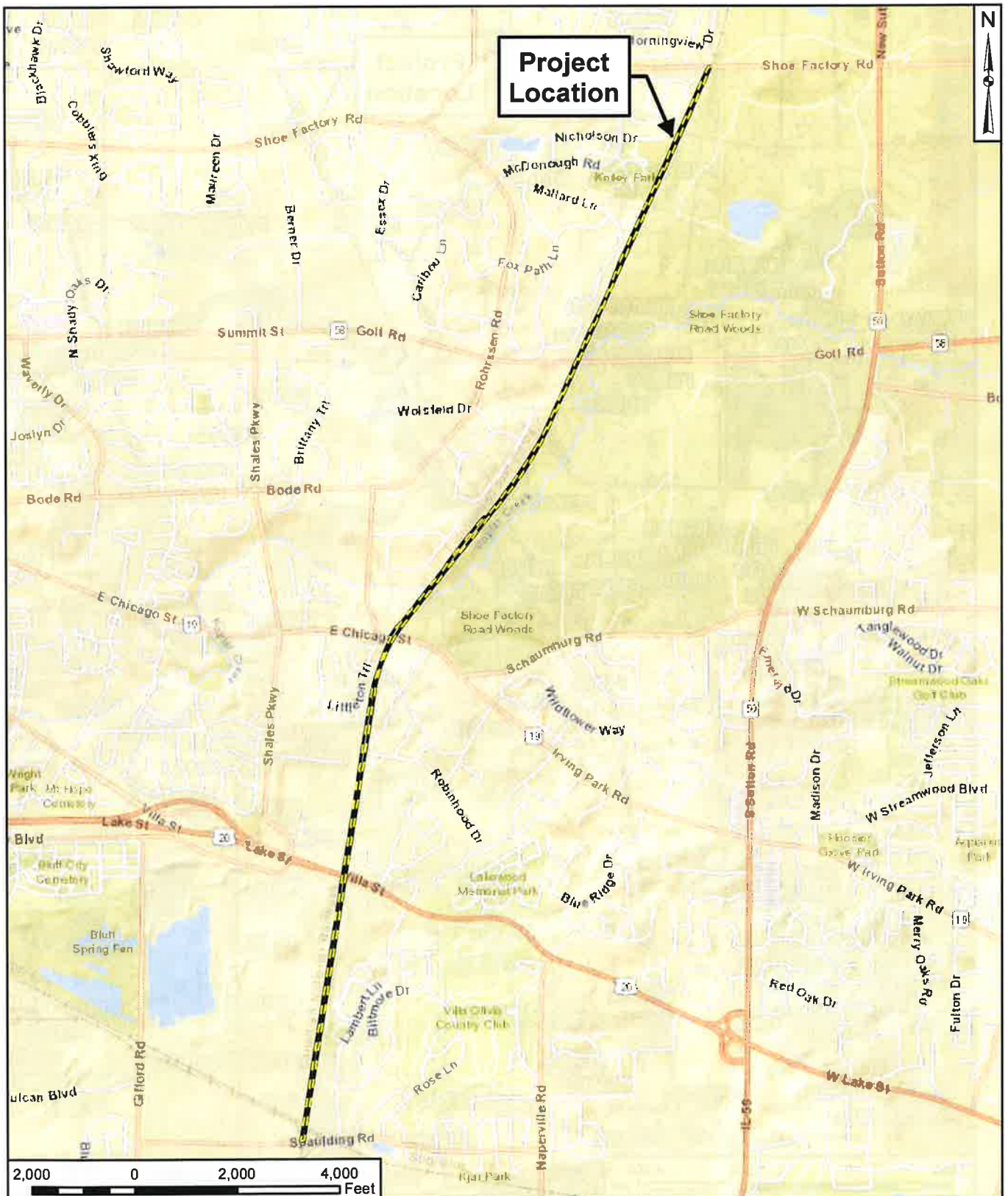
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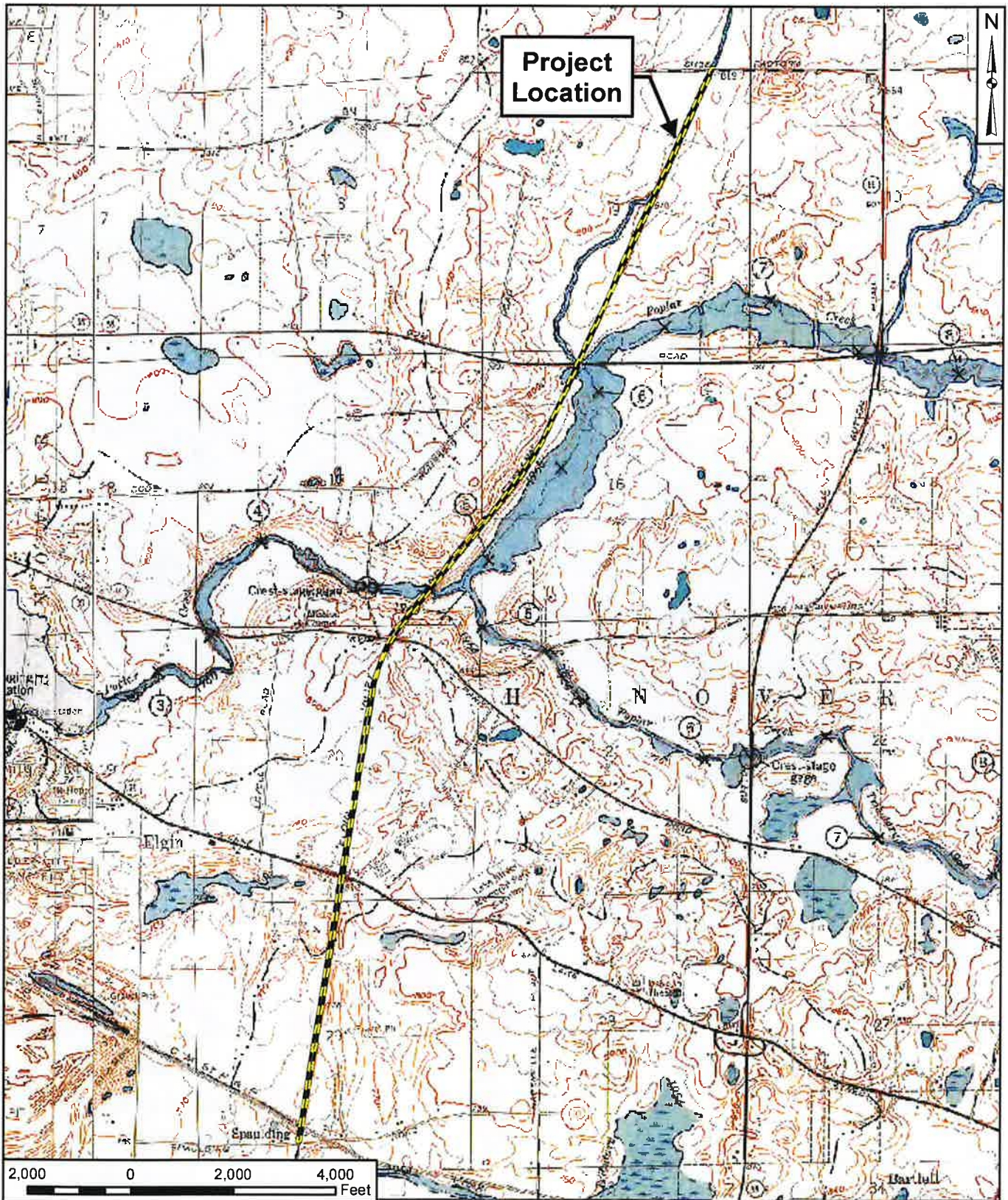
 V3 Companies 7325 Janes Avenue Woodridge, Illinois 60517 630.724.9200 phone 630.724.9200 fax www.v3co.com	PROJECT NO: 18252 CREATED BY: AMM DATE: 09/10/2018 SCALE: See Scale Bar	CLIENT: Wisconsin Central Ltd. 17641 S. Ashland Avenue Homewood, Illinois 60430 BASE LAYER: DigitalGlobe Aerial Imagery (2017)	TITLE: WETLAND DELINEATION MAP Spaulding to South Sutton Siding Extension/Double Track Project MP 37.80 to MP 41.80 Cook County, Illinois FIGURE: 8 F
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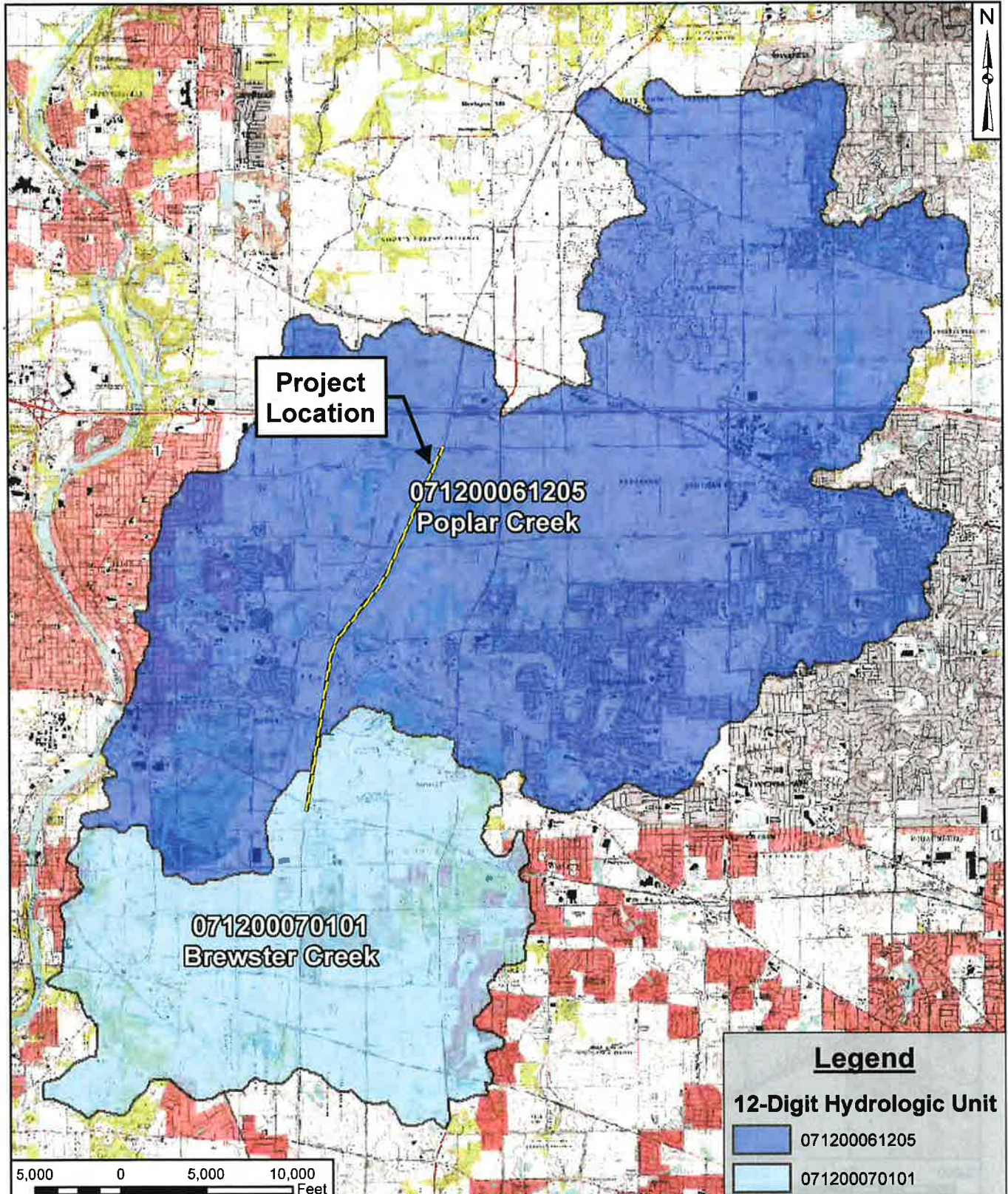
FIGURES



