AGENDA

LAKE COUNTY DRAINAGE BOARD and ADVISORY COMMITTEE WEDNESDAY, NOVEMBER 16, 2016

Advisory Committee Meeting-8:00 A.M. Drainage Board Meeting-9:00 A.M.

Both Meetings Held in the Commissioner's Courtroom, Lake County Government Center
2293 North Main Street, Crown Point, IN 46307 Phone-219-755-3745 Fax 219-755-3750

Lake County Drainage Board
Gerry J. Scheub, Chairman
Michael C. Repay, Member
Kyle W. Allen, Sr., Member
Peter Katic, Drainage Board Attorney

Technical Support
Bill Emerson Jr., Lake County Surveyor
Daniel V. Gossman, Drainage Administrator
, MS4 Coordinator
Clifford E. Duggan Jr., Legal Consultant
Mary Ellen Kupsik, Drainage Board Secretary

NOTE: **All motions and votes by the Advisory Committee are recommendations to the Lake County Drainage Board and are not final actions. The Lake County Drainage Board is the agency having the authority to act under Indiana Statute.**

1. **Meeting Called to Order – Pledge of Allegiance**

   A. **Emergency Exit Announcement: In case of emergency, exit the Commissioners Courtroom and proceed to the stairs and go to the second floor and exit the building. Do not enter an elevator in an emergency. If you require assistance, an employee will escort and/or assist you. Please silence any cellular telephones during this meeting. If you receive a call/text during this meeting, please excuse yourself with as little disruption as possible.**

2. **Roll Call**

3. **Agenda**
   A. **Additions, Deletions, and/or Corrections**
   B. **Permission to Open Bids/Proposals**

4. **Minutes**
   A. **October 19, 2016**

5. **Reports – Correspondence – Information for the Record**
   A. **Advisory Committee By Township**

B. Little Calumet River Watershed

1. Indiana Department of Natural Resources letter to Haley & Aldrich Inc. regarding renewal of "Certificate of Approval" for the Grand Calumet River.
2. Letter from Drainage Administrator Dan Gossman to property owner Albin & Karen Nimcek regarding procedure for "Obstruction of a Mutual Drain".
3. Letter from US Congressman Peter Visclosky to County Surveyor Bill Emerson, Jr. regarding drainage issues in Spring Rose Heath.
   - Letter from Drainage Administrator Dan Gossman to property owner Linda Kulik regarding county jurisdiction.
4. Indiana Department of Natural Resources (IDNR) "Certificate of Approval" for "Construction in a Floodway" to City of Lake Station for an 18" steel force main replacement over Burns Ditch near Clay Street, Lake Station.
5. Letter from Drainage Administrator Dan Gossman to property owner Nikola & Laura Cimesa regarding "Drainage Easement" access for the detention pond in Pheasant Ridge Unit 2.
6. Review/report from Frank Stewart, P.E., to County Surveyor Bill Emerson, Jr. regarding Bohling's East Oak Estates detention ponds.
7. Letter from Asst Drainage Administrator Tom Regalado to Jim Emerick, P.E. (INDOT) regarding regulated drain determination.
8. **Cady Marsh Ditch, Calumet Twp.**
   Letter/Request from property owner Peter Fisher to replace pedestrian foot bridge over the Cady Marsh Ditch which was approved in 1992.
   - Response letter from Drainage Administrator Dan Gossman to property owner Peter Fisher stating that a Drainage Board permit would not be necessary, but that he should consider contacting other local, state and federal agencies for their approval.
9. **Niles Ditch, Winfield Twp.**
   Letter from Drainage Administrator Dan Gossman to County Plan Commission Director Ned Kovachevich regarding "Variance from Development Standards" near Niles Ditch at 11201 Nevada Place.
10. **Spring Street Ditch, North Twp.**
    Email from Environmental Resources Management to Drainage Board Secretary Mary Ellen Kupsik regarding notification of completion to Drainage Board application.
11. Other.

C. Kankakee River Watershed

1. **Spring Run Ditch Lateral No. 12, Cedar Creek Twp.**
   Letter from Drainage Administrator Dan Gossman to County Highway Superintendent Marcus Malczewski regarding "Emergency Culvert Replacement" on Chase Street over Spring Run Ditch Lateral No. 12.
2. **M.J. Brown Ditch, Eagle Creek Twp.**
   Letter from Dan Delgado, P.E. from Lawson Fisher Assoc. regarding a "Final Field Check" for the proposed bridge replacement on S.R. 2 over the M.J. Brown Ditch.
3. **Vanatta Lateral, Eagle Creek Twp.**
   Letter from Indiana Department of Transportation regarding "slip lining" culvert under I-65.
4. Other

D. Current Projects - Little Calumet River Watershed

1. **Hart Ditch, St John Twp.** (State Line to US Highway 30, - Dyer)
   - Review and recommendation from Thomas T. Burke, PhD., P.E., (CBBEL) for remaining contract amount of $7,111.76 Contractor: KDM Services

2. **Niles Ditch, Center & Winfield Twps.** (113th to Gibson Street) Bill
3. **Turkey Creek Lateral No. 13 – Bank Stabilization, Schererville, St John Twp.**
   - Indiana Department of Environmental Management "Public Notice".
   - Letter from Indiana Department of Natural Resources to Drainage Administrator Dan Gossman regarding SEA #912 status.
4. **Main Beaver Dam Ditch, Center Twp.** (1423 Edgewater Road, Crown Point)
   - Indiana Department of Natural Resources "Certificate of Approval" for "Construction in a Floodway".
   - US Army Corps of Engineers authorization of a "Regional General Permit".
5. **Other**

E. **Current Projects - Kankakee River Watershed**
1. **West Creek Maintenance, Hanover Twp.** (125th Ave to 133rd Ave)
2. **Singleton Ditch Maintenance US 41 to Monon Road – Phase II, Cedar Creek Twp.** (Cedar Creek to Monon Road)
3. **Ernie Niemeyer Creek & Levee – Phase IV, West Creek Twp.** (Stateline to US 41)
4. **2016 Stoney Run Ditch Middle Branch Lateral No. 4 Maintenance, Winfield Twp.** (145th Avenue, Leroy)
5. **2016 Cedar Creek Maintenance, Cedar Creek Twp.** (Lake Dale to 171st Ave)
   - Letter from Indiana Department of Natural Resources to Drainage Administrator Dan Gossman regarding SEA #909 status.
6. **2016 McConnell Ditch Maintenance, Cedar Creek Twp.** (Morse St to 171st Ave)
   - Indiana Department of Natural Resources "Termination Notice" for "Construction in a Floodway".
7. **2016 Singleton Ditch Maintenance, Cedar Creek & Eagle Creek Twps.** (Monon Rd to Mississippi St)
   - Indiana Department of Natural Resources "Certificate of Approval" for "Construction in a Floodway".
   - Letter from Indiana Department of Natural Resources to Drainage Administrator Dan Gossman regarding SEA #911 status.
8. **Other**

6. **Applications / Petitions**

A. **Mutual Drain Application I.C. 36-9-27.4**
Applicant: Paul & Christine Gesiakowski
Petition to the Lake County Drainage Board regarding an alleged obstruction in a mutual drain.

B. **Mutual Drain Application I.C. 36-9-27.4**
Applicant: Lake County Highway Department
Petition to the Lake County Drainage Board regarding an alleged obstruction in a mutual drain.

C. **Other**

7. **MS4 Water Quality**

A. **Capital Projects Status Report**
1. **41st Avenue Storm Sewer Project, Calumet Twp.**
2. **133rd Avenue / S.R. 55 Storm Drainage Project, Center Twp.**
3. **Upper Beaver Dam Ditch Storage/Water Quality Project**
4. **Willowdale Sanitary Sewer – Phase II & III**
5. **Williams Street, Calumet Twp.**

6. **South County Sanitary Sewer Project with ACOE**
7. **Hawthorne Hills – Storm Sewer Video Inspection**

B. **MS4 Information and Correspondence**
C. **Other.**

8. **Financial Issues**
   A. **Little Calumet River Watershed**
      1. **Proposed Budget Priorities 2017 - HANDOUT**
   B. **Kankakee River Watershed**
      1. **Proposed Budget Priorities 2017 - HANDOUT**

9. **Approve Plans/Advertise for Bids/Seek Proposals and/or Approve Plan Modifications**
   A. **Little Calumet River Watershed**
   B. **Kankakee River Watershed**

10. **Receive and Open Bids/Proposals**
    A. **Little Calumet River Watershed**
       1. **2016 Hart Ditch – Bank Stabilization, St John Twp.** (Park Manor Drive, Dyer)
          - Addendum No. 1.
          - Open Bids.
       2. **2016 Cady Marsh Ditch Maintenance, Calumet Twp.**
          - Open Bids.
       3. **2016 Turkey Creek Lateral 6 Maintenance, Calumet Township** (George to I-65)
          - Addendum No. 1.
          - Open Bids.
       4. **2016 Turkey Creek Lateral 6 ANNUAL MAINTENANCE, Calumet & Hobart Twp.** (East of I-65)
          - Open Proposals.
    B. **Kankakee River Watershed**
       1. **2016 Bruce Ditch – Emergency Bank Repair, West Creek Twp.**
          - Addendum No. 1 & 2.
          - Open Proposals.

11. **Award Contracts, Approve Modifications, and/or Ratify Actions by County Surveyor**
    A. **Little Calumet River Watershed**
       1. **2016 Turkey Creek Bank Stabilization, St John Twp.** (Joliet Street to James Wittchen Drive, Schererville)

          The proposals opened were as follows:

R.A. Oros, Inc.	$123,702.50
Austgen Equipment	$ 85,126.00
Delta III, Inc.	$ 95,913.00**Correct to $85,113**
Gariup Construction	$147,500.00

          - Letter from Drainage Administrator Dan Gossman to County Surveyor Bill Emerson, Jr. and Drainage Board Chairman Gerry Scheub regarding corrections to mathematical errors of proposals and spreadsheets to show new totals.
    B. **Kankakee River Watershed**

12. **Other Business**
    A. **Other**

13. **Adjournment**
    A. **The next meeting is scheduled for Wednesday December 21, 2016 in the Lake County Commissioners' Courtroom at 8:00AM Drainage Advisory Committee and 9:00AM Drainage Board.**

    B. **Motion to Adjourn.**

MINUTES

LAKE COUNTY DRAINAGE BOARD
WEDNESDAY, OCTOBER 19, 2016

Advisory Committee Meeting-8:00 A.M. Drainage Board Meeting-9:00 A.M.

Both Meetings Held in the Commissioner's Courtroom, Lake County Government Center
2293 North Main Street, Crown Point, IN 46307 Phone-219-755-3745 Fax 219-755-3750

Lake County Drainage Board	**Technical Support**
Gerry J. Scheub, Chairman **Michael C. Repay, Member** **Kyle W. Allen, Sr., Member** **Peter Katic, Drainage Board Attorney**	**Bill Emerson Jr., Lake County Surveyor** **Daniel V. Gossman, Drainage Administrator** **, MS4 Coordinator** **Clifford E. Duggan Jr., Legal Consultant** **Mary Ellen Kupsik, Drainage Board Secretary**

NOTE: **All motions and votes by the Advisory Committee are recommendations to the Lake County Drainage Board and are not final actions. The Lake County Drainage Board is the agency having the authority to act under Indiana Statute.**

1. **Meeting Called to Order – Pledge of Allegiance**

   A. **Emergency Exit Announcement: In case of emergency, exit the Commissioners Courtroom and proceed to the stairs and go to the second floor and exit the building. Do not enter an elevator in an emergency. If you require assistance, an employee will escort and/or assist you. Please silence any cellular telephones during this meeting. If you receive a call/text during this meeting, please excuse yourself with as little disruption as possible.**

2. **Roll Call**

Members Present: **Chairman Gerry Scheub** and Board Member, **Michael C. Repay**, Board Member **Kyle W. Allen, Sr.** [3 Present, 0 Absent]. Also Present: **Lake County Surveyor Bill Emerson, Jr.;** Lake County Drainage Administrator, **Dan Gossman;** Drainage Board Attorney, **Peter Katic;** Lake County Drainage Consultant **Clifford E. Duggan, Jr.;** Drainage Board Secretary, **Mary Ellen Kupsik;** North Watershed Engineering Consultant, **Don Oliphant** of Christopher B. Burke Engineering; and South Watershed Engineering Consultant, and **Jeremy Schmitt and Greg Lorig,** American Structurepoint.

3. **Agenda**

   A. **Additions, Deletions, and/or Corrections**

Dan Gossman requested the following additions to the Agenda. Item No. 9-A-2, Plans and Specifications for Cady Marsh Ditch from Colfax to Ross; Item No. 9-A-3, Plans and Specifications for Turkey Creek Lateral 6; Item No. 9-A-4, Plans and Specifications for Turkey Creek Lateral 6 Annual Maintenance, and Item No. 11-A-1, amount on Delta III's bid should

read $95,913.00. Motion to accept the above-stated additions and amendments were made by **Michael C. Repay**, seconded by **Kyle W. Allen, Sr.** Motion carried.

B. Permission to Open Bids/Proposals

4. Minutes

A. September 21, 2016

Chairman Scheub requested approval of the **September 21, 2016** Minutes. Motion to approve same was made by **Michael C. Repay,** seconded by **Kyle W. Allen, Sr.** Motion carried 3-0.

5. Reports – Correspondence – Information for the Record

A. Advisory Committee By Township

B. Little Calumet River Watershed

1. Letter from Asst Drainage Admn Tom Regalado to County Surveyor Bill Emerson, Jr. and County Drainage Board Chairman Gerry Scheub regarding drainage at US Highway 30 and Clay Street.
2. Letter from Asst Drainage Admn Tom Regalado to County Surveyor Bill Emerson, Jr. regarding erosion on Hart Ditch in the Town of Munster.
3. Indiana Department of Natural Resources "Termination Notice" for "Construction in a Floodway" to Martin Yanovic regarding moving of Frog Creek, Hobart, IN.
4. Indiana Department of Natural Resources "Certificate of Approval" for "Construction in a Floodway" for IDNR regarding Grand Calumet River near Howard Street in Hammond, IN
5. Review letter from Thomas T. Burke, PhD, P.E., to Indiana Department of Transportation regarding "slip lining" culverts under I-65 near Turkey Creek.
6. Letter/Report from Asst Drainage Administrator Tom Regalado to County Surveyor Bill Emerson, Jr. regarding Clearing & Snagging Crew activity.
7. Other.

C. Kankakee River Watershed

1. **Singleton Ditch, Eagle Creek Twp.**
   Letter from MS4 Compliance Inspector Chris Brown to County Surveyor Bill Emerson, Jr. regarding routine inspection of Singleton Stone.
2. Other

Gerry Scheub requested that Item Nos. 5-B & C be made a "Matter of Public Record". Motion to make Item Nos. 5-B & C a "Matter of Public Record" was made by **Kyle W. Allen, Sr.,** seconded by **Michael C. Repay.** Motion carried 3-0.

D. Current Projects - Little Calumet River Watershed

1. **Hart Ditch, St John Twp.** (State Line to US Highway 30, - Dyer)
   - Review and recommendation for approval of partial payment of $20,635.07 from Senior Project manager Al Walus (CBBEL) Contractor: KDM Services

Dan Gossman requested approval for a partial payment to KDM Services in the amount of $20,635.07. Motion to approve partial payment to KDM Services in the amount of $20,635.07 was made by **Michael C. Repay**, seconded by **Kyle Allen, Sr.** Motion carried 3-0.

2. **Niles Ditch, Center & Winfield Twps.** (113th to Gibson Street)

3. **Cady Marsh Ditch - Highland, North Twp.** (Hart Ditch to Cline Ave, Highland)
   - Review and recommendation for approval of final payment of $2,186.42 from Senior Project manager Al Walus (CBBEL) Contractor: KDM Services

Dan Gossman requested approval for final payment to KDM Services in the amount of $2,186.42. Motion to approve final payment to KDM Services in the amount of $2,186.42 was made by **Michael C. Repay**, seconded by **Kyle Allen, Sr**. Motion carried 3-0.

4. **Turkey Creek Lateral No. 13 – Bank Stabilization, Schererville, St John Twp.**
5. **Main Beaver Dam Ditch, Center Twp.** (1423 Edgewater Road, Crown Point)
   - Letter from IDNR to Drainage Administrator Dan Gossman regarding "Certificate of Approval" for "Construction in a Floodway" from IDNR.

Dan Gossman reported that we are still waiting to receive permits from IDEM and Army Corps before starting this project.

6. **Other**

E. **Current Projects - Kankakee River Watershed**
1. **West Creek Maintenance, Hanover Twp.** (125th Ave to 133rd Ave)
2. **Singleton Ditch Maintenance US 41 to Monon Road – Phase II, Cedar Creek Twp.** (Cedar Creek to Monon Road)
3. **Ernie Niemeyer Creek & Levee – Phase IV, West Creek Twp.** (Stateline to US 41)
4. **2016 Stoney Run Ditch Middle Branch Lateral No. 4 Maintenance, Winfield Twp.** (145th Avenue, Leroy)
5. **2016 Cedar Creek Maintenance, Cedar Creek Twp.** (Lake Dale to 171st Ave)
6. **2016 McConnell Ditch Maintenance, Cedar Creek Twp.** (Morse St to 171st Ave)
7. **2016 Singleton Ditch Maintenance, Cedar Creek & Eagle Creek Twps.** (Monon Rd to Mississippi St)

Dan Gossman reported that we are still waiting to receive permits from the regulatory agencies under Item Nos. 5-E-4, 5, 6 & 7.

8. **Other**

Gerry Scheub requested that Item Nos. 5-D & E be made a "Matter of Public Record". Motion to make Item Nos. 5-D & E a "Matter of Public Record" was made by **Michael C. Repay**, seconded by **Kyle W. Allen, Sr.** Motion carried 3-0.

6. **<u>Applications / Petitions</u>**

A. **Hart Ditch / Plum Creek, St John Twp.**
Applicant: Enbridge Energy, Limited Partnership
Application to "Perform Work" within regulated drain for the purpose of routine pipeline maintenance.
   - Review letter from Thomas T. Burke, PhD., P.E. (CBBEL)

Dan Gossman reported that there was an outstanding issue from last month's Drainage Board Meeting that has been resolved. They moved the stockpile outside of the floodway. CBBEL recommends approval with the condition that their plan set should be signed and sealed by an Indiana Registered Professional Engineer. Motion to approve this application with the above-

stated condition was made by **Michael C. Repay** seconded by **Kyle W. Allen, Sr.** Motion carried 3-0.

B. Mutual Drain Application I.C. 36-9-27.4
Applicant: Paul & Christine Gesiakowski
Petition to the Lake County Drainage Board regarding an alleged obstruction in a mutual drain.

No action.

C. Other

7. <u>MS4 Water Quality</u>
A. Capital Projects Status Report
1. 41st Avenue Storm Sewer Project, Calumet Twp.

Surveyor Bill Emerson, Jr. stated that this project is moving along well. He reported that bids came in a little higher than anticipated and since the Army Corps is locked in as far as what they can spend in their fiscal year, funds from MS4, Commissioners, and Lake County Highway will make up the additional cost. The exact MS4 funding amount will be determined and requested at next month's meeting.

2. 133rd Avenue / S.R. 55 Storm Drainage Project, Center Twp.
3. Upper Beaver Dam Ditch Storage/Water Quality Project
4. Willowdale Sanitary Sewer – Phase II & III

Surveyor Bill Emerson, Jr. reported that this project is near completion with only a few outstanding restoration issues to address, along with verifying that the "as builts" are in accordance with the plans and specifications to ensure the city of Crown Point's acceptance of same.

5. Williams Street, Calumet Twp.

Surveyor Bill Emerson, Jr. asked **Duane Alverson** from the Lake County Highway Department to provide an update. **Duane Alverson** reported that the trees are out and they have been working on getting locates on a gas line, which has just now been accomplished and are now going in to finish working on the ditch. **Michael C. Repay** asked if this project will be complete before next month's Drainage Board Meeting. Both **Duane Alverson** and the Surveyor's Office staff concurred that it will be.

6. South County Sanitary Sewer Project with ACOE
7. Hawthorne Hills – Storm Sewer Video Inspection

B. MS4 Information and Correspondence
1. Agreement between Lake County Soil & Water Conservation District and the Lake County Surveyor's Office / MS4 Stormwater Quality Department

Surveyor Bill Emerson, Jr. reported that this is our Annual Agreement between Lake County Soil & Water Conservation District and the Lake County Surveyor's Office / MS4 Stormwater Quality Department for their Cover Crop Program, which has been very successful in dealing

with the removal of sediment and pesticides out of our water ways and requested the approval of same. Motion to approve was made by **Michael C. Repay**, seconded by **Kyle Allen, Sr**. Motion carried 3-0.

2. Inspection report from MS4 Compliance Inspector Chris Brown to County Surveyor Bill Emerson, Jr. regarding drainage concerns at 11818 Lee Street (Un-incorporated Crown Point).

Information Only.

C. Other.

8. <u>Financial Issues</u>

A. Little Calumet River Watershed

B. Kankakee River Watershed

9. <u>Approve Plans/Advertise for Bids/Seek Proposals and/or Approve Plan Modifications</u>

A. Little Calumet River Watershed

1. **2016 Hart Ditch – Bank Stabilization, St John Twp.** (Park Manor Dr, Dyer)
   - Approve plans and specifications for bank stabilization.

Dan Gossman requested approval of the Plans and Specification for the Hart Ditch Bank Stabilization Project and advertise for bids, with bids due at the November 16, 2016 Drainage Board Meeting. Motion to approve same was made by **Michael C. Repay**, seconded by **Kyle W. Allen, Sr.** Motion carried 3-0.

2. **2016 Cady Marsh Ditch Maintenance, Calumet Twp.** (Colfax to Ross)
   - Approve plans and specifications for ditch maintenance.

Dan Gossman requested approval of the Plans and Specification for the Cady Marsh Ditch Bank Maintenance Project and advertise for bids, with bids due at the November 16, 2016 Drainage Board Meeting. Motion to approve same was made by **Michael C. Repay**, seconded by **Kyle W. Allen, Sr**. Motion carried 3-0.

3. **2016 Turkey Creek Lateral 6 Maintenance, Calumet Township** (George to I-65)
   - Approve plans and specifications for ditch maintenance.

Dan Gossman requested approval of the Plans and Specifications for Turkey Creek Lateral 6 from Georgia Street to I-65 Maintenance Project and advertise for bids, with bids due at the November 16, 2016 Drainage Board Meeting. Motion to approve same was made by **Kyle W. Allen, Sr.**, seconded by **Michael C. Repay**. Motion carried 3-0.

4. **2016 & 2017 Turkey Creek Lateral 6 Annual Maintenance, Calumet Township on the East Side of I-65**
   - Approve plans and specifications for ditch maintenance.

Dan Gossman requested approval of the Plans and Specifications for the Turkey Creek Lateral 6 Annual Maintenance Project and seek proposals, with proposals due at the November 16, 2016 Drainage Board Meeting. Motion to approve same was made by **Kyle W. Allen, Sr.**, seconded by **Michael C. Repay**. Motion carried 3-0.

5. Other

B. **Kankakee River Watershed**
   1. **2016 Bruce Ditch – Emergency Bank Repair, West Creek Twp.**
      - Invitation to Contractors for "Mandatory Meeting" with plans and specifications.

Dan Gossman requested recommending approval of the Plans and Specifications for the Emergency Bank Repair on the Bruce Ditch and approve having an onsite "Mandatory Meeting" with the six "invited contractors" with proposals due at the November 16, 2016 Drainage Board Meeting. Motion to approve same was made by **Michael C. Repay**, seconded by **Kyle W. Allen, Sr**. Motion carried 3-0.

10. **Receive and Open Bids/Proposals**
    A. **Little Calumet River Watershed**
    B. **Kankakee River Watershed**

11. **Award Contracts, Approve Modifications, and/or Ratify Actions by County Surveyor**
    A. **Little Calumet River Watershed**
       1. **2016 Turkey Creek Bank Stabilization, St John Twp.** (Joliet Street to James Wittchen Drive, Schererville)

The bid proposals opened and taken under advisement at last month's Drainage Board Meeting were as follows:

R.A. Oros, Inc.	$123,702.50
Austgen Equipment	$ 85,126.00
Delta III, Inc.	$ 99,913.00 (Correction: $95,913.00)
Gariup Construction	$147,500.00

Dan Gossman explained that according to IDEM's permit requirement, they are asking us to change the scope for this project and that a meeting is being arranged with the above contractors to determine if the "change in the scope" will affect any of their bids. Dan requested keeping these bids under advisement with No Action taken and hopefully make a recommendation at next month's November Drainage Board Meeting. A motion to keep these bids under advisement until next month's November Drainage Board Meeting was made by **Kyle W. Allen, Sr.**, seconded by **Michael C. Repay**. Motion carried 3-0.

    B. **Kankakee River Watershed**

12. **Other Business**
    A. **Other**

William Damarjian (8676 Fulton Place- Bohling's East Oak Estates) stated that the pipes in the back of the retention pond behind his house are eroding and collapsing and so is the retention pond. He explained that whenever we have around two inches of rain, there is about four feet of water on the road in front of his house and claimed that for the last almost 18 years nobody has done anything about the plumbing in the back for the ditch or the retention pond and wanted to know why. Marc Malczewski replied that it is a critical situation and is amazed on how much water is coming through this area. **Chairman Scheub** reported that he has been out at Mr. Damarjian's property and there are ruts and some debris in the ditch that need to be addressed. He stated that **Marc Malczewski** will be bringing in county equipment to rectify the

situation and promises to have it all well-manicured when completely finished. **Marc Malczewski** responded that it is going to be hard to get equipment into the main swale with it being so wet and was concerned about crushing that embankment. **Chairman Scheub** requested that a meeting be set up with all parties and resolve this flooding situation. **Surveyor Emerson, Jr.** agreed and stated that he and his staff will work with County Highway/Public Works get some plans drawn up to present at next month's Drainage Board Meeting.

Paul Gesiakowski (10353 Cline Avenue, Crown Point, IN) inquired as to the status of their Drainage Petition presented at last month's Drainage Board Meeting and also inquired as to whether or not a statement of Findings of Facts will be presented at today's Meeting **Surveyor Emerson, Jr.** replied that the Findings of Facts will take place a next month's Drainage Board Meeting. **Dan Gossman** explained to the Board that this relates to Item 6-B, A Petition for an Obstruction of a Mutual Drain and since our MS4 Coordinator who was spearheading this Petition is no longer part of the Surveyor's Office staff, no action will be taken today. **Surveyor Emerson, Jr.** will be directing our MS4 consultant to prepare and present the Findings of Facts at next month's meeting.

13. Adjournment

A. The next meeting is scheduled for Wednesday November 16, 2016 in the Lake County Commissioners' Courtroom at 8:00AM Drainage Advisory Committee and 9:00AM Drainage Board.

B. Motion to Adjourn.

Motion to adjourn was made by **Michael C. Repay,** seconded by **Kyle W. Allen, Sr.** Motion carried 3-0. Meeting adjourned at 9:30 a.m.

APPROVED THIS **16th** DAY OF **NOVEMBER, 2016**

LAKE COUNTY DRAINAGE BOARD

Gerry Scheub, Chairman

K.B.

Michael C. Repay, Member

D.H.

Kyle W. Allen, Sr., Member

ATTEST: Mary Ellen Kupsik, Drainage Board Secretary

MINUTES

LAKE COUNTY DRAINAGE BOARD
ADVISORY COMMITTEE
WEDNESDAY, OCTOBER 19, 2016

Advisory Committee Meeting-8:00 A.M. Drainage Board Meeting-9:00 A.M.

Both Meetings Held in the Commissioner's Courtroom, Lake County Government Center
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Lake County Drainage Board	**Technical Support**
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1. Meeting Called to Order – Pledge of Allegiance

Lake County Surveyor Bill Emerson, Jr. requested a moment of silence out of respect for West Creek Township property owner/farmer and former Lake County Drainage Advisory Committee Chairman Bill Peterson who passed away this past week. Surveyor Emerson, Jr. stated that Bill was highly respected in south county for his vast knowledge, involvement and contributions concerning stormwater and drainage issues and that he also learned much from Mr. Peterson. *[Services and wake are being held today at Sheets Funeral Home IN Lowell].*

A. **Emergency Exit Announcement: In case of emergency, exit the Commissioners Courtroom and proceed to the stairs and go to the second floor and exit the building. Do not enter an elevator in an emergency. If you require assistance, an employee will escort and/or assist you. Please silence any cellular telephones during this meeting. If you receive a call/text during this meeting, please excuse yourself with as little disruption as possible.**

2. Roll Call

Tom Silich, Hobart Twp.; **Milan Dakich**, Ross Twp.; **Louise Neese**, Calumet Twp.; **Harold Mussman**, West Creek Twp.; **Alice Dahl**, Cedar Creek Twp. and **Jamie Blankman**, North Twp. [6 Present, 5 Absent]. Also Present: Lake County Surveyor **Bill Emerson, Jr.**; **Dan Gossman**, Drainage Administrator; Legal Consultant, **Clifford E. Duggan, Jr.**; Drainage Board

Attorney, **Peter Katic**; **Mary Ellen Kupsik,** Drainage Board Secretary; North Watershed Engineering Consultant, **Don Oliphant** of Christopher B. Burke Engineering, and South Watershed Engineering Consultant, **Greg Lorig,** American Structurepoint, Inc.

3. **Agenda**
   A. Additions, Deletions, and/or Corrections

Dan Gossman requested the following additions to the Agenda. Item No. 9-A-2, Plans and Specifications for Cady Marsh Ditch from Colfax to Ross, and Item No. 11-A-1, amount correction on Delta III's bid should read $95,913.00. Motion to accept the above-stated addition and correction was made by **Alice Dahl**, seconded by **Louise Neese**. Motion carried.

   B. Permission to Open Bids/Proposals

4. **Minutes**
   A. September 21, 2016

Tom Silich requested a motion to approve the **September 21, 2016** Lake County Drainage Advisory Board Minutes. Motion to accept and approve same was made by **Louise Neese,** seconded by **Milan Dakich**. Motion carried.

5. **Reports – Correspondence – Information for the Record**
   A. Advisory Committee By Township

Tom Silich (Hobart Township) reported attending a Little Calumet River Basin Commission Meetings wherein Turkey Creek Lateral No. 6 under I-65 was discussed. Tom explained that after opening up the culvert under the railroad tracks, it did relieve the head pressure, as water has gone down to a certain level and has remained at the same level. **Surveyor Emerson, Jr.** requested recommending approval to prepare plans and specifications and advertise for bids on Turkey Creek Lateral 6 from Georgia Street to I-65 to re-establish the ditch from Georgia Street to I-65. Motion to request recommending same was made by **Milan Dakich**, seconded by **Louise Neese**. Motion carried. In addition, **Surveyor Emerson, Jr.** requested a motion to request approval to pursue seeking bid proposals for an annual maintenance contract for this site in order to control sediment and beaver dam problems. Motion to request the approval of same was made by **Louise Neese**, seconded by **Milan Dakich.** Motion carried.

Harold Mussman (West Creek Township) inquired as to status of the engineering study for John Little's West Creek Project. **Greg Lorig,** from American Structurepoint, responded that he is working on finalizing the study and should be ready to present at next month's Drainage Board Meeting.

Alice Dahl (Cedar Creek Township) stated that she contacted the Lake County Highway Department to report flooding issues at 819 and 811 Lakeview Drive at Lake Dalecarlia. She explained that after Lake County Highway redid the road, these houses are now getting flooded and the water goes right down from their houses into Lake Dalecarlia. **Dan Gossman** responded that he had discussed this situation with **Duane Alverson** and **Commissioner Scheub** and action will be taken shortly. **Alice Dahl** explained that she continually gets calls from property owners complaining that their neighbor is redirecting their water on to their property and asked if there is some type of ruling in place that would prevent the property owners from doing this. **Surveyor Emerson, Jr.** responded that there are Indiana common

laws allowing property owners to redirect the flow of water off their property; however, they must also provide continual flow along their neighbors property. He stated that the Drainage Board may get involved if there is a general obstruction preventing the flow of water. **Cliff Duggan** explained that in Illinois the law protects the property owner's water drainage rights for their property. Whereby in Indiana, it is more of a common ethics and he recommended that Alice Dahl start working at the legislature to work towards making changes in Indiana.

Dan Gossman reported, on behalf of **Jean Shepherd (St. John Twp.),** that she has been receiving phone calls from a property owner regarding drainage concerns at Bohling East Oaks Estates on Fulton Street. The back half of their lot is a detention facility and their complaint now is that it is holding water and they cannot mow their lawn. It has always been there since their subdivision was established. The County Highway went out to remove some vegetation and the property owner requested them to remove themselves from the property. A letter was sent from Lake County Public Works to the property owners explaining that they were going to come in and mow the area down and get an excavator in their to reestablished the detention facility. The Surveyor's Office will assist in the seeding and restoration of it so it can be mowable again.

B. Little Calumet River Watershed

1. Letter from Asst Drainage Admn Tom Regalado to County Surveyor Bill Emerson, Jr. and County Drainage Board Chairman Gerry Scheub regarding drainage at US Highway 30 and Clay Street.
2. Letter from Asst Drainage Admn Tom Regalado to County Surveyor Bill Emerson, Jr. regarding erosion on Hart Ditch in the Town of Munster.
3. Indiana Department of Natural Resources "Termination Notice" for "Construction in a Floodway" to Martin Yanovic regarding moving of Frog Creek, Hobart, IN.
4. Indiana Department of Natural Resources "Certificate of Approval" for "Construction in a Floodway" for IDNR regarding Grand Calumet River near Howard Street in Hammond, IN
5. Review letter from Thomas T. Burke, PhD, P.E., to Indiana Department of Transportation regarding "slip lining" culverts under I-65 near Turkey Creek.
6. Letter/Report from Asst Drainage Administrator Tom Regalado to County Surveyor Bill Emerson, Jr. regarding Clearing & Snagging Crew activity.
7. Other.

C. Kankakee River Watershed

1. **Singleton Ditch, Eagle Creek Twp.**
   Letter from MS4 Compliance Inspector Chris Brown to County Surveyor Bill Emerson, Jr. regarding routine inspection of Singleton Stone.
2. Other

Tom Silich requested a Motion that Item Nos. 5-B & C be made a "Matter of Record". Motion to approve same was made by **Alice Dahl**, seconded by **Milan Dakich.** Motion carried.

D. Current Projects - Little Calumet River Watershed

1. **Hart Ditch, St John Twp.** (State Line to US Highway 30, - Dyer)
   - Review and recommendation for approval of partial payment of $20,635.07 from Senior Project manager Al Walus (CBBEL) Contractor: KDM Services

Dan Gossman requested a recommendation for approval of partial payment of $20,635.07 to KDM Services for this project, which will leave a remaining balance of

$7,111.76. Motion to request recommending approval to make a partial payment to KDM Services in the amount of $20,635.07 was made by **Alice Dahl**, seconded by **Louise Neese**. Motion carried.

2. **Niles Ditch, Center & Winfield Twps.** (113th to Gibson Street)
3. **Cady Marsh Ditch - Highland, North Twp.** (Hart Ditch to Cline Ave, Highland)
   - Review and recommendation for approval of final payment of $2,186.42 from Senior Project manager Al Walus (CBBEL) Contractor: KDM Services

Dan Gossman requested a recommendation for approval of final payment of $2,186.42 to KDM Services for this project. Motion to request recommending approval to make a final payment to KDM Services in the amount of $2,186.452 was made by **Jamie Blankman,** seconded by **Louise Neese**. Motion carried with one "nay" from **Harold Mussman.**

4. **Turkey Creek Lateral No. 13 – Bank Stabilization, Schererville, St John Twp.**

Dan Gossman reported that this project will be starting up shortly.

5. **Main Beaver Dam Ditch, Center Twp.** (1423 Edgewater Road, Crown Point)
   - Letter from IDNR to Drainage Administrator Dan Gossman regarding "Certificate of Approval" for "Construction in a Floodway" from IDNR.

Dan Gossman reported that the Surveyor's Office is waiting for IDEM and Army Corps permits and are hopeful to have them very soon.

6. **Other**

E. **Current Projects - Kankakee River Watershed**
   1. **West Creek Maintenance, Hanover Twp.** (125th Ave to 133rd Ave)
   2. **Singleton Ditch Maintenance US 41 to Monon Road – Phase II, Cedar Creek Twp.** (Cedar Creek to Monon Road)
   3. **Ernie Niemeyer Creek & Levee – Phase IV, West Creek Twp.** (Stateline to US 41)
   4. **2016 Stoney Run Ditch Middle Branch Lateral No. 4 Maintenance, Winfield Twp.** (145th Avenue, Leroy)
   5. **2016 Cedar Creek Maintenance, Cedar Creek Twp.** (Lake Dale to 171st Ave)
   6. **2016 McConnell Ditch Maintenance, Cedar Creek Twp.** (Morse St to 171st Ave)
   7. **2016 Singleton Ditch Maintenance, Cedar Creek & Eagle Creek Twps.** (Monon Rd to Mississippi St)
   8. **Other**

Dan Gossman reported that we are waiting on permits from the regulatory agencies for Item Nos. 5-E-4, 5, 6 & 7.

6. <u>Applications / Petitions</u>
   A. **Hart Ditch / Plum Creek, St John Twp.**
      Applicant: Enbridge Energy, Limited Partnership
      Application to "Perform Work" within regulated drain for the purpose of routine pipeline maintenance.
      - Review letter from Thomas T. Burke, PhD., P.E. (CBBEL)

Don Oliphant (CBBEL) reported that Enbridge has agreed not to stockpile excavated material within the floodway of Hart ditch and requested recommending approval with the condition that Enbridge should have their plan set signed and sealed by an Indiana Registered Professional Engineer. Motion to recommend approval with the above-stated condition was made by **Louise Neese**, seconded by **Alice Dahl**. Motion carried.

   B. **Mutual Drain Application I.C. 36-9-27.4**
      Applicant: Paul & Christine Gesiakowski
      Petition to the Lake County Drainage Board regarding an alleged obstruction in a mutual drain.

No Action Taken.
Surveyor Bill Emerson, Jr. reported that since our **MS4 Coordinator, Rich Budziak** is no longer on the Lake County Surveyor's Office staff, our Engineering Consultant, DLZ, is currently reviewing this Petition and will report back at next month's Drainage Board Meeting as to the direction to go next.

   C. **Other**

7. <u>MS4 Water Quality</u>
   A. **Capital Projects Status Report**
      1. **41st Avenue Storm Sewer Project, Calumet Twp.**

Surveyor Bill Emerson, Jr. reported this project is moving along very well. The MS4 Department is working with the Commissioners and the Army Corps of Engineers on funding for this project. He stated that after receiving bids, they all came in higher than originally expected, and since the Army Corps is locked in as far as what they can spend in their fiscal year, funds from MS4, Commissioners, and Lake County Highway have agreed to make up the additional cost.

      2. **133rd Avenue / S.R. 55 Storm Drainage Project, Center Twp.**
      3. **Upper Beaver Dam Ditch Storage/Water Quality Project**
      4. **Willowdale Sanitary Sewer – Phase II & III**

Surveyor Bill Emerson, Jr. reported that this project is near completion with only a few outstanding restoration issues to address, along with verifying that the "as builts" are in accordance with the plans and specifications.

      5. **Williams Street, Calumet Twp.**

Surveyor Bill Emerson, Jr. reported that the Lake County Highway/Public Works have agreed to perform the work for us so we don't have to hire an outside contractor to remove the trees and repair the ditch.

6. **South County Sanitary Sewer Project with ACOE**
7. **Hawthorne Hills – Storm Sewer Video Inspection**

B. **MS4 Information and Correspondence**
   1. **Agreement between Lake County Soil & Water Conservation District and the Lake County Surveyor's Office / MS4 Stormwater Quality Department**

Surveyor Bill Emerson, Jr. reported that this is our annual agreement with the Lake County Soil and Water, which we increased the amount to $12,000 last year, adding that it is a great project and requested keeping that same amount and recommending approval. Motion to recommend requesting approval of same was made by **Alice Dahl**, seconded by **Harold Mussman.** Motion carried.

   2. Inspection report from MS4 Compliance Inspector Chris Brown to County Surveyor Bill Emerson, Jr. regarding drainage concerns at 11818 Lee Street (Un-incorporated Crown Point).

For your information. No action needed.

C. **Other.**

8. **Financial Issues**
   A. **Little Calumet River Watershed**
   B. **Kankakee River Watershed**

9. **Approve Plans/Advertise for Bids/Seek Proposals and/or Approve Plan Modifications**
   A. **Little Calumet River Watershed**
      1. **2016 Hart Ditch – Bank Stabilization, St John Twp.** (Park Manor Dr, Dyer)
         - Approve plans and specifications for bank stabilization.

Dan Gossman requested recommending approval of the Plans and Specification for the Hart Ditch Bank Stabilization Project and advertise for bids, with bids due at the November 16, 2016 Drainage Board Meeting. Motion to approve same was made by **Alice Dahl**, seconded by **Harold Mussman**. Motion carried.

      2. **2016 Cady Marsh Ditch Maintenance, Calumet Twp.** (Colfax to Ross)
         - Approve plans and specifications for ditch maintenance.

Dan Gossman requested recommending approval of the Plans and Specification for the Cady Marsh Ditch Bank Maintenance Project and advertise for bids, with bids due at the November 16, 2016 Drainage Board Meeting. Motion to approve same was made by **Louise Neese**, seconded by **Milan Dakich**. Motion carried.

      3. Other

B. **Kankakee River Watershed**

1. **2016 Bruce Ditch – Emergency Bank Repair, West Creek Twp.**
   - Invitation to Contractors for "Mandatory Meeting" with plans and specifications.

Dan Gossman requested recommending approval of the Plans and Specification for the Emergency Bank Repair on the Bruce Ditch and approve having an onsite "Mandatory Meeting" with "invited contractors" with bids due at the November 16, 2016 Drainage Board Meeting. Motion to approve same was made by **Harold Mussman**, seconded by **Milan Dakich**. Motion carried.

Dan Gossman addressed **Harold Mussman** stating that he was hopeful by next month's meeting to approve and accept Plans and Specifications for the Bailey Ditch Lateral. **Surveyor Emerson, Jr.** thanked **Harold Mussman** for bringing the Bailey Ditch bank issues to our attention, as it is definitely in need of repairs.

10. <u>Receive and Open Bids/Proposals</u>

A. **Little Calumet River Watershed**

B. **Kankakee River Watershed**

11. <u>Award Contracts, Approve Modifications, and/or Ratify Actions by County Surveyor</u>

A. **Little Calumet River Watershed**

1. **2016 Turkey Creek Bank Stabilization, St John Twp.** (Joliet Street to James Wittchen Drive, Schererville)

   The proposals opened were as follows:

R.A. Oros, Inc.	$123,702.50
Austgen Equipment	$ 85,126.00
Delta III, Inc.	$ 99,913.00 (correction: $95,913.00)
Gariup Construction	$147,500.00

Dan Gossman reported that Indiana Department of Environmental Management (IDEM) is requiring us to modify the "scope of work" and we need to contact the above-listed contractors to see if the scope of work modification is going to alter their bids. No action is needed. We will continue to keep these bids under advisement.

B. **Kankakee River Watershed**

12. <u>Other Business</u>

A. **Other**

William Damarjian (8676 Fulton Place- Bohling East Oaks Estates) stated that he has lived there for almost 18 years and whenever it rains over two inches it floods the road and goes over 87th Street, causing the road to erode. He reported that County Highway/Public Works came in with heavy equipment without informing anybody and went on the hill where the retention pond is and ripped out 4 pipes, leaving them there and left with their heavy equipment. **Mr. Damarjian** inquired as to what the County's intention is, because nothing has been done for three weeks. **Dan Gossman** responded that the project **Mr. Damarjian** was referring to is a Lake County Highway/Public Works project and not a Drainage Board Project and recommended **Mr. Damarjian** attend the next Drainage Board Meeting at 9:00 a.m. which consists of all three Commissioners, and direct his questions to them.