 V3 Companies 7325 Janes Avenue Woodridge, Illinois 60517 630.724.9200 phone 630.724.9202 fax www.v3co.com	PROJECT NO.: 18252 CREATED BY: AMM DATE: 07/05/2018	CLIENT: Wisconsin Central Ltd. 17641 S. Ashland Avenue Homewood, Illinois 60430 BASE LAYER: ESRI World Street Map	TITLE: PROJECT LOCATION MAP SITE: Spaulding to South Sutton Siding Extension/Double Track Project MP 37.80 to MP 41.80 Cook County, Illinois FIGURE: 1	
Visio, Vertere, Virtute... "The Vision To Transform with Excellence"	SCALE: See Scale Bar			



 V3 Companies 7325 Janes Avenue Woodridge, Illinois 60517 630.724.9200 phone 630.724.9202 fax www.v3co.com	PROJECT NO.: 18252 CREATED BY: AMM DATE: 07/05/2018 SCALE: See Scale Bar	CLIENT: Wisconsin Central Ltd. 17641 S. Ashland Avenue Homewood, Illinois 60430 BASE LAYER: USGS Hydrologic Atlas Streamwood Quadrangle (1965)	TITLE: USGS HYDROLOGIC ATLAS SITE: Spaulding to South Sutton Siding Extension/Double Track Project MP 37.80 to MP 41.80 Cook County, Illinois FIGURE: 3
Visio, Vertere, Virtute... "The Vision To Transform with Excellence"	N:\2018\18252\Drawings\ArcGIS\Wetland\FIG3hydro18252.mxd		

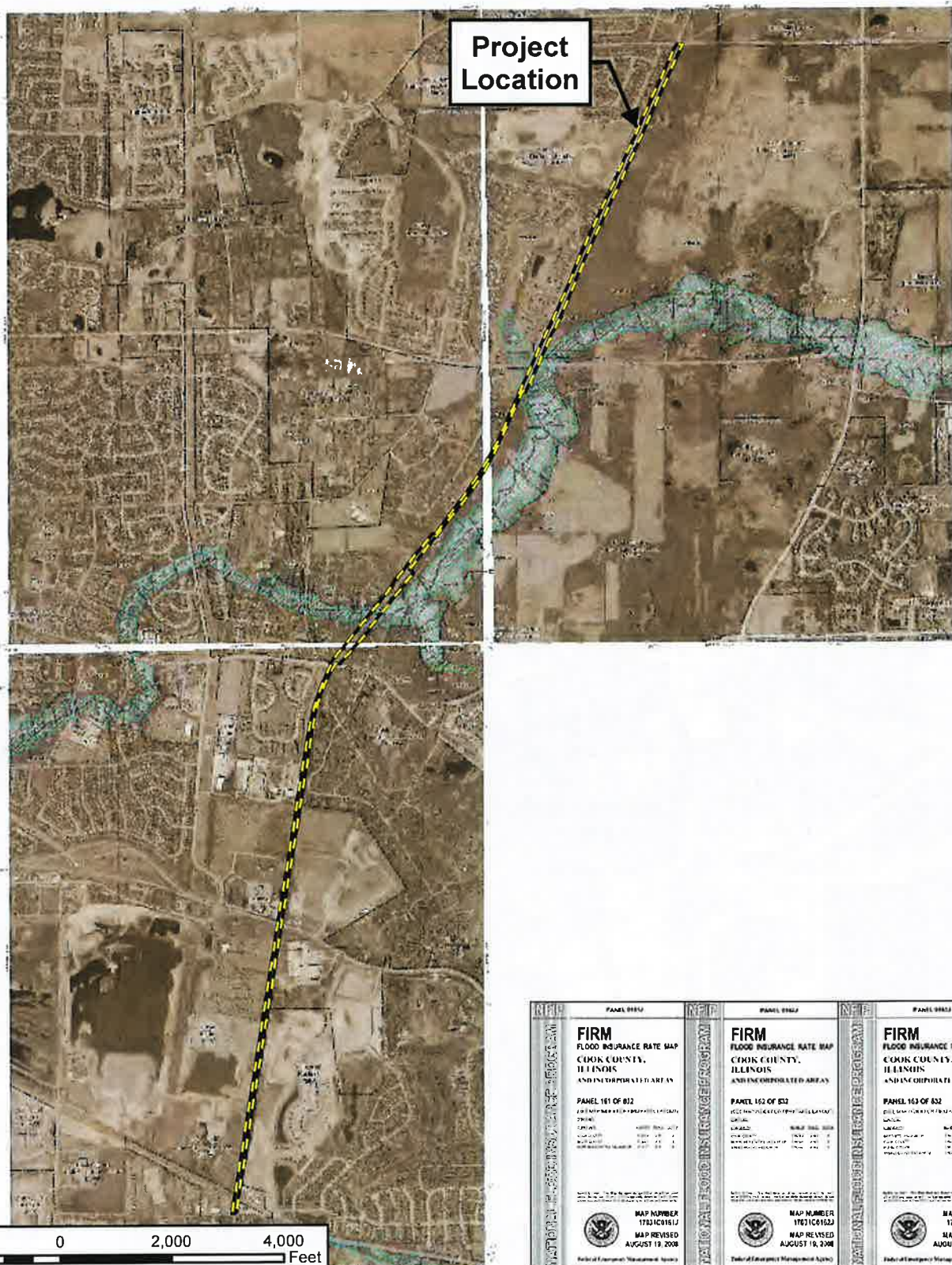


Legend

12-Digit Hydrologic Unit

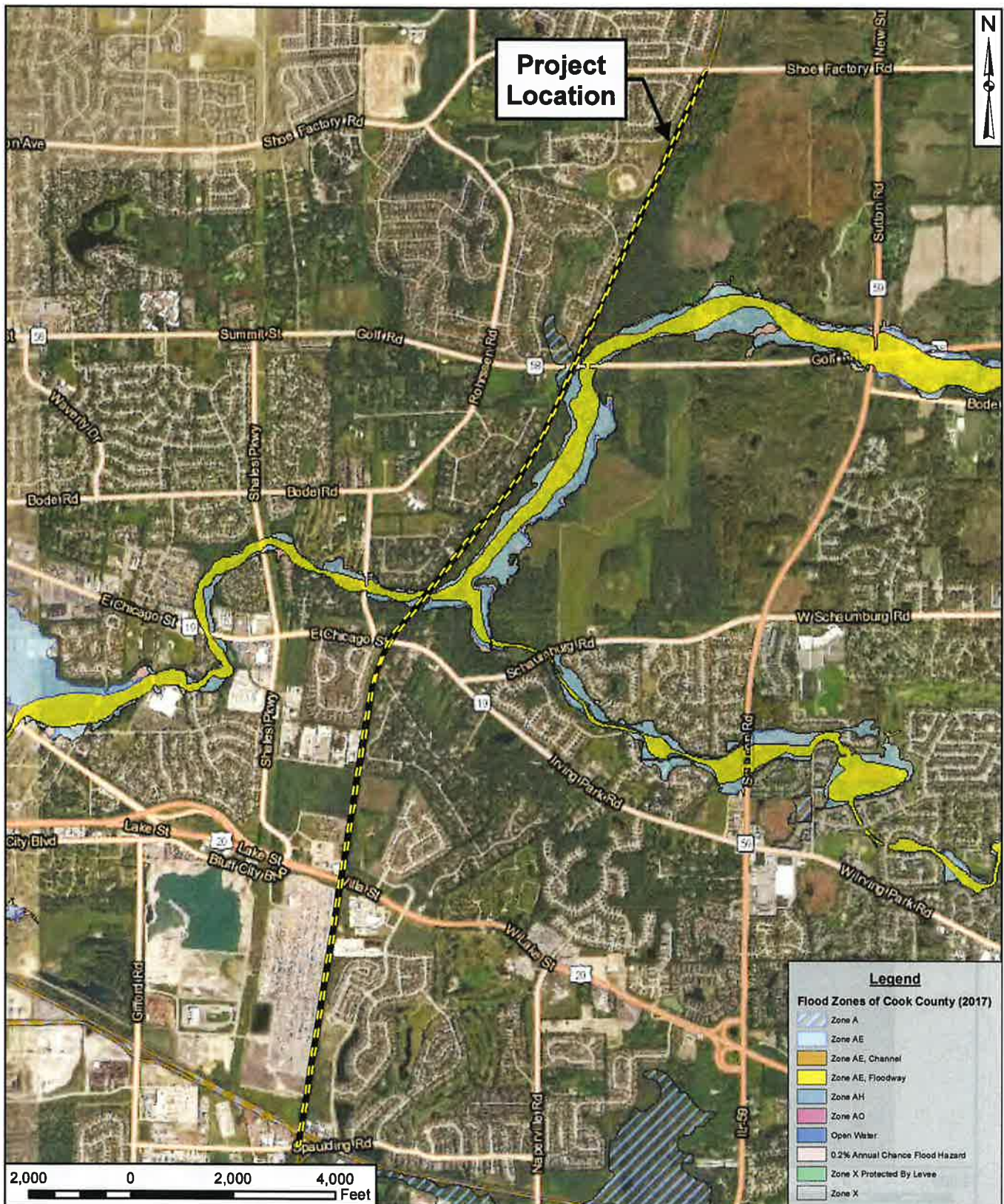
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 V3 Companies 7325 Janes Avenue Woodridge, Illinois 60517 630.724.9200 phone 630.724.9202 fax www.v3co.com Visio, Vertere, Virtute... "The Vision To Transform with Excellence"	PROJECT NO.: 18252	CLIENT: Wisconsin Central Ltd. 17641 S. Ashland Avenue Homewood, Illinois 60430	TITLE: 12-DIGIT HYDROLOGIC UNIT CODE (HUC) MAP	
	CREATED BY: AMM	BASE LAYER: USGS Topographic Map Cook County, Illinois (2002)	SITE: Spaulding to South Sutton Siding Extension/Double Track Project MP 37.80 to MP 41.80 Cook County, Illinois	FIGURE: 4
	DATE: 07/05/2018	SCALE: See Scale Bar	N:\2018\18252\Drawings\ArcGIS\Wetland\FIG4huc18252.mxd	



PANEL 0161J	PANEL 0162J	PANEL 0163J
FIRM FLOOD INSURANCE RATE MAP COOK COUNTY, ILLINOIS AND INCORPORATED AREAS	FIRM FLOOD INSURANCE RATE MAP COOK COUNTY, ILLINOIS AND INCORPORATED AREAS	FIRM FLOOD INSURANCE RATE MAP COOK COUNTY, ILLINOIS AND INCORPORATED AREAS
PANEL 161 OF 832 FIRM NUMBER 17031C0161J MAP REVISED AUGUST 19, 2008	PANEL 162 OF 832 FIRM NUMBER 17031C0162J MAP REVISED AUGUST 19, 2008	PANEL 163 OF 832 FIRM NUMBER 17031C0163J MAP REVISED AUGUST 19, 2008

 V3 Companies 7325 Janes Avenue Woodridge, Illinois 60517 630.724.9200 phone 630.724.9202 fax www.v3co.com Visio, Vertere, Virtute... "The Vision To Transform with Excellence"	PROJECT NO.: 18252	CLIENT: Wisconsin Central Ltd. 17641 S. Ashland Avenue Homewood, Illinois 60430	TITLE: FEMA FLOOD INSURANCE RATE MAP (FIRM)	
	CREATED BY: AMM			
	DATE: 07/26/2018	BASE LAYER: FEMA FIRM Panels 17031C: 0161J, 0162J and 0163J	SITE: Spaulding to South Sutton Siding Extension/Double Track Project MP 37.80 to MP 41.80 Cook County, Illinois	FIGURE: 5
	SCALE: See Scale Bar			



 V3 Companies 7325 Janes Avenue Woodridge, Illinois 60517 630.724.9200 phone 630.724.9202 fax www.v3co.com	PROJECT NO.: 18252 CREATED BY: AMM DATE: 07/05/2018 SCALE: See Scale Bar	CLIENT: Wisconsin Central Ltd. 17641 S. Ashland Avenue Homewood, Illinois 60430 BASE LAYER: DigitalGlobe Aerial Imagery (2017)	TITLE: FLOOD ZONES OF COOK COUNTY, ILLINOIS (2017) MAP SITE: Spaulding to South Sutton Siding Extension/Double Track Project MP 37.80 to MP 41.80 Cook County, Illinois	FIGURE: 6
Visio, Vertere, Virtute... "The Vision To Transform with Excellence"	N:\2018\18252\Drawings\ArcGIS\Wetland\FIG6\FH18252.mxd			