13. **Adjournment**

A. **The next meeting is scheduled for Wednesday November 17, 2016 in the Lake County Commissioners' Courtroom at 8:00AM Drainage Advisory Committee and 9:00AM Drainage Board.**

B. **Motion to Adjourn.**

Adjournment at 8:35 a.m.

5-B-1
11-14-16

MAILED OCT 07 2016

DNR Indiana Department of Natural Resources

Michael R. Pence, Governor
Cameron F. Clark, Director
Division of Water
402 W. Washington Street
Room W264
Indianapolis, IN 46204
Phone (317) 232-4160
Toll-free (877) 928-3755
Fax (317) 233-4579
www.in.gov/dnr/water

October 7, 2016

Stephen Kelley
Haley and Aldrich, Inc.
75 Washington Avenue, Suite 203
Portland, Maine, 04101

Re: CTS – 4299, FW-27504, CT-4286
Grand Calumet River, Lake County

Dear Mr. Kelley:

This is in response to your request received at the Division of Water on August 15, 2016 for the renewal of a Certificate of Approval, FW-27504, which was issued on October 7, 2014 and amended under CTS - 4286 on October 5, 2016.

In your request you provided verification that the permittee and the project plans approved under FW-27504 and amended under CTS-4286 have not changed. Therefore, in accordance to IC 14-28-1-22(h) the Department is granting a one-time two (2) year renewal of permit number FW-27504.

Please note that if the work authorized by this permit and its renewal, is not completed by October 7, 2018, your permit will expire and a new permit will have to be obtained.

This letter should be attached to the existing permit and displayed at the project site. The Division of Water will place a copy in the permit file to be retained as a permanent part of the application. Please be aware that all conditions of the permit must be met for your project to be in compliance.

If there are any further questions concerning this project, please contact the Technical Services Section, Division of Water at (317) 232-4160 or at water_inquiry@dnr.in.gov.

Sincerely,

James J. Hebenstreit, PE
Assistant Director
Division of Water

JJH/njm

Enclosures: Copy of Certificate of Approval, FW-27504
Notice of Right to Administrative Review

cc: Service List for FW-27504

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STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

NOTICE OF RIGHT TO ADMINISTRATIVE REVIEW

File No. CTS-4299

The letter or any of the conditions, limitations, and amendments which it contains may be appealed by applying for administrative review. Such review is governed by the Administrative Orders and Procedures Act, IC 4-21.5, and the Department's rules pertaining to adjudicative proceedings, 312 IAC 3-1.

In order to obtain a review, a written petition must be filed with the Division of Hearings within 18 days of the mailing date of this notice. The petition should be addressed to:

Division of Hearings
Indiana Government Center North, Room N501A
100 North Senate Avenue
Indianapolis, IN 46204

The petition must contain specific reasons for the appeal and indicate the portion or portions of the letter to which the appeal pertains.

If an appeal is filed, the final agency determination will be made by the Natural Resources Commission following a legal proceeding conducted before an Administrative Law Judge. The Department of Natural Resources will be represented by legal counsel.

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STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

CERTIFICATE OF APPROVAL
CONSTRUCTION IN A FLOODWAY

APPLICATION # : FW-27504 **MAILED: October 07, 2014**

STREAM : Grand Calumet River

APPLICANT : Indiana Department of Natural Resources
Carl Wodrich
Division of Land Acquisition
402 West Washington Street, Room W261
Indianapolis, IN 46204

AGENT : Haley and Aldrich Inc
Stephen J Kelley
75 Washington Avenue
Portland, ME 04101

AUTHORITY : IC 14-28-1 with 312 IAC 10 and IC 14-29-1 with 312 IAC 6

DESCRIPTION : A 2' thick layer of contaminated sediment totaling approximately 15,600 cubic yards will be dredged along 2000' of the channel and wetland shelves between the Indiana/Illinois state line and Hohman Avenue (Reach 6 and 7). The excavated material will be transported to an adjacent property to be stored prior to being moved to a disposal facility offsite. Approximately 15,600 cubic yards of material will be used to create an underwater reactive cap over the remaining contaminated sediment. The reactive cap will be a minimum of 2' thick throughout the channel and will be made up of organoclay and granulated activated carbon covered with 1' of sand. Temporary and semi-permanent steel sheet pile barriers will be installed within the channel to dewater and isolate the work areas. All steel sheet piling structures will either be cut or driven so that the top of the wall is flush with the top of the reactive cap upon completion of the project. Approximately 20' upstream of the Indiana/Illinois state line a permanent steel sheet piling wall will be installed with a top elevation of 577' NAVD, which is 1' above the top of the reactive cap. A 1' tall rock check dam will extend 20' upstream and downstream of the steel sheet piling wall to prevent scour of the reactive cap. The top of the rock check dam will be flush with the steel sheet piling wall. The rock check dam is proposed to eliminate the potential for impacted sediments to be released downstream of the state line. Details of the project are contained in information and plans received at the Division of Water on April 11, 2014, April 22, 2014, April 29, 2014, May 15, 2014, May 19, 2014, May 22, 2014, June 5, 2014, June 17, 2014, July 23, 2014, August 7, 2014, August 8, 2014 and August 11, 2014.

LOCATION : From the Indiana/Illinois state line continuing upstream approximately 2000' to the Hohman Avenue stream crossing near Hammond, North Township, Lake County
Section 25, T 37N, R 10W, Calumet City, IL-IN Quadrangle
UTM Coordinates: Downstream 4608403 North, 456272 East

APPROVED BY : James J. Hebenstreit

James J. Hebenstreit, PE, Assistant Director
Division of Water

APPROVED ON : October 7, 2014

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STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

CERTIFICATE OF APPROVAL
CONSTRUCTION IN A FLOODWAY

Included: Notice Of Right To Administrative Review - General Conditions - Special Conditions - Service List

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STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

NOTICE OF RIGHT TO ADMINISTRATIVE REVIEW

APPLICATION #: FW- 27504

This signed document constitutes the issuance of a permit by the Department of Natural Resources, subject to the conditions and limitations stated on the pages entitled "General Conditions" and "Special Conditions".

The permit or any of the conditions or limitations which it contains may be appealed by applying for administrative review. Such review is governed by the Administrative Orders and Procedures Act, IC 4-21.5, and the Department's rules pertaining to adjudicative proceedings, 312 IAC 3-1.

In order to obtain a review, a written petition must be filed with the Division of Hearings within 18 days of the mailing date of this notice. The petition should be addressed to:

Mr. Stephen L. Lucas, Director
Division of Hearings
Indiana Government Center North, Room N501A
100 North Senate Avenue
Indianapolis, Indiana 46204

The petition must contain specific reasons for the appeal and indicate the portion or portions of the permit to which the appeal pertains.

If an appeal is filed, the final agency determination will be made by the Natural Resources Commission following a legal proceeding conducted before an Administrative Law Judge. The Department of Natural Resources will be represented by legal counsel.

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STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

GENERAL CONDITIONS

APPLICATION #: FW- 27504

(1) If any archaeological artifacts or human remains are uncovered during construction, federal law and regulations (16 USC 470, et seq.; 36 CFR 800.11, et al) and State Law (IC 14-21-1) require that work must stop and that the discovery must be reported to the Division of Historic Preservation and Archaeology within 2 business days.

Division of Historic Preservation and Archaeology
Room W274
402 West Washington Street
Indianapolis, IN 46204

Telephone: (317) 232-1646, FAX: (317) 232-8036

(2) This permit must be posted and maintained at the project site until the project is completed.

(3) This permit does not relieve the permittee of the responsibility for obtaining additional permits, approvals, easements, etc. as required by other federal, state, or local regulatory agencies. These agencies include, but are not limited to:

Agency	Telephone Number
Lake County Drainage Board	
Little Calumet River Basin Development Commission	(219) 595-0599
US Army Corps of Engineers	(312) 846-5539
Indiana Department of Environmental Management	(317) 233-8488 or (800) 451-6027
Local city or county planning or zoning commission	

(4) This permit must not be construed as a waiver of any local ordinance or other state or federal law.

(5) This permit does not relieve the permittee of any liability for the effects which the project may have upon the safety of the life or property of others.

) This permit may be revoked by the Department of Natural Resources for violation of any condition, limitation or applicable statute or rule.

(7) This permit shall not be assignable or transferable without the prior written approval of the Department of Natural Resources. To initiate a transfer contact:

Mr. Michael W. Neyer, PE, Director
Division of Water
Room W264
402 West Washington Street
Indianapolis, IN 46204

Telephone: (317) 232-4160, Toll Free: (877) 928-3755
FAX: (317) 233-4579

(8) The Department of Natural Resources shall have the right to enter upon the site of the permitted activity for the purpose of inspecting the authorized work.

(9) The receipt and acceptance of this permit by the applicant or authorized agent shall be considered as acceptance of the conditions and limitations stated on the pages entitled "General Conditions" and "Special Conditions".

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STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

SPECIAL CONDITIONS

APPLICATION #: FW- 27504

PERMIT VALIDITY : This permit is valid for 24 months from the "Approved On" date shown on the first page. If construction work in the floodway has not been completed by October 07, 2016 the permit will become void. This permit may be renewed one (1) time for a period not to exceed two (2) additional years only if a written request for the two (2) year permit renewal is received by DNR, Division of Water prior to October 07, 2016. Thereafter the permit will become void and a new permit will be required in order to continue work on the project.

This permit becomes effective 18 days after the "MAILED" date shown on the first page. If both a petition for review and a petition for a stay of effectiveness are filed before this permit becomes effective, any part of the permit that is within the scope of the petition for stay is stayed for an additional 15 days.

CONFORMANCE : Other than those measures necessary to satisfy the "General Conditions" and "Special Conditions", the project must conform to the information received by the Department of Natural Resources on: April 11, 2014, April 22, 2014, April 29, 2014, May 15, 2014, May 19, 2014, May 22, 2014, June 5, 2014, June 17, 2014, July 23, 2014, August 7, 2014, August 8, 2014 and August 11, 2014. Any deviation from the information must receive the prior written approval of the Department.

Number	Special Condition
(1)	revegetate all bare and disturbed areas with a mixture of grasses (excluding all varieties of tall fescue), legumes, and native shrub and hardwood tree species as soon as possible upon completion
(2)	minimize and contain within the project limits inchannel disturbance and the clearing of trees and brush
(3)	do not cut any trees suitable for Indiana bat roosting (greater than 3 inches dbh, living or dead, with loose hanging bark) from April 1 through September 30
(4)	minimize the movement of resuspended bottom sediment from the immediate project area
(5)	appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized
(6)	seed and protect all disturbed streambanks and slopes that are 3:1 or steeper with erosion control blankets (follow manufacturer's recommendations for selection and installation); seed and apply mulch on all other disturbed areas
(7)	plant five trees, at least 2 inches in diameter-at-breast height, for each tree which is removed that is ten inches or greater in diameter-at-breast height
(8)	implement the planting plan received at the Division of Water on June 17, 2014, within one complete growing season of project initiation
(9)	submit a final report indicating the count of trees removed having a 10" or greater diameter-at-breast height, and the number, location and species of trees planted upon the completion of the project

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STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

SPECIAL CONDITIONS

APPLICATION #: FW- 27504

(10) post "Do Not Mow or Spray" signs along the right-of-way surrounding the planting area

(11) all work must conform with the existing bank at the upstream and downstream limits of the project site

(12) do not leave felled trees, brush, or other debris in the floodway *

(13) all riprap placed for bank stabilization must conform to the bank

(14) upon completion of the project, remove all construction debris from the floodway *

(15) upon completion of the project, remove all temporary sheet pile barriers from the floodway or cut or drive the sheet pile barriers so that the top of the sheet piling is flush with the top of the reactive cap

(16) any equipment and/or cables placed on a public waterway must be clearly marked with navigation buoys described in 312 IAC 5-4 in a manner that would be visible to any watercraft operator in the area

(17) any equipment and/or cables left in a public waterway in times of limited visibility must, in addition to the requirement listed above, be marked with flashing amber warning lights and reflective signage warning watercraft operators of the hazards

(18) signs should be posted at the upstream and downstream limits of the construction site, to warn boating traffic of the ongoing work

(19) * NOTE: for regulatory purposes, the floodway is defined as that shown on Panel 19 of the Lake County Flood Insurance Rate Map dated January 18, 2012

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STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

SERVICE LIST

APPLICATION #: FW- 27504

Indiana Department of Natural Resources
Carl Wodrich
Division of Land Acquisition
402 West Washington Street, Room W261
Indianapolis, IN 46204

Haley and Aldrich Inc
Stephen J Kelley
75 Washington Avenue
Portland, ME 04101

Baltimore and Ohio Railroad Company
CSX Transportation
500 Water Street, J910
Jacksonville, FL 32202

Jim Djuric
1616 White Oak Circle, Unit 1B
Munster, IN 46321

Federal Cement Products Inc
24 Marble Street
Hammond, IN 46320

Great Lakes Warehouse Corporation
11 Industrial Road
Hammond, IN 46323

Randal Hendrix
6304 Kennedy Avenue
Hammond, IN 46323

Illiana Scrap
Mike Thompson
13830 South Brainard Avenue
Chicago, IL 60633

Indiana Department of Natural Resources
Steve Davis
100 West Water Street
Michigan City, IN 46360-1310

Indiana Department of Natural Resources
Division of Law Enforcement
District 10 Headquarters
100 West Water Street
Michigan City, IN 46360

Indiana Harbor Belt Railroad Company
PO Box 8499
Philadelphia, PA 19101-8499

Lake County Drainage Board
2293 North Main Street
Crown Point, IN 46307

Lake County SWCD
880 East 99th Court, Suite A
Crown Point, IN 46307

Little Calumet River Basin Development Commission
Dan Repay
900 Ridge Road
Munster, IN 46321

Merchants National Bank of Aurora Tr 3918
105 Industrial Road
Hammond, IN 46323

Norfolk and Southern Railroad
Kathy Headrick
Strategic Planning 12th Floor
3 Commercial Place
Norfolk, VA 23510

Mr. Don Novak
5925 Calumet Avenue, Ground Floor
Hammond, IN 46320

RJ Huizinga Investments LLC
10910 Westwood Drive
Palos Hills, IL 60465

US Army Corps of Engineers
Chicago District
111 North Canal Street, Suite 600
Chicago, IL 60606

Staff Assignment:

Administrative	: Jennifer L. Ware
Technical	: Jennifer L. Ware
Environmental	: J. Matthew Buffington
Fish and Wildlife	: Lori White
Law Enforcement	: Tom Torsell
Historic Preservation & Archaeology	: Cathy Draeger-Williams
Engineering	: Tamika Ali-Yerima

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Michael R. Pence, Governor
Cameron F. Clark, Director
Division of Water
402 W. Washington Street
Room W264
Indianapolis, IN 46204
Phone (317) 232-4160
Toll-free (877) 928-3755
Fax (317) 233-4579
www.in.gov/dnr/water/

DNR Indiana Department of Natural Resources

October 5, 2016
Basin 1

MAILED
OCT 05 2016

Carl Wodrich
Indiana Department of Natural Resources
Division of Land Acquisition
402 West Washington Street, Room W261
Indianapolis, IN 46204

Re: CTS-4286 (Amendment to FW-27504)
Grand Calumet River – Lake County

Dear Mr. Wodrich,

On September 7, 2016 we received your request to amend Application No. FW-27504, which was approved by the Department on October 7, 2014, to include raising the south bank sheet pile wall to approximately 581', installing four additional sheets at a 45 degree angle into the southern bank, and a sand and rip rap mixture placement to stabilize the bank. The project is located along the south bank of Reach 7 in Section 25, Township 37 North, Range 10 West at Hammond, North Township, Lake County.

Our staff has completed the review of your request and has determined that if the project is completed as described in the information submitted, there should be no adverse effect on the efficiency or capacity of the floodway, no unreasonable threat to safety of life or property, and no unreasonable detrimental impact to fish, wildlife, and botanical resources resulting from the revision to this permit. All conditions listed on the original permit (FW-27504) must be met.

The original project description is amended to read as follows:

A 2' thick layer of contaminated sediment totaling approximately 15,600 cubic yards will be dredged along 2000' of the channel and wetland shelves between the Indiana/Illinois state line and Hohman Avenue (Reach 6 and 7). The excavated material will be transported to an adjacent property to be stored prior to being moved to a disposal facility offsite. Approximately 15,600 cubic yards of material will be used to create an underwater reactive cap over the remaining contaminated sediment. The reactive cap will be a minimum of 2' thick throughout the channel and will be made up of organoclay and granulated activated carbon covered with 1' of sand. Temporary and semi-permanent steel sheet pile barriers will be installed within the channel to dewater and isolate the work areas. All steel sheet piling structures will either be cut or driven so that the top of the wall is flush with the top of the reactive cap upon completion of the project. **The south bank sheet pile wall in Reach 7 will be raised to a consistent elevation of approximately 581' NAVD and will be welded to the adjacent sheet pile wall. Four additional sheets will be installed at a 45 degree angle into the southern bank and approximately 5' of sheet pile will be left higher than 581' NAVD to direct potential future high waters in the area back to the center channel. A bentonite "plug" and a rip rap and sand mixture will be installed to repair current and prevent future scouring. A 1' deep by 20' wide weir will be installed in the center of the sheet pile wall. Once the sheet pile wall is completed, a rip rap and sand mixture will be place to fill the eroded area and to prevent further erosion. A 4"-6" layer of top soil will be placed over the**

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sand and rip rap, and seeding and erosion control measures will be implemented. A 1' tall rock check dam will extend 20' upstream and downstream of the steel sheet piling wall to prevent scour of the reactive cap. The top of the rock check dam will be flush with the steel sheet piling wall. The rock check dam is proposed to eliminate the potential for impacted sediments to be released downstream of the state line. Details of the project are contained in information and plans received at the Division of Water on April 11, 2014, April 22, 2014, April 29, 2014, May 15, 2014, May 19, 2014, May 22, 2014, June 5, 2014, June 17, 2014, July 23, 2014, August 7, 2014, August 8, 2014, August 11, 2014, and September 30, 2016.

This letter should be displayed at the project site. The Division of Water will place a copy of this letter in the file to be retained as a permanent record.

You should not construe this letter as a local building permit or a waiver of any local building or zoning ordinance. Additionally, this letter does not relieve you of the responsibility of obtaining permits, approvals, easements, etc. as required by other federal, state and local agencies.

If you have any questions, please contact Nick Males, of the Technical Services Section, either at our toll-free number, 1-877-928-3755, or directly at (317) 234-1073.

Sincerely,

James J Hebenstreit, PE
Assistant Director
Division of Water

JJH/njm

cc: Service list for FW-27504

Enclosures: Notice of Right to Administrative Review
Copy of Permit FW-27504

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5-B-2
11-16-16

Office of the Lake County Surveyor

Lake County Government Center • 2293 North Main Street • Crown Point, Indiana 46307
Phone: (219) 755-3745 • Fax: (219) 755-3750

Bill Emerson, Jr.
County Surveyor

COPY
10-18-16

October 18, 2016

Albin & Karen Nemcek
11818 Lee Street
Crown Point, IN 46307

RE: I.C. 36-9-27.4 – Obstruction of a Mutual Drain/Natural Surface Watercourse

Dear Mr. & Mrs. Nemcek,

Attached for your review are the documents needed to submit for an "Obstruction of a Mutual Drain or Natural Surface Watercourse". I have also included the Indiana Code 36-9-27.4 from the State of Indiana describing the process as laid out from the State.

I understand that this may look a little overwhelming, but I will answer any questions that you may have. This "Code" was established to try and help property owners resolve drainage disputes without going to civil court. Please note that there is a $150 filing fee for this process.

As I explained to Mrs. Nemcek on the telephone, the Lake County Surveyor/Lake County Drainage Board has jurisdictional authority over "County Regulated Drains", and unfortunately this particular location is not part of the county's stormwater system. Therefore, the next step it to follow this procedure or go directly to civil court.

Again, I will assist you in the preparation of this application. Please call, fax, email or send correspondence via the US Postal Service for any questions.

Sincerely,

Daniel V. Gossman

Daniel V. Gossman
Drainage Administrator

Cc: Bill Emerson, Jr., Lake County Surveyor
Cliff Duggan, Legal Advisor
Chris Brown, MS4 Compliance Inspector
Bob Bauer, Lake County Plan Commission
Robert Golding, MS4 Legal Advisor

Office of the Lake County Surveyor

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Bill Emerson, Jr.
County Surveyor

LAKE COUNTY DRAINAGE BOARD
LAKE COUNTY, INDIANA
I.C. 36-9-27.4

RE: Obstruction of Private Drainage

Comes now _____, who petitions the Lake County Drainage Board, per IC 36-9-27.4, for removal of drainage obstruction(s). Petitioner, in support of the petition, advised the Board that:

1. Petitioner is the owner of tract _____ per the records of the Lake County Auditor and that said tract is upstream of a drainage obstruction within a private tile drain or a defined natural surface water channel, causing an adverse effect on petitioners tract.

2. An obstruction to drainage exists on the downstream tract owned by _____ _____which is listed on the Auditors Records as tract number _____ _____ and whose address is shown as _____ _____. Said obstruction is caused by _ _____ and is located _____

3. The petitioner has requested in writing & sent return receipt requested to the above named downstream owner, to remove the obstruction and at this time the obstruction has not been removed. In support of this there is attached a copy of the letter requesting the removal of the obstruction with the original return receipt. It has been thirty (30) or more days since the receipt of the letter by the above downstream owner.

4. Petitioner has submitted a copy of the Auditors Tax Map showing location of drain; location of obstruction; drainage shed of drain; and size of drain if tiled.

5. Petitioner has submitted a list of owners within the drainage shed of the private tile or natural stream showing names of owners; owners address; parcel number; and acres in tract. All of this information is per the Auditors Record. Also included is the estimated acres benefited by the drain for each tract listed.

6. Petitioner believes that the obstruction was: (Mark One)
   _____Caused intentionally by the downstream owner.
   _____Not caused intentionally by the downstream owner.

_____	_____
Signed	Signed
_____	_____
Printed	Printed
_____	_____
Phone Number(s)	Address

INSTRUCTIONS FOR FILING
OBSTRUCTION OF PRIVATE DRAIN PETITION

The 1996 Indiana State Legislature provided some relief for property owners that are adversely affected due to downstream blockage(s) in a private drain or unregulated natural surface watercourse.

This new legislation is Indiana Code 36-9-27.4, effective July 1, 1996. Included in Indiana Code 36-9-27.4 is a process in which a landowner may petition the drainage board of the county in which an obstruction allegedly exists, to remove or authorize, or order, the removal of the obstruction.

The Lake County Surveyor's Office and the Lake County Drainage Board have a Private Drainage Petition form available to assist Lake County residents who wish to resolve private drainage issues through petitioning the Lake County Drainage Board.

The following information is provided to explain and guide residents through the petitioning process.

Before the Drainage Board can be petitioned the affected landowner must first request, in writing, via registered mail, that the owner of the land where the obstruction exists remove the obstruction.

If after 30 days the obstruction has not been removed, the affected landowner may petition the Drainage Board.

To complete the private drain petition the petitioner must include all required information in the spaces provided on the petition form.

Section 1 – the petitioner must provide the parcel number of the affected property. This information can be obtained at the County Auditor's Office.

Section 2 – requires the landowners name, parcel number, and mailing address of the property on which the obstruction exists. This information may also be obtained at the County Auditor's Office. In addition, a brief description of the nature of the blockage is requested as well as description of where on the property the obstruction is located.

Section 3 – is requesting a copy of the letter sent via registered mail to the downstream landowner. The original return receipt must also be submitted with the petition.

Section 4 – requires that a copy of the Auditors Tax Map be included showing location of the drain, location of obstruction, drainage shed of drain, and size of tile if a tile drain.

The drainage shed refers to the area of land that is benefited, or area of land that flows surface water into the drain. The County Surveyor's Office or the Natural Resources Conservation Service may be able to assist the petitioner in determining the drainage shed if necessary.

Section 5 – requires that once the drainage shed has been determined, a list of owners of all land within that watershed be submitted. In addition to the owners name this list shall also include the owners address, parcel number, and acres in the tract. This information can be obtained from the County Auditor's Office. Also required is the estimated acres of each tract that is benefited by the drain.

Section 6 – is to help define the nature of the obstruction and to determine if the petitioner believes that the obstruction was or was not created intentionally.

The petition must be signed by the petitioner(s).

A filing fee of $150 is required, check or money order, made payable to the Lake County Surveyor.

To be filled out by the Lake County Surveyor

Office of the Lake County Surveyor

Lake County Government Center • 2293 North Main Street • Crown Point, Indiana 46307
Phone: (219) 755-3745 • Fax: (219) 755-3750

Bill Emerson, Jr.
County Surveyor

LAKE COUNTY DRAINAGE BOARD
FINDINGS OF FACT AND ORDER ON PETITION TO REMOVE OBSTRUCTION PURSUANT TO I.C. 36-9-27.4-1 THROUGH 25

After a hearing on a petition identified as file number _____filed by _____ _____(Names of Petitioners), the Lake County Drainage Board on the _____day of_____, _____heard evidence and now makes the following findings and order:

1. The obstruction of a **mutual drain** or a **natural surface watercourse** that is alleged in the petition exists. (I.C.36-9-27.4-14(a)(1)

   _____Yes _____No

   If Yes, proceed to number two ***If No, deny petition***

2. The removal of the obstruction will promote better drainage of the petitioner's land. (I.C.36-9-27.4-14(a)(2)(A)

   _____Yes _____No

   If Yes, proceed to number three ***If No, deny petition***

3. The removal of the obstruction will not cause unreasonable damage to the land of the respondents. (I.C.36-9-27.4-14(a)(2)(B)

   _____Yes _____No

   If Yes, proceed to number four ***If No, deny petition***

4. Based upon a preponderance of the evidence presented, the Board finds that the obstruction of the **mutual drain** or **natural surface watercourse** was created intentionally by one or more of the respondents. (LC. 36-9-27.4-15)

   _____Yes _____No

   If Yes, proceed to number five ***If No, proceed to number six***

5. Having found that the obstruction of the **mutual drain** or **natural surface watercourse** was created intentionally by at least one of the respondents, the Drainage Board orders:
   a. ___ the respondents to remove the obstruction at their expense
   b. ___ the county surveyor to remove the obstruction at the expense of the respondents. (choose one)(I.C. 36-9-27.4-16)

   Stop, or proceed to number 11

6. Does the petition relate to a ___ "**Mutual Drain**" or a ___"**Natural Surface Watercourse**" (choose one)

   If **Natural Surface Watercourse** – ***Proceed to number 7***
   If **Mutual Drain** – ***Proceed to number 9***
   (I.C.36-9-27.4-18(a))

7. Having found that the obstruction of a natural surface watercourse was not created intentionally by any of the respondents, the Drainage Board, after consultation with the petitioner, respondents and County Surveyor:
   a. ___ authorizes the petitioner to remove the obstruction at the expense of the petitioner. (I.C. 36-9-27.4-18(b) (1))
   b. ___ directs the county surveyor to remove the obstruction at the expense of the petitioner. (I.C. 36-9-27.4-18(b) (2))(choose one) - ***Proceed to number 8***

8. If desired, the Drainage Board may order the petitioner to also bear the expenses relating to the monetary value of the harm and inconvenience that the respondents will incur as a result of the removal of the obstruction from the **natural surface watercourse**. (It is not required that the respondents be paid for the harm and inconvenience incurred.) (I.C.36-9-27.4-18(d))
   a. ___ Petitioners are to pay expenses of Respondents in the sum of $ _____
   b. ___ Petitioners are not to pay any expenses of Respondents. (choose one)

   Stop or Proceed to number 11

9. Having found that the obstruction of a **mutual drain** was not created intentionally by any of the respondents, the Drainage Board:
   a. ___ authorizes the petitioner to remove the obstruction.
   b. ___ authorizes the respondents to remove the obstruction.
   c. ___ directs the county surveyor to remove the obstruction.
   d. ___ directs the obstruction be removed through the joint efforts of at least two of the persons referred to in this subsection. (fill in names)

   _____

   (choose one) (I.C.36-9-27.4-19)

   Proceed to number 10

10. The cost of the obstruction of the **mutual drain** must be borne by the owners of all tracts of land that are benefited by the drain. The benefited tracts are identified as follows:
    a. The tracts of land benefited by the drain. _____

    _____

    b. The owners of the tracts of land referred to above _____

    _____

    (the identity of the owners of the tracts of land referred to above are those either known to the Drainage Board or whose identity can be determined through the records of the County Recorder.)

    c. The percentage assigned to each tract for the cost of removing the obstruction must be equal to the ratio of the total length of the particular segment of the drain that benefits the tract. The costs of removing the obstruction are apportioned as follows among the tracts of land that are benefited by the drain.
    ___% to tract 1, ___% to tract 2, ___% to tract 3, ___% to tract 4, ___% to tract 5, ___% to tract 6, ___% to tract 7, ___% to tract 8, ___% to tract 9, ___% to tract 10.

    d. The owners of each tract of land referred to above ordered to pay their percentage. (total cost of removing obstruction multiplied by the percentage assigned to each tract above) (the percentage of the total costs assigned to a tract must correspond to the ratio of the total length of the drain to the length of the particular segment of the drain that benefits the tract.) (I.C.36-9-27.4-19(c))

All owners of a particular tract of land that is the subject of an order regarding a **mutual drain** obstruction are jointly and severally responsible for the payment of the amount apportioned to that tract. Any owner of a particular tract who pays all or a portion of the amount may bring an action to obtain contribution from a co-owner of the same tract who did not pay any equal or greater portion of the amount. (I.C.36-9-27.4-20)

Stop or proceed to number 11

11. Payment for removal of obstruction. Advance on general drain improvement fund.

a._____ The Board may provide that the initial costs of the removal work be paid by one or more persons subject to the order. The following persons will be responsible for the initial payment of the cost of removal which will be reimbursed by one or more persons subject to the order.

_____

_____

_____

OR

b._____ The Board may authorize an advance from the general drain improvement fund for the payment of the costs of the removal work and said advance will be reimbursed by one or more persons subject to the order:

_____

_____

_____

(choose one) (I.C.36-9-27.4-12(2))

Recovery of Unpaid Expenses-Enforcement - (a) If a person who is required by an order of a drainage board under this chapter to pay an amount or bear an expense does not comply with the requirement, the amount for which the person is responsible may be recovered by:

(1) the drainage board, as custodian of the general drain improvement fund, if the amount was advanced from the general drain improvement fund; or

(2) another person subject to the order who has paid the amount and is entitled to reimbursement.

(b) An amount may be recovered from a person under subsection (a) through an action in a court having jurisdiction in the same manner that a creditor may recover an amount owed under a contract. In an action brought under this subsection, the plaintiff may also be awarded costs and reasonable attorney's fees. (I.C. 36-9-27.4-22)

So ordered after hearing this_____ day of_____20_____.

LAKE COUNTY SURVEYOR

_____

BILL EMERSON, JR.

LAKE COUNTY DRAINAGE BOARD

_____

GERRY SCHEUB, CHAIRMAN

_____

KYLE ALLEN, SR., MEMBER

_____

MICHAEL C. REPAY, MEMBER

DEFINITIONS

"Mutual Drain" means a drain that:

(1) is located on two (2) or more tracts of land that are under different ownership;
(2) was established by the mutual consent of all the owners; and
(3) was not established under or made subject to any drainage statute.

I.C.39-9-27-2

"Natural Surface Watercourse" means:

an area of the surface of the ground over which water from falling rain or melting snow occasionally and temporarily flows in a definable direction and channel.

"Intentionally" means:

to do something purposely, and not accidentally or involuntarily. Person acts "intentionally" if he desires to cause consequences of his act or he believes consequences are substantially certain to result. When used with reference to civil and criminal responsibility, a person who contemplates any result, as not unlikely to follow from a deliberate act of his own, may be said to intend that result, whether he desires it or not.

IC 36-9-27.4

Chapter 27.4. Removal of Obstructions in Mutual Drains and Natural Surface Watercourses

IC 36-9-27.4-1

"Drain" defined

Sec. 1. As used in this chapter, "drain" refers to a mutual drain (as defined in IC 36-9-27-2).

As added by P.L.239-1996, SEC.3 and P.L.240-1996, SEC.2.

IC 36-9-27.4-2

"Drainage board" defined

Sec. 2. As used in this chapter, "drainage board" means the following:

(1) Except as provided in subdivision (2):

(A) the county board of commissioners, as provided in IC 36-9-27-5(a)(1); or

(B) the drainage board appointed by the board of commissioners under IC 36-9-27-5(a)(2).

(2) In a county having a consolidated city, the board of public works of the consolidated city, as provided in IC 36-9-27-5(b).

As added by P.L.239-1996, SEC.3 and P.L.240-1996, SEC.2.

IC 36-9-27.4-3

"Natural surface watercourse" defined

Sec. 3. As used in this chapter, "natural surface watercourse" means an area of the surface of the ground over which water from falling rain or melting snow occasionally and temporarily flows in a definable direction and channel.

As added by P.L.239-1996, SEC.3 and P.L.240-1996, SEC.2. Amended by P.L.276-2001, SEC.17.

IC 36-9-27.4-4

"Obstruction" defined

Sec. 4. (a) As used in this chapter, "obstruction" means a condition that:

(1) exists within or near a drain; and

(2) prevents or significantly impedes the flow of water through the drain.

(b) The term includes the following:

(1) The presence of:

(A) one (1) or more objects inside or near a drain;

(B) a quantity of materials inside or near a drain; or

(C) damage to a drain;

that prevents or significantly impedes the flow of water through the drain.

(2) Obstructions that:

(A) are created intentionally; and

(B) occur naturally or are created unintentionally.

As added by P.L.239-1996, SEC.3 and P.L.240-1996, SEC.2.

IC 36-9-27.4-5

"Owner" defined

Sec. 5. As used in this chapter, "owner" means a person who holds a possessory legal interest in land.

As added by P.L.239-1996, SEC.3 and P.L.240-1996, SEC.2.

IC 36-9-27.4-6

"Person" defined

Sec. 6. As used in this chapter, "person" means an individual, a corporation, a limited liability company, a partnership, or any other legal entity.

As added by P.L.239-1996, SEC.3 and P.L.240-1996, SEC.2.

IC 36-9-27.4-7
"Respondent" defined

Sec. 7. As used in this chapter, "respondent" means an owner of the tract of land that is the subject of a petition seeking the removal of an obstruction under this chapter.
As added by P.L.239-1996, SEC.3 and P.L.240-1996, SEC.2.

IC 36-9-27.4-8
"Tract" defined

Sec. 8. As used in this chapter, "tract" means an area of land that is:
(1) under common fee simple ownership;
(2) contained within a continuous border; and
(3) a separately identified parcel for property tax purposes.
As added by P.L.239-1996, SEC.3 and P.L.240-1996, SEC.2.

IC 36-9-27.4-9
Petition for removal of obstruction

Sec. 9. If:
(1) a person who owns a tract of land seeks the removal of an obstruction from a drain or natural surface watercourse located outside the person's tract in order to promote better drainage of the person's tract; and
(2) the owner of the land on which the obstruction is located, upon request, does not remove the obstruction;
the person seeking the removal of the obstruction may file a petition under this chapter asking the drainage board in the county in which the obstruction is located to remove, or authorize or order the removal of, the obstruction under this chapter.
As added by P.L.239-1996, SEC.3 and P.L.240-1996, SEC.2.

IC 36-9-27.4-10
Required contents of petition

Sec. 10. A petition filed by a person described in section 9(1) of this chapter must include the following:
(1) A general description of the tract of land owned by the petitioner.
(2) A general explanation of the need for the removal of the obstruction.
(3) A general description of the site of the obstruction.
As added by P.L.239-1996, SEC.3 and P.L.240-1996, SEC.2.

IC 36-9-27.4-11
Filing fee

Sec. 11. The drainage board may require, as a condition of filing a petition under this chapter, the payment of a filing fee. The drainage board may not set the filing fee at an amount greater than is reasonably necessary to defray the expenses incurred by the board in processing a petition.
As added by P.L.239-1996, SEC.3 and P.L.240-1996, SEC.2.

IC 36-9-27.4-12
Investigation by county surveyor; duties of drainage board after receiving report of obstruction

Sec. 12. (a) If a petition filed under this chapter alleges the obstruction of:
(1) a drain; or
(2) a natural surface watercourse;
the county surveyor of the county in which the obstruction is alleged to exist shall promptly investigate whether the obstruction exists.

(b) If the county surveyor, upon investigation, finds an existing obstruction in a drain or natural surface watercourse in the location alleged in the petition, the county surveyor shall report the existence of the obstruction to the drainage board.

(c) Upon receiving a report from the county surveyor under subsection (b), the drainage board shall:

(1) set a date for a hearing on the petition; and

(2) serve notice of the hearing on each owner of the land on which the obstruction exists who can be identified in the records of the county recorder.

(d) The hearing must be held at least thirty (30) days but less than ninety (90) days after the date of the filing of the petition.

(e) Notice of a hearing must be mailed to each respondent with return receipt requested.

As added by P.L.239-1996, SEC.3 and P.L.240-1996, SEC.2. Amended by P.L.276-2001, SEC.18.

IC 36-9-27.4-13

Postponement and rescheduling of hearing

Sec. 13. Before or on the date of a hearing held under this chapter, the drainage board may postpone and reschedule the hearing if:

(1) it appears that a respondent has not been served with notice; or

(2) the interests of fairness otherwise compel a postponement.

As added by P.L.239-1996, SEC.3 and P.L.240-1996, SEC.2.

IC 36-9-27.4-14

Findings of board

Sec. 14. (a) If, after a hearing held under this chapter, the drainage board finds that:

(1) the obstruction of a drain or a natural surface watercourse that is alleged in the petition exists; and

(2) the removal of the obstruction will:

(A) promote better drainage of the petitioner's land; and

(B) not cause unreasonable damage to the land of the respondents;

the drainage board shall find for the petitioner.

(b) If, after a hearing held under this chapter, the drainage board is unable to make the findings described in subsection (a), the drainage board shall deny the petition.

As added by P.L.239-1996, SEC.3 and P.L.240-1996, SEC.2.

IC 36-9-27.4-15

Drainage board determining whether obstruction created intentionally

Sec. 15. If the drainage board finds for the petitioner under section 14(a) of this chapter, the board shall determine, based upon a preponderance of the evidence, whether the obstruction of the drain or natural surface watercourse was created intentionally by any of the respondents.

As added by P.L.239-1996, SEC.3 and P.L.240-1996, SEC.2.

IC 36-9-27.4-16

Duty of board upon finding of intentional obstruction

Sec. 16. (a) If the drainage board finds:

(1) for the petitioner under section 14(a) of this chapter; and

(2) under section 15 of this chapter that the obstruction of the drain or natural surface watercourse was created intentionally by at least one (1) of the respondents;

the drainage board shall enter an order directing the respondents to remove the obstruction at their own expense, or directing the county surveyor to remove the obstruction at the expense of the respondents.

(b) A respondent against whom an order is entered under subsection (a) is subject to an action under section 22 of this chapter if the respondent fails to pay the amount for which the respondent is responsible under the order.

As added by P.L.239-1996, SEC.3 and P.L.240-1996, SEC.2.

IC 36-9-27.4-17

Duty of board upon finding of unintentional obstruction

Sec. 17. If the drainage board:

(1) finds for the petitioner under section 14(a) of this chapter; and

(2) does not find under section 15 of this chapter that the obstruction of the drain or a natural surface watercourse was created intentionally by any of the respondents;

the drainage board shall enter an order under section 18 or 19 of this chapter concerning the removal of the obstruction.

As added by P.L.239-1996, SEC.3 and P.L.240-1996, SEC.2.

IC 36-9-27.4-18

Additional duties of board; natural surface watercourses

Sec. 18. (a) If:

(1) a petition filed under this chapter concerns a natural surface watercourse; and

(2) the drainage board:

(A) finds for the petitioner under section 14(a) of this chapter; and

(B) does not find under section 15 of this chapter that the obstruction of the natural surface watercourse was created intentionally by any of the respondents;

the drainage board shall enter an order under subsection (b).

(b) Upon a determination made under subsection (a), the drainage board shall enter an order:

(1) authorizing the petitioner to remove the obstruction; or

(2) directing the county surveyor to remove the obstruction at the expense of the petitioner.

(c) The drainage board shall consult with the:

(1) petitioner;

(2) respondents; and

(3) county surveyor;

before deciding whether to enter an order under subsection (b)(1) or (b)(2).

(d) If the drainage board enters an order under subsection (b), the order may require the petitioner to bear the expenses of removing the obstruction, including the monetary value of the harm and inconvenience that the respondents will incur as a result of the removal of the obstruction.

As added by P.L.239-1996, SEC.3 and P.L.240-1996, SEC.2.

IC 36-9-27.4-19

Additional duties of board; drains

Sec. 19. (a) If:

(1) a petition filed under this chapter concerns a drain; and

(2) the drainage board:

(A) finds for the petitioner under section 14(a) of this chapter; but

(B) does not find under section 15 of this chapter that the obstruction of the drain was created intentionally by any of the respondents;

the drainage board shall enter an order under subsection (b).

(b) Upon a determination made under subsection (a), the drainage board shall enter an order:

(1) authorizing the petitioner to remove the obstruction;

(2) authorizing the respondents to remove the obstruction;

(3) directing the county surveyor to remove the obstruction; or

(4) directing that the obstruction be removed through the joint efforts of at least two (2) of the persons referred to in this subsection.

(c) If an order is issued under subsection (b), the costs of removing the obstruction must be borne by the owners of all the tracts of land that are benefited by the drain. The order of the board must do the following:

(1) Identify all tracts of land that are benefited by the drain.

(2) Identify the owners of the tracts of land referred to in subdivision (1):

(A) who are known to the drainage board; or

(B) whose identity can be determined through the records of the county auditor.

(3) Apportion the costs of removing the obstruction among the tracts of land that are benefited by the

drain, assigning to each tract a certain percentage of the total costs.

(4) Order the owners of each tract of land referred to in subdivision (1) to pay an amount equal to the product of the total costs of removing the obstruction multiplied by the percentage assigned to the tract under subdivision (3).

(d) The percentage of the total costs assigned to a tract under subsection (c)(3) must correspond to the ratio of the total length of the drain to the length of the particular segment of the drain that benefits the tract.

As added by P.L.239-1996, SEC.3 and P.L.240-1996, SEC.2. Amended by P.L.276-2001, SEC.19.

IC 36-9-27.4-20

Landowners jointly and severally responsible for costs of obstruction removal

Sec. 20. (a) All the owners of a tract that is the subject of an order issued under section 19 of this chapter are jointly and severally responsible for the payment of the amount determined under section 19(c)(4) of this chapter.

(b) An owner of a tract who pays all of or a portion of the amount may bring an action to obtain contribution from an owner of the tract who did not pay an equal or a greater portion of the amount.

(c) An owner of a tract that is the subject of an order issued under section 19 of this chapter is subject to an action under section 22 of this chapter if the owner fails to pay the amount for which the owner is responsible under the order.

As added by P.L.239-1996, SEC.3 and P.L.240-1996, SEC.2.

IC 36-9-27.4-21

Order authorizing advance on general drain improvement fund for payment of obstruction removal expenses

Sec. 21. In entering an order concerning the removal of an obstruction under this chapter, a drainage board may:

(1) provide for the costs of the removal work to be paid directly by one (1) or more of the persons subject to the order; or

(2) authorize an advance on the general drain improvement fund established in the county under IC 36-9-27-73 for the payment

of the costs of the removal work and provide for the amount advanced to be reimbursed by one (1) or more of the persons subject to the order.

As added by P.L.239-1996, SEC.3 and P.L.240-1996, SEC.2.