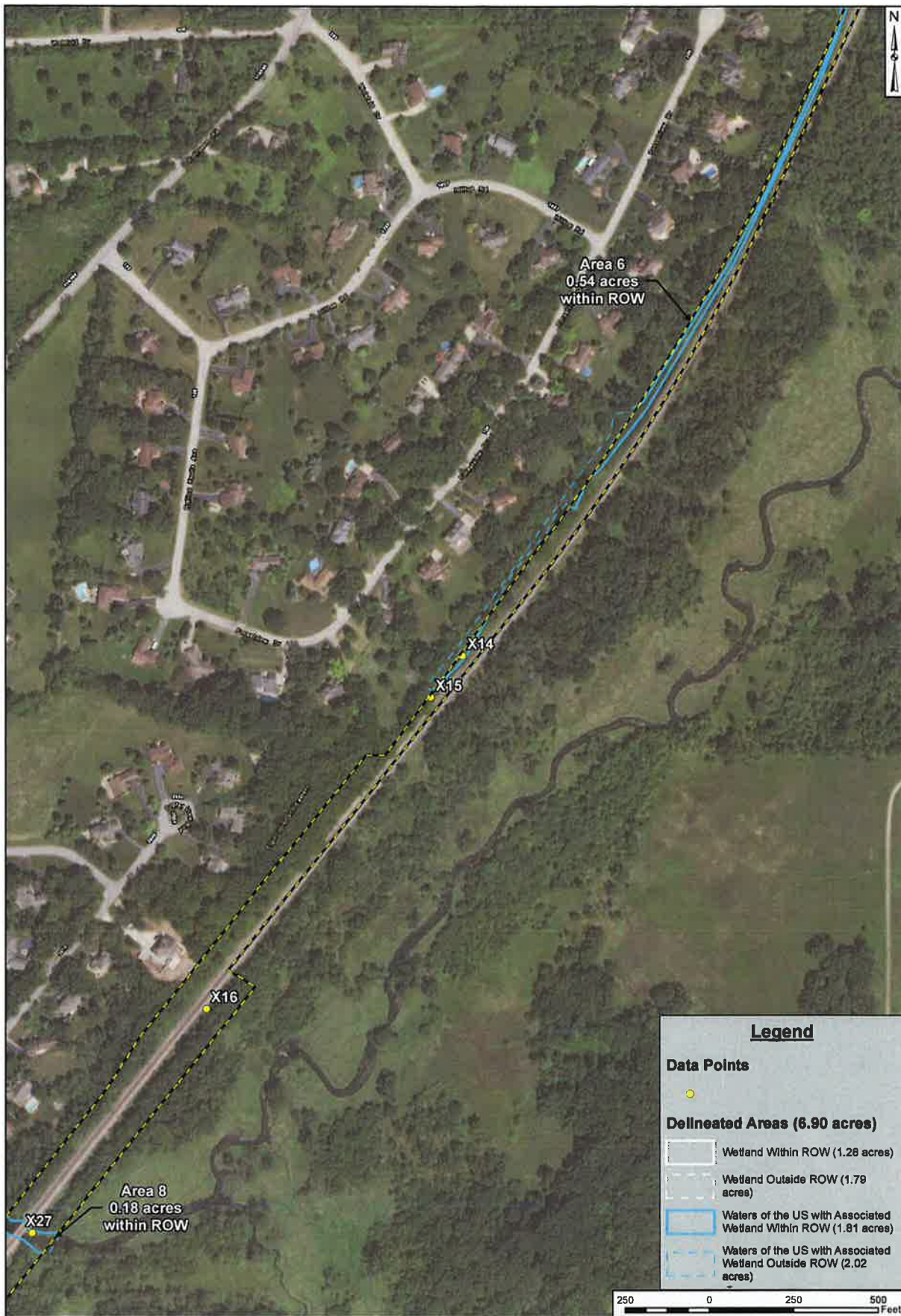
 V3 Companies 7325 Janes Avenue Woodridge, Illinois 60517 630.724.9200 phone 630.724.92020 fax www.v3co.com	PROJECT NO: 18252 CREATED BY: AMM DATE: 09/10/2018 SCALE: See Scale Bar	CLIENT: Wisconsin Central Ltd. 17641 S. Ashland Avenue Homewood, Illinois 60430 BASE LAYER: DigitalGlobe Aerial Imagery (2017)	TITLE: WETLAND DELINEATION MAP Spaulding to South Sutton Siding Extension/Double Track Project MP 37.80 to MP 41.80 Cook County, Illinois	FIGURE: 8 A
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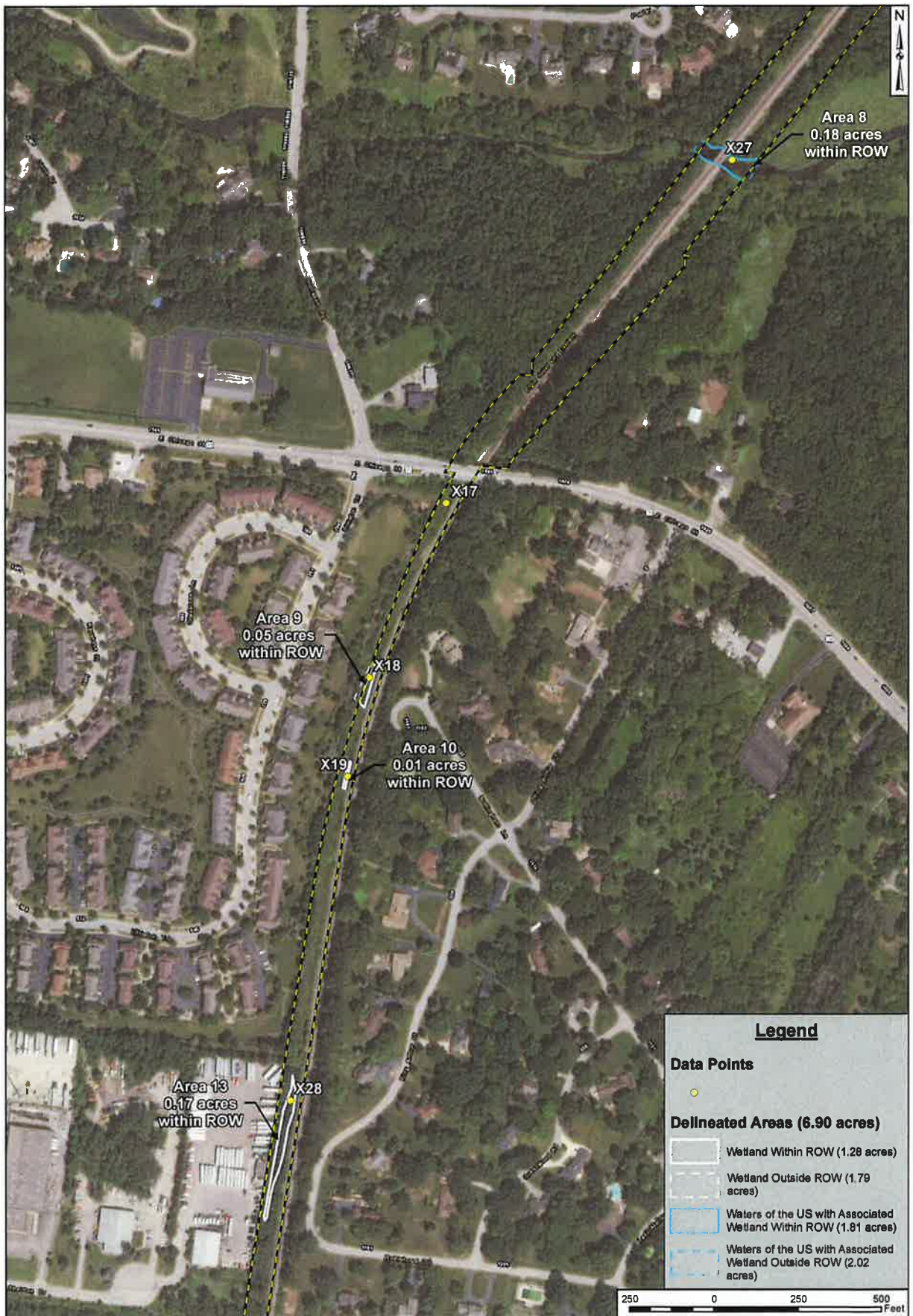
 V3 Companies 7325 Janes Avenue Woodridge, Illinois 60517 630.724.9200 phone 630.724.9200 fax www.v3co.com	PROJECT NO: 18252 CREATED BY: AMM DATE: 09/10/2018 SCALE: See Scale Bar	CLIENT Wisconsin Central Ltd. 17841 S. Ashland Avenue Homewood, Illinois 60430 BASE LAYER: DigitalGlobe Aerial Imagery (2017)	TITLE WETLAND DELINEATION MAP Spaulding to South Sutton Siding Extension/Double Track Project MP 37.80 to MP 41.80 Cook County, Illinois	FIGURE 8 B
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	V3 Companies 7325 Janes Avenue Woodridge, Illinois 60517 630.724.9200 phone 630.724.9200 fax www.v3co.com	PROJECT NO. 18252 CREATED BY AMM DATE 09/10/2018 SCALE See Scale Bar	CLIENT Wisconsin Central Ltd. 17641 S. Ashland Avenue Homewood, Illinois 60430 BASE LAYER DigitalGlobe Aerial Imagery (2017)	TITLE WETLAND DELINEATION MAP Spaulding to South Sutton Siding Extension/Double Track Project MP 37.80 to MP 41.80 Cook County, Illinois	FIGURE 8 C
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 V3 Companies 7325 Janes Avenue Woodridge, Illinois 60517 630.724.9200 phone 630.724.9200 fax www.v3co.com	PROJECT NO. 18252 CREATED BY: AMM DATE: 09/10/2018 SCALE: See Scale Bar	CLIENT Wisconsin Central Ltd. 17641 S. Ashland Avenue Homewood, Illinois 60430 BASE LAYER DigitalGlobe Aerial Imagery (2017)	FILE WETLAND DELINEATION MAP Spaulding to South Sutton Siding Extension/Double Track Project MP 37.80 to MP 41.80 Cook County, Illinois	FIGURE 8 D
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 V3 Companies 7325 Janes Avenue Woodridge, Illinois 60517 630.724.9200 phone 630.724.9200 fax www.v3co.com <i>"The Vision To Transform With Excellence"</i>	PROJECT NO. 18252 CREATED BY AMM DATE 09/10/2018 SCALE See Scale Bar	CLIENT Wisconsin Central Ltd. 17641 S. Ashland Avenue Homewood, Illinois 60430 BASE LAYER DigitalGlobe Aerial Imagery (2017)	TITLE WETLAND DELINEATION MAP Spaulding to South Sutton Siding Extension/Double Track Project MP 37.80 to MP 41.80 Cook County, Illinois	FIGURE 8 E
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 V3 Companies 7325 Janes Avenue Woodridge, Illinois 60517 630.724.9200 phone 630.724.9200 fax www.v3co.com	PROJECT NO. 18252 CREATED BY AMM DATE 09/10/2018 SCALE See Scale Bar	CLIENT Wisconsin Central Ltd. 17641 S. Ashland Avenue Homewood, Illinois 60430 BASE LAYER DigitalGlobe Aerial Imagery (2017)	TITLE WETLAND DELINEATION MAP Spaulding to South Sutton Siding Extension/Double Track Project MP 37.80 to MP 41.80 Cook County, Illinois	FIGURE 8 F
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DEPARTMENT OF THE ARMY
CHICAGO DISTRICT, CORPS OF ENGINEERS
231 SOUTH LA SALLE STREET
CHICAGO, ILLINOIS 60604-1437

REPLY TO
ATTENTION OF:

October 26, 2018

Technical Services Division
Regulatory Branch
LRC-2018-00651

**SUBJECT: Jurisdictional Determination for the Spaulding to South Sutton Siding
Extension/Double Track Project in Hoffman Estates, Cook County, Illinois (Latitude 42.037327,
Longitude -88.220691)**

Kari Harris
Wisconsin Central Ltd. Railroad
17641 South Ashland Ave.
Homewood, Illinois 60430

Dear Ms. Harris:

This is in response to your request that the U.S. Army Corps of Engineers complete a jurisdictional determination for the above-referenced site submitted on your behalf by V3 Companies. The subject project has been assigned number LRC-2018-00651. Please reference this number in all future correspondence concerning this project.

Following a review of the information you submitted, this office has determined that the subject property contains "waters of the United States".

Areas 1, 6, 6A & 8 have been determined to be under the jurisdiction of this office and therefore, subject to Federal regulation.

Areas 2, 3, 4, 5, 9, 10, 11, 12 & 13 are water features Exempt from Federal regulation. Please be informed that this office does not concur with the boundaries of waters not subject to Federal regulation.

This office concurs with the submitted wetland delineation and wetland boundaries at the subject site. In the event an application is submitted for work within jurisdictional areas, a survey of the wetland boundary(s) stamped by a professional surveyor shall accompany the approved wetland delineation.

For a detailed description of our determination please refer to the enclosed decision document. This determination covers only your project as depicted in the Wetland Delineation and Assessment Report dated August 6, 2018, prepared by V3 Companies.

This determination is valid for a period of five (5) years from the date of the letter, unless new information warrants revision of the determination before the expiration date or a District Commander has identified, after public notice and comment, that specific geographic areas with rapidly changing environmental conditions merit re-verification on a more frequent basis.

This letter is considered an approved jurisdictional determination for your subject site. If you object to this determination, you may appeal, according to 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and a Request for Appeal (RFA) form. If you request to appeal the above determination, you must submit a completed RFA form to the Great Lakes/Ohio River Division Office at the following address:

Jacob Siegrist
Regulatory Appeals Review Officer
US Army Corps of Engineers
Great Lakes and Ohio River Division
550 Main Street, Room 10524
Cincinnati, Ohio 45202-3222
Phone: (513) 684-2699 Fax: (513) 684-2460

In order to be accepted, your RFA must be complete, meet the criteria for appeal and be received by the Division Office within sixty (60) days of the date of the NAP. If you concur with the determination in this letter, submittal of the RFA form to the Division office is not necessary.

This determination has been conducted to identify the limits of the Corps Clean Water Act jurisdiction for the particular site identified in this request. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

It is your responsibility to obtain any required state, county, or local approvals for impacts to wetland areas not under the Department of the Army jurisdiction. For projects located in unincorporated and unauthorized municipalities in Cook County, please contact the Metropolitan Water Reclamation District of Greater Chicago at (312) 751-3247. For projects in incorporated areas of Cook County, contact the authorized municipality for information related to the Watershed Management Ordinance.

Pursuant to Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers regulates the discharge of dredged or fill material into waters of the United States, including wetlands. A Department of the Army permit is required for any proposed work involving the discharge of dredged or fill material within the jurisdiction of this office. To initiate the permit process, please submit a joint permit application form along with detailed plans of the proposed work. Information concerning our program, including the application form and an application checklist, can be found at and downloaded from our website:
<http://www.lrc.usace.army.mil/Missions/Regulatory.aspx>

If you have any questions, please contact Mr. Michael J. Machalek of my staff by telephone at (312) 846-5534 or email at Mike.J.Machalek@usace.army.mil.

Sincerely,
Digitally signed by
CHERNICH.KATHLEEN.G.1230
365616
Date: 2018.10.26 16:31:52
-05'00'
Kathleen G. Chernich
Chief, East Section
Regulatory Branch

Enclosures

Copy Furnished w/out Enclosures

Cook County Building and Zoning (Donald Wlodarski)
Metropolitan Water Reclamation District of Greater Chicago (Dan Feltes)
V3 Companies (Tom Slowinski)

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Kari Harris, Wisconsin Central Ltd. Railroad	File Number: LRC-2018-00651	Date: October 26, 2018
Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of Permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of Permission)	B
	PERMIT DENIAL	C
X	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/CECW/Pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

A. INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit or a Letter of Permission (LOP), you may sign the permit document and return it to the district commander for final authorization. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district commander. Your objections must be received by the district commander within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district commander will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district commander will send you a proffered permit for your reconsideration, as indicated in Section B below.

B. PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit or a Letter of Permission (LOP), you may sign the permit document and return it to the district commander for final authorization. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division commander. This form must be received by the division commander within 60 days of the date of this notice.

C. PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division commander. This form must be received by the division commander within 60 days of the date of this notice.

D. APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division commander. This form must be received by the division commander within 60 days of the date of this notice.

E. PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

Regulatory Branch
Chicago District Corps of Engineers
231 South LaSalle Street, Suite 1500
Chicago, IL 60604-1437
Phone: (312) 846-5530
Fax: (312) 353-4110

If you only have questions regarding the appeal process you may also contact:

Jacob Siegrist
Regulatory Appeals Review Officer
US Army Corps of Engineers
Great Lakes and Ohio River Division
550 Main Street, Room 10524
Cincinnati, Ohio 45202-3222
Phone: (513) 684-2699 Fax: (513) 684-2460

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Commanders personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15-day notice of any site investigation, and will have the opportunity to participate in all site investigations.

 Signature of appellant or agent.	Date:	Telephone number:
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APPENDIX 3

90% ENGINEERING PLANS

APPENDIX 4

USACE WETLAND/WATERS IMPACTS EXHIBIT



AREA	TOTAL AREA WITHIN ROW (AC)	WETLAND/WOVS IMPACTS (AC)	MITIGATION REQ'D (1.5x1 RATIO; AC)	BUFFER TYPE	TOTAL BUFFER AREA (AC)	BUFFER IMPACTS (AC)
1	1.09	0.95	1.43	FUNCTIONAL	7.04	0.96
				NON-FUNCTIONAL	2.38	0.26
6	0.54	0.28	0.42	FUNCTIONAL	7.75	1.94
				NON-FUNCTIONAL	1.62	0.17
8	0.18	0.01	0.02	FUNCTIONAL	0.83	0.04
				NON-FUNCTIONAL	0.20	0.00
TOTAL	1.81	1.24	1.87			

LEGEND

IMPACTS WITHIN BUFFER

WETLAND / WATERS OF US IMPACT

GRADING LIMITS



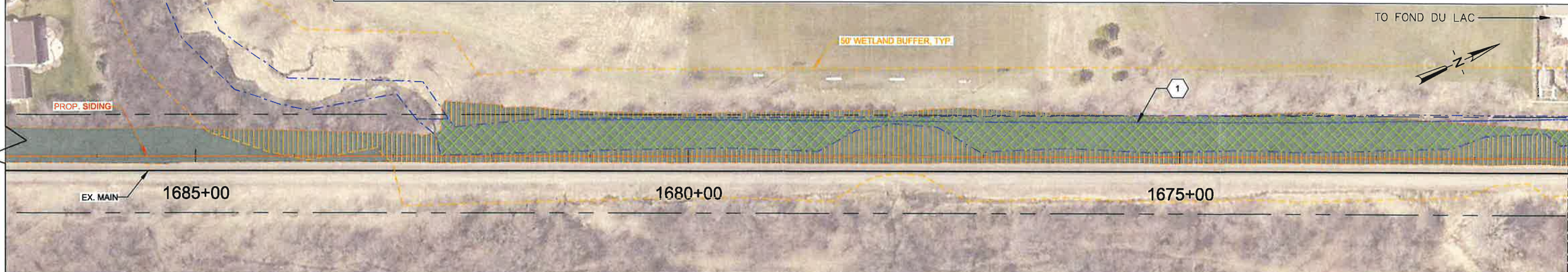
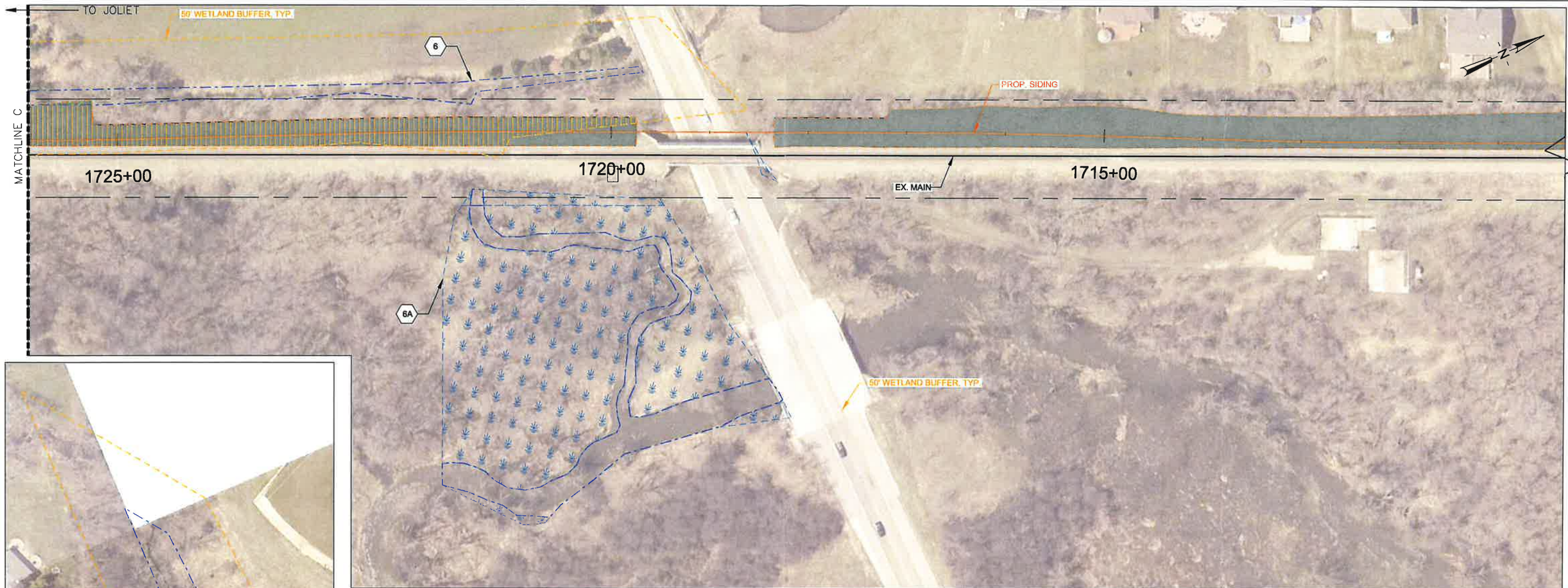
WISCONSIN CENTRAL LTD.
CHICAGO DIVISION
LEIGHTON SUB
ELGIN, IL