IC 36-9-27.4-22

Recovery of unpaid amounts or expenses

Sec. 22. (a) If a person who is required by an order of a drainage board under this chapter to pay an amount or bear an expense does not comply with the requirement, the amount for which the person is responsible may be recovered by:

(1) the drainage board, as custodian of the general drain improvement fund, if the amount was advanced from the general drain improvement fund; or

(2) another person subject to the order who has paid the amount and is entitled to reimbursement.

(b) An amount may be recovered from a person under subsection (a) through an action in a court having jurisdiction in the same manner that a creditor may recover an amount owed under a contract. In an action brought under this subsection, the plaintiff may also be awarded costs and reasonable attorney's fees.

As added by P.L.239-1996, SEC.3 and P.L.240-1996, SEC.2.

IC 36-9-27.4-23

Judicial review

Sec. 23. (a) If the drainage board finds for a petitioner after a hearing held under this chapter, a respondent may file an action in the circuit or superior court of the county in which the alleged obstruction exists seeking to have the order entered by the drainage board vacated.

(b) An action filed under subsection (a) must be based on at least one (1) of the following assertions by the respondent:

(1) The drainage board lacked authority to act under this chapter.

(2) The drainage board erred in making the findings described in section 14(a) of this chapter.

(3) The respondent should have been awarded compensation for harm and inconvenience, or the amount awarded to the respondent for harm and inconvenience is insufficient.

(4) The drainage board did not follow the procedure required by this chapter.

As added by P.L.239-1996, SEC.3 and P.L.240-1996, SEC.2.

IC 36-9-27.4-24

Remedies

Sec. 24. (a) In an action filed under section 23 of this chapter, the court:

(1) shall enter an order vacating the order of the drainage board directing the county surveyor to remove the obstruction; and

(2) may issue an injunction against the removal of the obstruction;

if the court makes a finding under subsection (b).

(b) The court is required or authorized to act under subsection (a) if the court finds that the drainage board:

(1) was clearly in error in making its findings under section 14(a) of this chapter with respect to the alleged obstruction; or

(2) exceeded its authority or discretion under the law in authorizing the removal of the obstruction.

As added by P.L.239-1996, SEC.3 and P.L.240-1996, SEC.2.

IC 36-9-27.4-25

Right of entry onto land

Sec. 25. (a) For the purposes of this chapter:

(1) a county surveyor;

(2) a member of a drainage board; or

(3) an authorized representative of a county surveyor or drainage board;

has a right of entry over and upon a tract of land containing a drain or natural surface watercourse that is the subject of a petition filed under this chapter.

(b) The right of entry granted by this section is limited to the land lying within seventy-five (75) feet of the drain or natural surface watercourse. The seventy-five (75) feet must be measured at right angles to:

(1) the center line of any tiled drain; and

(2) the top edge of each bank of an open drain; and

(3) the edge of any natural surface watercourse;

as determined by the county surveyor.

(c) A person exercising a right of entry under this section shall, to the extent possible, use due care to avoid damage to:

(1) crops, fences, buildings, and other structures located outside the right-of-way; and

(2) crops and approved structures located inside the right-of-way.

(d) Before exercising a right of entry under this section, an individual must give oral or written notice of the entry on the land to the property owner of record. The notice must state the purpose for the entry.

(e) A right of entry under this section is not criminal trespass under IC 35-43-2-2, and an individual exercising a right of entry under this section may not be arrested or prosecuted for criminal trespass under IC 35-43-2-2.

As added by P.L.239-1996, SEC.3 and P.L.240-1996, SEC.2.

5-B-3
11-16-16

PETER J. VISCLOSKY
1ST DISTRICT, INDIANA

COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEES:
RANKING MEMBER, DEFENSE
ENERGY AND WATER DEVELOPMENT

CONGRESSIONAL STEEL CAUCUS
VICE CHAIRMAN

U.S. HOUSE LAW ENFORCEMENT CAUCUS

Congress of the United States
House of Representatives
Washington, DC 20515-1401

2328 RAYBURN BUILDING
WASHINGTON, DC 20515-1401
(202) 225-2461

7895 BROADWAY, SUITE A
MERRILLVILLE, IN 46410
(219) 795-1844

Call Toll Free
1 888 423 7383

INTERNET:
http://visclosky.house.gov

October 21, 2016

RECEIVED
OCT 25 2016
LAKE COUNTY SURVEYOR

Mr. Bill Emerson, Jr.
Lake County Surveyor
2293 North Main Street
Crown Point, Indiana 46307

Dear Mr. Emerson:

Enclosed please find correspondence submitted to my office by our shared constituent, Ms. Linda Kulik.

Ms. Kulik has contacted my office with concerns regarding flooding and drainage issues in her subdivision. Ms. Kulik has expressed concerns regarding the severe property damage resulting from the drainage problems, as well as impact the stagnant water may have on the health of residents.

While this matter rests outside my purview as a federal representative, I would greatly appreciate your review of the circumstances involved in this matter and your insights as to efforts that can be taken to address Ms. Kulik's concerns.

I trust Ms. Kulik's concerns will be given the attention they deserve, and I thank you for your kind attention to this matter.

Sincerely,

Peter J. Visclosky
Member of Congress

PJV:gjg
Enclosure

THIS STATIONERY PRINTED ON PAPER MADE OF RECYCLED FIBERS

FOR OFFICE USE ONLY

CODE: Bock (County)

CASE # _____

CASEWORKER: GG

RECEIVED
OCT 25 2016
LAKE COUNTY SURVEYOR

OCT 20 2016

Constituent Fact Sheet
Congressman Pete Visclosky

Name: Linda (First) J (Middle) Kulik (Last)

Address: 6191 W. 88th AVE

City: CROWN POINT Zip Code: 46307 Date of Birth: 05-06-1961

Telephone (H): 219-365-0932 (W): _____ Social Security # 306-76-2607

Have you ever had a previous case with our office? _____ If yes, when? _____

PLEASE COMPLETE THE FOLLOWING SECTIONS THAT APPLY TO YOUR CASE!

Social Service Agency Information Section

What type of benefits have you applied for? (Check one) Medicare: _____ Medicaid: _____ Pension: _____

Social Security Retirement: _____ Social Security Disability: _____ Welfare: _____ Workers Compensation: _____

Equal Opportunity Commission: _____ Other: _____

At which office did you apply? _____

At what level is your claim? (Check one) Initial: _____ Hearing: _____ Claim denied and not re-opened: _____

Reconsideration: _____ Appeals Council: _____ Case Number, if applicable _____

Military/Veterans Affairs Information Section

Which branch of the service? Army _____ Navy: _____ Air Force: _____ Marines: _____ National Guard: _____

Air National Guard: _____ Coast Guard: _____ Other: _____

Rank, Social Security #, or Service #: _____

Entry Date: _____ Discharge Date: _____

Unit: _____

VA Claim #: _____ Type of VA Benefit applied for: _____

At what level is your claim? (Check one)
Initial: _____ Claim denied: _____ Appeal: _____ Board of Veteran Appeals: _____

PLEASE BE SURE TO COMPLETE BOTH SIDES OF THIS FORM

Immigration Section

Alien Number: _____ Type of Application: _____

Date of Receipt: _____ Date of Interview: _____

Please check all that apply:

Previous Inquiry Attached: _____ Green Card: _____ Interviews: _____ Oath Ceremony: _____ Fingerprints: _____

Rescheduled Interview: _____ Rescheduled Oath: _____ Fee Receipts: _____ File Lost/Transfer: _____

Employment Authorization (EAD): _____ Others: _____

PLEASE PRINT LEGIBLY USING BLACK INK

Please describe your problem and include any relevant file, claim, alien registration, or identification numbers and the phone numbers of individuals with whom you have previously discussed your problem. If possible, please provide copies of documentation that may help with your case. If you need more space, please continue on another sheet of paper.

HAVING ISSUES WITH PROPERTY DAMAGE DUE TO ONGOING SEWER ISSUES, CONTACTED APPROPRIATE OFFICES AT LAKE COUNTY, THEY ARE FULLY AWARE OF DRAINAGE ISSUES IN SUBDIVISION, NOTHING IS GETTING RESOLVED.

NOW THE FLOODING IS CAUSING SEVERE PROPERTY DAMAGE TO MY HOME & SURROUNDING HOMES. I WOULD, AS A TAX PAYER, LIKE THIS ADDRESSED AND RESOLVED.

BECOMING A PUBLIC HEALTH ISSUE FROM STAGNANT WATER, PROPERTY GROUND IS ERODING

Pursuant to the Privacy Act of 1974, I hereby give Congressman Peter J. Visclosky and his staff permission to contact and obtain any information necessary to assist me.

X Linda Kulik DATE: 10-18-16

Signature

Send completed form to:
Congressman Pete Visclosky
7895 Broadway, Suite A
Merrillville, IN 46410

Questions? Call (219) 795-1844

Fax completed form to:
Attention: Congressman Visclosky
Fax: (219) 795-1850

5-B-3
11-16-16

Office of the Lake County Surveyor

Lake County Government Center • 2293 North Main Street • Crown Point, Indiana 46307
Phone: (219) 755-3745 • Fax: (219) 755-3750

Bill Emerson, Jr.
County Surveyor

November 1, 2016

Linda Kulik
6191 West 88th Avenue
Crown Point, Indiana 46307

RE: Spring Rose Heath – Drainage
6191 West 88th Avenue
Crown Point, St John Township

Dear Ms. Kulik,

According to records in the Office of the Lake County Surveyor, the property located at 6191 W. 88th Avenue in un-incorporated Lake County, St John Township contains no regulated drains and is not under the jurisdiction of the Lake County Surveyor/Lake County Drainage Board. Therefore, neither of these two county agencies has statutory authority over this property to perform any type of maintenance.

It is unfortunate that we are unable to provide assistance. However, since this subdivision and lot, Spring Rose Heath-Unit 2 – Lot 171, are located outside the Crown Point municipal boundary, I believe that the Lake County Public Works Department would be better suited to handle this concern. If this issue progresses into a water quality concern, then I would ask that the County MS4 department join resources with the County Public Works department in searching for cooperative resolutions.

The following is a list of agencies you should consider contacting:

Lake County Public Works Department
Lake County Highway Department

The Lake County Surveyor's Office appreciates the opportunity to assist in this matter. Should you have any additional questions or comments, please do not hesitate to contact our office.

Sincerely,

Daniel V. Gossman
Drainage Administrator

cc: Bill Emerson, Jr., Lake County Surveyor
Tom Regalado, Asst Drainage Admn
Cliff Duggan, Legal Advisor
Hon. Peter J. Visclosky, U.S. Congressman
Gerry Scheub, Lake County Commissioner
Marcus Malczewski, Lake County Highway
Jean Shepherd, St John Township Advisory Committee Representative
Lake County Drainage Board and Advisory Committee

Owner Information
Kulik, Richard J & Linda J
6191 88th AVE
Crown Point, IN 46307
Parcel Number: 45-11-25-154-007.000-032

Site Information
6191 88TH AVE
CROWN POINT, IN 46307
Tax Code: 032
Tax Description: St. John Township
Legal Description (Not for use on legal documents): SPRINGROSE HEATH SUBDIVISIO
UNIT TWO LOT 171
Net Acres: 0
Property Class: One Family Dwelling Platted
Zoning Code: 0
Use Code: 0
Deductions: Mortgage, Homestead-Suppl, Homestead

Lake County, IN
Date Printed: November 1, 2016

This map is to be used for tax purposes only. - Bill Emerson, Jr., Lake County Surveyor

5-B-4
11-16-16

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

CERTIFICATE OF APPROVAL
CONSTRUCTION IN A FLOODWAY

APPLICATION # : FW-28464 **MAILED: October 24, 2016**

STREAM : Burns Ditch

APPLICANT : City of Lake Station
Bill Westmoreland
1969 Central Avenue
Lake Station, IN 46405

AGENT : American Structurepoint Inc
Benjamin Harvey
7260 Shadeland Station
Indianapolis, IN 46256

AUTHORITY : IC 14-28-1 with 312 IAC 10

DESCRIPTION : An 18" steel force main will be replaced with an 18" PVC or HDPE force main, adjacent to and at a similar elevation as the existing main. The trench will be open cut. Three structures with piping and venting will extend above the ground surface. A minimum 5' of cover will be placed over the pipe, and it will not cross or enter the flowline of Burns Ditch. Details of the project are contained in information received electronically at the Division of Water on June 20, 2016 and in plans and information received at the Division of Water on August 5, 2016 and September 26, 2016.

LOCATION : Approximately 1600' downstream of the Clay Street crossing at Lake Station, Calumet Township, Lake County
Section 7, T 36N, R 7W, Gary Quadrangle
UTM Coordinates: Downstream 4603111 North, 477257 East

APPROVED BY : Larissa Muellner
Larissa Muellner, CFM, Sr Environmental Manager
Division of Water

APPROVED ON : October 24, 2016

Included: Notice Of Right To Administrative Review - General Conditions - Special Conditions - Service List

RECEIVED
OCT 31 2016
LAKE COUNTY SURVEYOR

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

NOTICE OF RIGHT TO ADMINISTRATIVE REVIEW

APPLICATION #: FW- 28464

This signed document constitutes the issuance of a permit by the Department of Natural Resources, subject to the conditions and limitations stated on the pages entitled "General Conditions" and "Special Conditions".

The permit or any of the conditions or limitations which it contains may be appealed by applying for administrative review. Such review is governed by the Administrative Orders and Procedures Act, IC 4-21.5, and the Department's rules pertaining to adjudicative proceedings, 312 IAC 3-1.

In order to obtain a review, a written petition must be filed with the Division of Hearings within 18 days of the mailing date of this notice. The petition should be addressed to:

Director
Division of Hearings
Indiana Government Center North, Room N501A
100 North Senate Avenue
Indianapolis, Indiana 46204

The petition must contain specific reasons for the appeal and indicate the portion or portions of the permit to which the appeal pertains.

If an appeal is filed, the final agency determination will be made by the Natural Resources Commission following a legal proceeding conducted before an Administrative Law Judge. The Department of Natural Resources will be represented by legal counsel.

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

GENERAL CONDITIONS

APPLICATION #: FW- 28464

(1) If any archaeological artifacts or human remains are uncovered during construction, federal law and regulations (16 USC 470, et seq.; 36 CFR 800.11, et al) and State Law (IC 14-21-1) require that work must stop and that the discovery must be reported to the Division of Historic Preservation and Archaeology within 2 business days.

Division of Historic Preservation and Archaeology
Room W274
402 West Washington Street
Indianapolis, IN 46204

Telephone: (317) 232-1646, FAX: (317) 232-8036

(2) This permit must be posted and maintained at the project site until the project is completed.

(3) This permit does not relieve the permittee of the responsibility for obtaining additional permits, approvals, easements, etc. as required by other federal, state, or local regulatory agencies. These agencies include, but are not limited to:

Agency	Telephone Number
Lake County Drainage Board	
Little Calumet River Basin Development Commission	(219) 595-0599
US Army Corps of Engineers	(312) 846-5539
Indiana Department of Environmental Management	(317) 233-8488 or (800) 451-6027
Local city or county planning or zoning commission	

(4) This permit must not be construed as a waiver of any local ordinance or other state or federal law.

(5) This permit does not relieve the permittee of any liability for the effects which the project may have upon the safety of the life or property of others.

(6) This permit may be revoked by the Department of Natural Resources for violation of any condition, limitation or applicable statute or rule.

) This permit shall not be assignable or transferable without the prior written approval of the Department of Natural Resources. To initiate a transfer contact:

Mr. Michael W. Neyer, PE, Director
Division of Water
Room W264
402 West Washington Street
Indianapolis, IN 46204

Telephone: (317) 232-4160, Toll Free: (877) 928-3755
FAX: (317) 233-4579

(8) The Department of Natural Resources shall have the right to enter upon the site of the permitted activity for the purpose of inspecting the authorized work.

(9) The receipt and acceptance of this permit by the applicant or authorized agent shall be considered as acceptance of the conditions and limitations stated on the pages entitled "General Conditions" and "Special Conditions".

RECEIVED
OCT 31 2016
LAKE COUNTY SURVEYOR

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

SPECIAL CONDITIONS

APPLICATION #: FW- 28464

PERMIT VALIDITY : This permit is valid for 24 months from the "Approved On" date shown on the first page. If construction work in the floodway has not been completed by October 24, 2018 the permit will become void. This permit may be renewed one (1) time if a written request is received by DNR, Division of Water prior to October 24, 2018. Thereafter the permit will become void and a new permit will be required in order to continue work on the project.

This permit becomes effective 18 days after the "MAILED" date shown on the first page. If both a petition for review and a petition for a stay of effectiveness are filed before this permit becomes effective, any part of the permit that is within the scope of the petition for stay is stayed for an additional 15 days.

CONFORMANCE : Other than those measures necessary to satisfy the "General Conditions" and "Special Conditions", the project must conform to the information received by the Department of Natural Resources on: June 20, 2016, August 5, 2016 and September 26, 2016. Any deviation from the information must receive the prior written approval of the Department.

Number	Special Condition
(1)	replant any disturbed areas with the approved native seed mixture
(2)	do not excavate in the waterway and minimize disturbance to bank vegetation and contain disturbance to within the project limits
(3)	do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 3 inches dbh, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30
(4)	appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized
(5)	plant five trees, at least 2 inches in diameter-at-breast height, for each tree which is removed that is ten inches or greater in diameter-at-breast height
(6)	inspect structural erosion and sediment control practices daily and repair as necessary until all construction is complete and disturbed areas are permanently stabilized
(7)	do not excavate or place fill in any riparian wetland
(8)	install a silt fence along the eastern edge of the project area to protect the wetland from sedimentation and disturbance during construction
(9)	except for the material used as backfill as shown on the above referenced project plans on file at the Division of Water, place all excavated material landward of the floodway *
(10)	do not leave felled trees, brush, or other debris in the floodway *
(11)	backfill the trench to existing ground elevations
(12)	upon completion of the project, remove all construction debris from the floodway *

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

SPECIAL CONDITIONS

APPLICATION #: FW- 28464

(13) * NOTE: for regulatory purposes, the floodway is defined as that shown on Panel #159 of the Lake County Flood Insurance Rate Map dated January 18, 2012

RECEIVED
OCT 31 2016
LAKE COUNTY SURVEYOR

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

SERVICE LIST

APPLICATION #: FW- 28464

City of Lake Station
Bill Westmoreland
1969 Central Avenue
Lake Station, IN 46405

American Structurepoint Inc
Benjamin Harvey
7260 Shadeland Station
Indianapolis, IN 46256

Michael and Lynsae Allcox
920 East 23rd Avenue
Lake Station, IN 46405-1028

B&B LLC
11309 Broadway
Crown Point, IN 46307

City of Gary
401 Broadway
Gary, IN 46402

Conroy Family Trust
4525 North 1200 East
Grovertown, IN 46531

Frank M Ward Sr Trust
2401 Laflin Street
Chicago, IL 60608

Gary Recycling Services Inc
PO Box 29246
Phoenix, AZ 85038

Indiana Department of Natural Resources
Steve Davis
100 West Water Street
Michigan City, IN 46360-1310

Indiana Department of Natural Resources
Division of Law Enforcement
District 10 Headquarters
100 West Water Street
Michigan City, IN 46360

Kumar Family Limited Partnership
864 Madison Street
Crown Point, IN 46307

Lake County Drainage Board
2293 North Main Street
Crown Point, IN 46307

Lake County SWCD
880 East 99th Court, Suite A
Crown Point, IN 46307

Lake County Trust #5695
9800 Connecticiut Street
Suite B2-900
Crown Point, IN 46307

Lake Erie Land Company, Inc
290 West Nationwide Boulevard
Columbus, OH 43215

Dewey R Lemley
1969 Central Avenue
Lake Station, IN 46405

Little Calumet River Basin Development Commission
6100 Southport Road
Portage, IN 46368-1854

Little Calumet River Basin Development Commission
Dan Repay
900 Ridge Road
Munster, IN 46321

Little Calumet River Basin Development Commission
601 State Office Building
Indianapolis, IN 46204

Little Calumet River Basin Development Commission
8149 Kennedy Avenue
Highland, IN 46322

Cindy Miller
1016 23rd Avenue
Lake Station, IN 46405

Northern Indiana Public Service Company
P O Box 117
Columbus, OH 43216-0117

Manuel Pallachisaca
700 23rd Ave
Lake Station, IN 46405

Douglas Robb
960 23rd Avenue
Lake Station, IN 46405

Rhiannon Scoville
2627 41st Street
Highland, IN 46322

The Indiana Toll Road Commission
402 Washington Street Room W 478
Indianapolis, IN 46204

The Indiana Toll Road Commission
1101 Tippecanoe Street
Lake Station, IN 46405

US Army Corps of Engineers
Chicago District
231 South LaSalle Street, Suite 1500
Chicago, IL 60604

Leroy L and Darlene J Van Sickle
960 East 23rd Avenue
Lake Station, IN 46405

Staff Assignment:

Administrative	: Scott H Dean
Technical	: Scott H Dean
Environmental	: J. Matthew Buffington
Fish and Wildlife	: Stephanie Trapp

5-B-5
11-16-16

Office of the Lake County Surveyor

Lake County Government Center • 2293 North Main Street • Crown Point, Indiana 46307
Phone: (219) 755-3745 • Fax: (219) 755-3750

Bill Emerson, Jr.
County Surveyor

November 4, 2016

Nikola & Laura Cimesa
8844 159th Avenue
Lowell, Indiana 46356

RE: Pheasant Ridge Unit 2 – Drainage Easement (Detention Pond)

Dear Mr. & Mrs. Cimesa,

The Lake County Surveyor's Office has been requested to inspect the drainage for the Pheasant Ridge Subdivision. As you are aware, the detention pond for the drainage of the subdivision is located on Lot 9 which is owned by you. Since the subdivision is experiencing poor drainage, we have coordinated with the Lake County Highway Department/Lake County Public Works Department to perform inspections and some minor maintenance to determine if an obstruction is present.

To that end, I am notifying you that the Lake County Surveyor's staff will be utilizing the drainage "easement" to attempt to locate the outlet for the drainage system. We will be removing trees and reducing them to wood chips to help locate the end of the pipe. This work will be taking place the latter part of the week of November 7th thru November 11th, 2016. Additional maintenance will be scheduled and coordinated with the County Highway/Public Works over the next couple of months, and you will be notified of that activity also.

This is an attempt to re-establish the drainage system that was originally designed for this subdivision. Please understand that you are not being held responsible for what has occurred, and that the County will keep you informed of all activity regarding this detention pond and "easement".

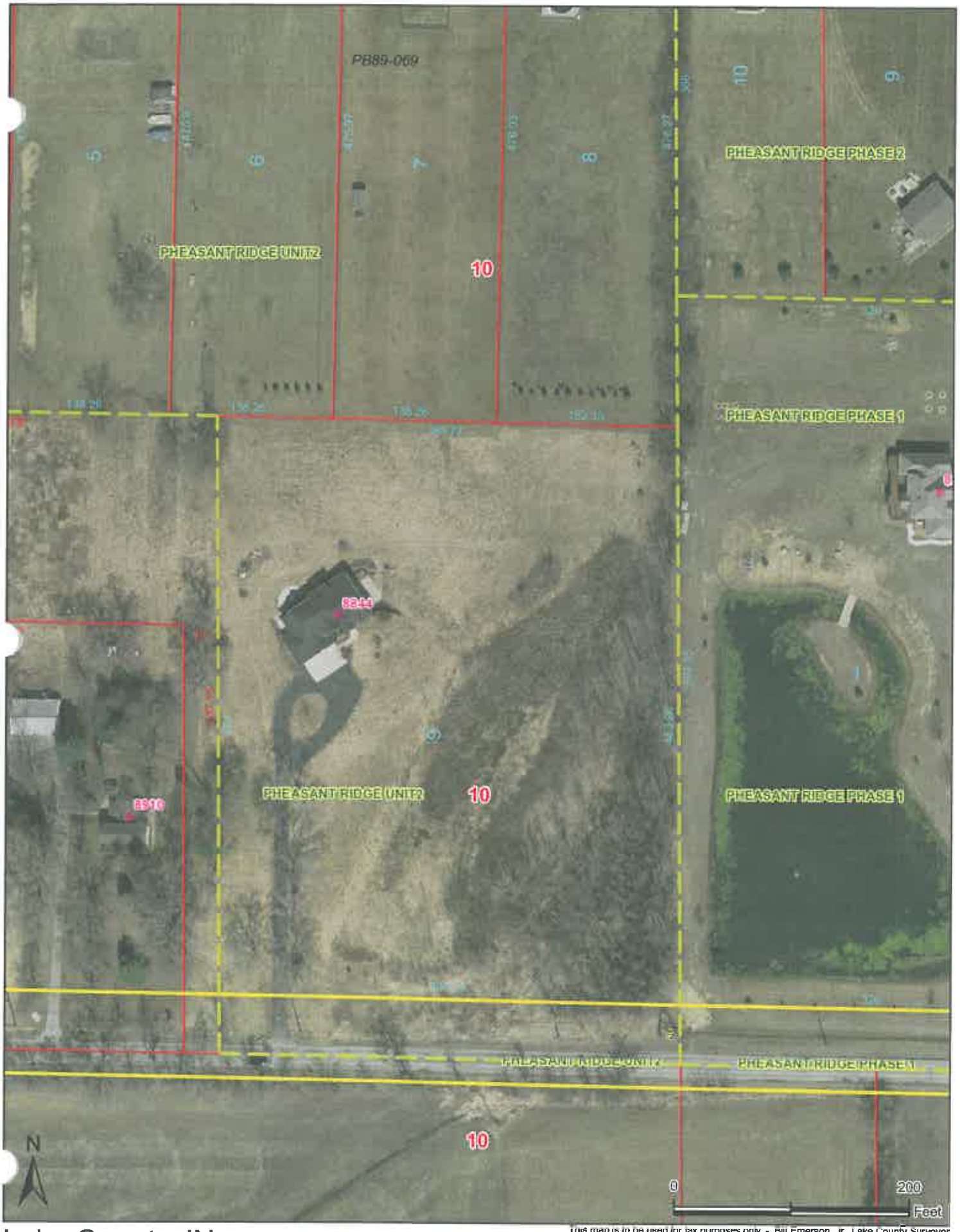
Should you have any questions or concerns, please do not hesitate to contact our office or the Lake County Highway for additional information. You may call or email me at (219) 755-3745 – gossmdv@lakecountyin.org or Duane Alverson, P.E. at (219) 663-0525 – alverda@lakecountyin.org.

Sincerely,

Daniel V. Gossman

Daniel V. Gossman
Drainage Administrator

Cc: Bill Emerson, Jr., Lake County Surveyor
Gerry Scheub, Lake County Commissioner
Eldon Strong, Lake County Councilman
Marcus Malczewski, Lake County highway Superintendent
Duane Alverson, Lake County Highway Engineer



Lake County, IN

Date Printed: November 4, 2016

This map is to be used for tax purposes only. - Bill Emerson, Jr., Lake County Surveyor

5-B-6
11-16-16

DLZ
ARCHITECTURE • ENGINEERING • PLANNING
SURVEYING • CONSTRUCTION SERVICES

INNOVATIVE IDEAS
EXCEPTIONAL DESIGN
UNMATCHED CLIENT SERVICE

RECEIVED
NOV 09 2016
LAKE COUNTY SURVEYOR

MEMORANDUM

DATE: November 9, 2016

TO: Bill Emerson, Jr., Lake County Surveyor
Dan Gossman, Drainage Administrator, Lake County Surveyor's Office

FROM: Frank Stewart, P.E.

SUBJECT: Bohling's 2nd Addition Flooding / Schererville Heights Drainage Model

Background

The Lake County Highway Department and the Lake County Surveyor's Office have noted reports of street flooding at the south end of Fulton Place in Bohling's 2nd Addition subdivision. The reports indicated water has risen to a level where it has entered structures. There are two (2) detention ponds along the west side of the subdivision that flow into the Shererville Heights subdivision stormwater system. These ponds serve an upstream watershed of approximately 135 acres. Approximately 61 acres of the upstream watershed drains through an existing pond that provides some attenuation, leaving approximately 71 acres flowing undetained into the Bohling's detention ponds.

The Schererville Heights subdivision experienced flooding especially along 85th Avenue and a study was performed in 2002. As a result, a diversion was constructed to relieve the flooding starting at the 2nd detention pond downstream of the Bohling's 2nd Addition outfall (labeled in the computer model SH-7). This diversion pipe was sized to allow the SH-7 pond to fill but not overtop during the 100-year storm events.

Topographic Review

The Lake County GIS contour data indicates a low area in Fulton Street approximately 135 feet north of the intersection with 87th Avenue. The **697** foot contour surrounds this location where there are presumed to be inlets. These inlets are likely at an elevation between **696** and **696.5** feet.

The contours also indicate an overflow route to the south Bohling's pond between the first and second house on the west side of the street. The elevation of this overflow rout appears to be between 698 and 697 feet.

Hydrologic / Hydraulic Model Review

The hydrologic / hydraulic model from the design of the Schererville Heights subdivision diversion was reviewed and input parameters checked. The current NOAA rainfall depths were added for reference. In general, the NOAA rainfall depths are larger for the longer duration events when compared to the Lake County Stormwater Design Manual.

In both the updated and existing model, the Bohling's ponds were overtopping for all 100-year events. Pond SH-7 did not overtop during the 100-year events as listed in the Lake County Stormwater Design Manual, but did overflow during the NOAA 2-hour through 24-hour events.

Also observed in the existing model, the peak elevation in the south Bohling's pond (SHW9_1) was higher than the peak elevation in the north Bohling's pond (SHW9_2). The existing peak elevations are summarized below.

Table 1: Summary of Existing Peak Pond Elevations – Bohling's 2nd Addition

Event	Peak Elevation Pond SHW9_1 (ft)	Peak Elevation Pond SHW9_2 (ft)
100-Yr, 1-Hr	696.50	694.27
100-Yr, 2-Hr	696.65	694.30
100-Yr, 3-Hr	696.33	694.25
100-Yr, 6-Hr	695.96	694.16
100-Yr, 12-Hr	695.85	694.10
100-Yr, 24-Hr	695.73	694.02
100-Yr, 1-Hr NOAA	697.17	694.37
100-Yr, 2-Hr NOAA	697.39	694.40
100-Yr, 3-Hr NOAA	697.18	694.38
100-Yr, 6-Hr NOAA	696.84	694.34
100-Yr, 12-Hr NOAA	696.23	694.24
100-Yr, 24-Hr NOAA	695.96	694.16

Alternatives

Two (2) alternatives were modeled. One was to remove the berm between Ponds SHW9_1 and SHW9_2 to create one pond, maximizing the detention volume. The other was to add off-site detention in addition to maximizing detention.

The results of combining the two ponds are summarized below.

Table 2: Comparison of Existing Peak Elevations for Pond SHW9_1 and Combined Ponds

Event	Peak Elevation Pond SHW9_1 (ft)	Peak Elevation Combined Ponds (ft)
100-Yr, 1-Hr	696.50	696.50
100-Yr, 2-Hr	696.65	696.65
100-Yr, 3-Hr	696.33	696.33
100-Yr, 6-Hr	695.96	695.96
100-Yr, 12-Hr	695.85	695.85
100-Yr, 24-Hr	695.73	695.73
100-Yr, 1-Hr NOAA	697.17	697.17
100-Yr, 2-Hr NOAA	697.39	697.43
100-Yr, 3-Hr NOAA	697.18	697.15
100-Yr, 6-Hr NOAA	696.84	696.81
100-Yr, 12-Hr NOAA	696.23	696.19
100-Yr, 24-Hr NOAA	695.96	695.94

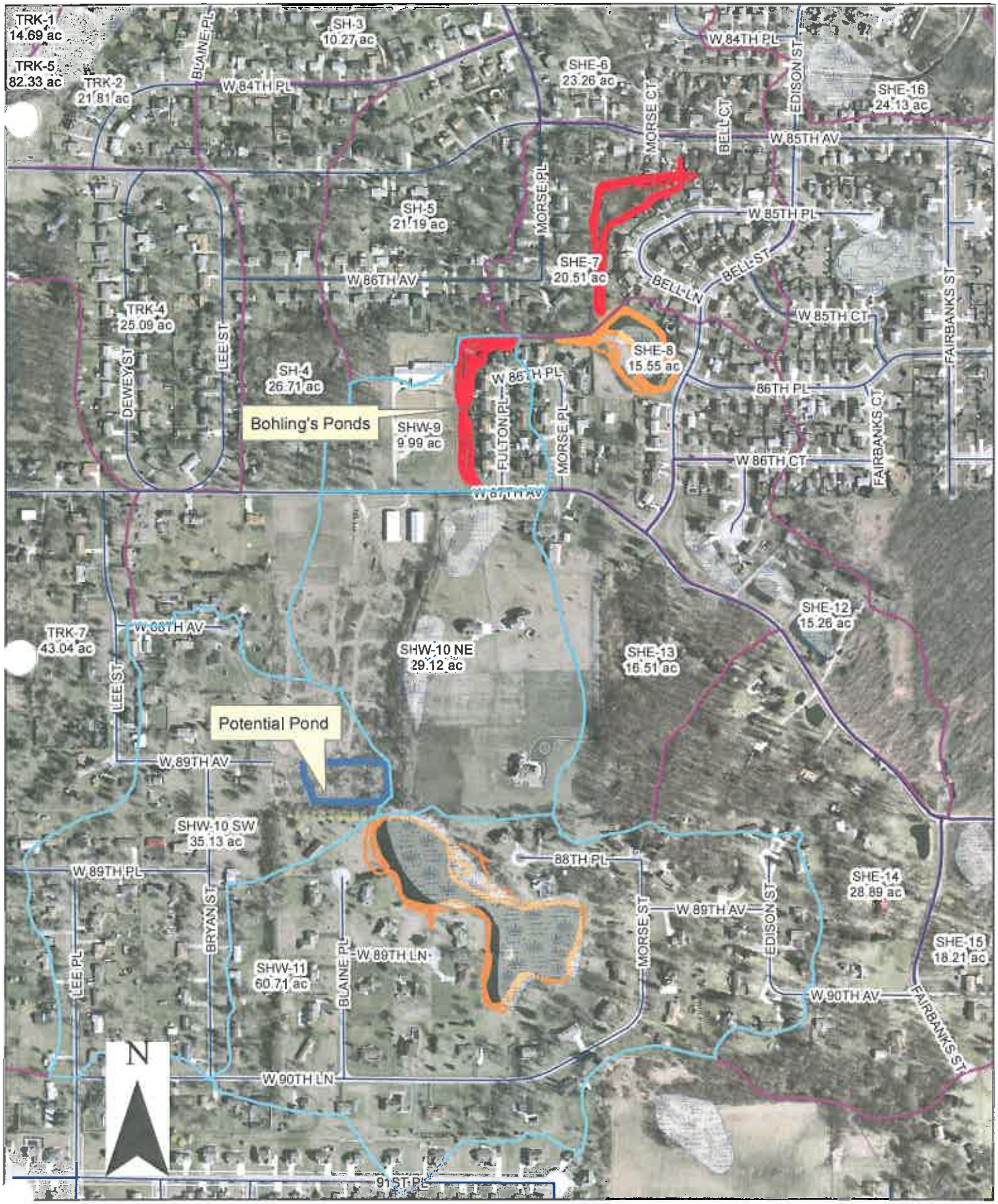
The results indicate no reduction in the peak elevation, except for a small amount during the higher depth NOAA storm events. This probably attributable to quicker activation of the overflow at the downstream end.

The second alternative was to model a detention at the downstream end of the subdivision in the southwest watershed (see Exhibit A). This location was chosen because it could capture all of the developed subdivision and would be located within an individual parcel. The upstream watershed is approximately 35 acres at this point.

The proposed pond as shown will provide approximately five (5) acre-feet of storage and used a one (1) foot diameter orifice. The peak outflow ranged from 7.5 to 9.8 cfs for the County storm events and 8.6 to 12.3 for the NOAA events. The resulting elevations for the proposed combined pond are summarized below.

Table 3: Comparison of Peak Elevations for Combined Ponds and Combined Pond with Upstream Detention

Event	Peak Elevation Combined Ponds (ft)	Peak Elevation Combined Ponds + Detention (ft)	Change (ft)
100-Yr, 1-Hr	696.50	694.11	2.39
100-Yr, 2-Hr	696.65	694.18	2.47
100-Yr, 3-Hr	696.33	694.18	2.15
100-Yr, 6-Hr	695.96	694.16	1.8
100-Yr, 12-Hr	695.85	694.17	1.68
100-Yr, 24-Hr	695.73	694.15	1.58
100-Yr, 1-Hr NOAA	697.17	694.23	2.94
100-Yr, 2-Hr NOAA	697.43	694.30	3.13
100-Yr, 3-Hr NOAA	697.15	694.29	2.86
100-Yr, 6-Hr NOAA	696.81	694.30	2.51
100-Yr, 12-Hr NOAA	696.19	694.27	1.92
100-Yr, 24-Hr NOAA	695.94	694.24	1.7



350 175 0 350 Feet

Bohling's 2nd Addition
Detention Review
Lake County, Indiana

Exhibit A

5-B-7
11-16-16

Office of the Lake County Surveyor

Lake County Government Center • 2293 North Main Street • Crown Point, Indiana 46307
Phone: (219) 755-3745 • Fax: (219) 755-3750

Bill Emerson, Jr.
County Surveyor

November 10, 2016

Jim Emerick, PE
INDOT Hydraulic Engineer
100 North Senate Ave. N642
Indianapolis, IN 46204

RE: Regulated Drain Determination

Dear Mr. Emerick,

According to records located in the Office of the Lake County Surveyor, the culvert on SR 130 in Hobart is not within a county regulated drain easement. Therefore, it is not under the jurisdiction of the Lake County Surveyor/Lake County Drainage Board and neither of these two agencies have statutory authority to perform any type of review or maintenance. For these reasons no Drainage Board application is necessary.

The Lake County Surveyor's Office appreciates your request concerning this matter. Should you have any further questions or comments, please do not hesitate to contact our office.

Sincerely,

Thomas Regalado

Thomas Regalado
Assistant Drainage Administrator

Cc: Bill Emerson, Jr. Lake County Surveyor
Daniel V. Gossman, Drainage Administrator
Lake County Drainage Board and Advisory Committee

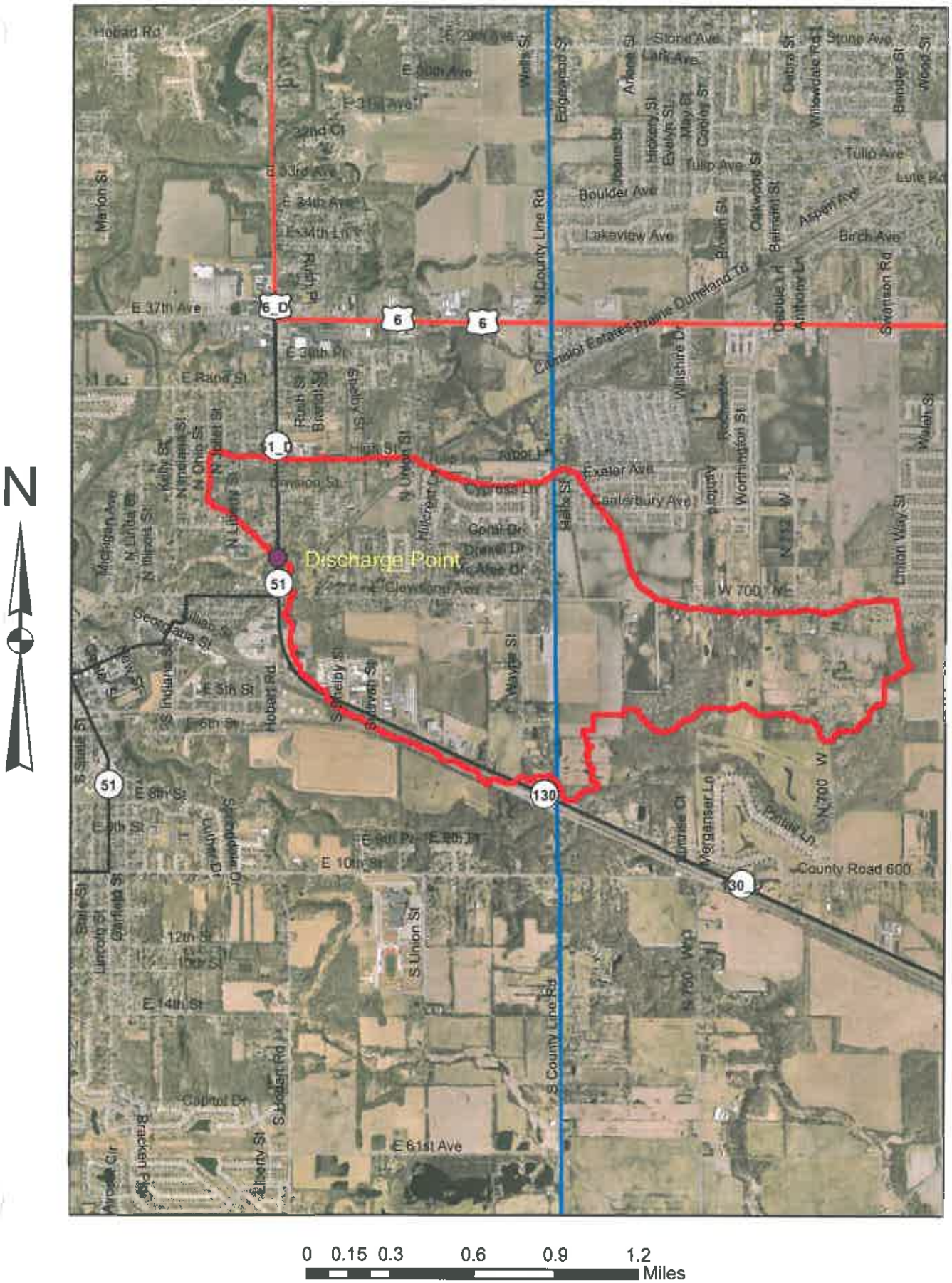
Regalado, Tom R

From: Emerick, James <JEmerick@indot.IN.gov>
Sent: Monday, November 07, 2016 2:57 PM
To: Regalado, Tom R
Cc: 'kusime@lakecountyin.org'
Subject: Culvert Replacement
Attachments: Location Map.pdf

We are doing preliminary engineering for a culvert on SR 130. I wanted to check to see if this culvert is part of a County Legal Drain. If it is could you please let me know if there are any specific concerns or requirements with replacement. I have attached a map showing the location. The point marked discharge point is the location of the culvert.

Thanks,

Jim Emerick, PE
INDOT Hydraulic Engineer
100 North Senate Ave. N642
Indianapolis, IN 46204
Office: (317) 232-2770
Email: jemerick@indot.in.gov



0 0.15 0.3 0.6 0.9 1.2 Miles

5-B-8
11-16-16

Office of the Lake County Surveyor

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Phone: (219) 755-3745 • Fax: (219) 755-3750

Bill Emerson, Jr.
County Surveyor

November 10, 2016

Peter Fisher
4722 West 45th Avenue
Gary, Indiana 46408

RE: Cady Marsh Ditch – Pedestrian Crossing
Calumet Township

Dear Mr. Fisher,

According to your letter received November 3, 2016, you would like to replace the deteriorated pedestrian crossing over the Cady Marsh Ditch at 4722 West 45th Avenue. It appears that a Lake County Drainage Board permit was issued in 1992 for the installation of this structure. Since the Lake County Surveyor/Lake County Drainage Board issued a permit for the same purpose in 1992, the Lake County Surveyor/Lake County Drainage Board has no objections or concerns to the replacement of the structure over the Cady Marsh Ditch.

Therefore, the Lake County Surveyor/Lake County Drainage Board will not require a permit for this pedestrian crossing replacement. However, this does not obviate you to procure any other local, state or federal permits that may be required for this activity.

The Lake County Surveyor's Office appreciates your concern in this issue. Should you have any additional questions, please do not hesitate to contact our office.

Sincerely,

Daniel V. Gossman
Drainage Administrator

LAKE COUNTY DRAINAGE BOARD

APPROVED THIS 16 DAY OF NOV 20 16

Cc: Bill Emerson, Jr., Lake County Surveyor
Tom Regalado, Asst Drainage Admn
Cliff Duggan, Legal Advisor
Louise Neese, Calumet Township Advisory Committee Representative
Lake County Drainage Board & Advisory Committee

5-B-8
11-16-16

Gentleman,

I would Like to rebuild my footbridge over Cady Marsh Ditch in the same manner as this permit states.

I would Like to know if there would be any other requirements to take care of or if I may rebuild the footbridge per this permit?

Thank You,
Pete Fisher

Peter Fisher
4722 W. 45 th. AVE
GARY, IN. 46408
219-838-3313

RECEIVED
NOV 03 2016
LAKE COUNTY SURVEYOR

Lake County Drainage Board

Lake County Government Center
2293 North Main Street
Crown Point, Indiana 46307
PHONE: (219) 755-3746

Chairman
ERNEST NIEMEYER

Members:
STEVE COREY
RUDOLPH CLAY

FEBRUARY 12,1992

NOTICE OF ACTION

PETER & GEORGETTE FISHER
4722 W. 45TH AVE.
GARY, INDIANA 46409

DEAR PETITIONER;

THIS NOTICE IS TO INFORM YOU THAT YOUR PETITION OR REQUEST FOR:

A FOOTBRIDGE CROSSING THE CADY MARSH DITCH AT 4722W.45TH AVE.

GARY, CALUMET TWP.,LAKE COUNTY, INDIANA

WAS CONSIDERED BY THE DRAINAGE BOARD AT A MEETING ON THE 11TH DAY OF FEBRUARY, 1992 WITH THE FOLLOWING ACTION:

- [X] APPROVED PETITION OR REQUEST
- [ ] APPROVED PETITION OR REQUEST SUBJECT TO CONDITIONS LISTED ON ATTACHMENT #2
- [ ] CONTINUED PETITION OR REQUEST TO _____ MEETING
- [ ] DENIED PETITION OR REQUEST

[X] THIS NOTICE OF ACTION IS SUBJECT TO ALL CONDITIONS LISTED IN ATTACHMENT #1.

IF YOU HAVE FURTHER QUESTIONS PLEASE CONTACT

LAWRENCE J. MC CLELLAND AT (219) 755-3746.

Lawrence J. McClelland

ATTACHMENT #1

APPLICATION FOR PERMISSION TO PLACE PERMANENT/
TEMPORARY STRUCTURES WITHIN A REGULATED DRAIN

TO THE LAKE COUNTY DRAINAGE BOARD
LAKE COUNTY, INDIANA

Pete & Georgette Fisher, (hereinafter called applicant) hereby makes application to the Lake County Drainage Board for permission to construct proposed crossing with necessary appurtenances and attachments thereto, across ditches, creeks and waterways which are part of the Lake County drainage system and especially at the following location: (please attach plans and specs): Cady MARSH IN GARY, Ind.

The purpose of the Application and the work to be performed thereunder is to: obtain access to back 2½ acres.

The applicant agrees to restore the land, drainage ditches and other surfaces to as good or better a condition as they were at the commencement of the work, including backfilling of any trenches opened, and maintaining the surface which has been disturbed by the installation.

The applicant agrees, subject to the provisions of I.C. 39-9-27-46 or I.C. 36-9-27-47, to move said improvement(s) at its own expense to conform with any future improvement of existing or proposed regulated drains upon request of the County Drainage board or Lake County Surveyor's Office.

The applicant shall, and will, indemnify and hold any and all County entities, including but not limited to the County of Lake, the Board of Commissioners of the County of Lake, the Lake County Drainage Board, its elected officials, its appointed officials, its officers, its employees, its departments or boards and/or agents harmless from and against any and all damages, injuries, losses, claims, demands or costs proximately caused by the fault, culpability or negligence of the applicant in the installation, maintenance, operation, repair, replacement or renewal of said improvement(s) over and across the drains or drainage right-of-ways under the jurisdiction of the Lake County Drainage Board.

The applicant agrees to maintain said improvement(s) at its own expense to avoid causing any damage to the established regulated drain or to landowners affected by the drain, pursuant to I.C. 6-9-27-72 (d).

The applicant agrees that in the event construction, maintenance, relocation or repair of the improvements within the regulated drain or drainage right-of-way under the jurisdication of the Lake County Drainage Board causes or shall cause any damage to the established regulated drain or necessitate increased maintenance thereof it will reimburse the Lake County Drainage Board for any such expenses incurred, including reasonable attorney's fees, pursuant to I.C. 36-9-27-46(d) or I.C. 36-9-27-47(b).

The applicant further agrees to notify the Lake County Drainage Board or the Lake County Surveyor in writing five (5) days in advance of the time of beginning of the work requested to be done under this permit, and will give the Lake County Drainage Board or the Lake County Surveyor notice the day preceding the commencement of the work herein requested.

The applicant shall have workmans compensation coverage as required by state law.

This permit does not obviate the need to obtain any other Federal, State, and/or local authorization, if required.

The applicant shall carry public liability insurance meeting the maximum dollar limits as specified in I.C. 34-4-16.4-4 and shall list all of the bodies/parties listed in paragraph 5 above as other insureds.

Engineering plans which accompany this application must state:

1. The proposed structure meets all structural and hydraulic requirements that will permit the drain to function properly. (I.C. 36-9-37-72 (c))

2. The regulated drain is adequate to handle the additional flow of water, if any.

3. No harmful pollution is likely to result. (I.C. 36-9-27-17 (c))

Dated this 11th day of FEBRUARY, 19 92.

LAKE COUNTY DRAINAGE BOARD

ERNEST NIEMEYER - CHAIRMAN

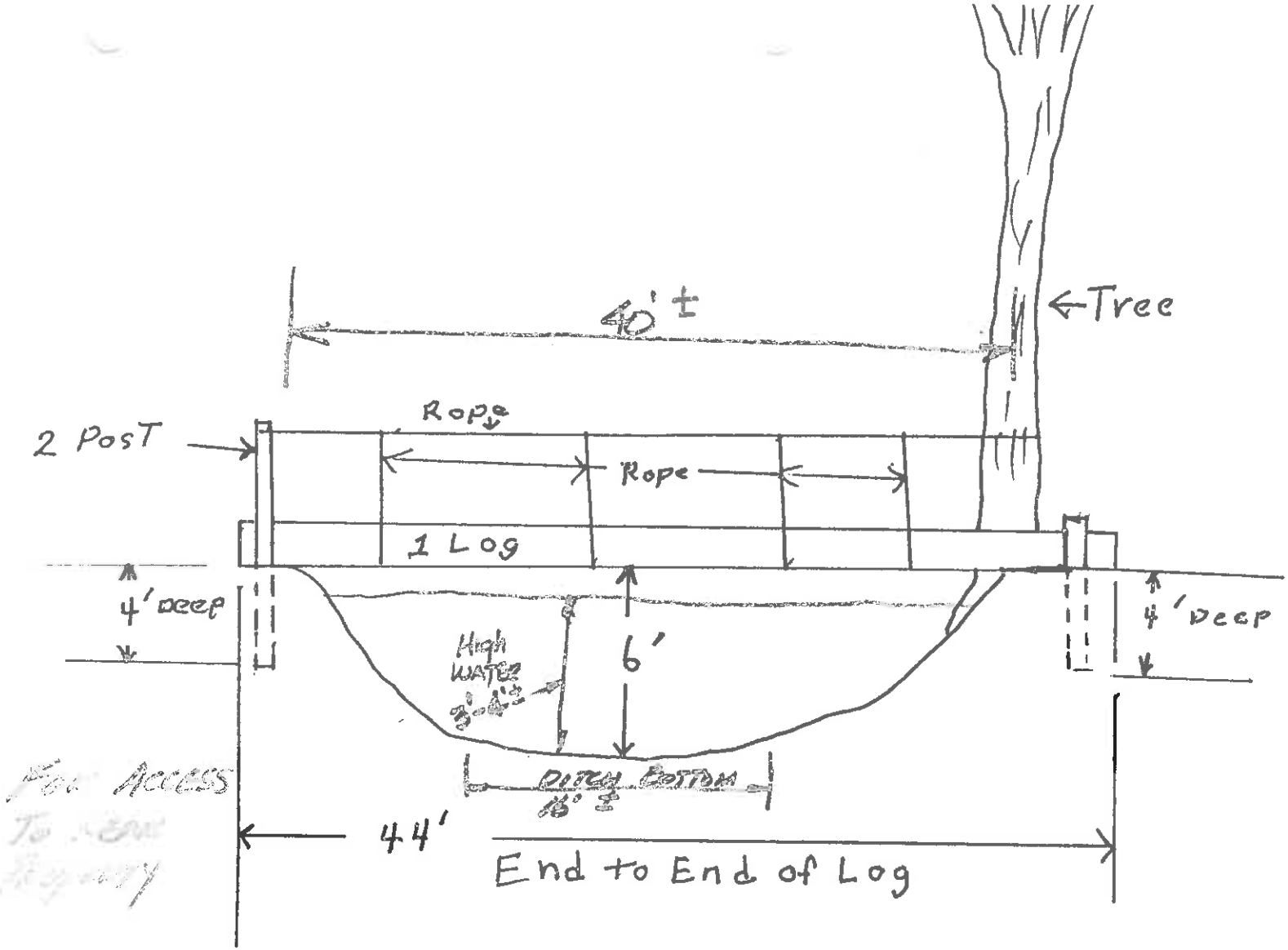
STEVE COREY - MEMBER

RUDOLPH CLAY - MEMBER

for: Peter Fisher
Georgette Fisher
Applicant

Peter Fisher
by: Georgette Fisher
Applicant

4722 W. 45th Ave.
Gary, IN



FOOT BRIDGE ACROSS CADY MARSH DITCH
AT 4722 W. 45th AVE., Gary, Cal Twp.
FISHER PROPERTY

1-20-92

Depth of Ditch — 6'-six feet

WIDTH From Bank to Bank — 41'- Fourty one feet

WIDTH at Bottom of DITCH — 16'- sixteen feet

DIMENSIONS of STRUCTURE;

WIDTH - 22" at south END
10½" at North END — O.D.

Length - 44 feet - North To South

5-B-9
11-16-16

Office of the Lake County Surveyor

Lake County Government Center • 2293 North Main Street • Crown Point, Indiana 46307
Phone: (219) 755-3745 • Fax: (219) 755-3750

Bill Emerson, Jr.
County Surveyor

November 4, 2016

Ned Kovachevich, Director
Lake County Plan Commission
2293 North Main Street
Crown Point, Indiana 46307

RE: Variance from Development Standards
John Townsend (Petitioner/Owner)
11201 Nevada Place
Crown Point, Indiana 46307

Dear Ned,

I am in agreement with Surveying Administrator Juan Lopez' letter dated November 3, 2016 regarding no objection to the request for the above mentioned petition to the Lake County Plan Commission for a "Variance from Development Standards". However, in addition to the Lake County "Construction Practices" pamphlet that was provided to the Petitioner, I would like to add a condition to the approval regarding the placement of the proposed structure.

From the attached aerial, it appears that the proposed structure may obstruct a natural surface watercourse coming from the adjacent property to the south. **If at any point in the future, storm water starts to accumulate on the property to the south as a result of this proposed structure, it will be the responsibility of the Petitioner or their heirs or successors, to provide an outlet or re-establish the natural surface watercourse.**

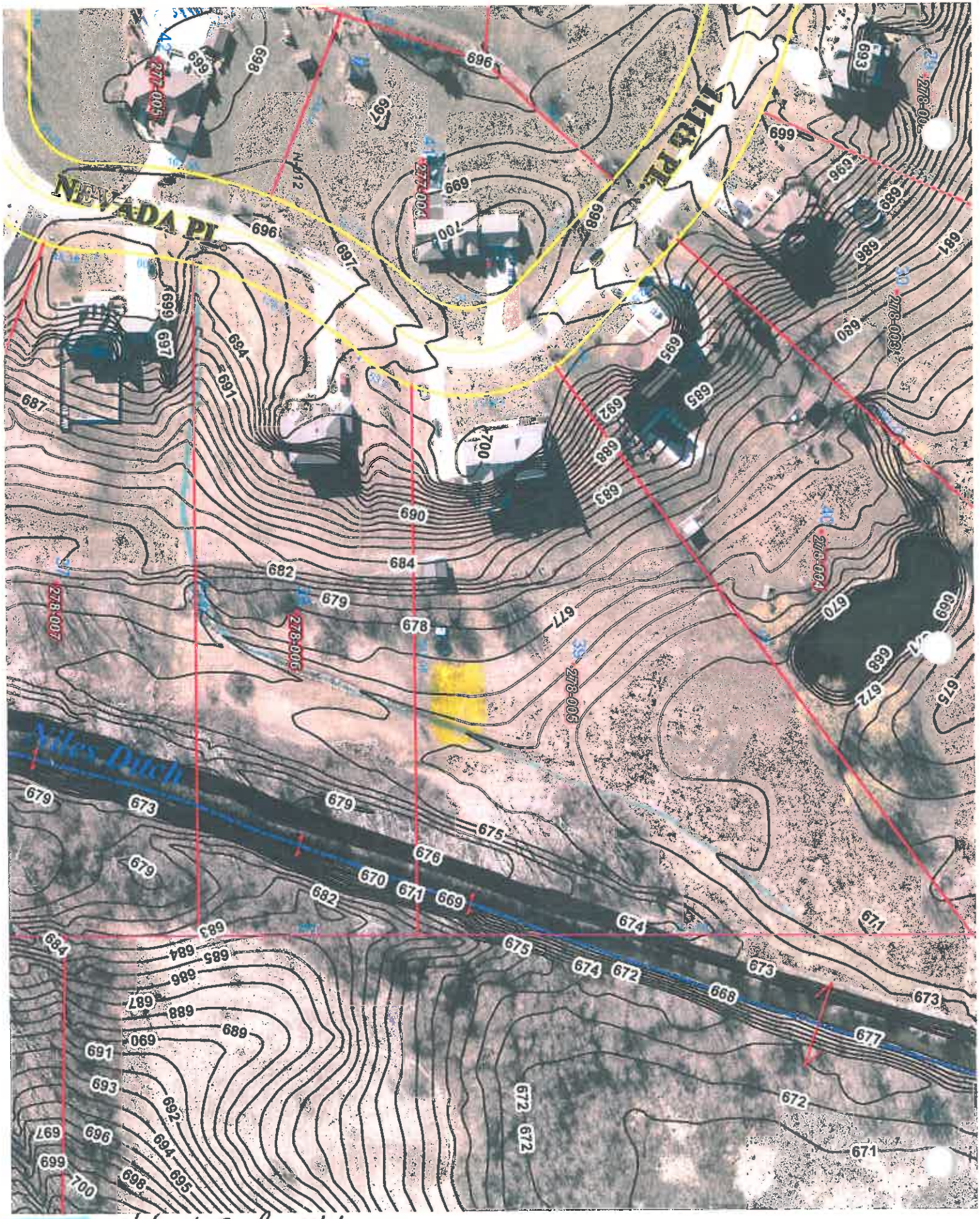
The Lake County Surveyor's Office appreciates your cooperation in this matter. Should you have any questions, please do not hesitate to contact our office.

Sincerely,

Daniel V. Gossman

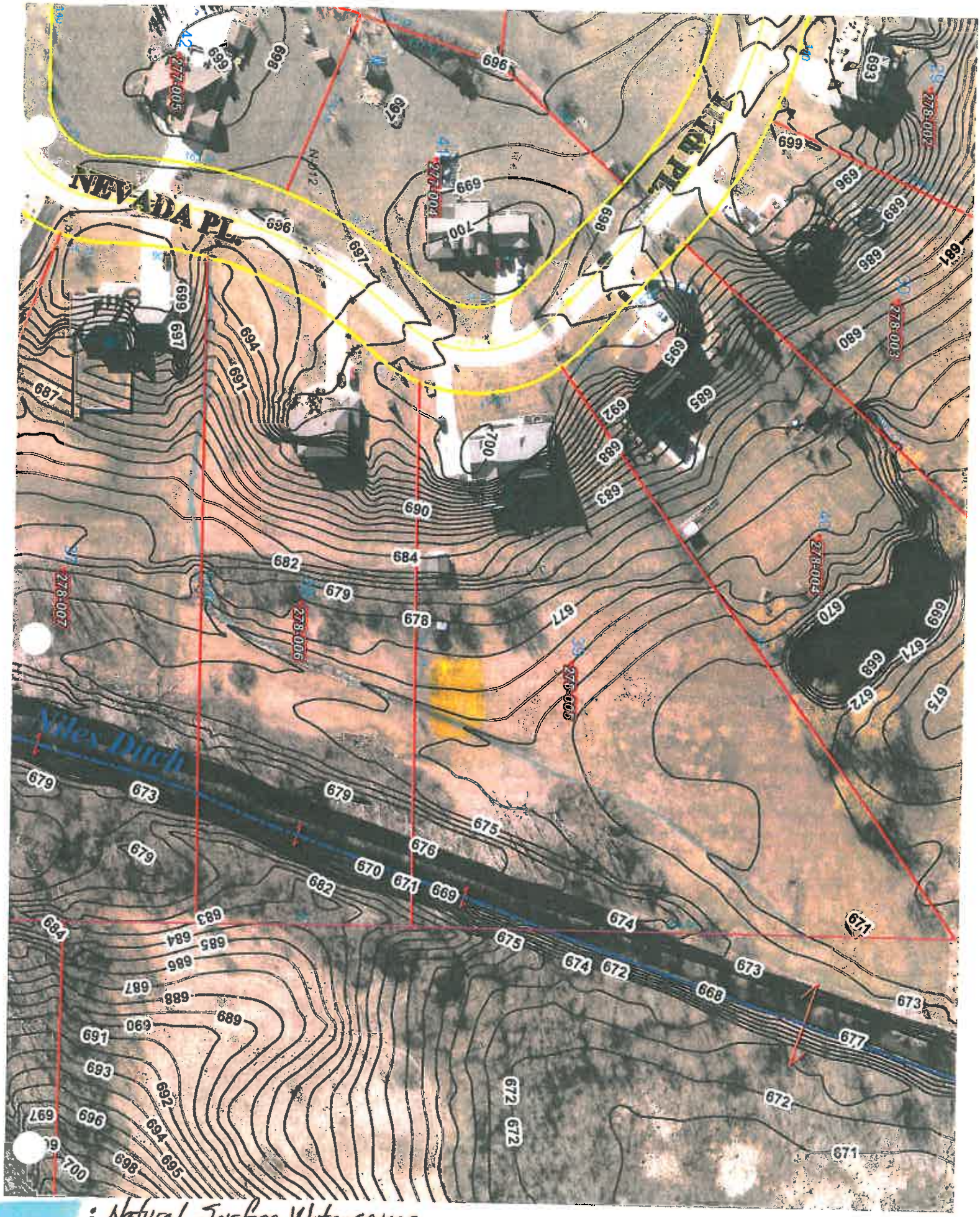
Daniel V. Gossman
Drainage Administrator

Cc: Bill Emerson, Jr., Lake County Surveyor
Juan Lopez, Surveying Administrator
Chris Brown, MS4 Compliance Inspector



: Natural Surface Watercourse

: Proposed Structure



: Natural Surface Watercourse

: Proposed Structure

Office of the Lake County Surveyor

Lake County Government Center • 2293 North Main Street • Crown Point, Indiana 46307
Phone: (219) 755-3745 • Fax: (219) 755-3750

Bill Emerson, Jr.
County Surveyor

November 3, 2016

Ned Kovachevich, Director
Lake County Plan Commission
2293 North Main Street
Crown Point, Indiana 46307

RE: Variances from Development Standards

John Townsend (Petitioner/ Owner)
11201 Nevada Place,
Crown Point, Indiana 46307

Dear Ned,

We do not object to above, since it does not appear to affect a legal drain, Niles Ditch, for construction of an accessory building with the following variances:

1) An increase to permitted square footage.

It shall be noted that proper construction practices should be acknowledge and followed to prevent any illicit discharge into Lake County Legal Drain known as Niles Ditch.

Should you have any questions or comments, please do not hesitate to contact our office@ 219-755-3745.

Sincerely,

Juan Lopez
Surveying Administrator

Enclosures

cc: Bill Emerson, Jr., *Lake County Surveyor*
Allura Jean Gray, *Chief Deputy*
Dan Gossman, *Drainage Administrator, (acting) MS4 Coordinator*
Chris Brown, *MS4 Compliance Inspector*

PROJECT

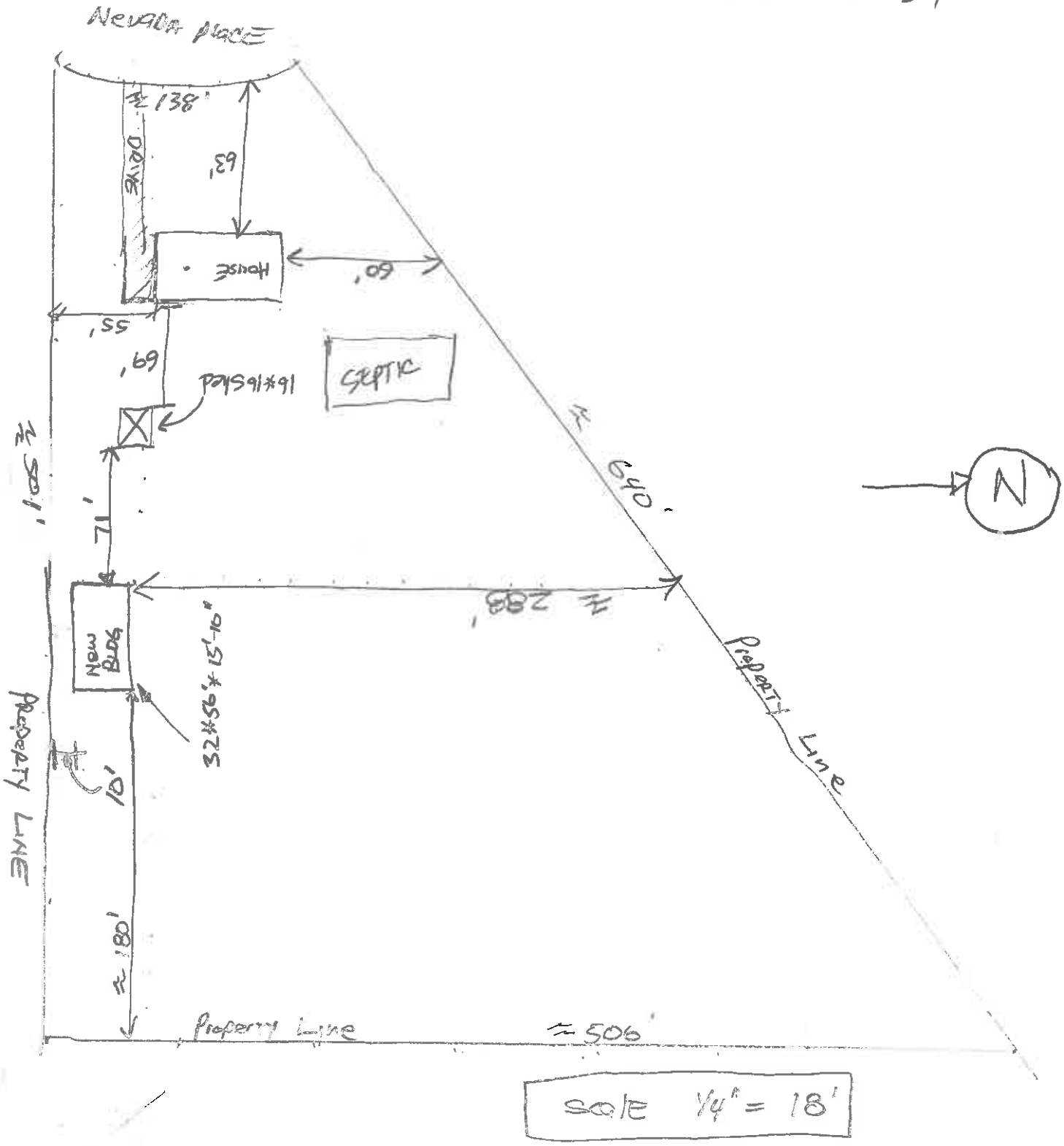
RECEIVED
NOV 03 2016
LAKE COUNTY SURVEYOR

BY

DATE

PAGE ____ OF ____

John Townsend
11201 Nevada Pl
Crown Point, IN 46307
219-688-8134



FBi Buildings
3823 W 1800 S, Remington, IN 47977
1-800-552-2981 • www.fbibuildings.com

5-B-10
11-16-16

Mary Ellen Kupsik

From: James Smit <James.Smit@erm.com>
Sent: Thursday, November 03, 2016 5:26 AM
To: Mary Ellen Kupsik
Cc: Jeff Williams
Subject: Application No. 286-8-15-I-III Closure
Attachments: Dig_30_31_Lake_Co_Surveyor_Drain_Permit.pdf

Hello Ms. Kupsik,

My name is James Smit and I work for Environmental Resources Management in Holland, MI. I'm emailing in regards to a permit that we previously received on behalf of our client Wolverine Pipe Line Company for work that was to occur within the Spring Street Ditch (Application No. 286-8-15-I-III). I have attached the approved permit for reference.

To notify you, the permitted work was completed this week and the site has been stabilized as permitted. As such, the permit can be closed in your system as needed.

Please let me know if you have any questions or if you need anything else from me.

Thanks

James Smit
Associate Scientist
Impact Assessment & Planning

Environmental Resources Management (ERM)
3352 128th Avenue
Holland, MI 49424

Tel: +16167387315 (direct line)
Tel: +16163993500 (switchboard)
Fax: +16163993777
Mobile: 16165106310

www.erm.com
james.smit@erm.com

ERM *The business of sustainability*

This message contains information which may be confidential, proprietary, privileged, or otherwise protected by law from disclosure or use by a third party. If you have received this message in error, please contact us immediately and take the steps necessary to delete the message completely from your computer system. Thank you.

Please visit ERM's web site: http://www.erm.com

Handout 5-13-11 11-16-16

Office of the Lake County Surveyor

Lake County Government Center • 2293 North Main Street • Crown Point, Indiana 46307
Phone: (219) 755-3745 • Fax: (219) 755-3750

Bill Emerson, Jr.
County Surveyor

October 27, 2016

Bill Emerson, Jr.
Lake County Surveyor
2293 North Main Street
Crown Point, Indiana 46307

RE: Turkey Creek north of Gatlin Ponds

Bill,

On October 21st, while doing routine checks of known beaver dam locations, I located a dam just north of Gatlin ponds on Turkey Creek. I checked with Drainage Administrator Dan Gossman to schedule a day to remove the dam. Due to the rain expected later in the week it was determined that this be taken care of as soon as possible.

On Monday October 24th I along with Dan and MS4 Compliance Inspector Chris Brown were successful in removing the dam. While removing the dam, Chris discovered several "traps" that were not set by the county.

If you need any further information, do not hesitate to let me know. Attached for your review are photographs showing the removal process.

Respectfully,

Thomas Regalado

Tom Regalado
Assistant Drainage Administrator

Cc: Daniel V. Gossman, Drainage Administrator
Jean Shepherd, St. John Township Advisory Committee Representative
Lake County Drainage Board and Advisory Committee

Turkey Creek
North of Gatlin Ponds

St.John Twp.

Before

After

Handout 5-B-11
11-16-16

Office of the Lake County Surveyor

Lake County Government Center • 2293 North Main Street • Crown Point, Indiana 46307
Phone: (219) 755-3745 • Fax: (219) 755-3750

Bill Emerson, Jr.
County Surveyor

October 27, 2016

Bill Emerson, Jr.
Lake County Surveyor
2293 North Main Street
Crown Point, Indiana 46307

RE: Cady Marsh Ditch east of Whitcomb
Calumet Twp.

Bill,

On Monday October 24th, Drainage Administrator Dan Gossman, MS4 Compliance Inspector Chris Brown and I were out locating and removing beaver dams in our regulated drains. While we were out, the office received a call regarding a beaver dam in the Cady Marsh Ditch in Calumet Township near Whitcomb Street. After checking several known locations along the Cady Marsh Ditch, we found that there were 2 beaver dams east of Whitcomb Street. We successfully removed both dams and got the water flowing again.

If you need any further information, do not hesitate to let me know.

Respectfully,

Thomas Regalado

Tom Regalado
Assistant Drainage Administrator

Cc: Daniel V. Gossman, Drainage Administrator
Lake County Drainage Board and Advisory Committee
Louise Neese, Calumet Township Advisor committee Representative

Cady Marsh Ditch
East of Whitcomb

Ross Twp.

Before

After

Cady Marsh Ditch
East of Whitcomb

Ross Twp.

Before

After

5-C-1
11-16-16

Office of the Lake County Surveyor

Lake County Government Center • 2293 North Main Street • Crown Point, Indiana 46307
Phone: (219) 755-3745 • Fax: (219) 755-3750

Bill Emerson, Jr.
County Surveyor

November 10, 2016

Lake County Highway Department
1100 East monitor Street
Crown Point, Indiana 46307

ATTN: Marcus Malczewski, Superintendent

RE: Spring Run Ditch Lateral No 12 - Emergency Culvert Replacement
Chase Street – Lake County Structure #1003
Lowell, Cedar Creek Township

Dear Mr. Malczewski,

The Lake County Surveyor/Lake County Drainage Board has no objections or concerns to the emergency replacement of the structure under Chase Street on the Spring Run Ditch Lateral No. 12. It appears that while a different type of structure is being installed than what exists, the volume of stormwater will not be compromised.

Therefore, the Lake County Surveyor/Lake County Drainage Board will not require a permit for this emergency culvert replacement. However, this does not obviate you to procure any other local, state or federal permits that may be required for this activity.

The Lake County Surveyor's Office appreciates your concern in this issue. We look forward to our continued cooperative efforts with the Lake County Highway Department. Should you have any additional questions, please do not hesitate to contact our office.

Sincerely,

Daniel V. Gossman

Daniel V. Gossman
Drainage Administrator

Cc: Bill Emerson, Jr., Lake County Surveyor
Tom Regalado, Asst Drainage Admn
Cliff Duggan, Legal Advisor
Alice Dahl, Cedar Creek Township Advisory Committee Representative
Lake County Drainage Board & Advisory Committee

Lake County Highway Department

Duane A. Alverson, P.E.
Engineer

1100 E. Monitor Street
Crown Point, Indiana 46307
Phones: 219-663-0525
219-374-5608
219-769-4247
Fax: 219-662-0497

November 8, 2016

Lake County Drainage Board
Lake County Government Center
2293 North Main Street
Crown Point, Indiana 46307

ATTN: Bill Emerson, Jr., County Surveyor

RE: Emergency Culvert Replacement
Chase Street over Spring Run Ditch Lateral
Lake County Structure #1003

Dear Mr. Emerson;

The Lake County Highway Department has experienced a failure in the culverts carrying Chase Street over the Spring Run Ditch Lateral just north of 191st Avenue. We have experienced sink holes in Chase Street due to the deteriorated conditions of the two (2) six foot (6′) diameter corrugate metal culverts. The bottoms of the existing culverts have deteriorated to a condition that warrants immediate replacement.

The Highway Department proposes to replace the existing twin 6′ diameter corrugated metal culverts with a single 11′-8″ span x 5′-9″ rise Aluminum Box Culvert 75′-3″ in length. This is a replacement in kind for the waterway opening, 56.55 Sq. Ft existing and 57.2 Sq. Ft. proposed. The single opening will be more efficient and pose less future maintenance.

Respectfully Submitted,

Duane A. Alverson
Engineer

DAA/daa

c: Lake County Board of Commissioners
Marcus Malczewski, Superintendent

5-C-2
11-16-16

LAWSON-FISHER ASSOCIATES P.C.

PAUL A. HUMMEL, P.E.
PIPER C. TITTLE, P.E.
MICHAEL J. GUZIK, P.E.

GREGORY L. HOLDEN, P.E.
JON E. RIEMKE, P.E.
JEFFREY L. McKEAN, P.E.
RANDOLPH J. LINDLEY, P.E.
CHRISTOPHER J. JETER, P.E.
DENNIS A. ZEBELL, P.E.
BENJAMIN P. HOLDEN, P.E.
DAN G. DELGADO, P.E.
MICHAEL F. JOHNSTON, P.E.
JEFFREY M. BYRD, P.E.
JARED M. HUSS, P.E.
SKY K. MEDORS, P.E.
AARON W. BLANK, P.L.S., P.E.
BREAGAN P. EICHER, P.E.
RICHARD A. CHAPMAN, II, P.E.
THOMAS J. McNICHOLAS, P.E.
KEVIN J. SIEDLECKI, P.E.
CHRISTOPHER M. VANHULLE, P.E.
MICHELLE M. G. SLACK, P.L.S.

201461.34

October 24, 2016

RECEIVED
OCT 25 2016
LAKE COUNTY SURVEYOR

FINAL FIELD CHECK NOTIFICATION

Work Type:	Bridge Replacement Project
Route:	S.R. 2 Over MJ Brown Ditch
Des. No.:	0500028
PE Project No.:	0500028
RW Project No.:	0500028
CN Project No.:	0500028
Bridge File:	002-45-09632
Land Acq. Code:	5211
Location:	2.75 mi. east of junction with I-65 in Lake County

Lawson-Fisher Associates P.C. is under contract with the Indiana Department of Transportation for the design of the above referenced project. A Final Field Check for this project has been scheduled for November 9, 2016. The meeting will be held at 12:00 p.m. Central time at the project site. Anyone wishing to provide input into the design of this project should plan to attend.

Utilities with facilities within the limits of this project should review the plans to determine if their existing facilities are accurately shown. Utilities that believe that their facilities will need to be adjusted should attend this meeting. This meeting could provide opportunities for design changes that could eliminate some utility conflicts. Utilities will be contacted by Lawson-Fisher Associates P.C. at a later date concerning the project schedule and relocation coordination. The Utility Coordinator will be Dan G. Delgado, P.E., Lawson-Fisher Associates P.C., 525 West Washington Avenue, South Bend, Indiana, 46601, Tel: 574-234-3167, Fax: 574-236-1330, email: ddelgado@lawson-fisher.com.

Very truly yours,

LAWSON-FISHER ASSOCIATES P.C.

Dan G. Delgado, P.E.
Project Manager

DGD/sab
c: Paul A. Hummel, P.E. (Letter Only)
Michael F. Johnston, P.E. (Letter Only)
Thomas J. McNicholas, P.E. (Letter Only)
Faith R. Morrison, E.I. (Letter Only)

The distribution of this notification is as follows:

INDOT Production Mgmt. Div., Geotechnical Engineering Manager – Letter only
INDOT Production Mgmt. Div., Real Estate Acquisition Team Leader – Letter only
INDOT Production Mgmt. Div., Real Estate Admin. Services Team Leader – Letter only
INDOT LaPorte District Bridge Inspection Engineer – Letter only
INDOT LaPorte District Construction Engineer – Letter only
INDOT LaPorte District Design Office Manager – Letter only
INDOT LaPorte District Environmental Scoping Manager – Letter only
INDOT LaPorte District Highway Maintenance Director Manager – Letter only
INDOT LaPorte District Planning and Programming Director – Letter only
INDOT LaPorte District Production Director – Letter only
INDOT LaPorte District Program Coordinator – Letter only
INDOT LaPorte District Real Estate and R/W Program Director – Letter only
INDOT LaPorte District System Assessment Manager – Letter only
INDOT LaPorte District Testing Office Manager – Letter only
INDOT LaPorte District Traffic Engineer – Letter only
Ms. Lynette Werner, INDOT LaPorte District Utilities Team Leader – Letter only
Mr. Duane A. Alverson, P.E., Lake County Engineer w/11x17 Plans & X-Sections
Mr. Marcus W. Malczewski, Lake County Highway Superintendent w/11x17 Plans & X-Sections
Mr. Bill Emerson, Jr., Lake County Surveyor w/11x17 Plans & X-Sections
Mr. Raymond D. Riddell, Porter County Engineer w/11x17 Plans & X-Sections
Mr. David James, Porter County Highway Supervisor w/11x17 Plans & X-Sections
Mr. Dave Peeler, Hebron Town Council President w/11x17 Plans & X-Sections
Ms. Elizabeth McCloskey, U.S. Fish and Wildlife Services – Letter Only
Mr. Doug Benda, NIPSCO (Electric & Gas) – Letter Only
Mr. Timothy Roy, NIPSCO (Electric) w/11x17 Plans & X-Sections
Mr. Daniel Phillips, NIPSCO (Gas) w/11x17 Plans & X-Sections
Mr. Don Schoenbeck, NITCO (Telephone) w/11x17 Plans & X-Sections
Mr. Angelo LaMantia, AT&T (Telephone and Fiber) w/11x17 Plans & X-Sections
Mr. Scott Roosa, P.E., Earth Exploration Inc. – Letter Only
Ms. Beth Hillen, P.E., Civil & Environmental Consultants, Inc. – Letter Only
Mr. Daniel Kurdziel, P.E., VS Engineering, Inc. w/11x17 Plans & X-Sections (via email)
Mr. Vincent J. Barr, P.S. VS Engineering, Inc. – Letter Only
Mr. John Bryant w/11x17 Plans & X-Sections
Ms. Becky Evans w/11x17 Plans & X-Sections

PROJECT	DESIGNATION
0500028	0500028
CONTRACT	BRIDGE FILE
B-37688	002-45-09632

STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
002-45-09632	Continuous Reinforced Concrete Slab Bridge	3 Spans: 33'-0", 41'-6", 33'-0" Skew 8°0'0" Rt.	M.J. Brown Ditch	928+18.70 Line "B"

INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

FOR SPANS OVER 20 FEET

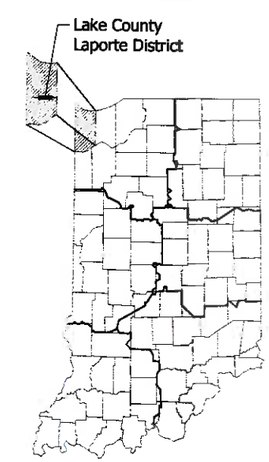
ROUTE: S.R. 2 AT: 17+62

PROJECT NO. 0500028 P.E.
0500028 R/W
0500028 CONST.

TRAFFIC DATA	SR 2
A.A.D.T. (2014)	6,490 V.P.D.
A.A.D.T. (2037)	8,450 V.P.D.
D.H.V. (2037)	612 V.P.H.
DIRECTIONAL DISTRIBUTION	48.42%
TRUCKS	12.75% A.A.D.T.
	9.05% D.H.V.

DESIGN DATA	
DESIGN SPEED	55 M.P.H.
PROJECT DESIGN CRITERIA	3R (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION	RURAL MINOR ARTERIAL
RURAL/URBAN	RURAL
TERRAIN	LEVEL
ACCESS CONTROL	NONE

RECEIVED
OCT 25 2016
LAKE COUNTY SURVEYOR



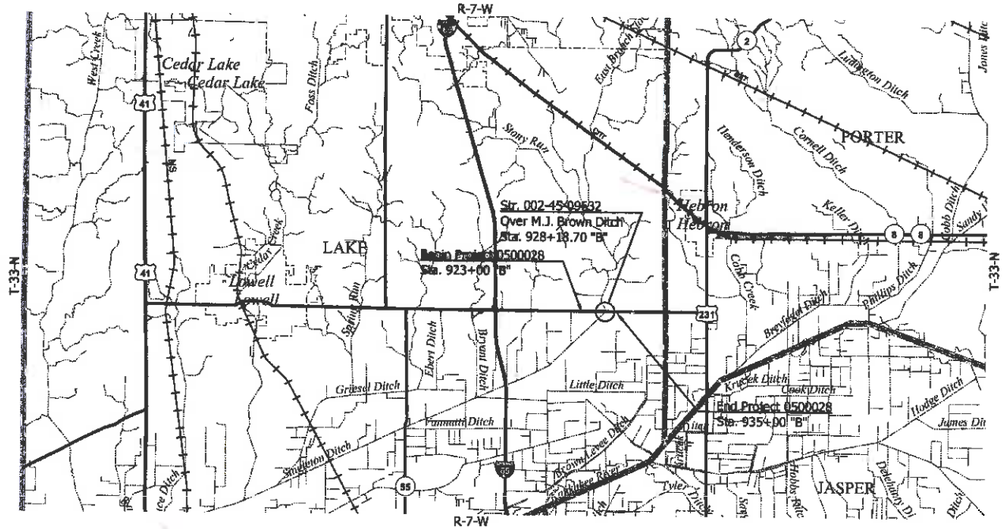
PROJECT LOCATION SHOWN BY —

LATITUDE: 41°17'21.68"N. LONGITUDE: 87°14'53.33" W.