**SPAULDING TO SUTTON DOUBLE TRACK
USACE WETLAND/WATERS IMPACTS
SHEET 1 OF 3**

OFFICE OF DESIGN & CONSTRUCTION

DRAWN BY: DCB SCALE: 1" TO 100' DWG NO:

CHECKED BY: NKS DATE: 19 DEC 2018 FILE:



AREA	TOTAL AREA WITHIN ROW (AC)	WETLAND/WOUS IMPACTS (AC)	MITIGATION REQ'D (1.5x1 RATIO; AC)	BUFFER TYPE	TOTAL BUFFER AREA (AC)	BUFFER IMPACTS (AC)
1	1.09	0.95	1.43	FUNCTIONAL	7.04	0.96
				NON-FUNCTIONAL	2.38	0.26
6	0.54	0.28	0.42	FUNCTIONAL	7.75	1.94
				NON-FUNCTIONAL	1.62	0.17
8	0.18	0.01	0.02	FUNCTIONAL	0.83	0.04
				NON-FUNCTIONAL	0.20	0.00
TOTAL	1.81	1.24	1.87			

LEGEND

IMPACTS WITHIN BUFFER

WETLAND / WATERS OF US IMPACT

GRADING LIMITS

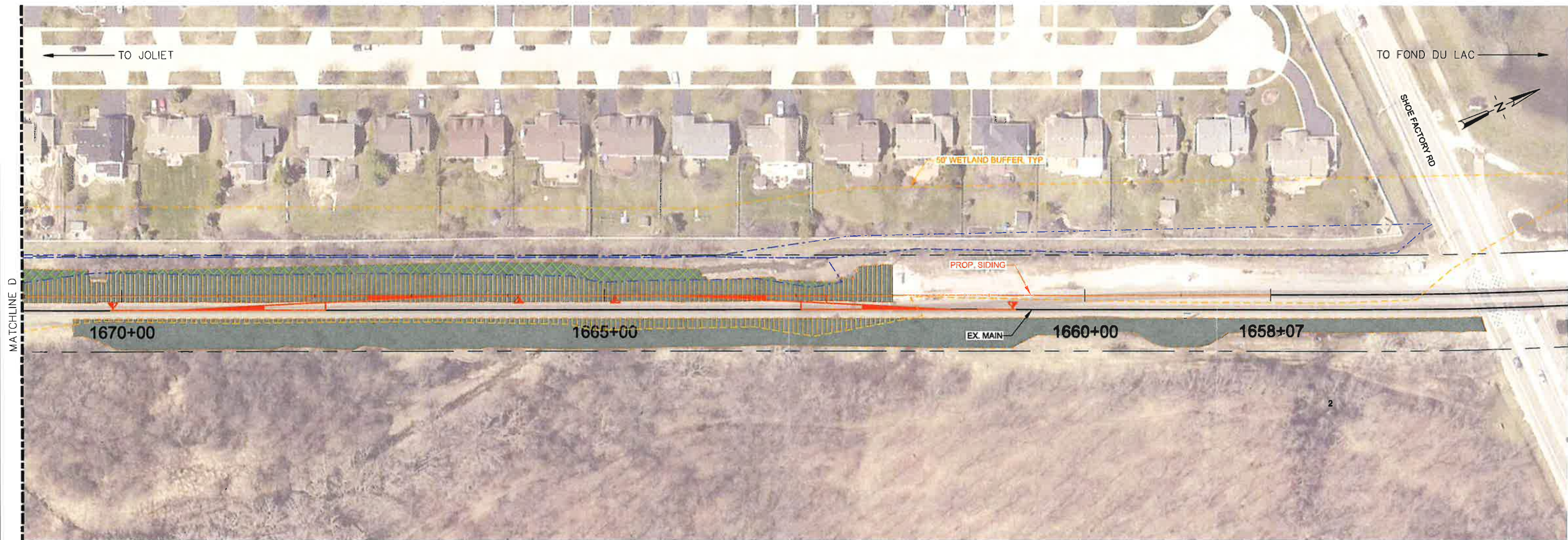


SOUTHERN REGION

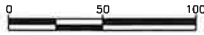
WISCONSIN CENTRAL LTD.
 CHICAGO DIVISION
 LEIGHTON SUB
 ELGIN, IL

**SPAULDING TO SUTTON DOUBLE TRACK
 USACE WETLAND/WATERS IMPACTS
 SHEET 2 OF 3**

OFFICE OF DESIGN & CONSTRUCTION
 DRAWN BY: DCB/SCALE: 1" TO 100' DWG NO:
 CHECKED BY: NKS/DATE: 19 DEC 2018 FILE:



AREA	TOTAL AREA WITHIN ROW (AC)	WETLAND/WOUS IMPACTS (AC)	MITIGATION REQ'D (1.5x1 RATIO; AC)	BUFFER TYPE	TOTAL BUFFER AREA (AC)	BUFFER IMPACTS (AC)
1	1.09	0.95	1.43	FUNCTIONAL	7.04	0.96
				NON-FUNCTIONAL	2.38	0.26
6	0.54	0.28	0.42	FUNCTIONAL	7.75	1.94
				NON-FUNCTIONAL	1.62	0.17
8	0.18	0.01	0.02	FUNCTIONAL	0.83	0.04
				NON-FUNCTIONAL	0.20	0.00
TOTAL	1.81	1.24	1.87			



WISCONSIN CENTRAL LTD.
CHICAGO DIVISION
LEIGHTON SUB
ELGIN, IL

**SPAULDING TO SUTTON DOUBLE TRACK
USACE WETLAND/WATERS IMPACTS
SHEET 3 OF 3**

OFFICE OF DESIGN & CONSTRUCTION
DRAWN BY: DCB | SCALE: 1" TO 100' | DWG NO:
CHECKED BY: NKS | DATE: 19 DEC 2018 | FILE:

APPENDIX 5

**USFWS AND IDNR
THREATENED & ENDANGERED SPECIES
COORDINATION**

U.S. FISH AND WILDLIFE SERVICE: SECTION 7 CONSULTATION

Project: Spaulding to South Sutton Siding Extension/Double Track Project, MP 37.80 to MP 41.80, Hoffman Estates, Cook County, Illinois (#18252)

Analysis conducted by: Alicia Metzger, V3 Companies, July 25, 2018

Site Description: The project area consists of railroad tracks and adjacent right of way areas. Poplar Creek is located throughout the northern portion of the project area. The adjoining properties consist of forest preserve properties, residential homes, recreational parks and industrial and commercial properties.

SPECIES	STATUS	HABITAT	SUITABLE HABITAT PRESENT?	CONCLUSION
Rattlesnake-master borer moth (<i>Papaipema eryngii</i>)	Candidate	Undisturbed prairie and woodland openings containing their only food source, rattlesnake-master (<i>Eryngium yuccifolium</i>).	No, suitable habitat is not present. There are no prairies in the project area.	Species and habitat not present. No further consultation is required.
Eastern massasauga (<i>Sistrurus catenatus</i>)	Threatened	Wet areas including wet prairies, marshes, and low areas along rivers and lakes.	No, suitable habitat is not present. The Eastern massasauga is not found within Poplar Creek.	Species and habitat not present. No further consultation is required.
Eastern prairie fringed orchid (<i>Platanthera leucophaea</i>)	Threatened	Mesic prairies to wetlands such as sedge meadows, marsh edges, and bogs with full sun and little or no woody encroachment.	No, suitable habitat is not present. There are no prairies in the project area.	Species and habitat not present. No further consultation is required.
Mead's milkweed (<i>Asclepias meadii</i>)	Threatened	Mesic to dry mesic upland tallgrass prairie or glade habitat adapted to drought and fire. Persists in stable late-successional prairie.	No, suitable habitat is not present. There are no prairies in the project area.	Species and habitat not present. No further consultation is required.
Prairie bush clover (<i>Lespedeza leptostachya</i>)	Threatened	Dry to mesic prairies with gravelly soils.	No, suitable habitat is not present. There are no prairies in the project area.	Species and habitat not present. No further consultation is required.
Rufa Red knot (<i>Calidris canutus rufa</i>)	Threatened	Coastal areas and large wetland complexes during migratory window of May 1-September 30	No, suitable habitat is not present. There are no coastal areas or large wetland complexes in the project area.	Species and habitat not present. No further consultation is required.
Northern long-eared bat (<i>Myotis septentrionalis</i>)	Threatened	Small crevices and cavities in caves, mines, and under the bark of dead and live trees.	No, suitable habitat is not present. The trees within the project area would not support this species.	Species and habitat not present. No further consultation is required.
Piping plover (<i>Charadrius melodus</i>)	Endangered	Lakeshore beaches along Lake Michigan.	No, suitable habitat is not present. The project area is not located on Lake Michigan.	Species and habitat not present. No further consultation is required.