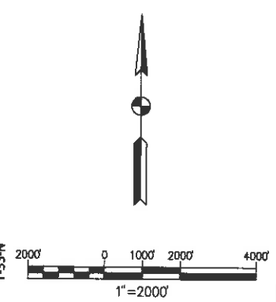
BRIDGE LENGTH:	0.021	MI.
ROADWAY LENGTH:	0.206	MI.
TOTAL LENGTH:	0.227	MI.
MAX. GRADE:	1.387	%

HUC: 07120001130030

Bridge Replacement on SR 2 Over MJ Brown Ditch Located 2.75 Miles East of Junction With I-65 in Sections 20 and 29, T-33-N, R-7-W, Eagle Creek Township, Lake County, Indiana



LOCATION MAP
LAKE COUNTY



FINAL FIELD CHECK
OCTOBER 24, 2016

INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS DATED 2016
TO BE USED WITH THESE PLANS

LFA
LAWSON-FISHER ASSOCIATES P.C.
525 W. WASHINGTON AVENUE
SOUTH BEND, INDIANA 46601
PH. (574) 234-3167

NOT FOR CONSTRUCTION

PLANS PREPARED BY: LAWSON-FISHER ASSOC. P.C. 574-234-3167
PHONE NUMBER
CERTIFIED BY: DATE
APPROVED FOR LETTING: INDIANA DEPARTMENT OF TRANSPORTATION DATE

BRIDGE FILE	
002-45-09632	
DESIGNATION	
0500028	
SURVEY BOOK	SHEETS
-	1 of 27
CONTRACT	PROJECT
B-37688	0500028

GDH – 10/24/2016 3:15 PM – U:\2014\201461_00 INDOT SR2\Cad\Plan Set\Structural\146110BR_CS01.dwg

UTILITIES

UTILITY	OWNER	ADDRESS
ELECTRIC -	NIPSCO Electric Contact: Tim Roy Phone: (219) 384-7778 troy@nisource.com	801 East 86th Avenue Merrillville, IN 46410
GAS -	NIPSCO Gas Contact: Dan Phillips Phone: (219) 647-5143 danielphillips@nisource.com	801 East 86th Avenue Merrillville, IN 46410
TELEPHONE -	Northwest Indiana Telephone Co. (NITCO) Contact: Don Schoenbeck Phone: (219) 996-0216 (Office) (219) 405-9286 (Cell) dons@nitco.com	P.O. Box 67 205 North Washington St Hebron, IN 46341
	AT&T Contact: Angelo LaMantia Phone: (219) 662-4418 al1242@att.com	302 South East Street Crown Point, IN 46307

GENERAL NOTES

LEGEND:

INDEX

SHEET NO.	DRAWING INDEX
1	Cover Sheet
2	Index and General Notes
3-4	Typical Sections
5	Plat No. 1
6-7	Maintenance of Traffic
8-11	Plan and Profile
12	Construction Detail
13	Soil Borings
14	Bridge Layout
15	Bridge General Plan
16	Structures Layout
17	Structures General Plan
18	Structures Details
19	Road Summary Sheet
20-27	Cross Sections

REVISIONS

SHEET NO.	DATE	REVISED

NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: FRM DRAWN: BJS

CHECKED: DGD CHECKED: DGD

INDIANA
DEPARTMENT OF TRANSPORTATION

INDEX AND GENERAL NOTES

SCALE	BRIDGE FILE
	002-45-09632
	DESIGNATION
	0500028
SURVEY BOOK	SHEETS
-	2 of 27
CONTRACT	PROJECT
B-37688	0500028

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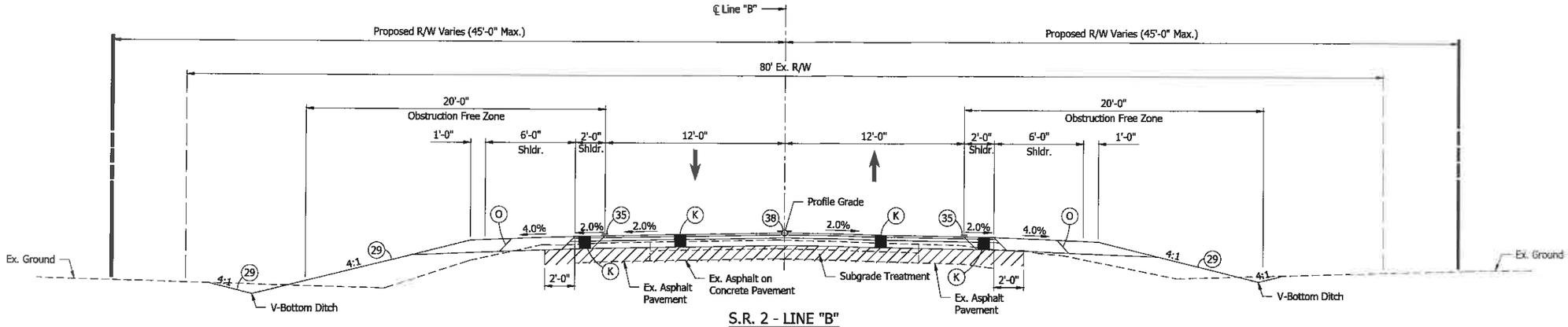
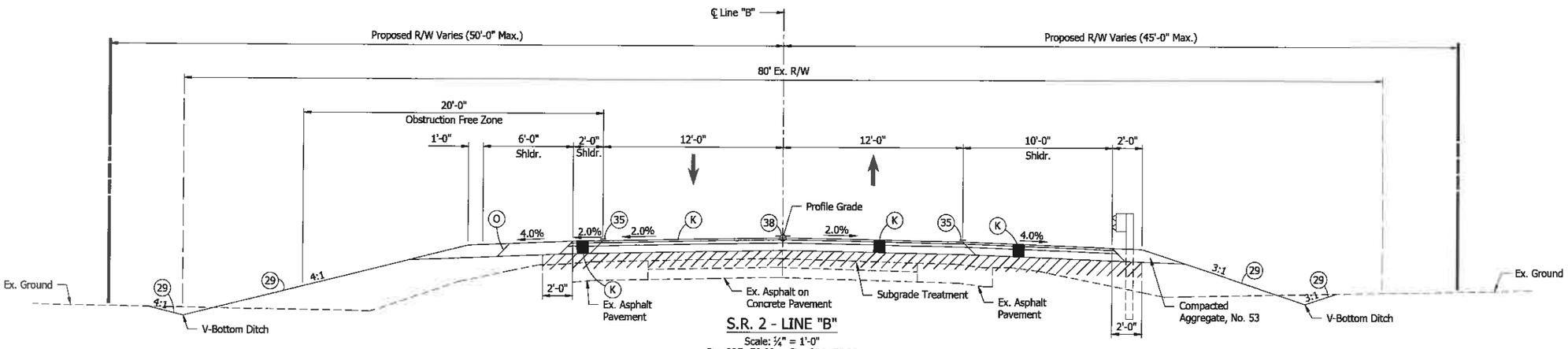


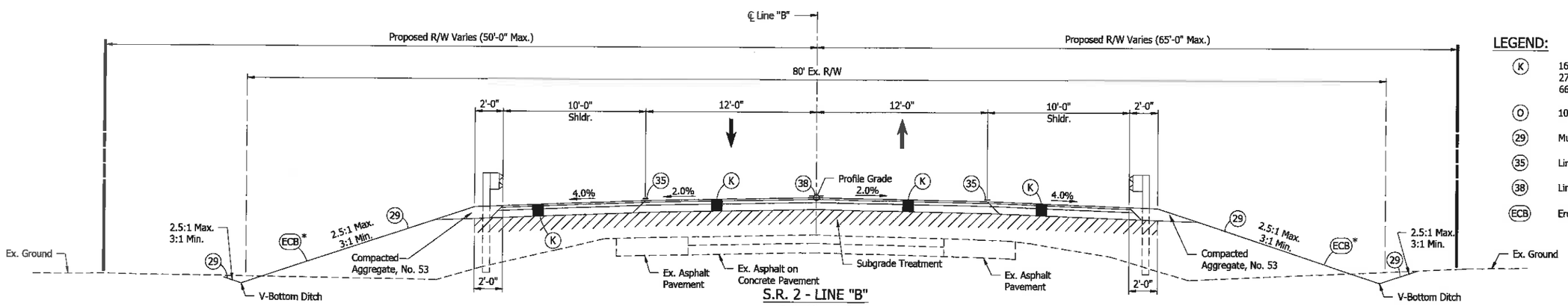
S.R. 2 - LINE "B"

Scale: ¼" = 1'-0"
Sta. 923+00.00 to Sta. 925+70.00



S.R. 2 - LINE "B"

Scale: ¼" = 1'-0"
Sta. 925+70.00 to Sta. 926+50.00



S.R. 2 - LINE "B"

Scale: ¼" = 1'-0"
Sta. 926+50.00 to Sta. 927+40.65

LEGEND:

K	165 #/sys QC/QA-HMA, 3, 70, Surface, 9.5 mm on 275 #/sys QC/QA-HMA, 3, 70, Intermediate, 19.0 mm on 660 #/sys Qc/QA-HMA, 3, 64, Base 19.0 mm
O	10" Compacted Aggregate, No. 53
29	Mulch Seeding, R
35	Line, Thermoplastic, Solid, White, 4"
38	Line, Thermoplastic, Broken, Yellow, 4"
ECB	Erosion Control Blanket

ECB* Use when steeper than 3:1.

NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: FRM DRAWN: BJS
CHECKED: DGD CHECKED: FRM

INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
LINE "B"

SCALE	BRIDGE FILE
1/4" = 1'-0"	002-45-09632
	DESIGNATION
	0500028
SURVEY BOOK	SHEETS
-	3 of 27
CONTRACT	PROJECT
B-37688	0500028

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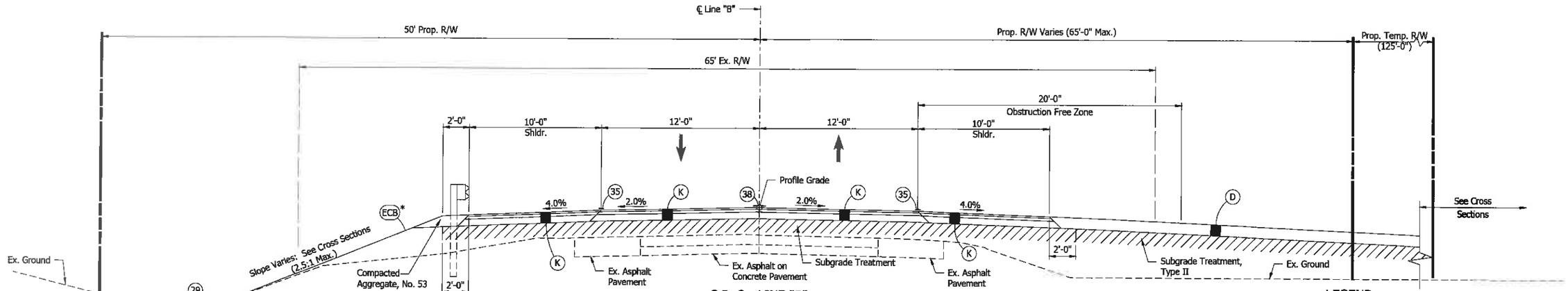


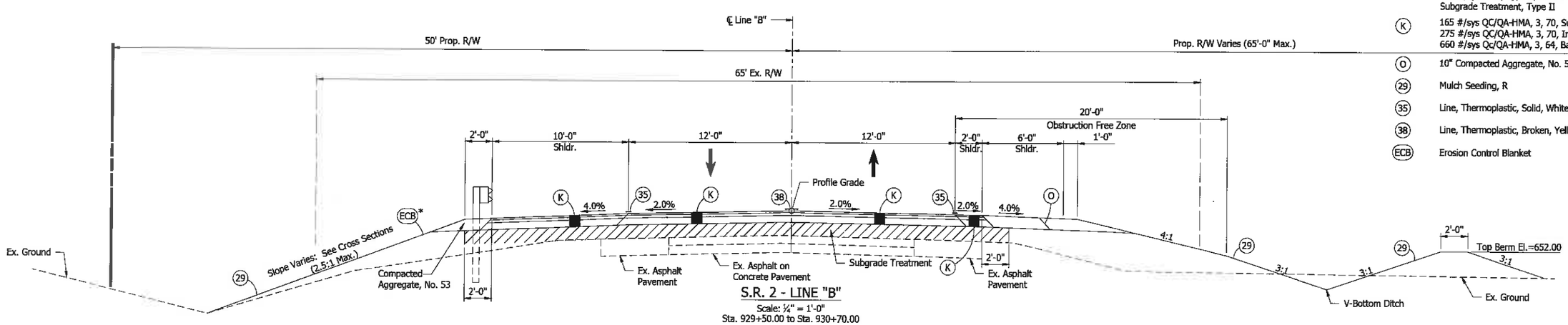
S.R. 2 - LINE "B"

Scale: ¼" = 1'-0"
Sta. 928+96.75 to Sta. 929+50.00

(ECB)* Use when steeper than 3:1.

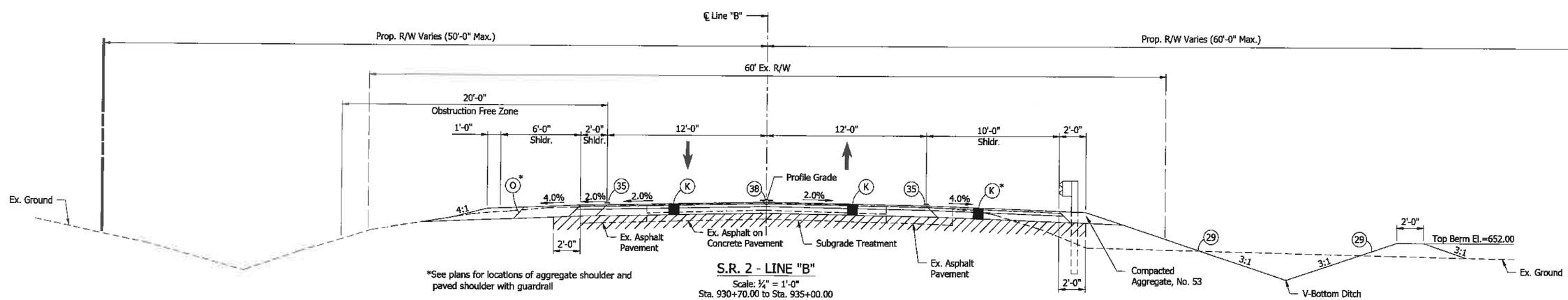
LEGEND:

(D)	1320 #/sys HMA for Approaches, Type B 165 #/sys HMA, Type B, Surface on 275 #/sys HMA, Type B, Intermediate on 880 #/sys HMA, Type B, Base on Subgrade Treatment, Type II
(K)	165 #/sys QC/QA-HMA, 3, 70, Surface, 9.5 mm on 275 #/sys QC/QA-HMA, 3, 70, Intermediate, 19.0 mm on 660 #/sys Qc/QA-HMA, 3, 64, Base 19.0 mm
(O)	10" Compacted Aggregate, No. 53
(29)	Mulch Seeding, R
(35)	Line, Thermoplastic, Solid, White, 4"
(38)	Line, Thermoplastic, Broken, Yellow, 4"
(ECB)	Erosion Control Blanket



S.R. 2 - LINE "B"

Scale: ¼" = 1'-0"
Sta. 929+50.00 to Sta. 930+70.00



*See plans for locations of aggregate shoulder and paved shoulder with guardrail

S.R. 2 - LINE "B"

Scale: ¼" = 1'-0"
Sta. 930+70.00 to Sta. 935+00.00

NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: FRM
DRAWN: BJS
CHECKED: DGD
CHECKED: FRM

INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
LINE "B"

SCALE	BRIDGE FILE
1/4" = 1'-0"	002-45-09632
	DESIGNATION
	0500028
SURVEY BOOK	SHEETS
-	4 of 27
CONTRACT	PROJECT
B-37688	0500028

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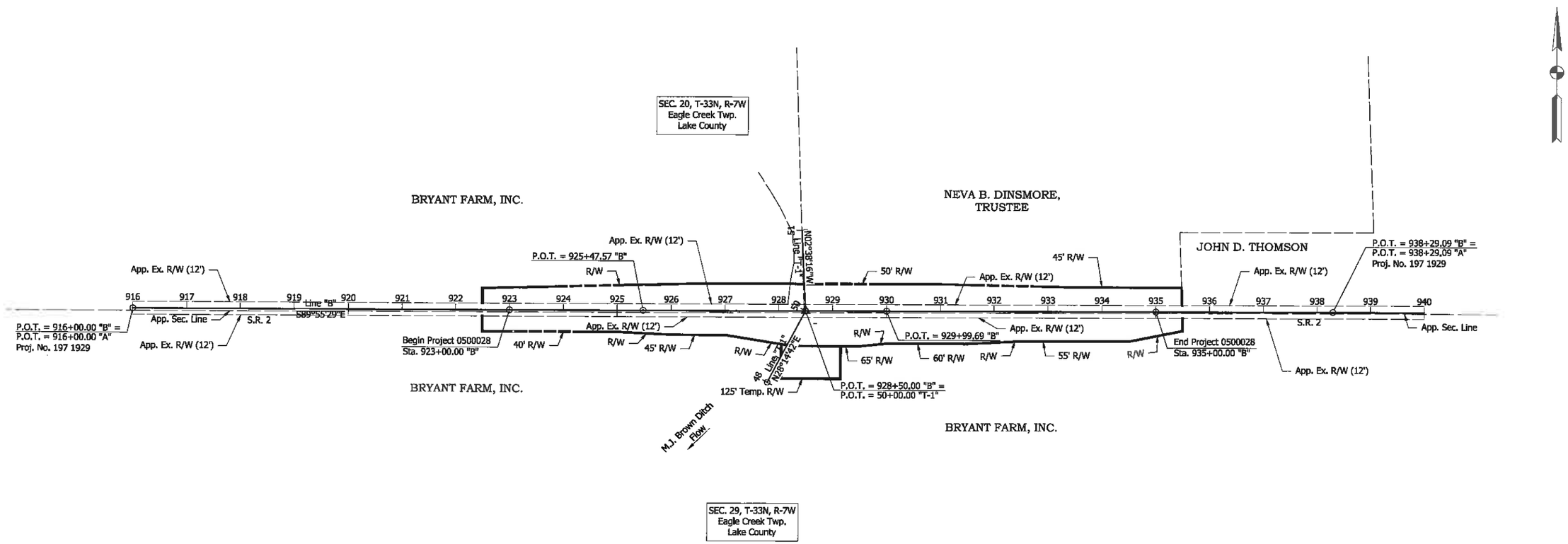

NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE		INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE 1" = 100'
DESIGNED: FRM	DRAWN: GDH	PLAT NO. 1	VERTICAL SCALE
CHECKED: DGD	CHECKED: FRM		SURVEY BOOK -
			CONTRACT B-37688

BRIDGE FILE	002-45-09632
DESIGNATION	0500028
SHEETS	5 of 27
PROJECT	0500028

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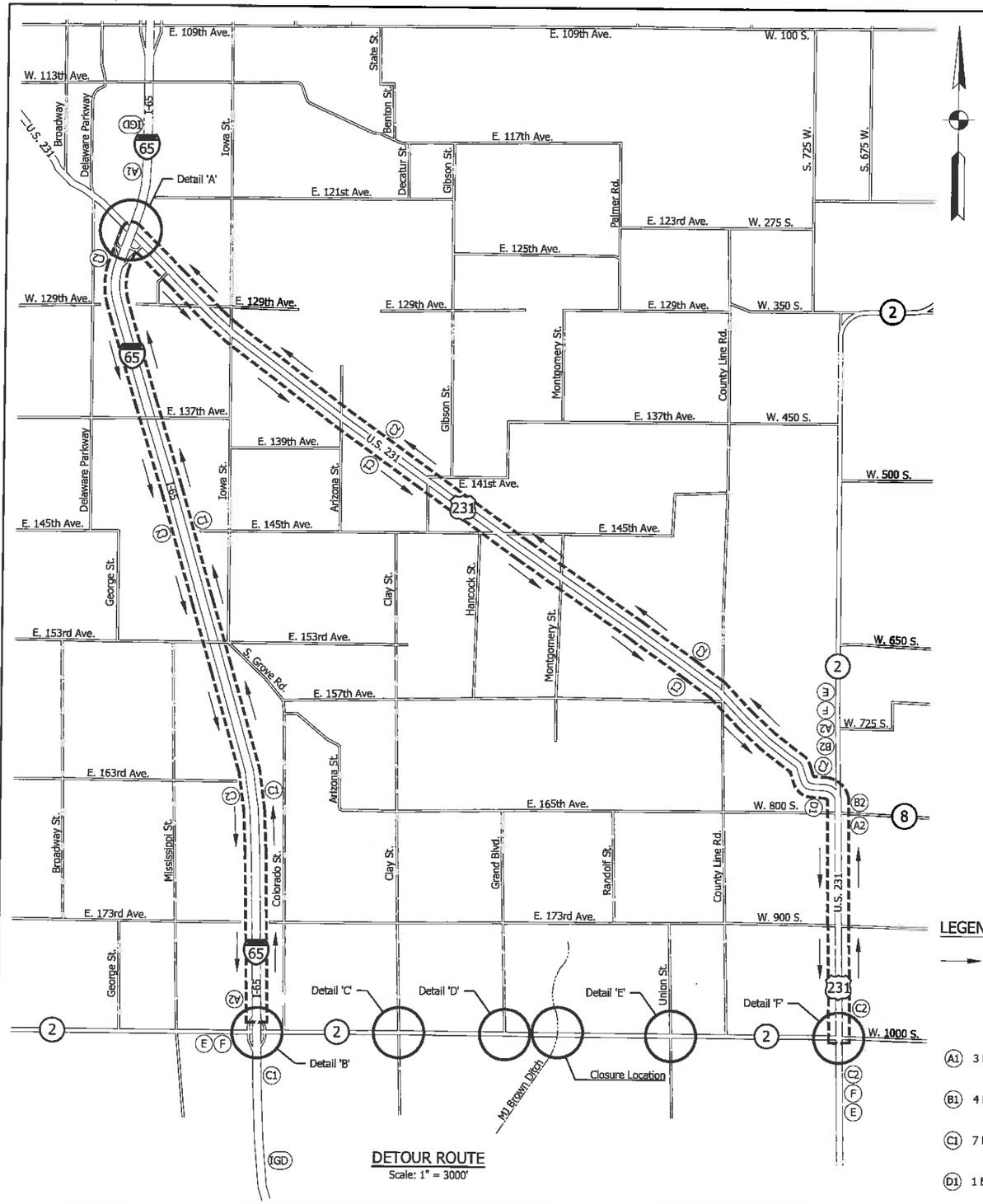
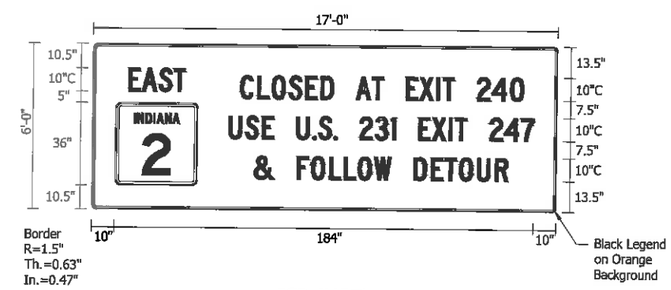


DETOUR ROUTE

Scale: 1" = 3000'

DETOUR ROUTE MARKER ASSEMBLIES

(A1) DETOUR / EAST / INDIANA 2 — M4-8 24" x 12", M3-2(S) 24" x 12", M1-5 24" x 24", M5-1(R or L)(S) 21" x 15" — ADVANCE TURN DETOUR MARKER ASSEMBLY	(B1) DETOUR / EAST / INDIANA 2 — M4-8 24" x 12", M3-2(S) 24" x 12", M1-5 24" x 24", M6-1(R or L)(S) 21" x 15" — DIRECTIONAL DETOUR MARKER ASSEMBLY	(C1) DETOUR / EAST / INDIANA 2 — M4-8 24" x 12", M3-2(S) 24" x 12", M1-5 24" x 24", M6-3(S) 21" x 15" — CONFIRMING DETOUR ROUTE MARKER ASSEMBLY	(D1) END DETOUR / EAST / INDIANA 2 — M4-8a 24" x 18", M3-2(S) 24" x 12", M1-5 24" x 24" — END DETOUR ROUTE MARKER ASSEMBLY
(A2) DETOUR / WEST / INDIANA 2 — M4-8 24" x 12", M3-4(S) 24" x 12", M1-5 24" x 24", M5-1(R or L)(S) 21" x 15" — ADVANCE TURN DETOUR MARKER ASSEMBLY	(B2) DETOUR / WEST / INDIANA 2 — M4-8 24" x 12", M3-4(S) 24" x 12", M1-5 24" x 24", M6-1(R or L)(S) 21" x 15" — DIRECTIONAL DETOUR MARKER ASSEMBLY	(C2) DETOUR / WEST / INDIANA 2 — M4-8 24" x 12", M3-4(S) 24" x 12", M1-5 24" x 24", M6-3(S) 21" x 15" — CONFIRMING DETOUR ROUTE MARKER ASSEMBLY	(D2) END DETOUR / WEST / INDIANA 2 — M4-8a 24" x 18", M3-4(S) 24" x 12", M1-5 24" x 24" — END DETOUR ROUTE MARKER ASSEMBLY



IGD (MOT) TEMPORARY PANEL SIGN ON I-65 NORTHBOUND AND SOUTHBOUND

LEGEND:

→ Direction of Traffic

(A1) 3 Each	(A2) 4 Each	(E) 3 Each
(B1) 4 Each	(B2) 4 Each	(F) 3 Each
(C1) 7 Each	(C2) 8 Each	(IDG) Temporary Panel Sign
(D1) 1 Each	(D2) 1 Each	

NOTE:

See sheet 7 for details and quantities.

NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: FHM DRAWN: JAJ

CHECKED: DGD CHECKED: FHM

INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC DETOUR

SCALE	BRIDGE FILE
AS NOTED	002-45-09632
	DESIGNATION
	0500028
SURVEY BOOK	SHEETS
-	6 of 27
CONTRACT	PROJECT
B-37688	0500028

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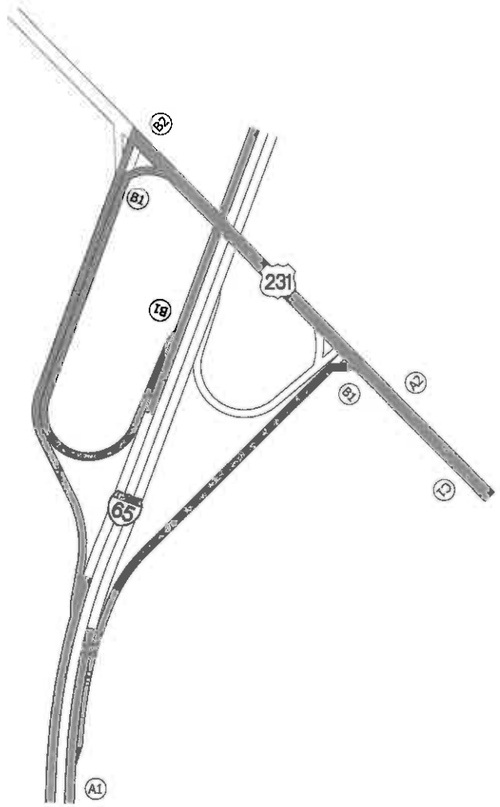
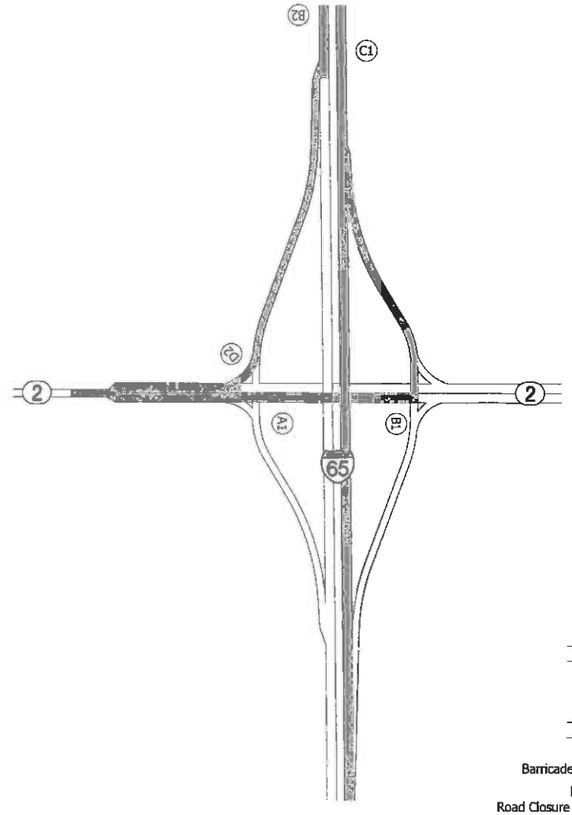
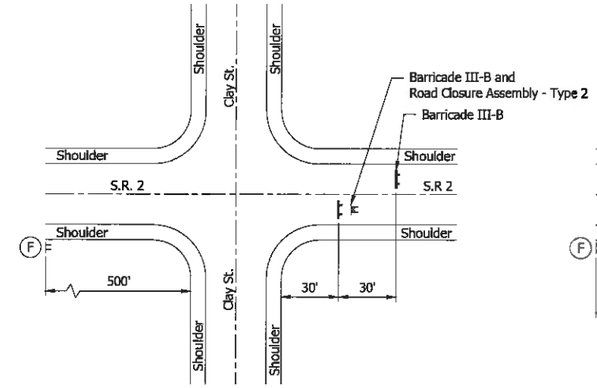


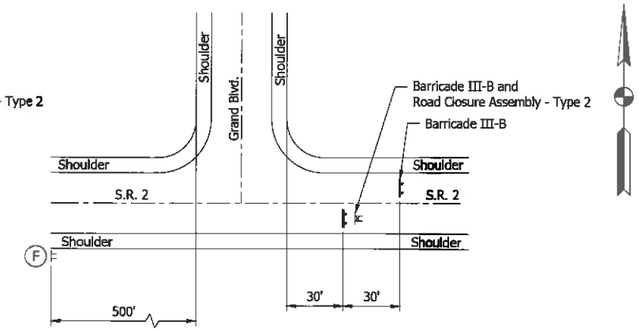
DETAIL A
U.S. 231 AND I-65 INTERSECTION
Not to Scale



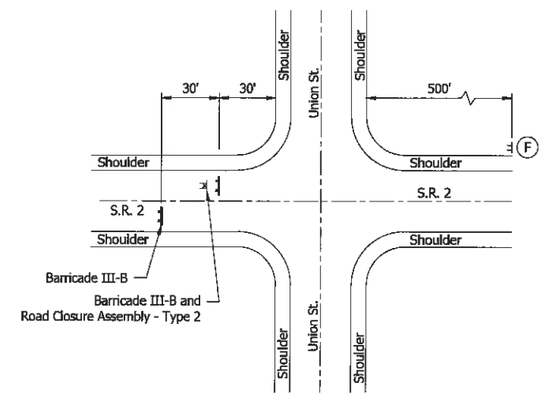
DETAIL B
S.R. 2 AND I-65 INTERSECTION
Not to Scale



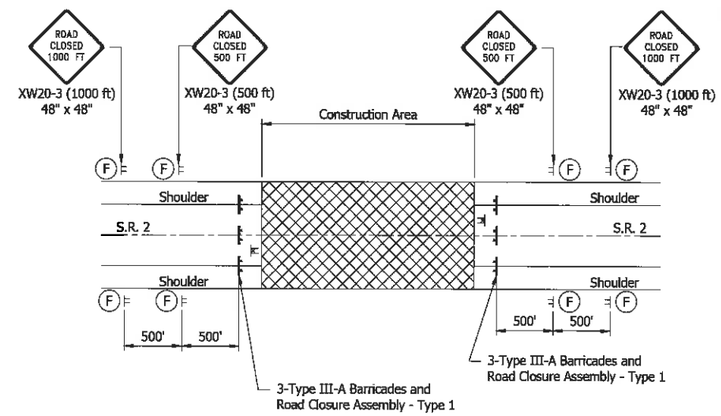
DETAIL C
Not to Scale



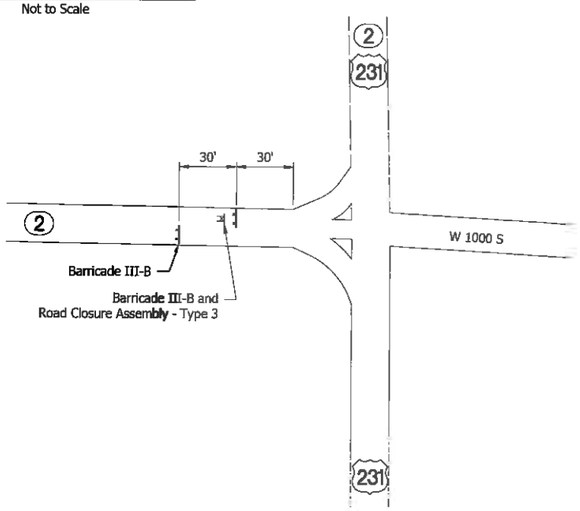
DETAIL D
Not to Scale



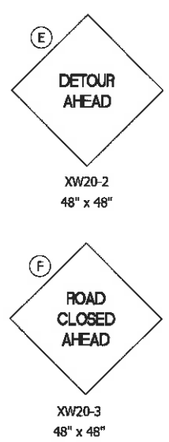
DETAIL E
Not to Scale

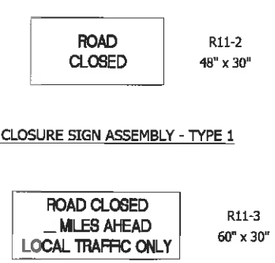


PROJECT SITE DETAIL
Not to Scale



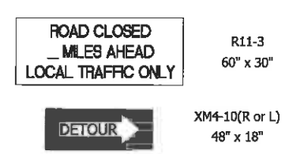
DETAIL F
Not to Scale





ROAD CLOSURE SIGN ASSEMBLY - TYPE 1

ROAD CLOSURE SIGN ASSEMBLY - TYPE 2



ROAD CLOSURE SIGN ASSEMBLY - TYPE 3

ESTIMATE OF QUANTITIES

Item	Quantity	Unit
Maintaining Traffic	1	Lump Sum
Construction Sign Type A (2 Undistributed)	19	Each
Temporary Panel Sign (2 Signs)	204	Sft
Temporary Panel Sign Supports	120	ft
Detour Route Marker Assemblies	32	Each
Standard Barricade Type III-A (24 Ft Undistributed)	96	ft
Standard Barricade Type III-B (24 Ft Undistributed)	120	ft
Road Closure Assemblies	6	Each

LEGEND:

- Road Closure Sign Assembly
- Barricade III-B
- Construction Sign And Supports
- Construction Area
- (A#) Advance Turn Detour Route Marker Assembly
- (B#) Directional Detour Route Marker Assembly
- (C#) Confirming Detour Route Marker Assembly
- (D#) End Detour Route Marker Assembly

NOTE:

See sheet 6 for detour and detail locations.

NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: FRM | DRAWN: BJS
CHECKED: DGD | CHECKED: FRM

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
DETAILS & QUANTITIES

SCALE	BRIDGE FILE
NOT TO SCALE	002-45-09632
	DESIGNATION
	0500028
SURVEY BOOK	SHEETS
-	7 of 27
CONTRACT	PROJECT
B-37688	0500028

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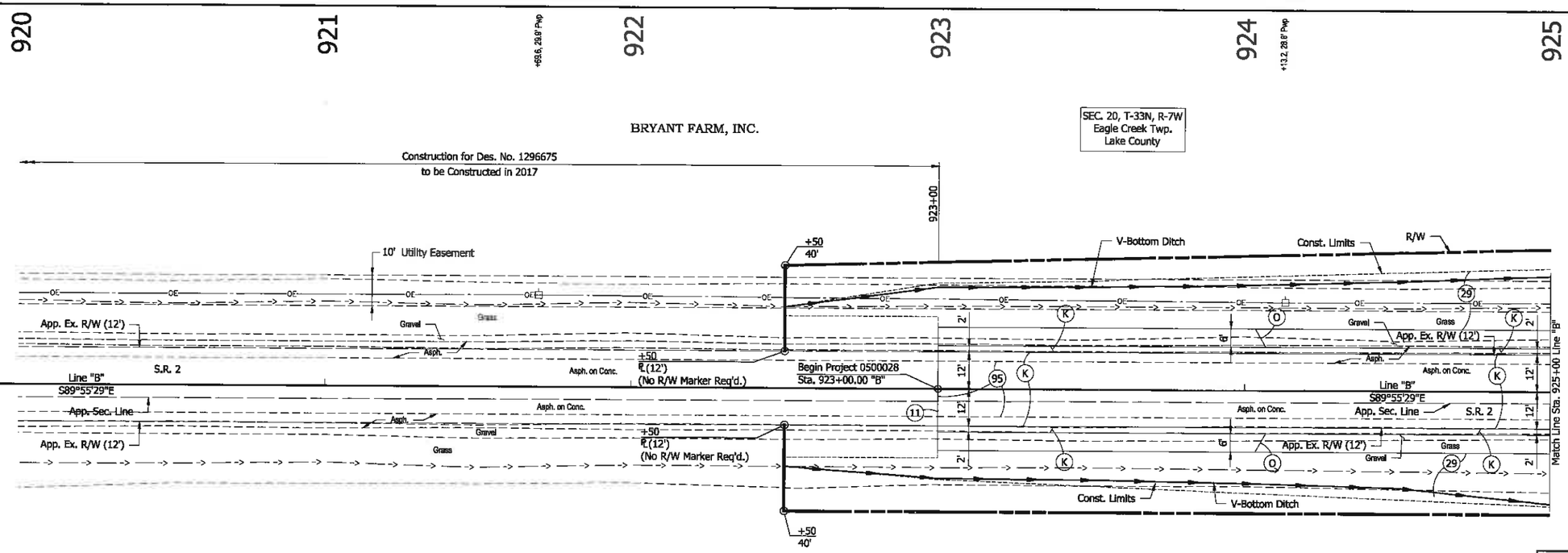


LEGEND:

- (K) 165 #/sys QC/QA-HMA, 3, 70, Surface, 9.5 mm on
  275 #/sys QC/QA-HMA, 3, 70, Intermediate, 19.0 mm on
  660 #/sys Qc/QA-HMA, 3, 64, Base 19.0 mm
- (O) 10" Compacted Aggregate, No. 53
- (11) Sawcut
- (29) Mulched Seeding, R
- (95) Pavement Removal

SEC. 29, T-33N, R-7W
Eagle Creek Twp.
Lake County

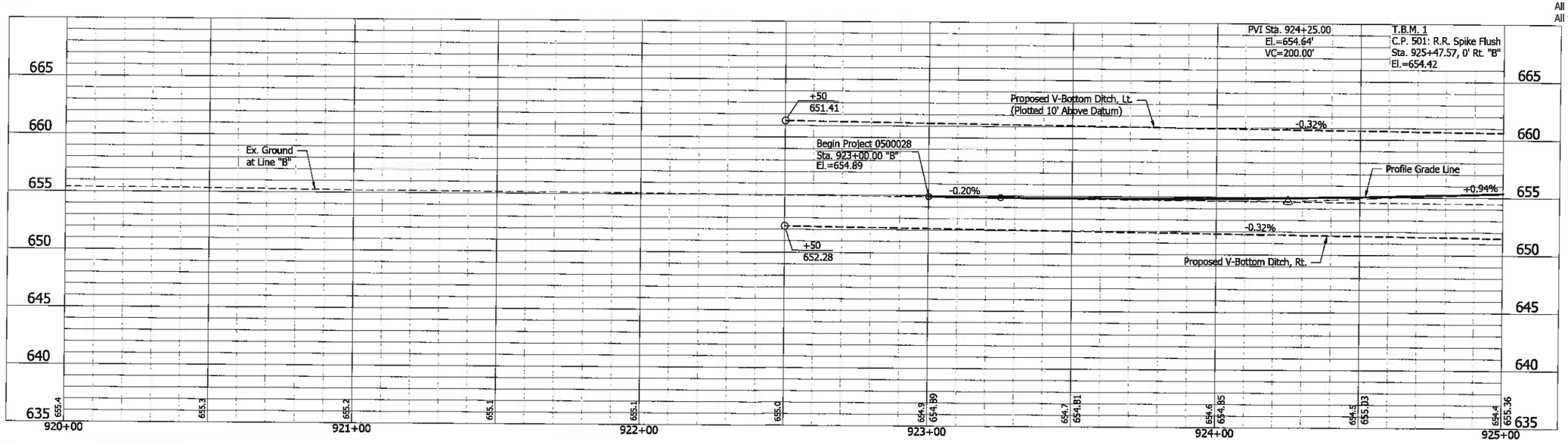
BRYANT FARM, INC.

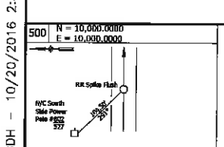
EARTHWORK TABULATION

FILL + 25%	=	3,424	cys
COMMON EXCAVATION	=	860	cys
BORROW	=	2,564	cys
BENCHING	=	640	cys*

* NO DIRECT PAYMENT MADE FOR BENCHING

All R/W described from Line "B"
All topography described from Line "B"





NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: DGD | DRAWN: BJS
CHECKED: MFJ | CHECKED: MFJ

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
STA. 920+00 TO STA. 925+00 - LINE "B"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	002-45-09632
VERTICAL SCALE	DESIGNATION
1" = 5'	0500028
SURVEY BOOK	SHEETS
-	8 of 27
CONTRACT	PROJECT
B-37688	0500028

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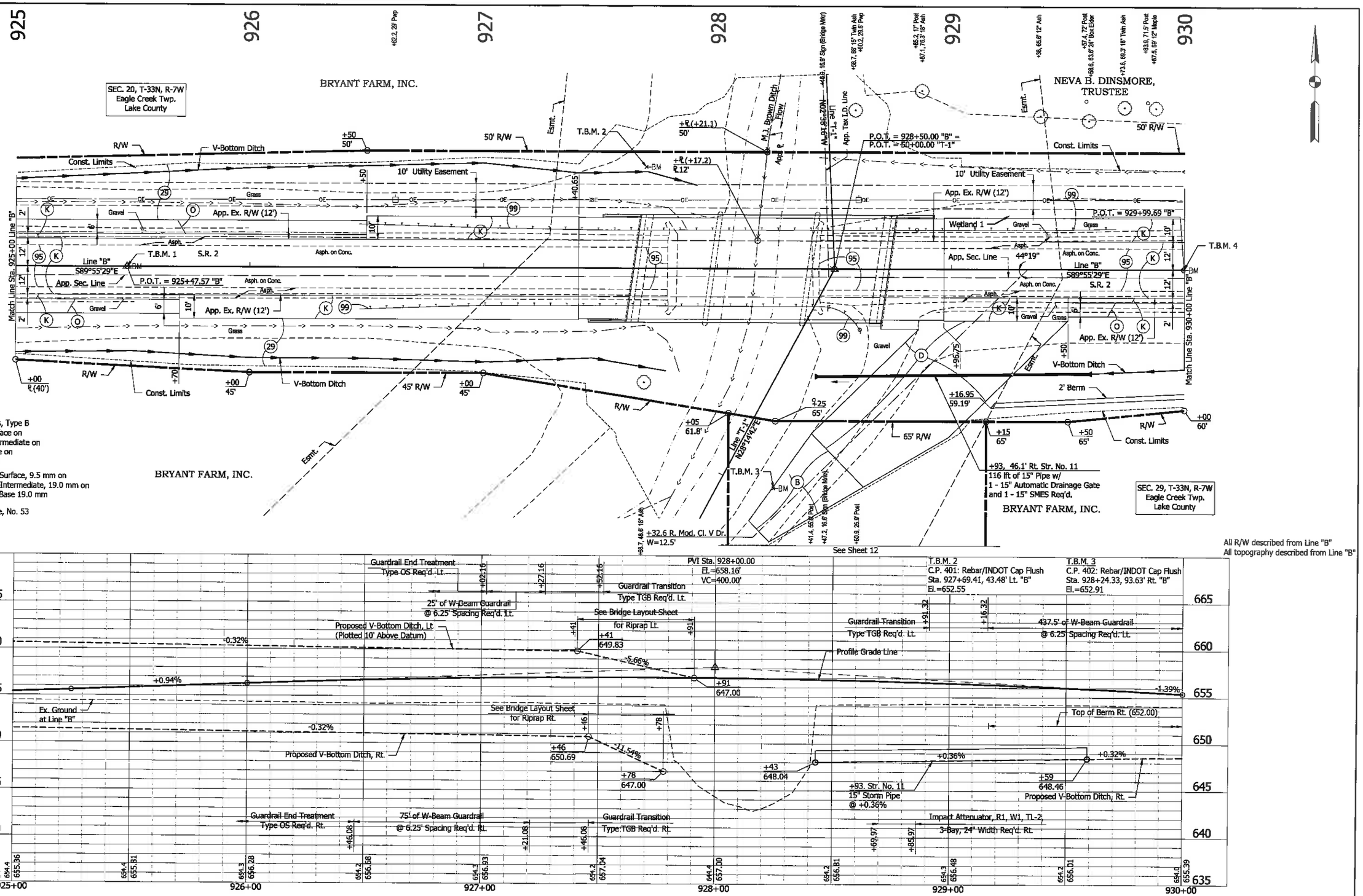

NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: DGD DRAWN: BJS

CHECKED: MFJ CHECKED: MFJ

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
STA. 925+00 TO STA. 930+00 - LINE "B"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	002-45-09632
VERTICAL SCALE	DESIGNATION
1" = 5'	0500028
SURVEY BOOK	SHEETS
-	9 of 27
CONTRACT	PROJECT
B-37688	0500028

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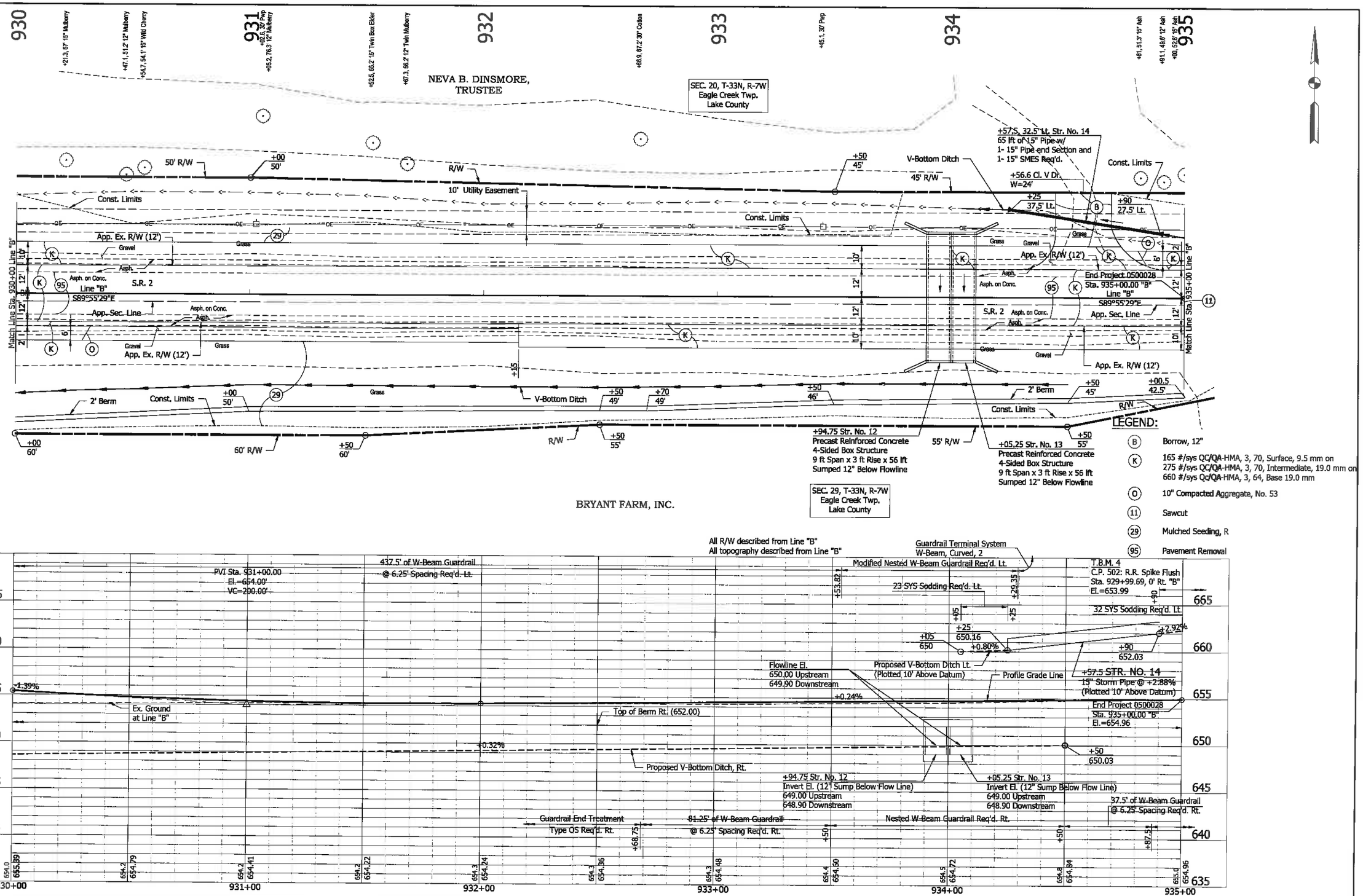

NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: DGD | DRAWN: BJS
CHECKED: MFJ | CHECKED: MFJ

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
STA. 930+00 TO STA. 935+00 - LINE "B"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	002-45-09632
VERTICAL SCALE	DESIGNATION
1" = 5'	0500028
SURVEY BOOK	SHEETS
-	10 of 27
CONTRACT	PROJECT
B-37688	0500028

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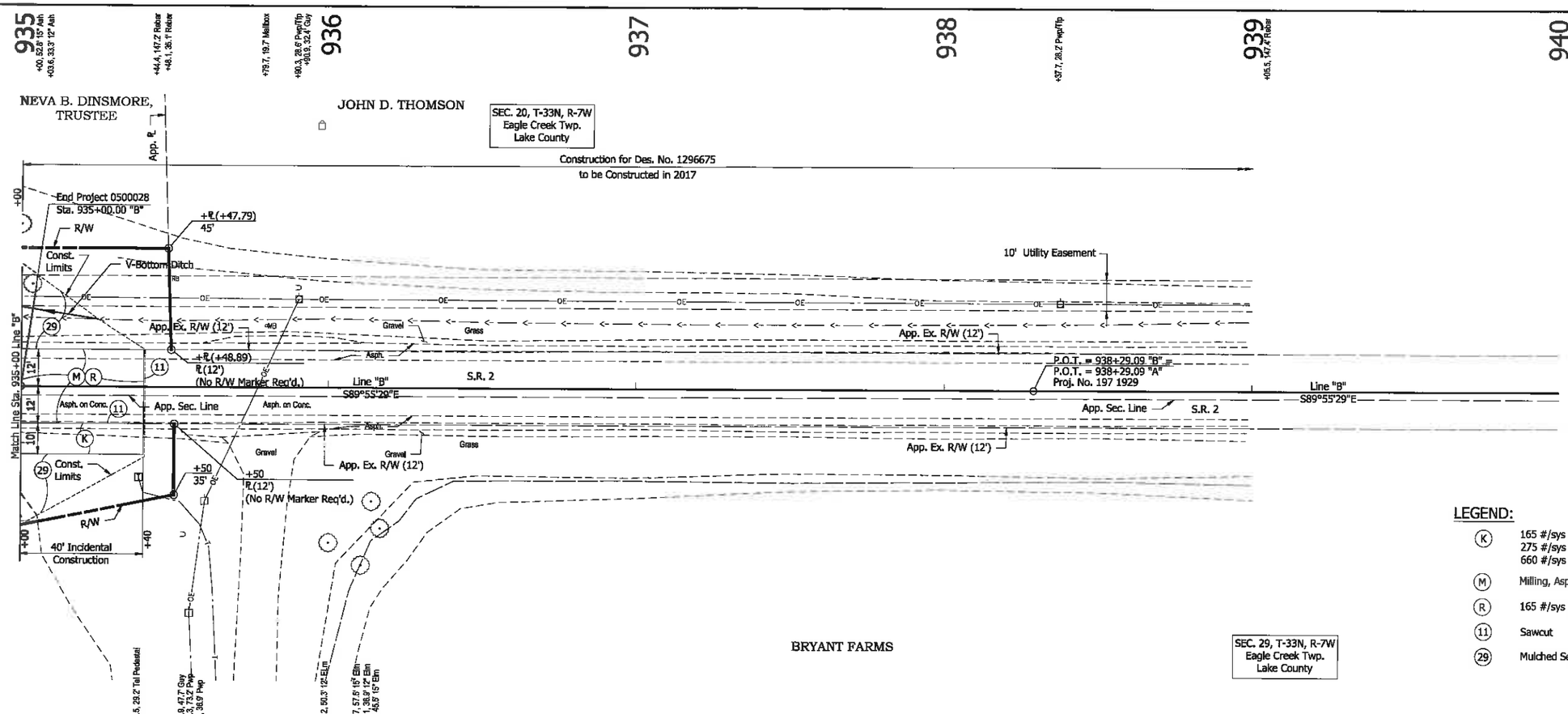
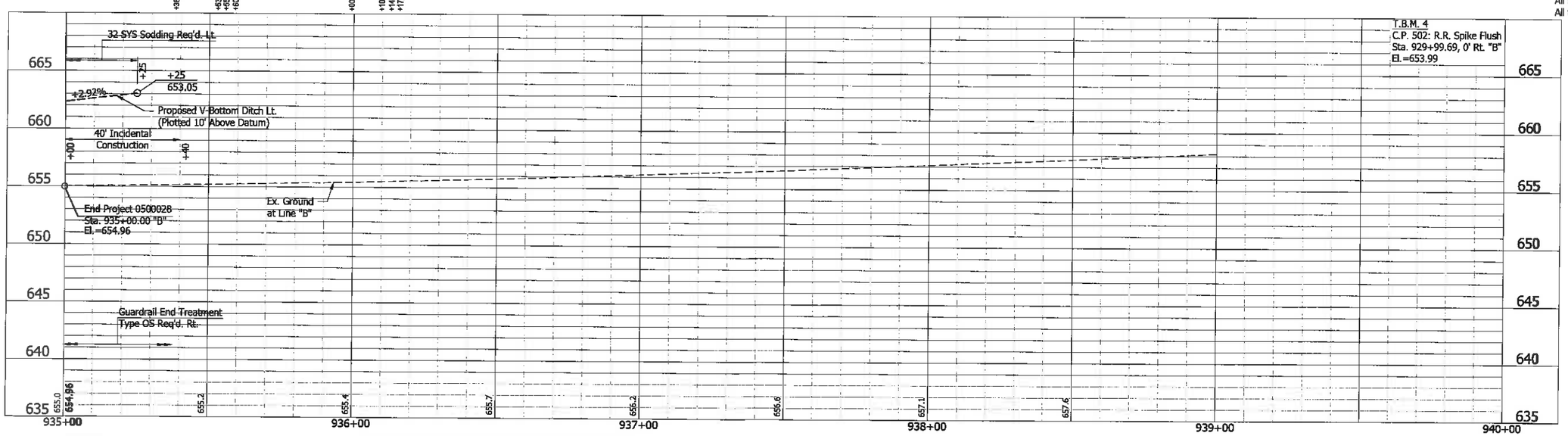
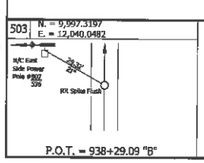


LEGEND:

- (K) 165 #/sys QC/QA-HMA, 3, 70, Surface, 9.5 mm on 275 #/sys QC/QA-HMA, 3, 70, Intermediate, 19.0 mm on 660 #/sys Qc/QA-HMA, 3, 64, Base 19.0 mm
- (M) Milling, Asphalt, 1-½"
- (R) 165 #/sys QC/QA-HMA, 3, 70, Surface, 9.5 mm
- (11) Sawcut
- (29) Mulched Seeding, R

All R/W described from Line "B"
All topography described from Line "B"





NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: DGD
DRAWN: BJS
CHECKED: MFJ
CHECKED: MFJ

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
STA. 935+00 TO STA. 940+00 - LINE "B"

HORIZONTAL SCALE	BRIDGE FILE
1" =20'	002-45-09632
VERTICAL SCALE	DESIGNATION
1" = 5'	0500028
SURVEY BOOK	SHEETS
-	11 of 27
CONTRACT	PROJECT
B-37688	0500028

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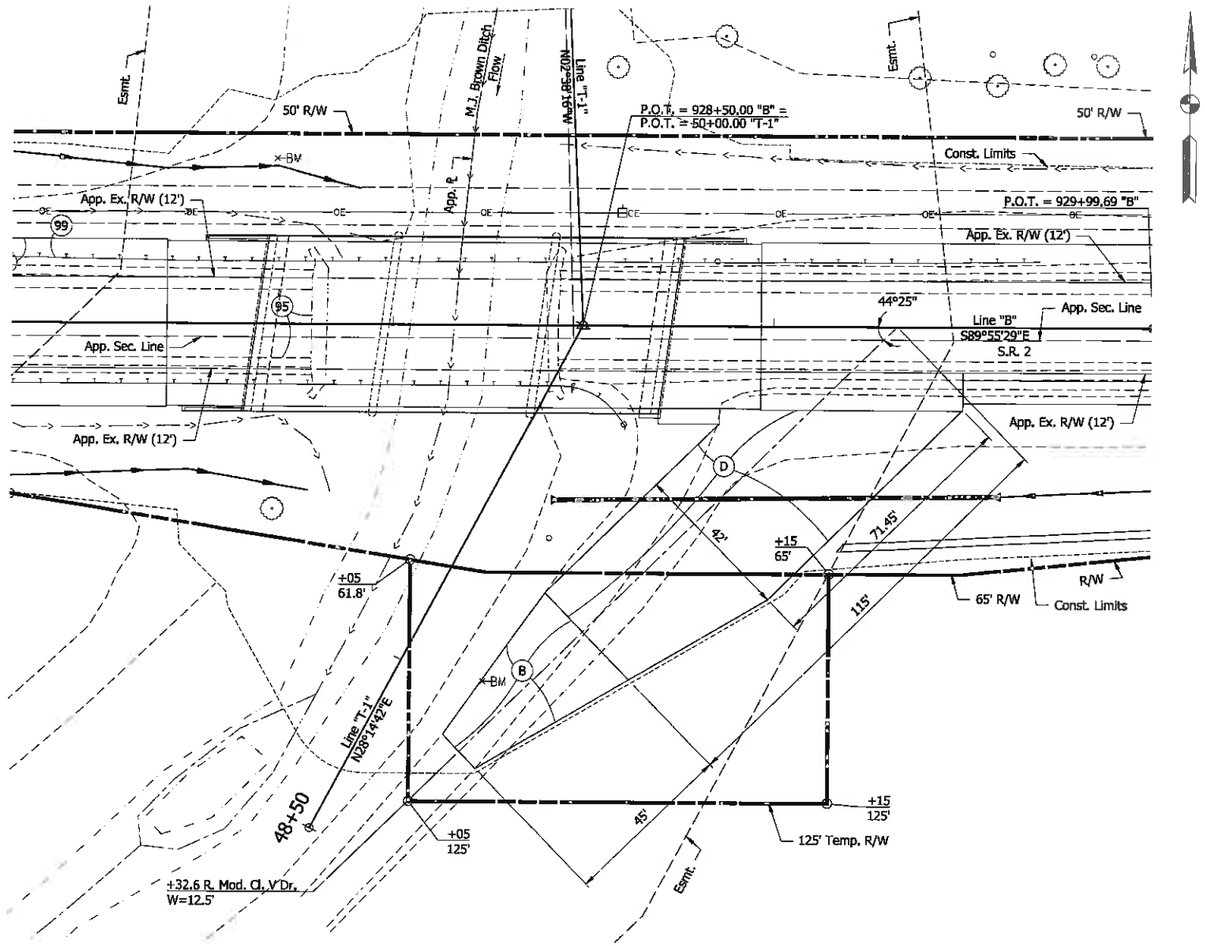
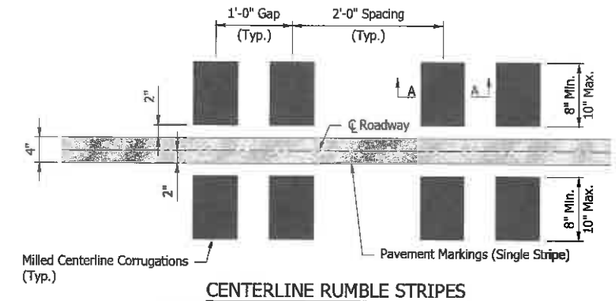
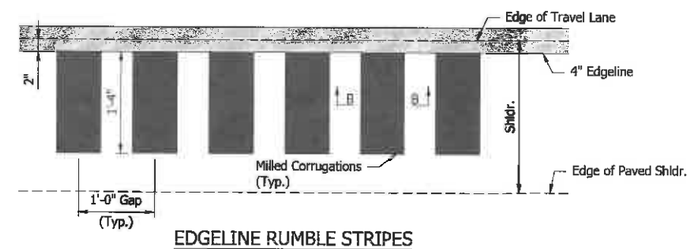


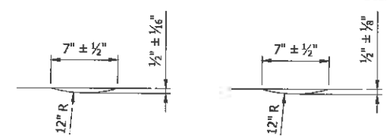
SOUTHEAST QUADRANT FIELD ENTRANCE
Scale: 1" = 20'-0"



CENTERLINE RUMBLE STRIPES
DETAIL FOR SINGLE STRIPED CENTERLINE
Scale: 1" = 1'-0"



EDGELINE RUMBLE STRIPES
Scale: 1" = 1'-0"



SECTION A-A
Not to Scale

SECTION B-B
Not to Scale

NOTES:

1. The liquid asphalt sealant width shall be a minimum of 24 in. centered on the shoulder joint line.
2. Rumble Stripe Stationing:
   Sta. 923+00.00 to Sta. 927+40.65 "A"
   Sta. 928+96.75 to Sta. 935+00.00 "A"

LEGEND:

(B) Borrow, 12"

(D) 1320 #/sys HMA for Approaches, Type B
165 #/sys HMA, Type B, Surface on
275 #/sys HMA, Type B, Intermediate on
880 #/sys HMA, Type B, Base on
Subgrade Treatment, Type II

NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: DGD DRAWN: BJS
CHECKED: MFJ CHECKED: MFJ

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAIL

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	002-45-09632
VERTICAL SCALE	DESIGNATION
1" = 5'	0500028
SURVEY BOOK	SHEETS
-	12 of 27
CONTRACT	PROJECT
B-37688	0500028

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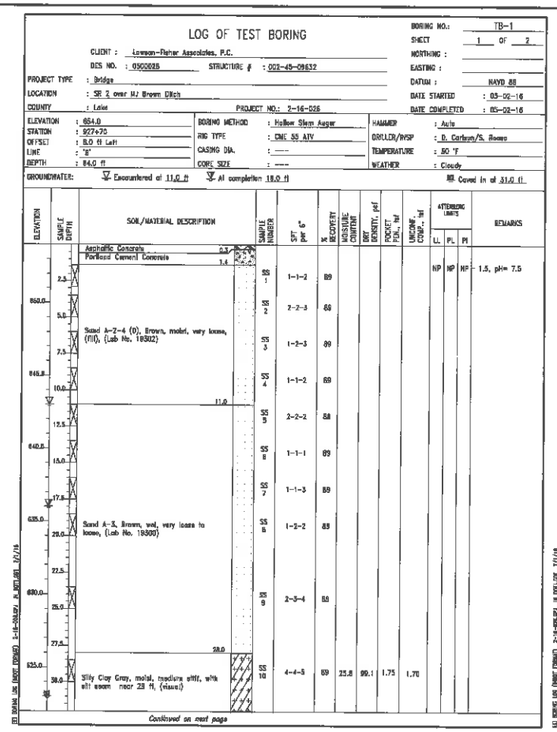
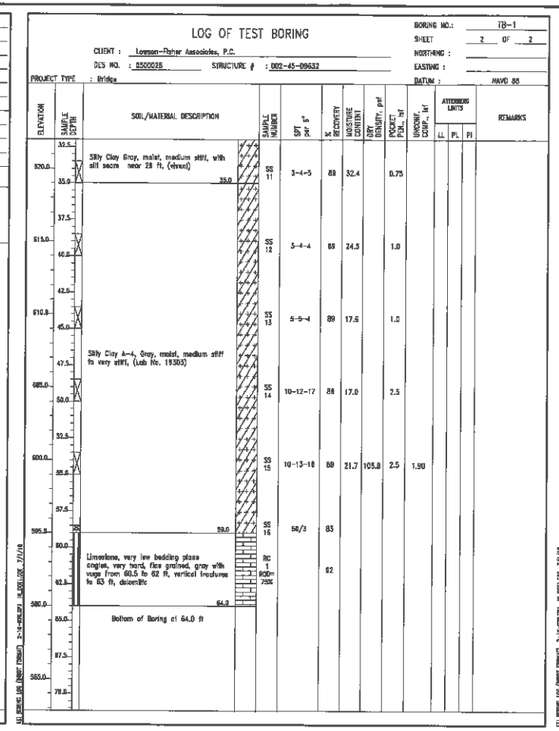
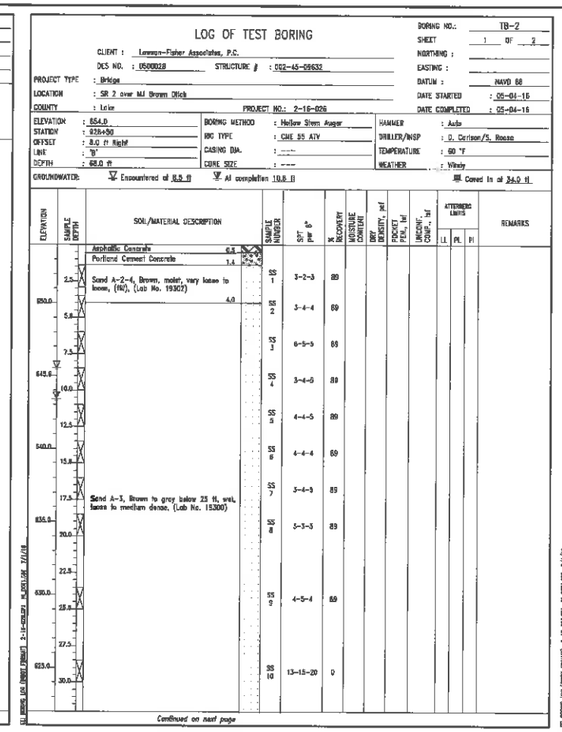
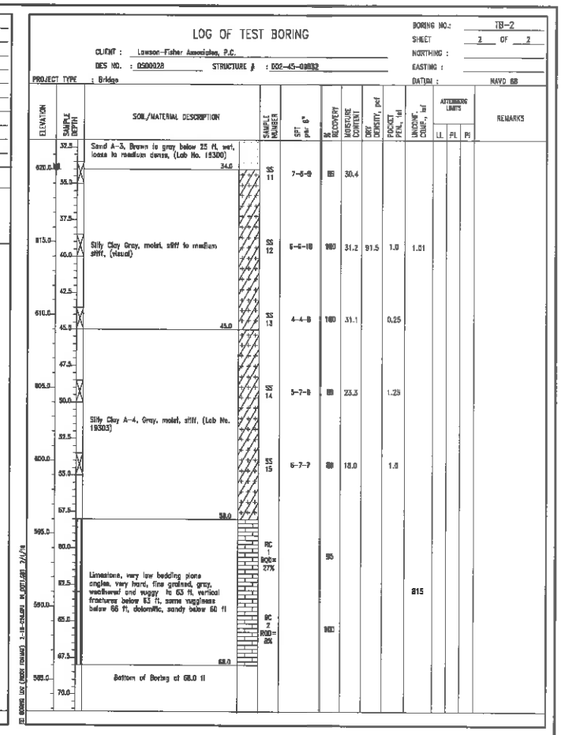
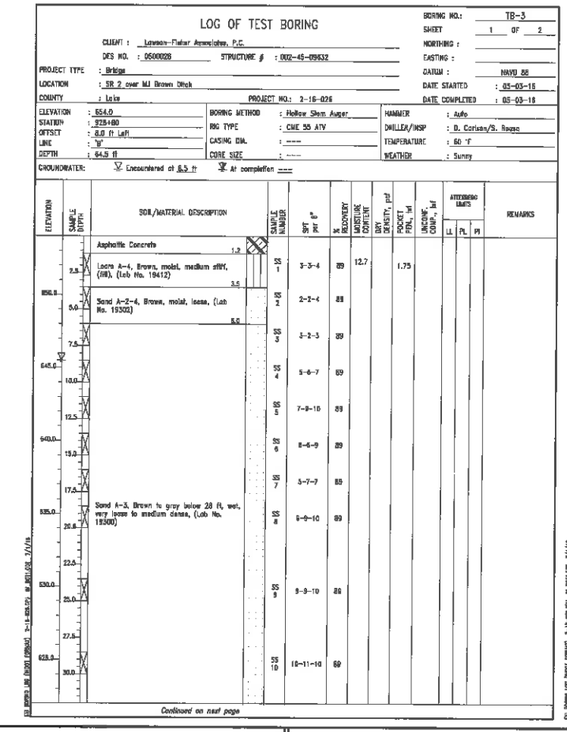
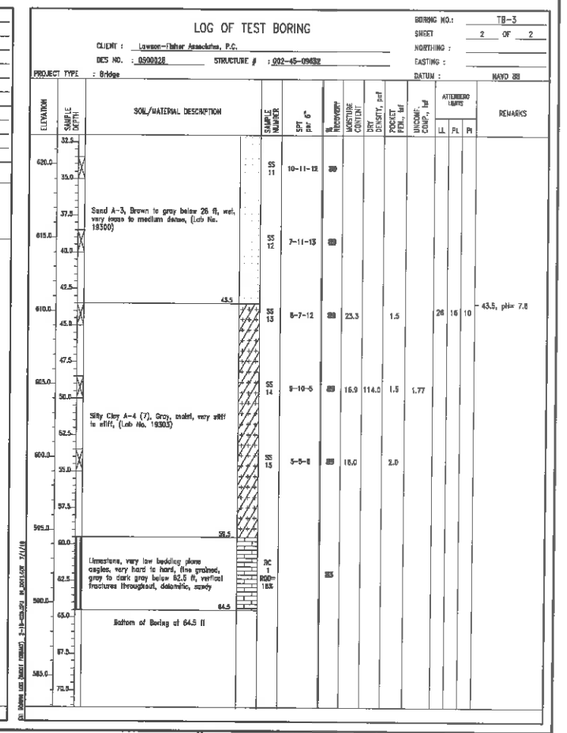










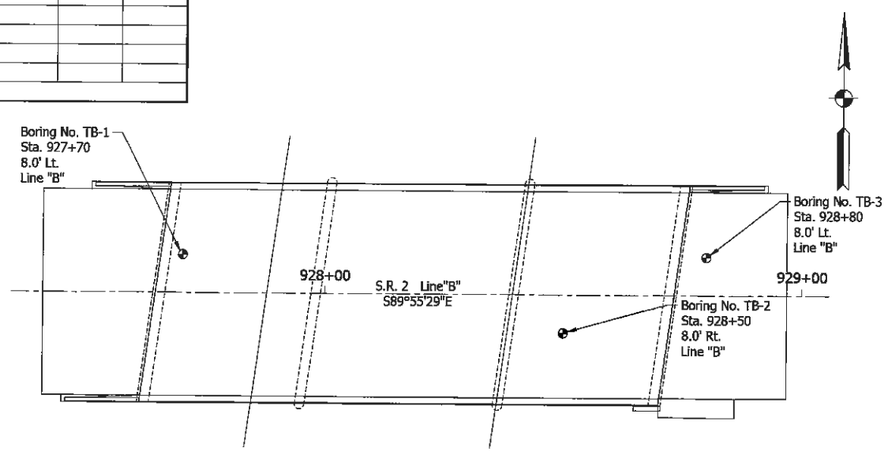


SUMMARY OF PILE LOADING FOR GEOTECHNICAL TESTING

Support	Bent No. 1	Pier No. 2	Pier No. 3	Bent No. 4
Plan Size, Type, and Grade				
Factored Design Load, Q_F (kip)				
Factored Design Soil Resistance, R_R (kip)				
Resistance Factor φ_{dyn}				
Downdrag Load, DD (kip)				
Nominal Soil Resistance, R_n (kip) *				
Downdrag Friction, $R_{s\,dd}$ (kip)				
Scour Zone Friction, $R_{s\,scour}$ (kip)				
Relaxation of Tip in Shale, R_{relax} (kip)				
Nominal Driving Resistance, R_{ndr} (kip)				
Estimated Pile Tip Elevation (Minimum)				
Testing Method				

* In Calculation of DD, γ_p = 1.4

Note to Reviewer:
Table will be filled in once the Foundation Review Form is Complete



SOIL BORING PLAN

NOTES:

1.

NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: TJM DRAWN: BJT

CHECKED: BMA CHECKED: TJM

INDIANA DEPARTMENT OF TRANSPORTATION

SOIL BORINGS

SCALE	BRIDGE FILE
1/16" = 1'-0"	002-45-08632
	DESIGNATION 0500028
SURVEY BOOK -	SHEETS 13 of 27
CONTRACT B-37688	PROJECT 0500028

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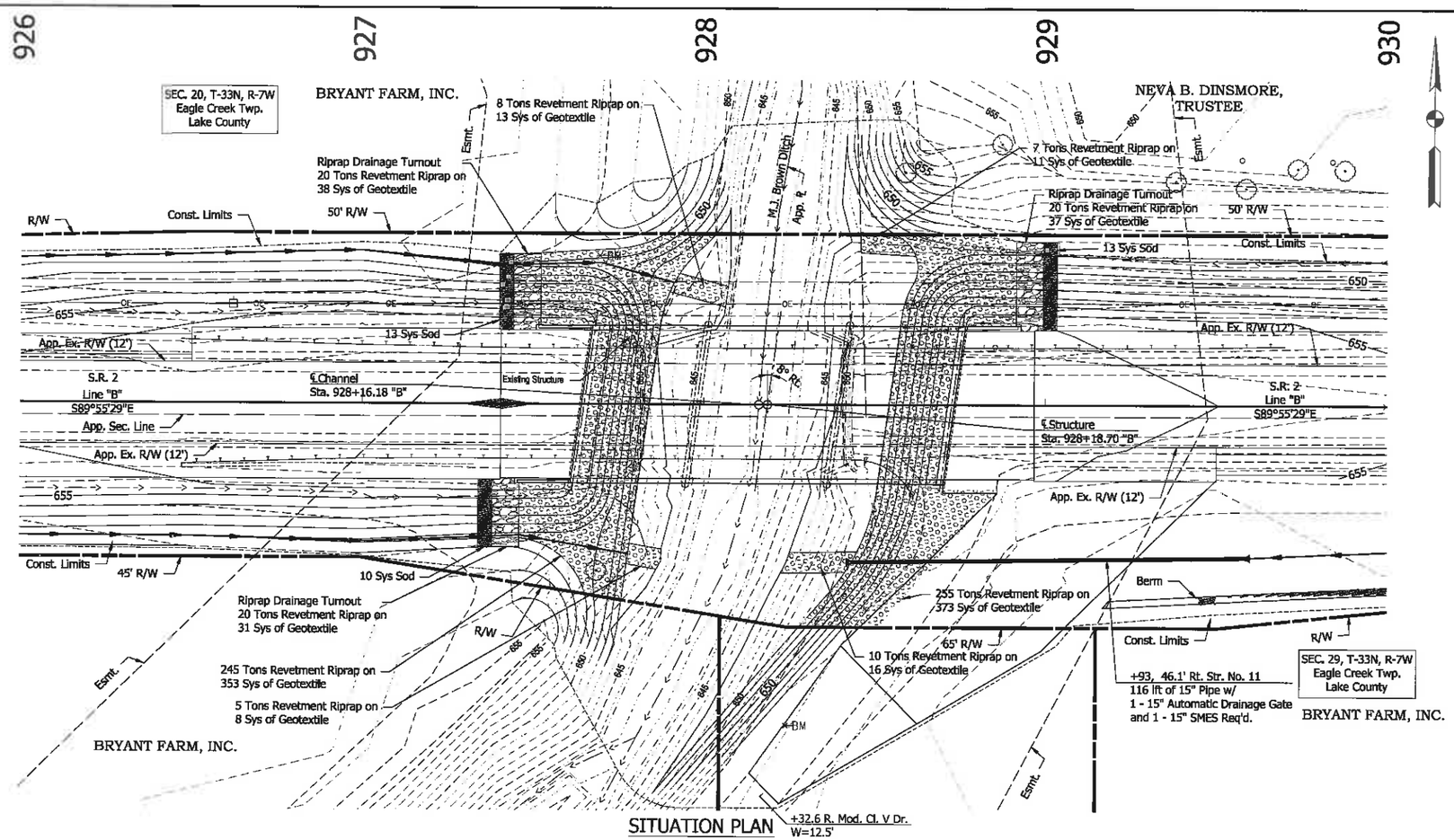
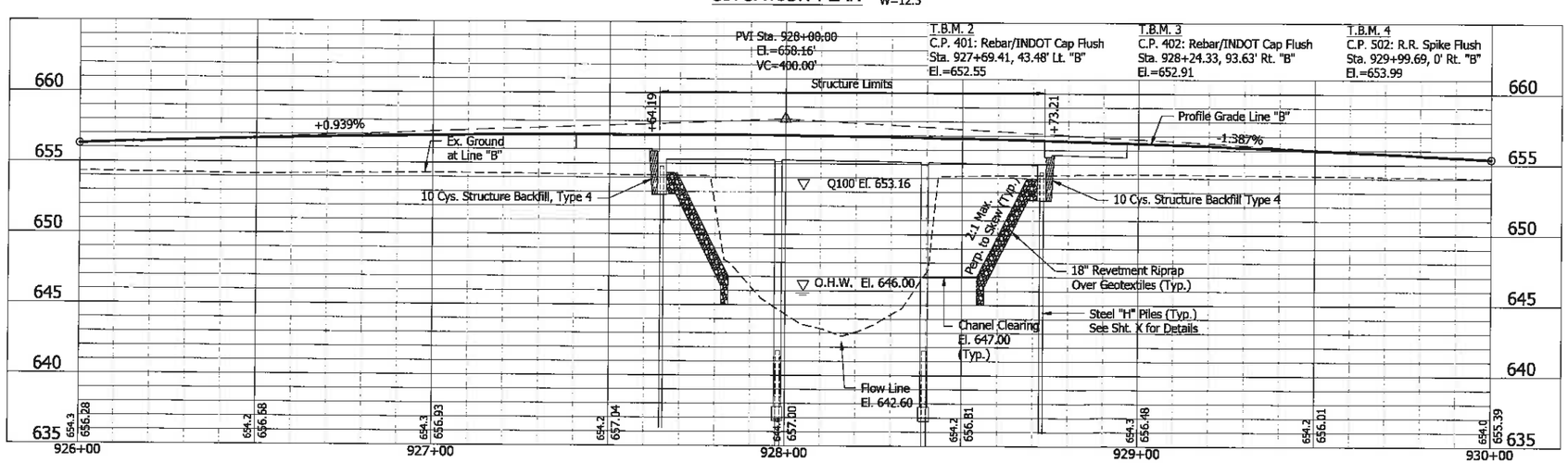


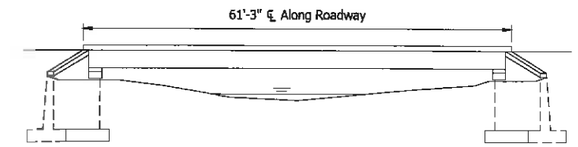
SITUATION PLAN



PROFILE ON PROPOSED LINE "B"

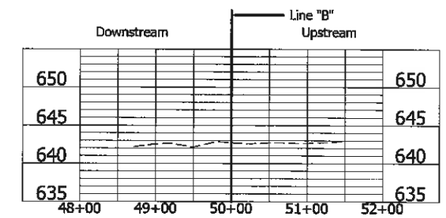
EXISTING STRUCTURE:

The existing structure (002-45-00802-C) is an adjacent prestressed concrete box beam bridge with steel bridge railings; built in 1929; 1 span: 60'-0"; o-o coping: 34'-0"; clear roadway: 31'-0"; substructures: concrete abutments on timber piles. Existing structure to be removed.



EXISTING STRUCTURE ELEVATION

Scale: 3/32" = 1'-0"



EXISTING STREAM PROFILE - M.J. BROWN DITCH

Horizontal Scale: 1" = 100'
Vertical Scale: 1" = 10'

HYDRAULIC DATA:

Drainage Area	34.2 mi.^{2}
Q_{100} Discharge	2260 ft.^{3}/sec.
Q_{100} Elevation	653.16 ft.
Backwater at Q_{100}	1.36 ft.
Gross Waterway Opening Required Below Q_{100} Elevation	650.63 ft.^{2}
Gross Waterway Opening Provided Below Q_{100} Elevation	650.63 ft.^{2}
Road Overflow Waterway Area	0 ft.^{2}
Velocity at Q_{100}	3.09 ft./sec.
Minimum Low Structure Elevation	654.47 ft.
Freeboard Provided (Above Q_{100})	1.31 ft.
Skew	8°
Existing Backwater at Q_{100}	1.11 ft.
Existing Gross Waterway Opening (Below Q_{100})	356.85 ft.^{2}
Existing Road Overflow Area	93.09 ft.^{2}
Existing Velocity at Q_{100}	5.02 ft./sec.
Existing Low Structure Elevation	650.84 ft.
Existing Freeboard Provided (Above Q_{100})	0 ft.
Q_{500} Discharge	2940 ft.^{3}/sec.
Q_{500} Elevation	653.73 ft.
Velocity at Q_{500}	4.97 ft./sec.

HYDRAULIC SCOUR DATA:

Q_{100} Scour Depth (Contraction)	5.94 ft.
Q_{100} Scour Depth (Total)	9.60 ft.
Minimum Flowline	642.60 ft.
Q_{100} Low Scour Elevation	633.0 ft.
Q_{500} Scour Depth (Contraction)	14.36 ft.
Q_{500} Scour Depth (Total)	18.14 ft.
Q_{500} Low Scour Elevation	624.46 ft.

EARTHWORK TABULATION:

Fill +25%	3,190 cys
Common Excavation	1,907 cys
Usable Waterway Excavation (70%)	215 cys
Surplus Foundation Excavation	105 cys
Borrow	2,557 cys
Total Waterway Excavation	300 cys
Benching (Estimated)	640 cys

NOTES:

See Sheet 2 for Utility Owners.

CONTINUOUS REINFORCED CONCRETE
SLAB BRIDGE
3 SPANS: 33'-0", 41'-6", 33'-0"
43'-4" CLEAR ROADWAY; SKEW 8°00'00" RT.
S.R. 2 OVER M.J. BROWN DITCH
LAKE COUNTY

NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

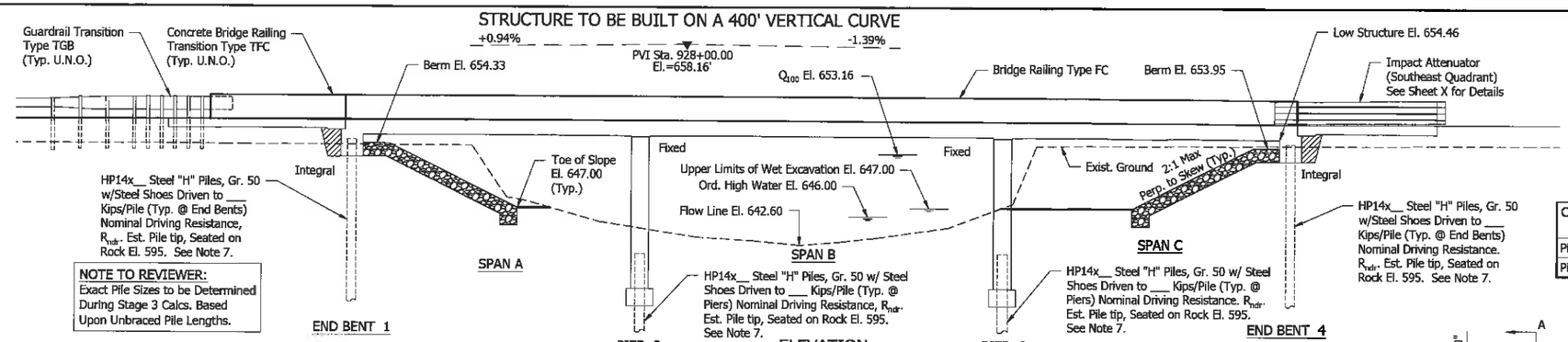
DESIGNED: TJM DRAWN: BJS
CHECKED: BMA CHECKED: TJM

INDIANA
DEPARTMENT OF TRANSPORTATION

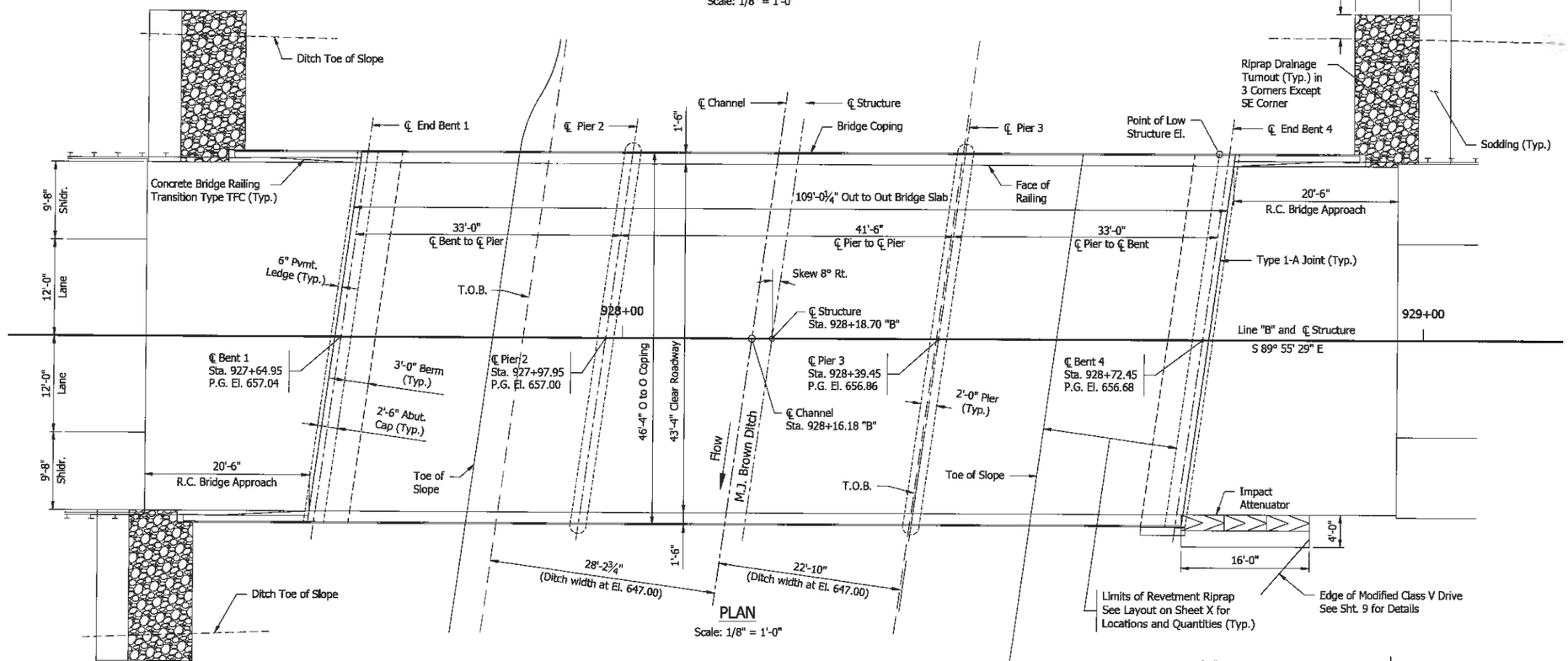
BRIDGE LAYOUT
S.R. 2 OVER M.J. BROWN DITCH

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	002-45-09632
VERTICAL SCALE	DESIGNATION
1"=5'	0500028
SURVEY BOOK	SHEETS
-	14 of 27
CONTRACT	PROJECT
B-37688	0500028

BJS - 10/20/2015 2:42 PM - U:\2014\201461_00 indot er2\Cos\Plan Set\Structure\146110BR_BL01.dwg



Concrete Foundation Seal Dimensions	
Pier 2	51' x 6' x 2'
Pier 3	51' x 6' x 2'



GENERAL NOTES:

1. Existing structure shall be removed. Plans for existing structure are on file at INDOT Central office as Bridge File No. 002-45-00802. Plans for Bridge Files 002-45-00802A, 002-45-00802B, and 002-45-00802C are available upon request.
2. Reinforcing steel cover shall be 2 ½" in the top and 1" minimum in the bottom of the floor slab, 3" in footings except bottom steel which shall be 4", and 2" in all other parts, unless noted otherwise.
3. The following surfaces shall be surface sealed: Top of bridge deck, copings, including underside of bridge deck from coping to drip bead, all exposed surfaces of concrete bridge railings, concrete bridge railing transitions, and RCBAs.
4. Concrete foundation seal required at each pier. See table for dimensions. The mudsill shown on piers 2 and 3 shall also be the concrete foundation seals. Assumed water surface elevation during foundation construction = 648.00 ft.
5. Concrete in the end bents, floor slab, railings, railing transitions, and reinforced concrete bridge approaches shall be Class "C." Concrete in the piers shall be Class "A." Concrete in the foundation seals shall be Class "B."
6. Reinforcing steel in pier stem shall be plain. All other reinforcing steel shall be epoxy coated.
7. One indicator pile shall be at an end bent and a pier, 2 total. The re-strike period for the indicator piles shall be 24 hours.