SPECIES	STATUS	HABITAT	SUITABLE HABITAT PRESENT?	CONCLUSION
Hine's emerald dragonfly (<i>Somatochlora hineana</i>)	Endangered	Spring fed wetlands, wet meadows, and marshes within the <u>Designated Critical Habitat</u> areas.	No, suitable habitat is not present. The project area is not within the Designated Critical Habitat area.	Species and habitat not present. No further consultation is required.
Leafy-prairie clover (<i>Dalea foliosa</i>)	Endangered	Prairie remnants with thin soil over limestone along the Des Plaines River.	No, suitable habitat is not present. There are no prairies in the project area.	Species and habitat not present. No further consultation is required.
Rusty patched bumble bee (<i>Bombus affinis</i>)	Endangered	Grasslands with flowering plants from April – October, underground rodent cavities or clumps of grasses above ground as nesting sites and undisturbed soil for hibernating queens to overwinter; <u>High Potential Zones</u>	No, suitable habitat is not present. The project area is not located within a High Potential Zone.	Species and habitat not present. No further consultation is required.

Conclusion: Species and critical habitat are not present. No further consultation is required.



Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov

Bruce Rauner, Governor

Wayne A. Rosenthal, Director

August 8, 2018

Mrs. Metzger
7325 Janes Avenue
Woodridge, IL 60517

**RE: CN Railroad Siding Project
Endangered Species Consultation Program
EcoCAT Review #1900628**

Dear Mrs. Metzger:

The Department has received your submission for this project for the purposes of consultation pursuant to the *Illinois Endangered Species Protection Act* [520 ILCS 10/11], the *Illinois Natural Areas Preservation Act* [525 ILCS 30/17], and Title 17 *Illinois Administrative Code* Part 1075. Additionally, the Department may offer advice and recommendations for species covered under the *Fish & Aquatic Life Code* [515 ILCS 5, *et seq.*]; the *Illinois Wildlife Code* [520 ILCS 5, *et seq.*]; and the *Herptiles-Herps Act* [510 ILCS 69].

The proposed action consists of CN Railroad adding side tracks at various points throughout the project corridor.

EcoCAT indicates a record of the **rusty-patched bumble bee** (*Bombus affinis*), which was federally-listed as endangered on March 21, 2017, in the vicinity of the project area. In accordance with State law, it was automatically placed on the *Illinois Endangered Species List*. The rusty-patched bumble bee is found in grasslands with flowering plants from April to October, and nests underground in abandoned rodent burrows or above ground in clumps of grass. The Department recommends work that disturbs the ground or may removing flowering plants be done between October 1st and April 1st to avoid potential impacts. If work must be conducted outside these dates there is a chance the project could disturb a nest, in which case, the Department suggest a field visit be performed by a qualified individual (biologist, entomologist, or others who have been trained accordingly) to look for rusty-patched bumble bee nests sites. This is not the only species of bee in the area, so a positive ID of the rusty-patched bumble bee is needed before coordination with the Department would need to be initiated. **If** the bee is discovered, the Department also recommends consultation with the US Fish & Wildlife Service regarding potential liability which may result from excavation.

The Department recommends the project proponent review the USFWS rusty-patched bumble bee website: <https://www.fws.gov/midwest/endangered/insects/rpbb/index.html> This site offers life history and bee surveyor/researcher information.

EcoCAT also indicates a portion of this project falls within the Buff Springs Fen Class III Groundwater recharge area, which protects the integrity of the Bluff Springs Fen Nature Preserve. Class III

Groundwaters are groundwaters that are particularly sensitive and ecologically vital. The modification of groundwater quality and quantity which may affect conditions within a Nature Preserve is prohibited. The Department recommends that BMPs be implemented to ensure that the quality and quantity of groundwater not be adversely affected to avoid potential liability on the part of the applicant.

Given the above recommendations are adopted, the Department has determined that impacts are unlikely. Please notify the Department if the project will be modified to include these recommendations.

Consultation on the part of the Department is closed, unless V3 Companies desires additional information or advice related to this proposal. Consultation for Part 1075 is valid for two years unless new information becomes available which was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the action has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal, and should not be regarded as a final statement on the project being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are unexpectedly encountered during the project's implementation, the applicant must comply with the applicable statutes and regulations.

Please contact me with any questions about this review.

Sincerely,

A handwritten signature in black ink, reading "Bradley Hayes". The signature is fluid and cursive, with a long horizontal stroke extending from the end of the name.

Bradley Hayes
Resource Planner
Impact Assessment Section
Department of Natural Resources
(217) 787-0031
bradley.hayes@illinois.gov

Applicant: V3 Companies
Contact: Alicia Metzger
Address: 7325 Janes Avenue
Woodridge, IL 60517

IDNR Project Number: 1900628
Date: 07/19/2018
Alternate Number: 18252

Project: CN Railroad Siding Project
Address: Shoe Factory Road, Hoffman Estates

Description: CN Railroad proposes to add side tracks at various points throughout the project corridor.

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Bluff Springs Fen Class III Groundwater Site
Bluff Spring Fen INAI Site
Shoe Factory Road Prairie INAI Site
Bluff Spring Fen Nature Preserve
Shoe Factory Road Prairie Nature Preserve
Prairie Bush Clover (*Lespedeza leptostachya*)
Rusty Patched Bumble Bee (*Bombus affinis*)
Rusty Patched Bumble Bee (*Bombus affinis*)
Slippershell (*Alasmodonta viridis*)
Woolly Milkweed (*Asclepias lanuginosa*)
Yellow-Headed Blackbird (*Xanthocephalus xanthocephalus*)

An IDNR staff member will evaluate this information and contact you to request additional information or to terminate consultation if adverse effects are unlikely.

Location

The applicant is responsible for the accuracy of the location submitted for the project.



County: Cook

Township, Range, Section:

41N, 9E, 4
41N, 9E, 9
41N, 9E, 16
41N, 9E, 17
41N, 9E, 20
41N, 9E, 29

IL Department of Natural Resources
Contact
Bradley Hayes
217-785-5500
Division of Ecosystems & Environment

Government Jurisdiction
IL Environmental Protection Agency
Bureau of Water Quality
1021 N Grand Ave East
PO Box 19276
Springfield, Illinois 62794

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

Terms of Use

By using this website, you acknowledge that you have read and agree to these terms. These terms may be revised by IDNR as necessary. If you continue to use the EcoCAT application after we post changes to these terms, it will mean that you accept such changes. If at any time you do not accept the Terms of Use, you may not continue to use the website.

1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.

2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.

3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

Security

EcoCAT operates on a state of Illinois computer system. We may use software to monitor traffic and to identify unauthorized attempts to upload, download, or change information, to cause harm or otherwise to damage this site. Unauthorized attempts to upload, download, or change information on this server is strictly prohibited by law.

Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

Privacy

EcoCAT generates a public record subject to disclosure under the Freedom of Information Act. Otherwise, IDNR uses the information submitted to EcoCAT solely for internal tracking purposes.

Attachment B

Petition to Reopen

FD 35087 Sub-No. 8

CN > Media > News > News Articles

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News

News Articles

CN targeting record C\$3.2 billion capital program in 2018

Investment up C\$500 million compared to last year; plan includes new spending on capacity projects to add resiliency to network

MONTREAL, Jan. 23, 2018 /CNW/ - CN (TSX: CNR) (NYSE: CNI) today announced its planned C\$3.2 billion capital program will focus on key capacity projects to meet growing freight demand and continued investment in infrastructure maintenance to enhance safety and efficiency.

"CN is investing more than ever before in the safety, efficiency and resiliency of our network," said Luc Jobin, CN president and chief executive officer. "These record investments, a substantial portion of which will go to new capacity and growth projects, will improve our network fluidity, allowing us to deliver superior service to meet our customers' growing freight volumes."

For the third straight year, CN plans to invest approximately C\$1.6 billion on track and railway infrastructure maintenance to support safe and efficient operations. The planned work includes the replacement of 2.1 million rail ties and more than 600 miles of rail, plus work on bridges and other general track maintenance.

Approximately C\$400 million is expected to be spent on equipment, including the acquisition of new high horsepower locomotives. A further C\$800 million is targeted towards initiatives to increase capacity and enable growth, such as track infrastructure expansion, investments in yards and in intermodal terminals; and on information technology to improve safety performance, operational efficiency and customer service.

More specifically, major capacity and equipment investments include:

Sixty new GE locomotives, the first deliveries from a three-year order of 200 new units

Double track and siding extensions in the West Coast to Chicago corridors

Intermodal equipment and infrastructure in Toronto, Memphis, Tenn., Joliet, Ill., and other terminals

The Company plans to invest approximately C\$400 million in 2018 on the implementation of Positive Train Control (PTC) along 3,500 route miles of its U.S. network. CN plans to invest a total of US\$1.4 billion on PTC capital expenditures by 2020.

"CN's growth continues to outpace the economy," Jobin said. "With our 2018 capital program and ongoing hiring, we are focused on meeting the needs of our customers. We have confidence in the North American economy and in our ability to help our customers grow their businesses."

Forward-Looking Statements

Certain statements included in this news release constitute "forward-looking statements" within the meaning of

reasonable at the time they were made, subject to greater uncertainty. Forward-looking statements may be identified by the use of terminology such as "believes," "expects," "anticipates," "assumes," "outlook," "plans," "targets," or other similar words.

Forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties and other factors which may cause the actual results or performance of the Company to be materially different from the outlook or any future results or performance implied by such statements. Accordingly, readers are advised not to place undue reliance on forward-looking statements. Important risk factors that could affect the forward-looking statements include, but are not limited to, the effects of general economic and business conditions; industry competition; inflation, currency and interest rate fluctuations; changes in fuel prices; legislative and/or regulatory developments; compliance with environmental laws and regulations; actions by regulators; increases in maintenance and operating costs; security threats; reliance on technology and related cybersecurity risk; trade restrictions or other changes to international trade arrangements; transportation of hazardous materials; various events which could disrupt operations, including natural events such as severe weather, droughts, fires, floods and earthquakes; climate change; labor negotiations and disruptions; environmental claims; uncertainties of investigations, proceedings or other types of claims and litigation; risks and liabilities arising from derailments; timing and completion of capital programs; and other risks detailed from time to time in reports filed by CN with securities regulators in Canada and the United States. Reference should be made to Management's Discussion and Analysis in CN's annual and interim reports, Annual Information Form and Form 40-F, filed with Canadian and U.S. securities regulators and available on CN's website, for a description of major risk factors.

Forward-looking statements reflect information as of the date on which they are made. CN assumes no obligation to update or revise forward-looking statements to reflect future events, changes in circumstances, or changes in beliefs, unless required by applicable securities laws. In the event CN does update any forward-looking statement, no inference should be made that CN will make additional updates with respect to that statement, related matters, or any other forward-looking statement.

CN is a true backbone of the economy whose team of approximately 24,000 railroaders transports more than C\$250 billion worth of goods annually for a wide range of business sectors, ranging from resource products to manufactured products to consumer goods, across a rail network of approximately 20,000 route-miles spanning Canada and mid-America. CN – Canadian National Railway Company, along with its operating railway subsidiaries – serves the cities and ports of Vancouver, Prince Rupert, B.C., Montreal, Halifax, New Orleans, and Mobile, Ala., and the metropolitan areas of Toronto, Edmonton, Winnipeg, Calgary, Chicago, Memphis, Detroit, Duluth, Minn./Superior, Wis., and Jackson, Miss., with connections to all points in North America. For more information about CN, visit the Company's website at www.cn.ca.

SOURCE CN

Media: Patrick Waldron, Senior Manager, Media Relations, (514) 399-8803; Investment Community: Paul Butcher, Vice-President, Investor Relations, (514) 399-0052

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Attachment C

Petition to Reopen

FD 35087 Sub-No. 8

[National Energy Board](#)
[Home](#) → [Energy Information](#) → [Statistics & Analysis](#) → [Crude Oil and Petroleum Products](#)
[→ Canadian Crude Oil Exports by Rail – Monthly Data](#)

Canadian Crude Oil Exports by Rail – Monthly Data

This data is for Canadian exports only. Provincial and domestic breakdowns of this data are not available. These statistics are provided in EXCEL spreadsheet format and updated every month. Data prior to 2012 is not available for confidentiality reasons. Please subscribe to our [RSS Feeds](#) to be notified when new data tables are published.

For further information, contact request.demande@neb-one.gc.ca.

[Canadian Crude Oil Exports by Rail – Monthly Data \[EXCEL 52 KB\]](#)

Canadian Crude Oil Exports by Rail – Monthly Data

Year	Month	Volume (m ³)	Volume (m ³ per day)	Volume (bbl)	Volume (bbl per day)
2019	January	1,603,480	51,725	10,090,472	325,499
2018	December	1,742,842	56,221	10,967,456	353,789
	November	1,575,116	52,504	9,911,979	330,399
	October	1,661,418	53,594	10,455,066	337,260
	September	1,305,572	43,519	8,215,778	273,859
	August	1,153,709	37,216	7,260,124	234,198
	July	1,037,545	33,469	6,529,120	210,617
	June	994,033	33,134	6,255,307	208,510
	May	979,178	31,586	6,161,830	198,769
	April	922,323	30,744	5,804,048	193,468

Year	Month	Volume (m³)	Volume (m³ per day)	Volume (bbl)	Volume (bbl per day)
2017	March	840,522	27,114	5,289,282	170,622
	February	596,565	21,306	3,754,096	134,075
	January	717,684	23,151	4,516,283	145,687
	December	748,489	24,145	4,710,133	151,940
	November	707,046	23,568	4,449,337	148,311
	October	675,768	21,799	4,252,509	137,178
	September	639,449	21,315	4,023,963	134,132
	August	590,833	19,059	3,718,026	119,936
	July	455,925	14,707	2,869,071	92,551
	June	522,049	17,402	3,285,182	109,506
	May	644,920	20,804	4,058,391	130,916
	April	714,633	23,821	4,497,084	149,903
2016	March	766,789	24,735	4,825,292	155,655
	February	590,415	21,086	3,715,400	132,693
	January	590,534	19,049	3,716,146	119,876
	December	627,434	20,240	3,948,352	127,366
	November	572,235	19,075	3,600,992	120,033
	October	505,205	16,297	3,179,183	102,554
	September	330,335	11,011	2,078,748	69,292
	August	324,495	10,468	2,041,999	65,871
	July	261,529	8,436	1,645,766	53,089
	June	205,970	6,866	1,296,137	43,205

Year	Month	Volume (m ³)	Volume (m ³ per day)	Volume (bbl)	Volume (bbl per day)
2015	May	350,179	11,296	2,203,629	71,085
	April	517,689	17,256	3,257,744	108,591
	March	501,999	16,194	3,159,005	101,903
	February	440,680	15,196	2,773,133	95,625
	January	473,239	15,266	2,978,023	96,065
	December	525,645	16,956	3,307,811	106,704
	November	487,773	16,259	3,069,483	102,316
	October	821,728	26,507	5,171,018	166,807
	September	763,584	25,453	4,805,128	160,171
	August	526,399	16,981	3,312,554	106,857
	July	409,055	13,195	2,574,123	83,036
	June	382,950	12,765	2,409,850	80,328
2014	May	405,088	13,067	2,549,160	82,231
	April	420,967	14,032	2,649,088	88,303
	March	580,246	18,718	3,651,407	117,787
	February	469,322	16,762	2,953,378	105,478
	January	663,166	21,392	4,173,206	134,620
	December	865,312	27,913	5,445,285	175,654
	November	719,672	23,989	4,528,791	150,960
	October	732,721	23,636	4,610,906	148,739
	September	853,297	28,443	5,369,675	178,989
	August	765,107	24,681	4,814,711	155,313

Year	Month	Volume (m³)	Volume (m³ per day)	Volume (bbl)	Volume (bbl per day)
2013	July	808,440	26,079	5,087,396	164,110
	June	696,292	23,210	4,381,664	146,055
	May	776,525	25,049	4,886,564	157,631
	April	758,758	25,292	4,774,756	159,159
	March	850,706	27,442	5,353,369	172,689
	February	725,916	25,926	4,568,086	163,146
	January	786,832	25,382	4,951,420	159,723
	December	820,562	26,470	5,163,676	166,570
	November	701,526	23,384	4,414,601	147,153
	October	655,222	21,136	4,123,219	133,007
	September	569,699	18,990	3,585,033	119,501
	August	571,439	18,434	3,595,983	115,999
	July	668,280	21,557	4,205,393	135,658
	June	669,779	22,326	4,214,825	140,494
	May	655,162	21,134	4,122,844	132,995
	April	604,793	20,160	3,805,875	126,863
2012	March	568,840	18,350	3,579,631	115,472
	February	450,965	16,106	2,837,857	101,352
	January	490,932	15,837	3,089,363	99,657
	December	614,912	19,836	3,869,555	124,824
	November	262,269	8,742	1,650,423	55,014
	October	288,932	9,320	1,818,210	58,652

Year	Month	Volume (m ³)	Volume (m ³ per day)	Volume (bbl)	Volume (bbl per day)
	September	323,331	10,778	2,034,677	67,823
	August	265,902	8,577	1,673,283	53,977
	July	247,848	7,995	1,559,671	50,312
	June	160,936	5,365	1,012,750	33,758
	May	164,510	5,307	1,035,239	33,395
	April	135,952	4,532	855,524	28,517
	March	104,986	3,387	660,660	21,312
	February	79,915	2,756	502,897	17,341
	January	46,185	1,490	290,635	9,375

m³ = Cubic metres

bbl = Barrels

Notes

This table represents exports of Canadian crude oil by transportation system as the crude oil export crosses the Canadian border.

Use of other transportation routes/systems may occur before and/or after the transportation system used for export.

Crude oil includes Canadian crude oil and/or equivalent. It does not include exports of Canadian refined petroleum products.

These export figures are representative of the Board's best estimates derived from monthly export reports. To the best of our knowledge and belief, all information contained herein is accurate and reliable.

Be aware that revisions to monthly export reports are processed on an ongoing basis. Therefore, export volumes are subject to change.

For reasons of confidentiality, the export figures above are only available at an aggregate level.

Numbers last updated on 21 November 2018

Date modified:

2019-03-27

CERTIFICATE OF SERVICE

I, Suzanne Devane, certify that I have this 8th day of April, 2019, served a true copy of the Petition to Reopen Based on New Evidence and Materially Changed Circumstances pursuant to the Board's Governing Regulations filed by the Village of Barrington, IL, by e-mail, upon all parties of record.

/s/ Suzanne Devane

Suzanne Devane