DESIGN DATA:

Design Strengths:

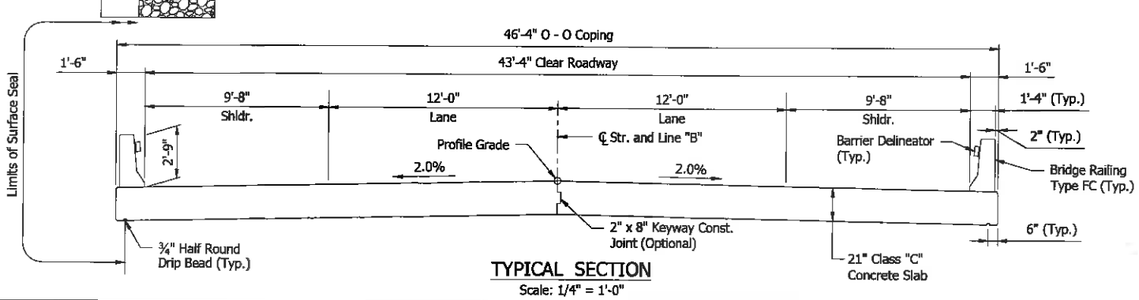
Class "C" Concrete	f'_c = 4,000 PSI
Class "B" Concrete	f'_c = 3,000 PSI
Class "A" Concrete	f'_c = 3,500 PSI
Reinforcing Steel	F_y = 60,000 PSI

Live Load:
Superstructure and Substructure designed for HL-93 loading, in accordance with the AASHTO LRFD Bridge Design Specifications 6th. edition, 2012, and its subsequent interims.

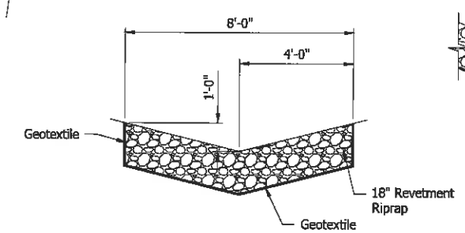
Dead Load:
Actual weight plus 35 psf (composite) for future wearing surface.

Seismic:
Site Class: D
Seismic Zone: 1

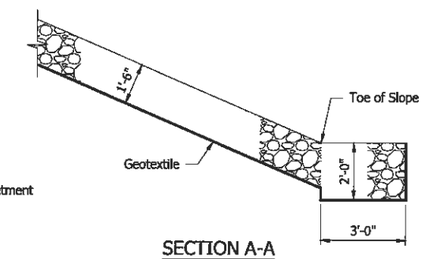
Slab designed with a structural depth of 20 ½".



TYPICAL SECTION
Scale: 1/4" = 1'-0"



RIPRAP DRAINAGE TURNOUT
TYPICAL SECTION
Scale: 1/16" = 1'-0"



SECTION A-A
Scale: 1/16" = 1'-0"

Note:
1. See Sheet __ for Riprap Limits

CONTINUOUS REINFORCED CONCRETE SLAB BRIDGE
3 SPANS: 33'-0", 41'-6", 33'-0"
43'-4" CLEAR ROADWAY; SKEW 8°00'00" RT.
S.R. 2 OVER M.J. BROWN DITCH
LAKE COUNTY

NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: TJM DRAWN: BJS
CHECKED: BMA CHECKED: TJM

INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE GENERAL PLAN

SCALE	BRIDGE FILE
AS NOTED	002-45-09632
	DESIGNATION
	0500028
SURVEY BOOK	SHEETS
-	15 of 27
CONTRACT	PROJECT
B-37688	0500028

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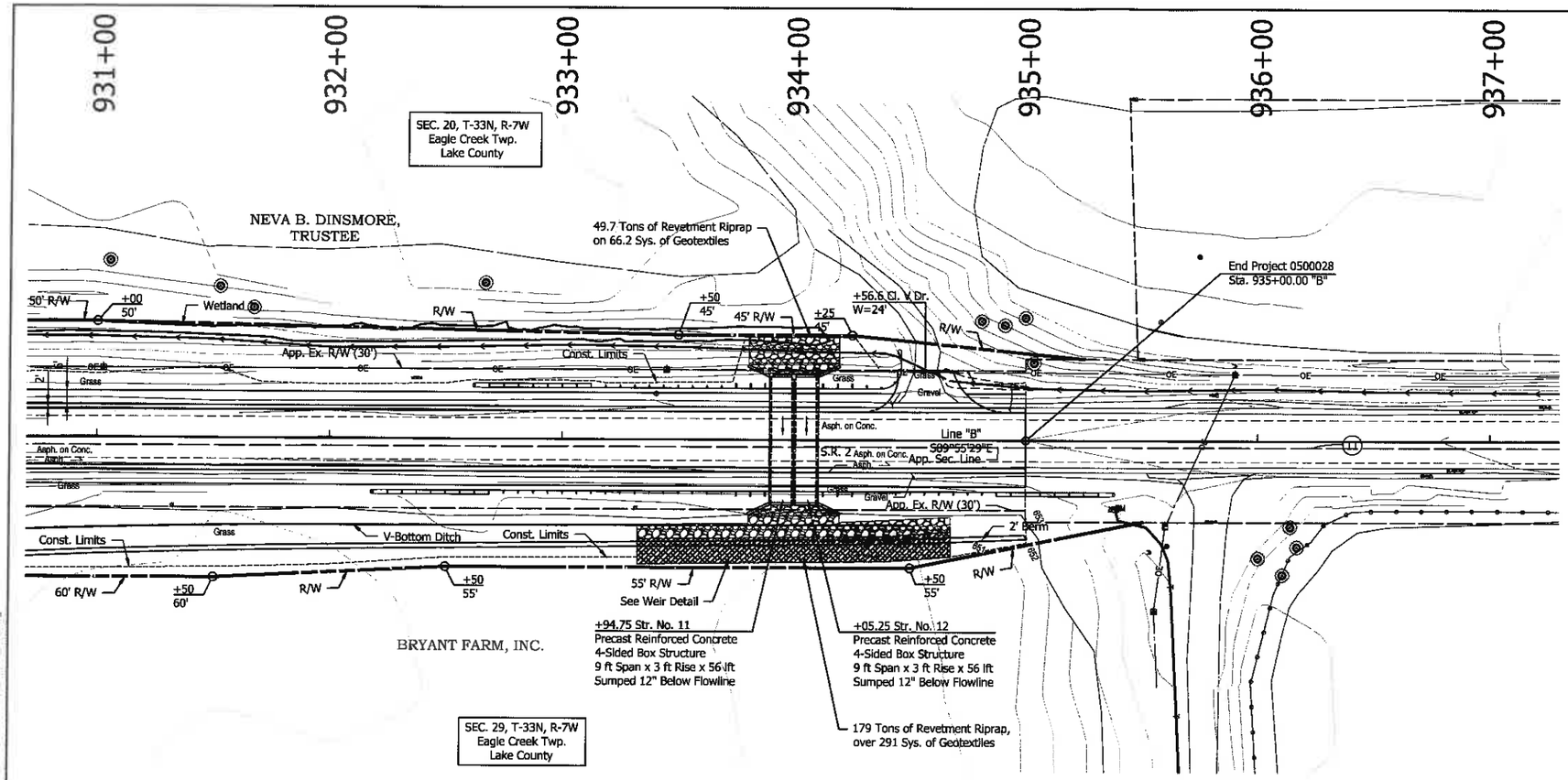
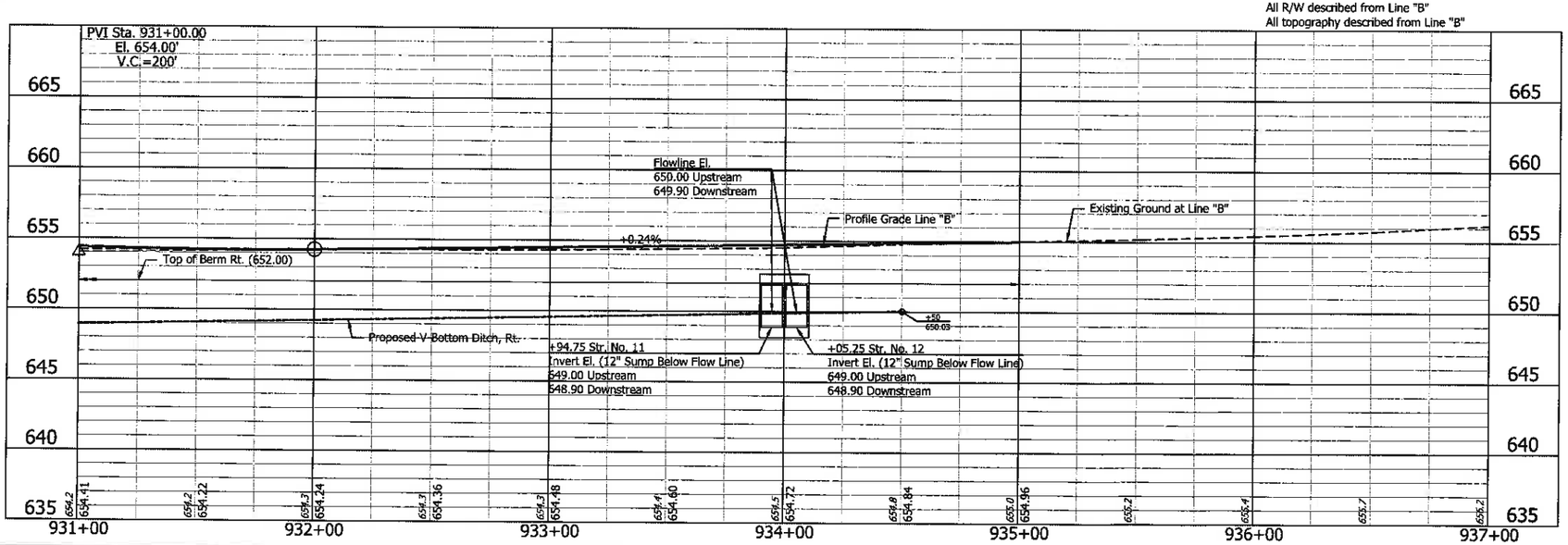


HYDRAULIC DATA

DRAINAGE AREA (*)	34.2 sq. mi.
Q_{100} DISCHARGE (*)	2260.0 cfs.
Q_{100} HEADWATER EL. (*)	653.16 ft.
BACKWATER (*)	1.20 ft.
VELOCITY @ Q_{100}	3.63 ft./sec.
GROSS WATERWAY AREA (BELOW Q_{100} EL.)	54.0 sft.
REQUIRED WATERWAY OPENING	54.0 sft.
WATERWAY OPENING PROVIDED	54.0 sft.
LOW STRUCTURE EL. PROVIDED	651.90 ft.
SKEW	0°

(*) NOTE: VALUES PROVIDED FOR ENTIRE HYDRAULIC SYSTEM INCLUDES BOTH THE BRIDGE AND OVERFLOW STRUCTURES.

All R/W described from Line "B"
All topography described from Line "B"



PRECAST 9'-0" SPAN x 3'-0" RISE
REINFORCED CONCRETE BOX CULVERT
CLEAR ROADWAY ; 0° SKEW
SR 2 OVER OVERFLOW
LAKE COUNTY

NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: SC | DRAWN: DRF
CHECKED: DJK | CHECKED: DJK

INDIANA
DEPARTMENT OF TRANSPORTATION

STRUCTURES LAYOUT

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'	002-45-09632
VERTICAL SCALE	DESIGNATION
1" = 5'	0500028
SURVEY BOOK	SHEETS
-	16 of 27
CONTRACT	PROJECT
B-37688	0500028

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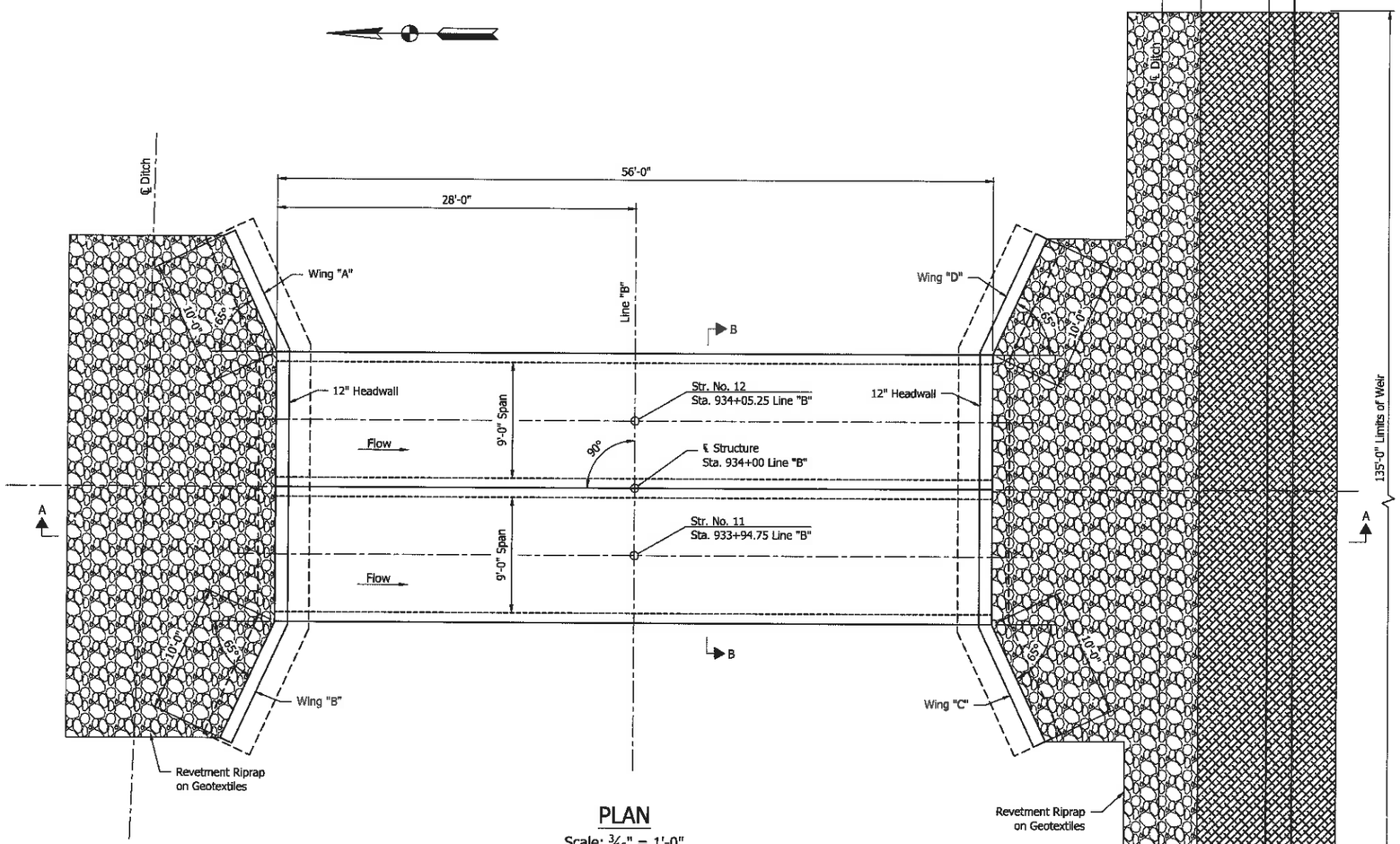
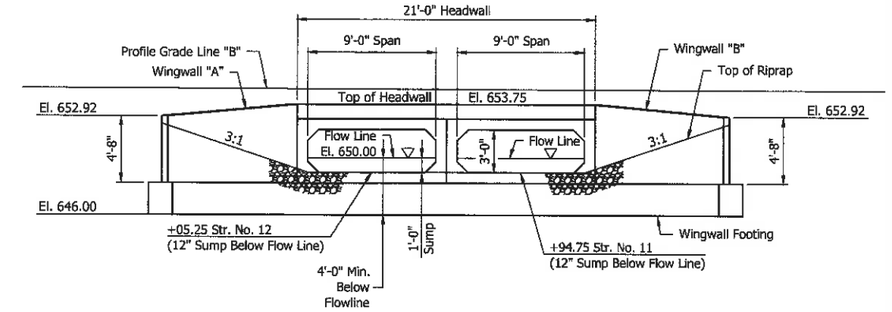


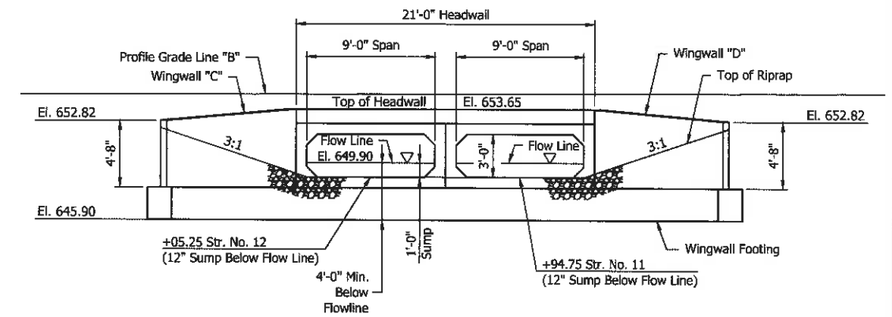
PLAN

Scale: 3/16" = 1'-0"



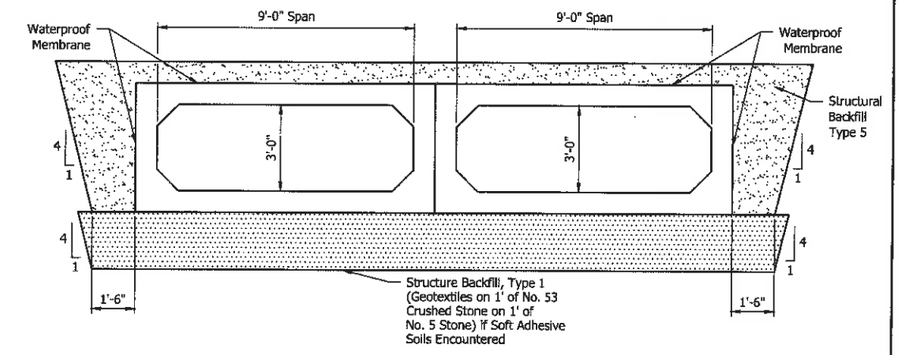
UPSTREAM ELEVATION

Scale: 3/16" = 1'-0"



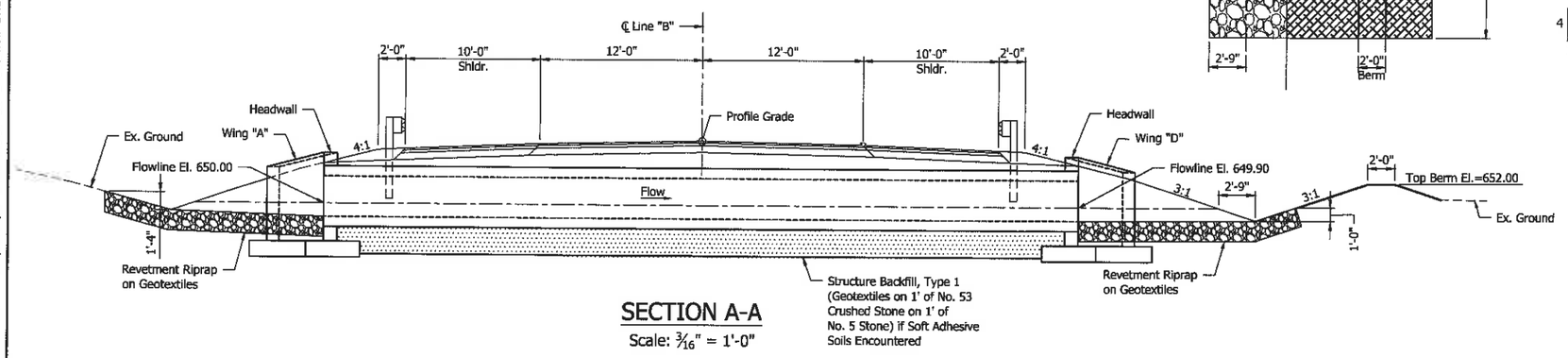
DOWNSTREAM ELEVATION

Scale: 3/16" = 1'-0"



SECTION B-B

Scale: 3/8" = 1'-0"



SECTION A-A

Scale: 3/16" = 1'-0"

PRECAST 9'-0" SPAN x 3'-0" RISE
REINFORCED CONCRETE BOX CULVERT
CLEAR ROADWAY ; 0° SKEW
SR 2 OVER OVERFLOW
LAKE COUNTY

A Three-Sided, Arch-Topped, or True-Arch
Structure Will Not Be Permitted at this Location.

NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: SC DRAWN: BJS
CHECKED: DJK CHECKED: DJK

INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
STRUCTURES

SCALE	BRIDGE FILE
AS NOTED	002-45-09632
	DESIGNATION
	0500028
SURVEY BOOK	SHEETS
-	17 of 27
CONTRACT	PROJECT
B-37688	0500028

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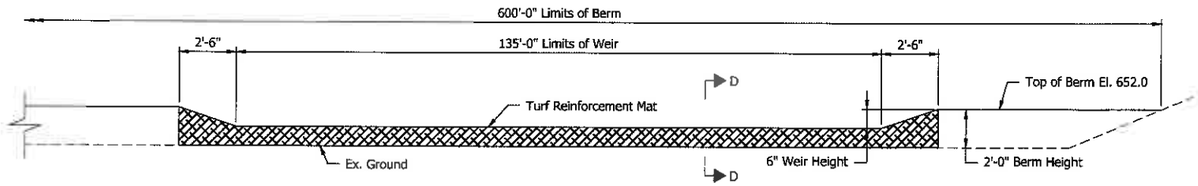
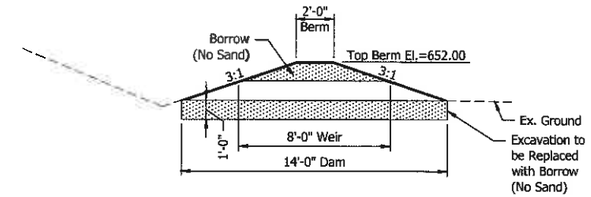


ELEVATION - WEIR

Not to Scale



SECTION D-D

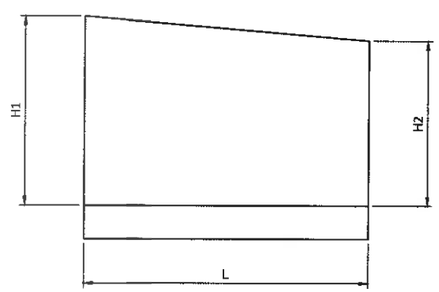
Scale: ¼" = 1'-0"

NOTE:
Refer to Geotechnical Addendum No. 1 for Berm Construction

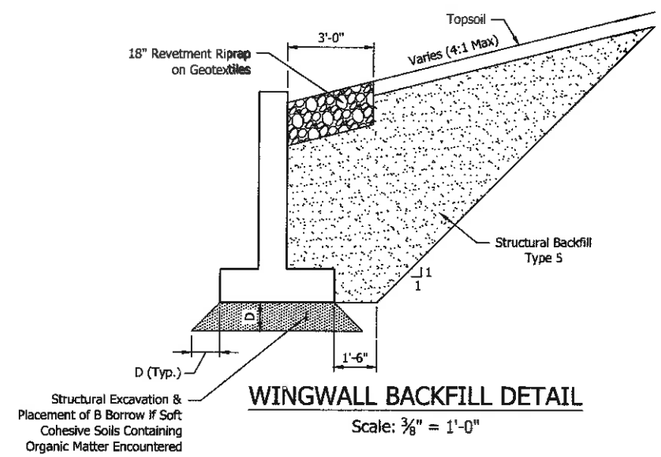
DESIGN DATA:

Wingwalls and Wingwall Foundations shall be designed in accordance with AASHTO LRFD Bridge Design Specifications, Sixth Edition 2012, and all subsequent Interims.

Dead load increased 35 psf for future wearing surface.



WINGWALLS				
WINGWALL "X"	AREA (SFT)	H1 (FT)	H2 (FT)	L (FT)
"A"	50.85	5.50'	4.67'	10.00
"B"	50.85	5.50'	4.67'	10.00
"C"	50.85	5.50'	4.67'	10.00
"D"	50.85	5.50'	4.67'	10.00



WINGWALL BACKFILL DETAIL

Scale: ⅜" = 1'-0"

LEGEND

- BORROW
- RIPRAP
- STRUCTURAL BACKFILL
- TURF REINFORCEMENT MAT

PRECAST 9'-0" SPAN x 3'-0" RISE
REINFORCED CONCRETE BOX CULVERT
CLEAR ROADWAY ; 0° SKEW
SR 2 OVER OVERFLOW
LAKE COUNTY

NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: SC DRAWN: DRF

CHECKED: DGD CHECKED: DJK

INDIANA
DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS
STRUCTURES

SCALE	BRIDGE FILE
AS NOTED	002-45-09632
	DESIGNATION
	0500028
SURVEY BOOK	SHEETS
-	18 of 27
CONTRACT	PROJECT
B-37688	0500028

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PAVEMENT QUANTITIES AND APPROACH TABLE

LOCATION	DESCRIPTION (APPROACH TYPE OR CLASS)	WIDTH	LENGTH	RADII	DISTANCE BEYOND R/W LINE	SURFACE BEYOND R/W LINE: COMPACTED AGGREGATE BASE	SURFACE BEYOND R/W LINE: HMA	SURFACE BEYOND R/W LINE: PCCP	GRADE		EXCAVATION	EXCAVATION: FILL + 25%	HMA FOR APPROACHES: SURFACE	HMA FOR APPROACHES: INTERMED	HMA FOR APPROACHES: BASE	HMA FOR ROADS: SURFACE QC/QA, 2, 64	HMA FOR ROADS: INTERMED QC/QA, 2, 64	HMA FOR ROADS: SURFACE, QC/QA, 2, 64	HMA FOR ROADS: INTERMED QC/QA, 3, 64	HMA FOR ROADS: SURFACE TYPE A	HMA FOR ROADS: INTEREMED TYPE A	SEAL COAT TYPE –	ASPHALT MATERIAL: PRIME COAT	ASPHALT MATERIAL: TACK COAT	COMPACTED AGGREGATE FOR BASE NO. 53 DEPTH 6"		COMPACTED AGGREGATE FOR SURFACE NO. 73 DEPTH		LIQUID ASPHALT SEALANT	JOINT ADHESIVE SURFACE	JOINT ADHESIVE INTERMEDIATE	SUBGRADE TREATMENT TYPE IB	SUBGRADE TREATMENT TYPE II	REMARKS
		FT	FT	FT	FT	SYS	SYS	%	%	CYS	CYS	CYS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS		SYS	SYS	TONS	TONS	TONS	TONS	LFT	LFT	LFT	SYS	SYS	
Project Limits											860	3424																					394	
928+32.6	Mod. Cl. V Dr.	12.5	83	-	61				5				32.5	54.2	173.3																		33	
934+56.6	Mod. Cl. V Dr.	24	33	15	0				1.8				2.7	4.6	14.6																			
TOTALS:											860	3424	35.2	58.8	187.9																		427	

STRUCTURE DATA TABLE

STRUCTURE NUMBER	LOCATION: STATION	OFFSET	LEFT	CROSS	RIGHT	SIZE	PIPE TYPE	MANHOLE, INLET, CATCH BASIN, OR SPECIALTY STRUCTURE AND TYPE	LENGTH	SKEW	FLOW LINE: COVER	UP STREAM	DOWN STREAM	SERVICE LIFE	SITE DESIGNATION	pH	BACKFILL METHOD	STRUCTURE BACKFILL		REVETMENT RIPRAP	NO. 2 STONE	VIDEO INSPECTION	PIPE END SECTION	GRATED BOX END SECTION			SAFETY METAL END SECTION			REMARKS
		FT				IN.			LFT		FT	ELEV.	ELEV.	YR				TYPE	CYS	TONS	TONS	LFT	EA.	TYPE	SLOPE	EA.	TYPE	SLOPE	EA.	
11	928+93	46.1			●	15	3	—	16			648.46	647.98	75	ABR	6.5							1							1-Automatic Drainage Gate Req'd.
12	933+94.75			●				9'x3' RCBC	56		2.7	649.00	648.90	75	ABR	6.5		5	48	25	87.5									
13	934+05.25			●				9'x3' RCBC	56		2.7	649.00	648.90	75	ABR	6.5		5	48	25	87.5									
14	934+57.5	32.5	●			15	3	—	65		0.8	652.03	650.16	75	ABR	6.5							1					6:1	1	
																			96	50	175									

MONUMENT TABLE

STATION	OFFSET	MONUMENT

R/W MARKER TABLE

STATION	OFFSET	MONUMENT
923+00	40' Lt.	
923+00	40' Rt.	
925+00	40' Rt.	
926+00	45' Rt.	
926+50	50' Lt.	
927+00	45' Rt.	
928+25	65' Rt.	
929+50	65' Rt.	
930+00	60' Rt.	
931+00	50' Lt.	
931+50	60' Rt.	
932+50	55' Rt.	
933+50	45' Lt.	
934+50	55' Rt.	
935+25	45' Lt.	
935+50	35' Rt.	

PERMANENT EROSION CONTROL SUMMARY TABLE

LOCATION: FROM STATION	TO STATION	LEFT	CROSS	RIGHT	PAVEMENT SIDE DITCH: ACTUAL LENGTH	CUT WALLS (8 FT EQUAL LENGTH EACH)	TOTAL EQUIVALENT PAY LENGTHS TYPE					RIPRAP DITCH: RIPRAP, REVETMENT	RIPRAP, UNIFORM	GEOTEXTILES	SODDING: FOR PAVED SIDE DITCHES	FOR DITCHES	FOR MEDIAN	FOR SHOULDER BREAK	SODDING AT BRIDGE CONE	TOTAL SODDING	NURSERY SODDING FOR LAWNS
					EACH	LFT	LFT	LFT	LFT	LFT	LFT	TONS	TONS	SYS	SYS	SYS	SYS	SYS	SYS	SYS	SYS
927+77	927+88			●								4.8	8.1								
927+90	928+07	●										7.9	13.0								
928+23	928+45			●								9.6	15.6								
928+46	928+62	●										6.9	11.4								
934+05	934+25	●													23						
934+90	935+25	●													32						
TOTALS:												29.2	48.1		55						

MAILBOX APPROACHES

LT./RT.	C/L BOX STATION	DESCRIPTION	WIDTH, W(FT)	ASSEMBLY REQ'D.: SINGLE	DOUBLE	
		TOTALS:				

STRUCTURE NUMBER

		11	14
PIPE TYPE / SHAPE		3	3
SMOOTH PIPE SIZE		15	15
CORRUGATED PIPE SIZE		15	15
RCP/RCHEP (S)	CLASS	II	III
	D 0.01 RATING	1000	1250
NON-REINFORCED CONCRETE PIPE, CLASS 3 (S)		X	
CORRUGATED PE PIPE, TYPE S (S) *			
RIBBED PE PIPE (S) *			
SMOOTH WALL PE PIPE (S) */MAXIMUM DR.			
PROFILE WALL PVC PIPE (S)			
SMOOTH WALL PVC PIPE (S) *			
VITRIFIED CLAY PIPE, EXTRA STRENGTH (S)			
CORRUGATED STEEL PIPE/PIPE-ARCH: FULLY BIT. PAVED & LINED (S)	CORR. PROFILE		
	THICKNESS		
ZINC COATED (C)	CORR. PROFILE		
	THICKNESS		
ZINC COATED W/BPI (C)	CORR. PROFILE		
	THICKNESS		
ALUM. COATED TYPE 2 (C)	CORR. PROFILE		
	THICKNESS		
ALUM. COATED TYPE 2 W/BPI (C)	CORR. PROFILE		
	THICKNESS		
POLYMER PRECOATED GALVANIZED (C)	CORR. PROFILE		2-2/3" x 1/2"
	THICKNESS		0.109
POLYMER PRECOATED GALVANIZED W/ BPI (C)	CORR. PROFILE		2-2/3" x 1/2"
	THICKNESS		0.109
POLYMER PRECOATED GALVANIZED CORRUGATED STEEL PIPE TYPE 1A (S)	CORR. PROFILE		
	THICKNESS		
FIBER BONDED BITUMINOUS COATED W/ BPI (C)	CORR. PROFILE		
	THICKNESS		
CORRUGATED ALUM. ALLOY PIPE (C)	CORR. PROFILE		2-2/3" x 1/2"
	THICKNESS		0.060
CORRUGATED ALUM. ALLOY PIPE W/ BPI (C)	CORR. PROFILE		2-2/3" x 1/2"
	THICKNESS		0.060
STR. PLATE ALUMINUM ALLOY PIPE (C)	CORR. PROFILE		
	THICKNESS		
STR. PLATE ALUMINUM ALLOY PIPE W/CFP (C)	CORR. PROFILE		
	THICKNESS		
STR. PLATE STEEL PIPE (C)	CORR. PROFILE		
	THICKNESS **		
STR. PLATE STEEL PIPE W/CFP (C)	CORR. PROFILE		
	THICKNESS **		

RCP – REINFORCED CONCRETE PIPE
RCHEP – REINFORCED CONCRETE HORZONTAL ELLIPTICAL PIPE
PE – POLYETHYLENE
DR – DIMENSION RATIO
PVC – POLYVINYL CHLORIDE
BIT – BITUMINOUS
CORR – CORRUGATION
BPI – BITUMINOUS PAVED INVERT
ALUM – ALUMINUM
STR – STRUCTURAL
CFP – CONCRETE FIELD PAVING
CIR – CIRCULAR PIPE
DEF – DEFORMED PIPE
(S) – SMOOTH PIPE MATERIAL
(C) – CORRUGATED PIPE MATERIAL
OK – ACCEPTABLE FOR USE
(LS) – LOCK SEAMED PIPE REQUIRED
* – REFER TO STD. DRAWING 715-PHCL-18 OR 19 FOR NOMINAL DIAMETER APPROPRIATE FOR PAY ITEM DIAMETER

** – TABULATED THICKNESS REFERS TO TOP AND SIDE PLATES. BOTTOM PLATES SHALL BE NEXT GREATER THICKNESS.

GUARDRAIL SUMMARY TABLE

LOCATION: FROM STATION	TO STATION	LEFT	MEDIAN LEFT	MEDIAN RIGHT	RIGHT	W-BEAM GUARD RAIL LENGTH: STANDARD POST AT 6'-3" SPA.	STANDARD POST AT 3'-1.5" SPA.	DOUBLE FACED AT 6'-3" SPA.	DOUBLE FACED AT 3'-1.5" SPA.	SHOP CURVED AT ____ SPA.	NESTED GUARD RAIL	GUARD RAIL FLARE RATE	GUARD RAIL TRANSITION TYPE TGB	GUARD RAIL TRANSITION TYPE ____	GUARD RAIL END TREATMENT TYPE OS	CURVED W-BEAM GUARD RAIL SYSTEM: TERMINAL SYSTEM		CONNECTOR SYSTEM		GUARD RAIL REMOVE	GUARD RAIL RESET	IMPACT ATTENUATOR TYPE R1, W1, TL-2	IMPACT ATTENUATOR TYPE ____	REMARKS
						(LFT)	(LFT)	(LFT)	(LFT)	(LFT)	(LFT)		(EA)	(EA)	(EA)	(TYPE)	(EA)	(TYPE)	(EA)	(LFT)	(LFT)	(EA)	(EA)	
926+46.08	927+21.08				●	75							1		1					130				
927+02.16	927+27.16	●				25							1		1					130				
928+69.97	928+85.97				●															25		1		
929+16.32	933+53.82	●				437.5					1		1		1	2	1			125				
932+68.75	934+87.5				●	118.75					1				2									
TOTALS:						656.25					2		3		5		1			410		1		

NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: FRM DRAWN: BJS
CHECKED: DGD CHECKED: FRM

INDIANA
DEPARTMENT OF TRANSPORTATION

ROAD SUMMARY SHEET

SCALE	BRIDGE FILE
	002-45-09632
	DESIGNATION
	0500028

SURVEY BOOK	SHEETS
-	19 of 27
CONTRACT	PROJECT
B-37688	0500028

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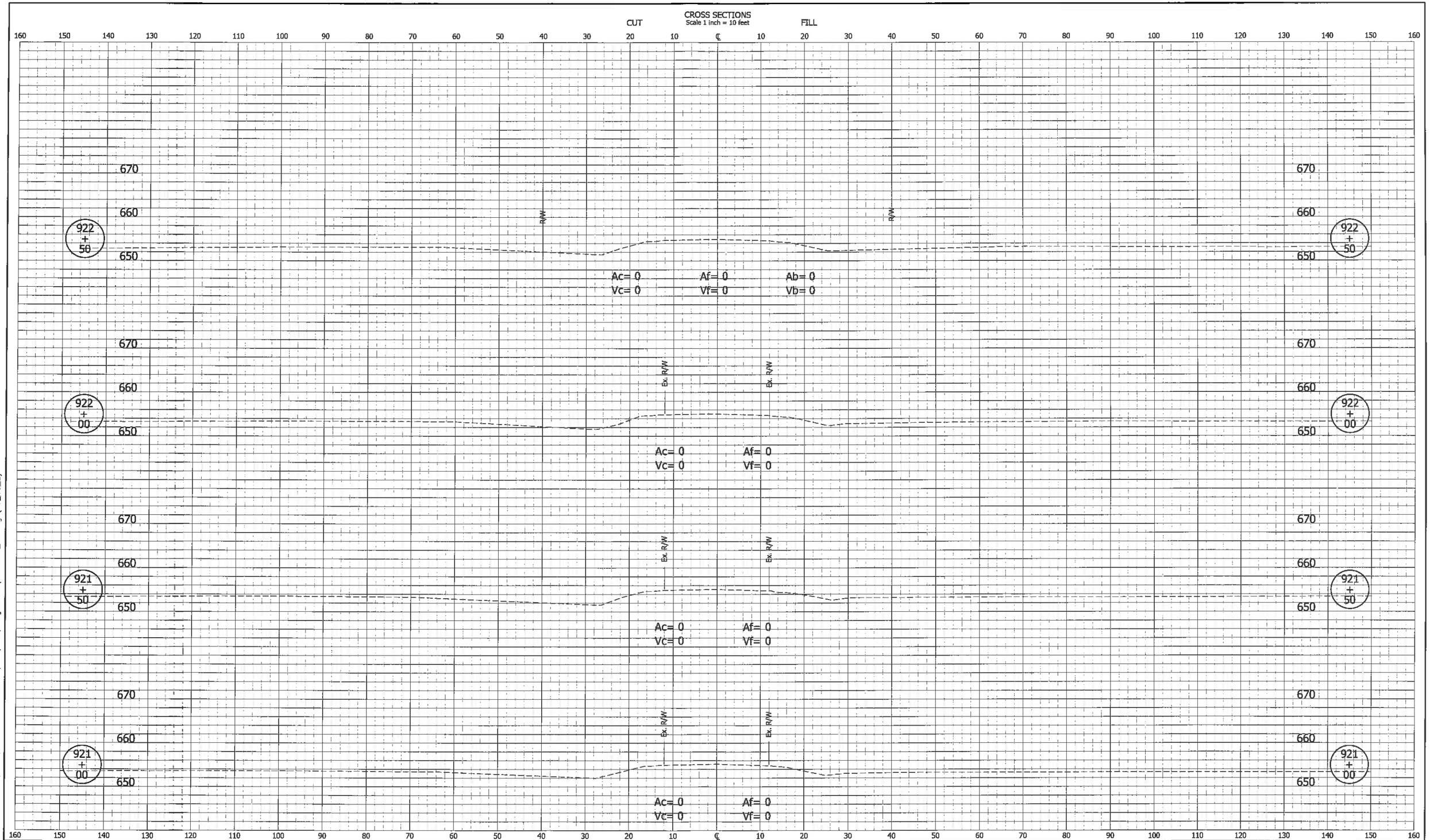

NOT FOR CONSTRUCTION	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE 1" = 10'	BRIDGE FILE 002-45-09632
			DESIGNATION 0500028
DESIGNED: FRM	DRAWN: BJS	SURVEY BOOK -	SHEETS 20 of 27
CHECKED: MFJ	CHECKED: MFJ	CONTRACT B-37688	PROJECT 0500028
	CROSS SECTIONS LINE "B"		

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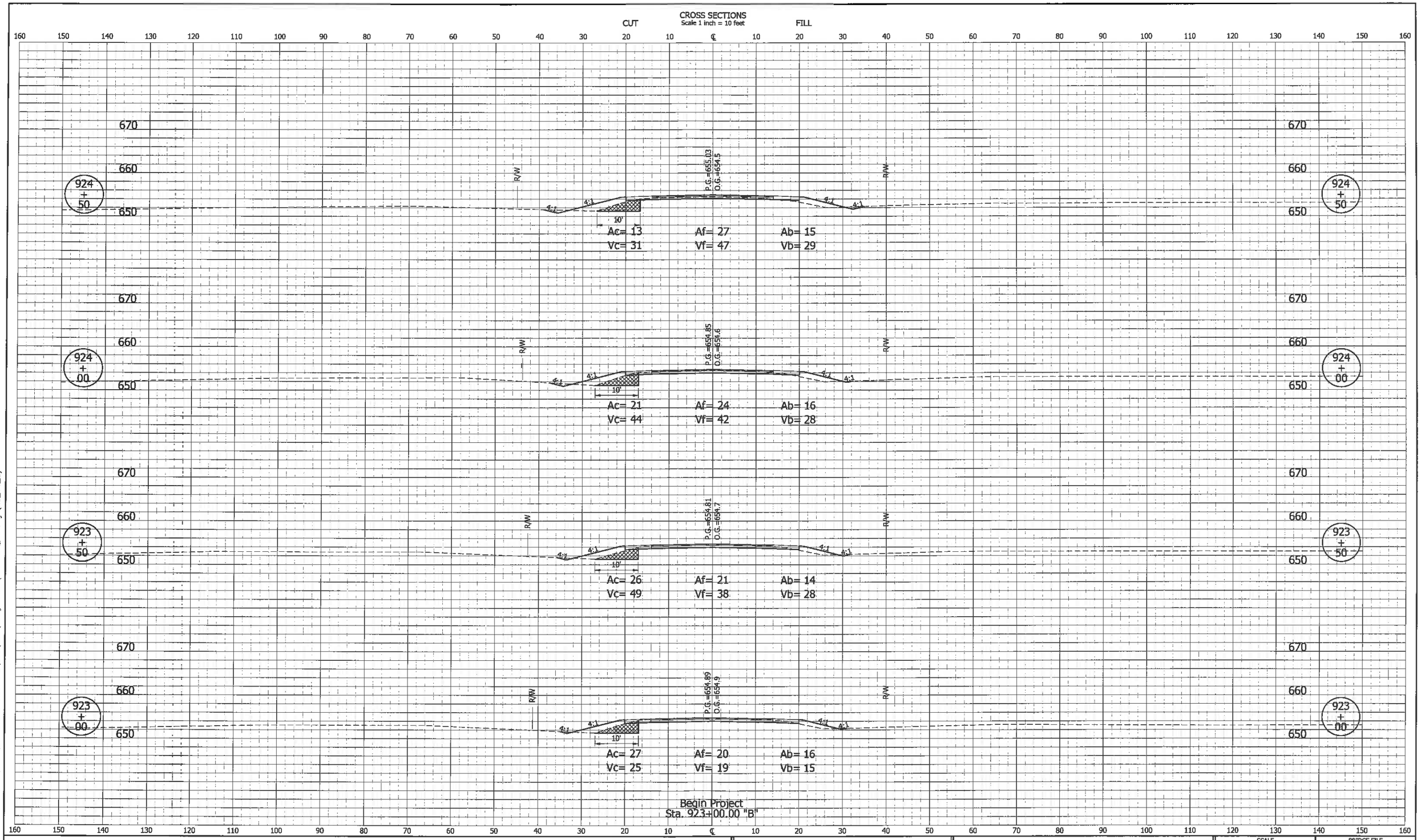

NOT FOR CONSTRUCTION	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE 1" = 10'	BRIDGE FILE 002-45-09632
			DESIGNATION 0500028
DESIGNED: FRM / DRAWN: BJS	CROSS SECTIONS LINE "B"	SURVEY BOOK -	SHEETS 21 of 27
CHECKED: MFJ / CHECKED: MFJ		CONTRACT B-37688	PROJECT 0500028

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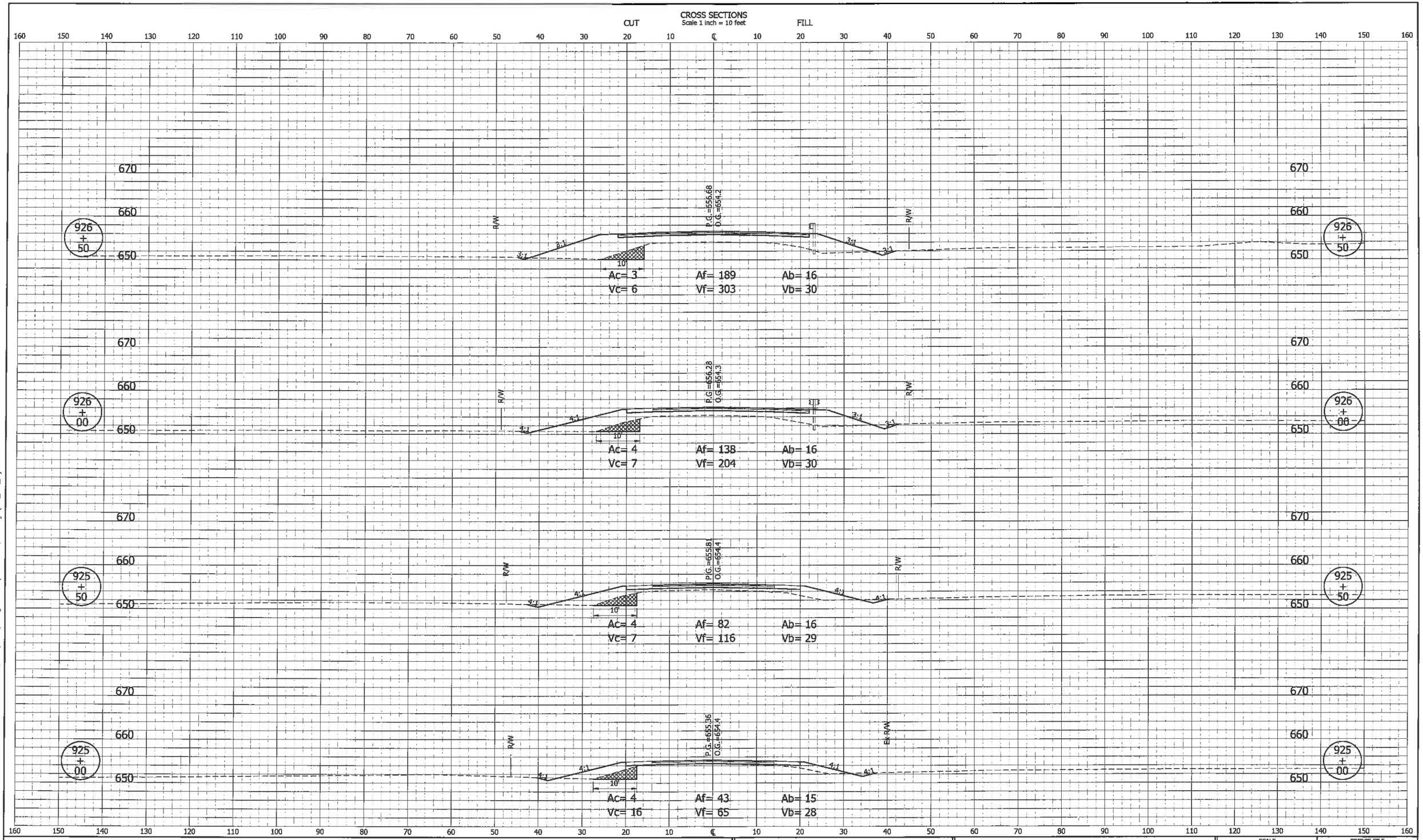

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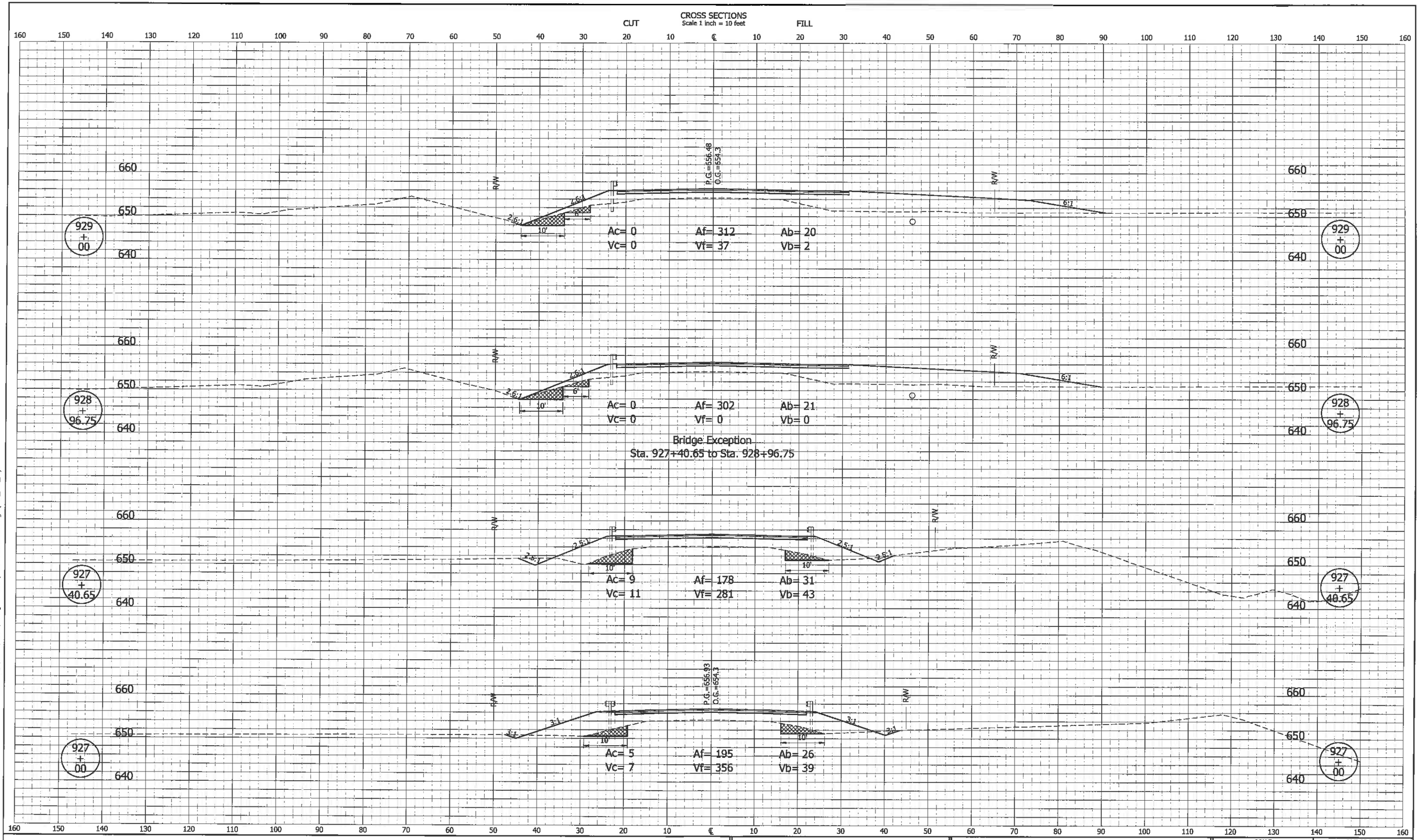
NOT FOR CONSTRUCTION	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE 1" = 10'	BRIDGE FILE 002-45-09632
			DESIGNATION 0500028
DESIGNED: FRM	DRAWN: BJS	SURVEY BOOK -	SHEETS 22 of 27
CHECKED: MFJ	CHECKED: MFJ	CONTRACT B-37688	PROJECT 0500028
	CROSS SECTIONS LINE "B"		



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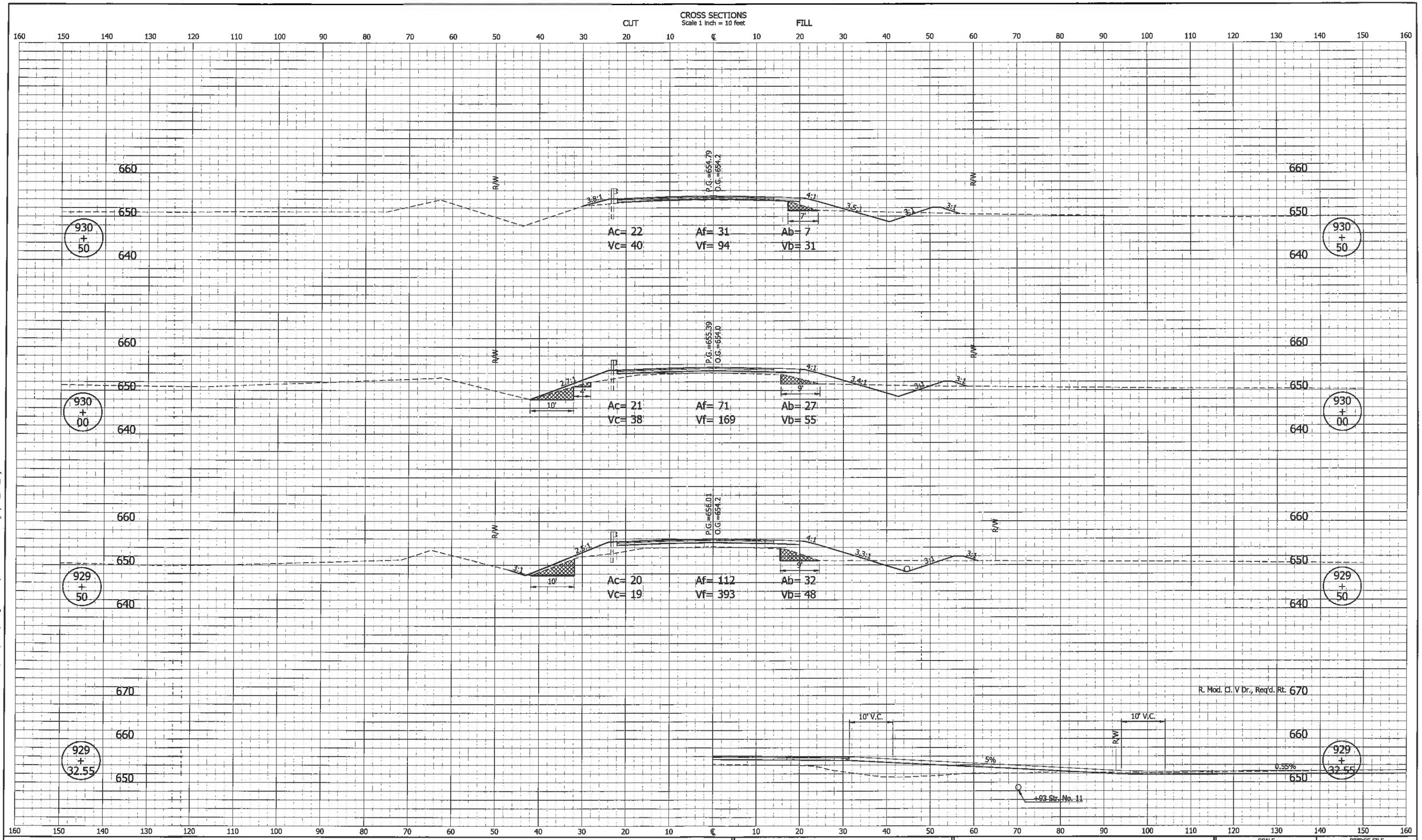
NOT FOR CONSTRUCTION	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE 1" = 10'	BRIDGE FILE 002-45-09632
			DESIGNATION 0500028
DESIGNED: FRM	DRAWN: BJS	SURVEY BOOK -	SHEETS 23 of 27
CHECKED: MFJ	CHECKED: MFJ	CONTRACT B-37688	PROJECT 0500028

CROSS SECTIONS
LINE "B"



NOT FOR CONSTRUCTION	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE 1" = 10'	BRIDGE FILE 002-45-09632
			DESIGNATION 0500028
DESIGNED: FRM / DRAWN: BJS	CROSS SECTIONS LINE "B"	SURVEY BOOK -	SHEETS 24 of 27
CHECKED: MFJ / CHECKED: MFJ		CONTRACT B-37688	PROJECT 0500028

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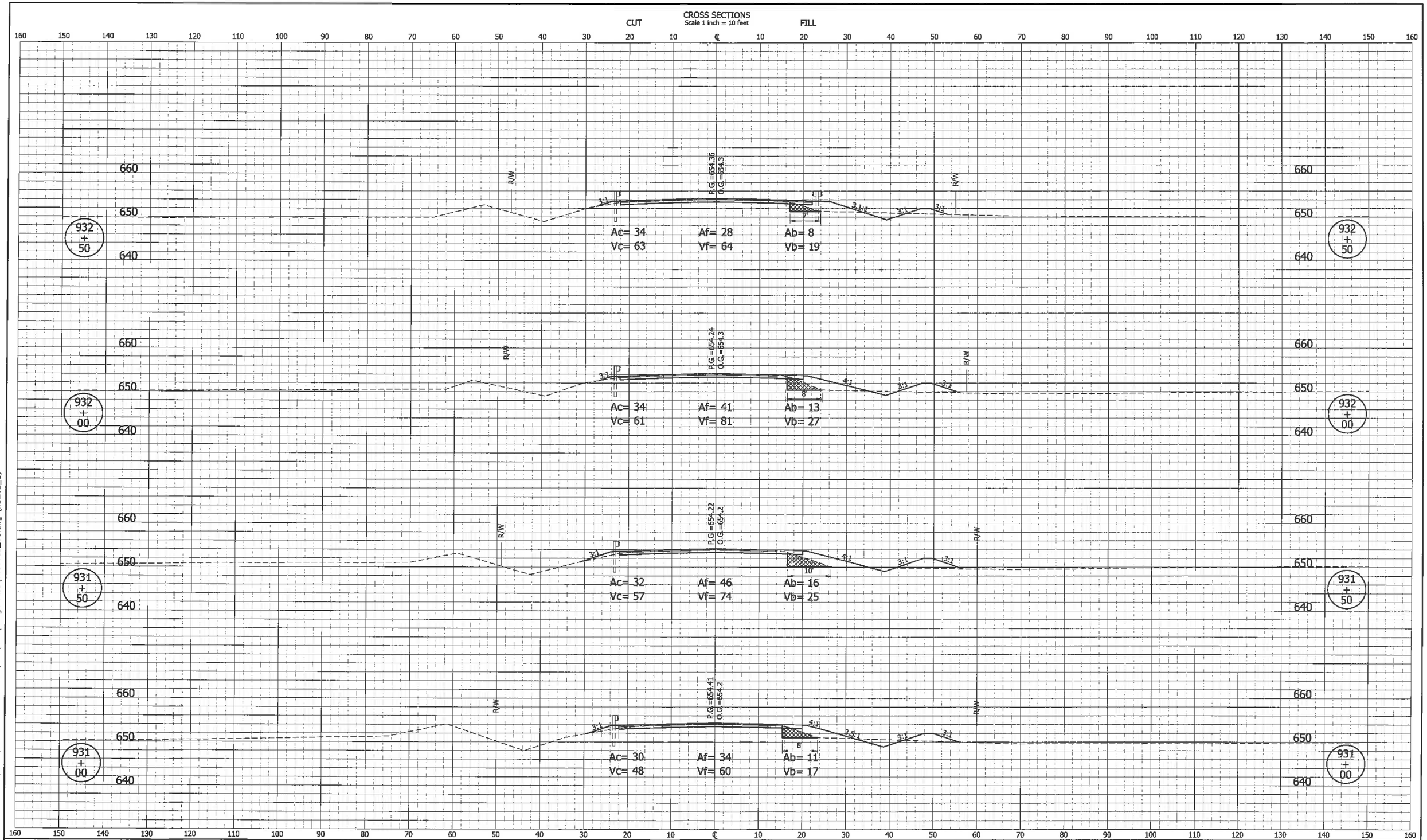

NOT FOR CONSTRUCTION	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE 1" = 10'	BRIDGE FILE 002-45-09632
			DESIGNATION 0500028
DESIGNED: FRM / DRAWN: BJS	CROSS SECTIONS LINE "B"	SURVEY BOOK -	SHEETS 25 of 27
CHECKED: MFJ / CHECKED: MFJ		CONTRACT B-37688	PROJECT 0500028

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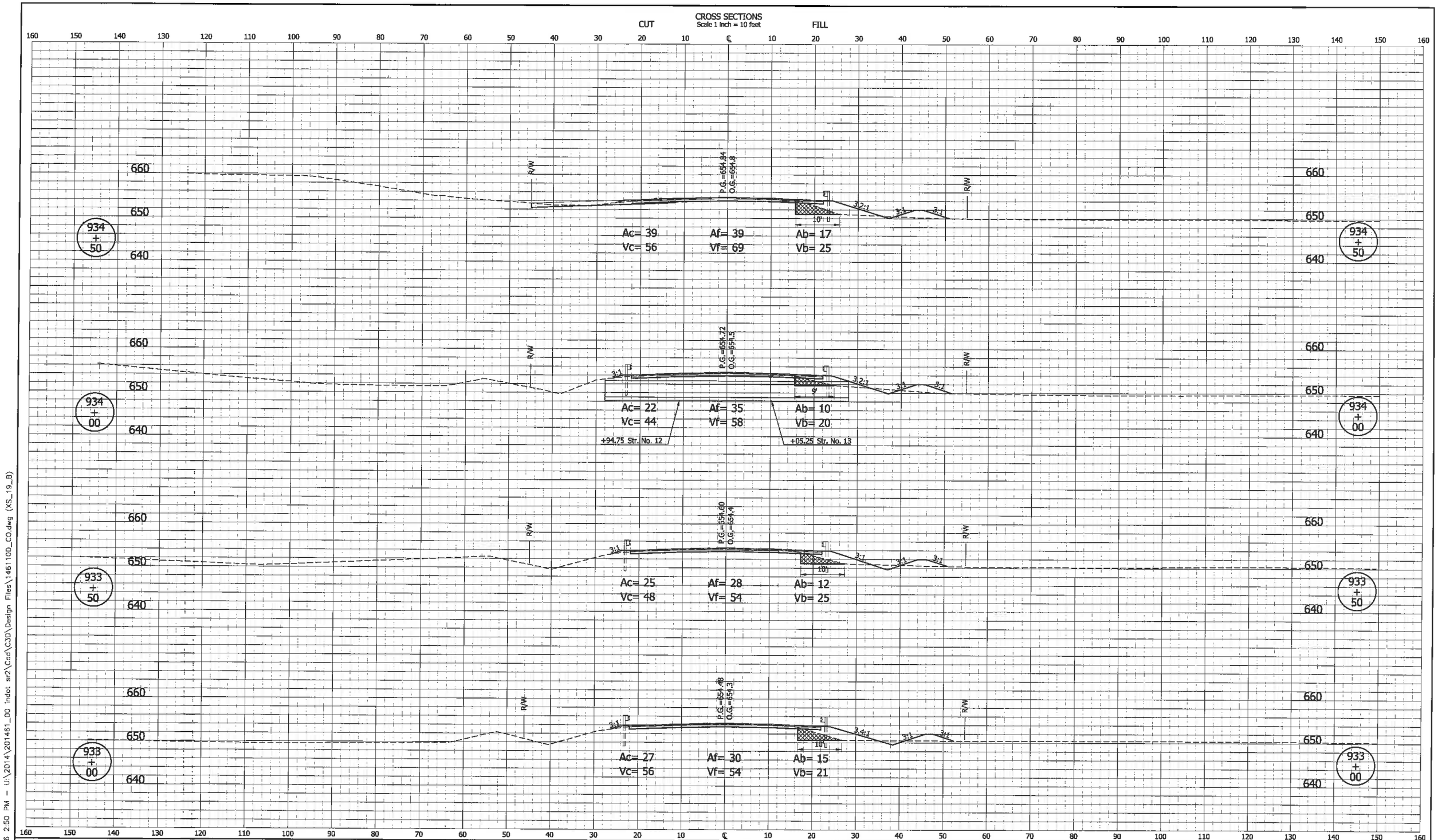
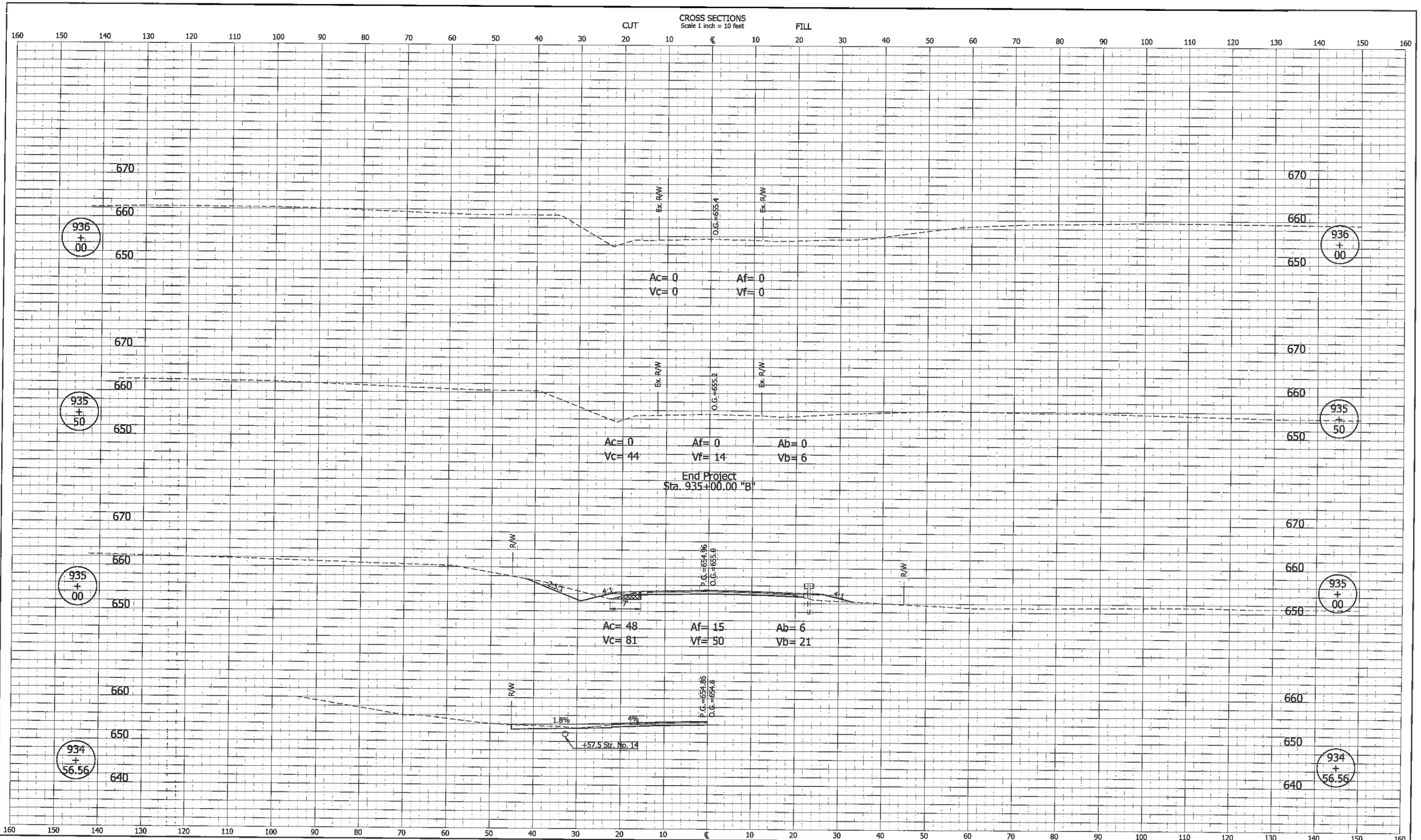


NOT FOR CONSTRUCTION	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE 1" = 10'	BRIDGE FILE 002-45-09632
			DESIGNATION 0500028
DESIGNED: FRM	DRAWN: BJS	SURVEY BOOK -	SHEETS 26 of 27
CHECKED: MFJ	CHECKED: MFJ	CONTRACT B-37688	PROJECT 0500028
	CROSS SECTIONS LINE "B"		

GDH – 10/20/2016 2:50 PM – U:\2014\201461_00 Indot sr2\Cad\C3D\Design Files\146110D_CO.dwg (XS_19_B)



GDH - 10/20/2016 2:35 PM - U:\2014\201461_00 indot sr2\Cad\C3D\Design Files\146110D_CO.dwg (XS_20_B)

NOT FOR CONSTRUCTION	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE 1" = 10'	BRIDGE FILE 002-45-09632
			DESIGNATION 0500028
DESIGNED: FRM / DRAWN: BJS	CROSS SECTIONS LINE "B"	SURVEY BOOK -	SHEETS 27 of 27
CHECKED: MFJ / CHECKED: MFJ		CONTRACT B-37688	PROJECT 0500028

5-C-3
11-16-16

INDIANA DEPARTMENT OF TRANSPORTATION
Driving Indiana's Economic Growth

LaPorte District
315 E Boyd Boulevard, P.O. Box 429
LaPorte, IN 46350, 46352

PHONE: (219) 362-6125
FAX: (219) 325-7516

Michael R. Pence, Governor
Brandye Hendrickson, Commissioner

October 20, 2016

Re: Des. No. 1600012
Small Structure Pipe Lining
I-65, 2.96 mi S of SR 2
Lake County, Indiana

To Whom It May Concern:

The Indiana Department of Transportation intends to proceed with the aforementioned project. This letter is part of the early coordination phase of the environmental review process, in which we are requesting comments from your area of expertise regarding any possible environmental effects associated with this project. **Please use the above designation number and description in your reply.** We will incorporate your comments into a study of this project's environmental impacts.

The purpose of the proposed project is to repair and improve the existing pipe structure to extend the life of the pipe and prevent damage from being done to the I-65 roadway.

The project will line an existing small structure already running under the I-65 roadway. The pipe allows Vannatti Ditch to flow under I-65. All work will be done within existing right-of-way. This project is located in Section 1 & 2, Township 32N, Range 8W in the Shelby Quadrangle.

Three alternatives were considered:

1) Do no work on the structure

2) Install a pipe liner

3) Replace pipe in kind

Alternative 1 is not recommended because it does not address the structural deficiency of the pipe and the structure would continue to deteriorate, causing increased maintenance to maintain the roadway and eventually surface damage to the roadway. Therefore, this alternative does not meet the purpose and need of the project.

Alternative 2 is recommended because it would repair and improve the structural deficiency of the pipe. It will also have a small impact to traffic on the I-65 roadway. Therefore this alternative is recommended.

Alternative 3 is not recommended because although it would repair and improve the the structural deficiency of the pipe, it would cause the greatest impact to traffic on the I-65 roadway. Therefore, this alternative is not recommended.

Permits anticipated for this project include 401/404 and Construction in a Floodway.

Please respond with your comments on any environmental impacts that may be incurred as a result of this project so that an environmental report can be prepared. We also welcome your related opinions and other input for consideration in the preparation of the environmental document. If we do not receive your response within **thirty (30) days**, it will be assumed that your agency or organization feels that there will be no significant effects as a result of this project or you do not wish to offer opinions concerning this project. However, should you find that an extension to respond is required; a reasonable amount of time will be granted upon request. If you have any questions regarding this matter, please contact Jessica Spiess at 219-325-7439.

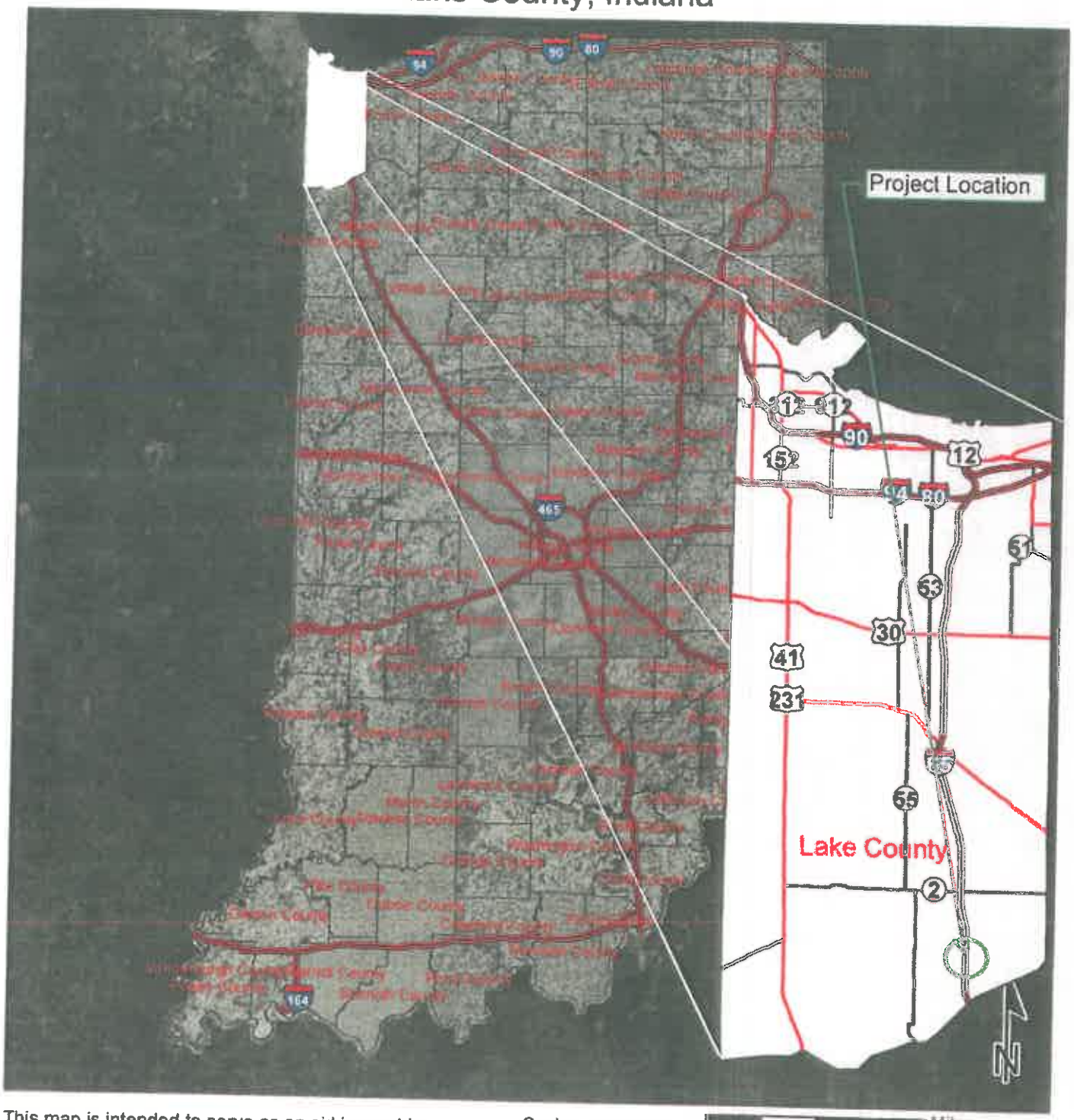
Thank you in advance for your input.

Attachments: Aerial Maps
Topographic Map
Photographs

Sincerely,

Jessica Spiess
Capital Program Management
LaPorte District, INDOT
jspiess@indot.in.gov

Site Location
I-65, 2.96 mi S of SR 2
Des. No. 1600012, Small Structure Pipe Lining
Lake County, Indiana



This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

Sources: Non Orthophotography
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum**: NAD83

Scale 1:2,340,472

30 15 0 30 Miles

Section Town and Range
County Boundary
Local Road
Interstate
State Route
US Route

AMERICAN STRUCTUREPOINT INC.

7260 Shadeland Station, Indianapolis, Indiana 46256
TEL 317.547.5580 FAX 317.543.0270

www.structurepoint.com

MEMORANDUM

DATE: November 15, 2016

TO: Bill Emerson, Jr. – Lake County Surveyor

FROM: Jeremy Schmitt

RE: West Creek – Singleton Ditch to State Road 2

CC: Dan Gossman, Greg Lorig

This memorandum summarizes information found to date regarding the 3.2-mile stretch of West Creek from the confluence with Singleton Ditch upstream to State Road 2. This memorandum pecifically addresses items to be researched based on a teleconference on October 21, 2016 etween the Lake County Surveyor's Office and American Structurepoint. The items and information found are provided below:

1. Review LIDAR contour information along West Creek to see if bank elevations have changed from the FIS study.
   We have requested LIDAR from Lake County. While waiting to receive that, we reviewed existing contour data from the State. The scale was not sufficient to meaningfully evaluate any potential changes in bank elevations along West Creek.

   A review of base flood elevations (100-year flood elevation) shows the 100-year floodplain varies from 647 at State Road 2 to 632 at the confluence with Singleton. The 100-year floodplain varies throughout the length of West Creek. It mostly affects the east side of West Creek with the 100-year floodplain varying from about 300 feet east of West Creek at SR 2 to almost 2,000 feet wide east of West Creek near 223rd Avenue.

2. Research existing study.
   The original Flood Insurance Study was completed for unincorporated areas of Lake County including West Creek in July 1978. A review of the FIS indicates no weirs existed in this stretch of West Creek at the time it was modeled prior to 1978.

   We have requested additional information from IDNR regarding permit applications affecting this stretch of West Creek. The applications found on IDNR's Online Database are shown in the table below:

Application ID	Description	Applicant	Date	Status
FW-27898	Rebuild 4 existing weirs	John Little	07/23/15	Terminated
FW-25536	Ditch Maintenance	BLN	12/09/09	Approved
B-14184	223rd Avenue Bridge	North West Engineering	04/03/92	Approved

None of the permits listed above appear to cover the original weir installation.

3. Effect of Weirs on Flow in West Creek
   The slope of West Creek from SR 2 to Singleton Ditch is 0.08% (15 feet of fall over 17,000 feet). The FIS indicates the peak flow during a 100-year event is approximately 2,200 cfs with a velocity of approximately 2 feet per second. As the cross sectional area of a channel is reduced, one of two things must happen assuming the flow stays the same:
   a. *Water rises higher in the channel*
   b. *Water flows faster through the weir.*

   If we examine these a little further, weirs will reduce the velocity of floodwaters upstream of it. However, weirs would raise the flood elevation in the areas immediately upstream and downstream of the weir and increase velocity of the water as it traverses a narrower stream cross section over the weir. The banks and channels around the weirs would need to be reinforced to prevent erosion.

4. Reinstalling Weirs in West Creek
   We can find no documentation of weirs being permitted in West Creek through IDNR. Mr. Little has indicated there were weirs previously installed in four locations. In order to prove to IDNR these weirs could be re-established, a complete hydrologic/hydraulic analysis of this stretch of West Creek would have to be performed. IDNR requires this study to prove that less than 0.1 feet of base flood elevation (100 year flood event) increase would occur.

5. Hydrologic/Hydraulic Analysis for Permitting on West Creek
   American Structurepoint estimates we can perform this analysis for between $32,000 and $45,000 depending upon how much survey we would need to do, if any. The cost for designing, permitting, and constructing these weirs cannot be determined until the study is completed.

<u>Recommendation</u>

American Structurepoint has conducted multiple site visits along West Creek with John Little. Observations by staff during these site visits have shown the locations where weirs were once installed and have since washed out. There are some locations where bank erosion appears to be occurring. In some cases, this erosion appears in the vicinity of the weirs.

We do not know how reintroduction of the weirs will affect the current condition of West Creek without conducting a study. We also understand Mr. Little's concerns for wanting to protect his property and his livelihood. It needs to be understood generally accepted engineering practice would likely rate flooding of property along this part of West Creek as lower priority due to the small chance of loss of life or permanent structures.

We recommend the following actions at this time:

1. Provide the LIDAR contours of this area so American Structurepoint can evaluate the number and extent of low spots in the West Creek bank.

2. Conduct cross section surveys from top of bank to top of bank at key locations along West Creek to generate a baseline. It is anticipated this could be done with Lake County Surveyor forces. These could then be repeated every five years to determine the severity of erosion. These cross sections could also be compared with the original FIS cross section data to determine what changes have already occurred.

5-D-1
11-16-16

Christopher B. Burke Engineering, LLC

One Professional Center Suite 314 Crown Point, IN 46307 219.663.3410 cbbel-in.com

October 13, 2016

Lake County Surveyor's Office
Lake County Government Center
2293 North Main Street
Crown Point, Indiana 46307

Attention: Bill Emerson Jr., Lake County Surveyor

Subject: Hart Ditch – US 30 to State Line
Recommendation on Completion of the Project for KDM Services, LLC
(CBBEL Project No. 930169)

Dear Mr. Emerson:

Following up on our field meeting yesterday with KDM Services, LLC (KDM), I recommend that the remaining amount of the contract, roughly $5600, be awarded to KDM to remove the large trees in Hart Ditch within the project area. The largest of the trees is immediately east of Hart Street.

$7,111.76 BA

When KDM first submitted an invoice for the work in 2015, CBBEL recommended paying 80% of the Logjam Removal item because not all the trees were removed in the project stretch. With KDM removing the large tree east of Hart Street and the other smaller trees, as well as restoring any disturbed areas, the requested work from the contractor will be complete.

Sincerely,

Thomas T. Burke, Jr, PhD, PE
Vice President and Head, Water Resources Department

cc: Kevin Madison, KDM Services
Daniel V. Gossman, Lake County Surveyor's Office

L93016902015-PH59 Hart Ditch US 30 to State Line Tree Review 101316

5-D-4
11-16-16

DNR Indiana Department of Natural Resources

Michael R. Pence., Governor
Cameron F. Clark, Director
Division of Water
402 W. Washington Street
Room W264
Indianapolis, IN 46204
Phone (317) 232-4160
Toll-free (877) 928-3755
Fax (317) 233-4579
www.in.gov/dnr/water/

October 26, 2016

Bill Emerson Jr.
Lake County Surveyor
2293 North Main Street
Crown Point, IN 46307

Re: SEA #912, Turkey Creek, Lake County

Dear Mr. Emerson:

This letter is written as a follow up to the September 27, 2016 field review for the reconstruction project on Turkey Creek. Attendees included Marty Maupin, Office of Water Quality, Indiana Department of Environmental Management; Elizabeth McCloskey, U.S. Fish and Wildlife Service; Paul Leffler U.S. Army Corps of Engineers, Chicago District; John Kuntz, Engineering Services Section, Division of Water; Erin Basiger, Division of Fish and Wildlife; and Dan Gossman, Lake County Surveyor's Office. A copy of the SEA 368 Inspection Report is enclosed.

IC 36-9-27-53.5 requires that prior to initiating work on a drainage project, which is subject to regulation under certain State and/or Federal environmental regulations, an on-site field review must occur. Within 30 days of the field review, the Department of Natural Resources is required to provide the county drainage board with a list of conditions that the Department of Environmental Management and the Department of Natural Resources would place on any permit for the proposed work. The Department of Natural Resources' conditions are valid for up to 2 years after the on-site field review provided a permit application is submitted within that time frame.

This letter is not approval for construction under any State or Federal Law.

Description: Along 625' of the stream, clear and snag all trees and vegetation from the ditch bottom and both sides, repair slope, and install riprap in a 5' by 90' area.

Location: Beginning at the south side of Joliet Street (Highway 330) working upstream for 625' ending at the north side of James Whittchen Drive, St. John Township, Lake County.

UTM Coordinates: Downstream North = 4593505, East = 463851
Upstream North = 4593337, East = 463739
(St. John Quadrangle Map)

Because the total stream length of Turkey Creek is more than 10 miles, a Construction in a Floodway permit is required from the Indiana Department of Natural Resources (IDNR) under *IC 14-28-1, Flood Control Act.*

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The following are the Department of Natural Resources' comments as they would appear as conditions on a Construction in the Floodway Permit or in response to the Corps of Engineers as a result of a Section 404 review.

DEPARTMENT OF NATURAL RESOURCES COMMENTS

A field meeting was held with Dan Gossman, Lake County Surveyor's Office, on September 27, 2016 to discuss this project. The following comments were made.

1. Revegetate all bare and disturbed areas, except for land that will be used for crop production in the next growing season, with a mixture of grasses (excluding all varieties of tall fescue) and legumes as soon as possible upon completion. Low endophyte tall fescue may be used in the ditch bottom and side slopes only.

2. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife's Environmental Unit.

3. Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 3" in diameter, living or dead, with loose hanging bark or with cracks, crevices, or cavities) from April 1 through September 30.

4. Limit any channel widening and bank disturbance to the least vegetated side of the waterway.

5. Stabilize banks as work progresses so that no more than 200 linear feet are left disturbed at the completion of the workday.

6. Revegetate all spoil materials deposited in areas not used for crop production.

7. Use appropriate structural armament in channel straightening transition areas to blend with the existing channel. Use one of the appropriate structural armament practices listed in Section 5.5 of the INDIANA DRAINAGE HANDBOOK from the Division of Water, Indiana Department of Natural Resources (October 1996).

8. A representative of the Surveyor's Office or their contractor shall inspect erosion and sediment control practices daily and repair as necessary until all construction is complete and disturbed areas are permanently stabilized.

9. Install appropriate sediment control measures to prevent the flow of sediment laden water, resulting from dredging operations, back into the watercourse.

10. All work must conform with the existing bank at the upstream and downstream limits of the project site.

11. Except for trees cabled in-place for bank protection, do not leave felled trees, brush, or other debris in the floodway.

12. Place all excavated materials at least 10' landward of the top of the ditch bank; spread all excavated materials evenly to a thickness not to exceed 12" and slope landward from the channel or completely remove from the floodway.

13. * Note: For regulatory purposes, the floodway of Turkey Creek is defined as that shown on PANEL 231 of the Lake County and Incorporated Areas Flood Insurance Rate Map dated January 18, 2012.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT COMMENTS

The following comments are directed toward the above-referenced project and are specific to the sections of the proposed project reviewed by IDEM.

1. Submit an application to IDEM for Section 401 Water Quality Certification if the Corps requires an individual Section 404 permit, a Regional General Permit for impacts greater than 0.1 acre, or a Nationwide Permit for which IDEM has denied Water Quality Certification. Application forms are available through the IDEM office.

2. Avoid and minimize impacts (filling or mechanical clearing) of jurisdictional wetlands to the greatest extent possible, and provide acceptable compensatory mitigation for all unavoidable impacts to jurisdictional wetlands greater than 0.1 acre.

3. Field mark the area where the filling or mechanical clearing of wetlands is unavoidable.

4. Install appropriate sediment control measures to prevent the flow of sediment laden water, resulting from dredging operations, back into the watercourse.

5. Limit the physical disturbance of banks, other soils, and existing vegetation to that which is necessary to achieve the purpose of the project.

6. Deposit dredged material on upland, or old spoils that are considered upland.

7. Conduct logjam removal and tree preservation consistent with the practices established in the *Indiana Drainage Handbook.* The handbook was prepared in accordance with State of Indiana Public Law 329-1995 to serve as an administrative and technical guide for drainage activities within Indiana streams and ditches.

8. Work from only one side of the stream, and where possible, from the side of the stream which does not have adjacent wetlands. If no wetlands are present, work from the side with the fewest trees and woody vegetation. If both banks are equally vegetated, work only from the north or east side, whichever is appropriate.

9. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife's Environmental Unit.

10. Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 3" in diameter, living or dead, with loose hanging bark or with cracks, crevices, or cavities) from April 1 through September 30.

11. IDEM will need a wetland delineation to make informed comments and conditions; when IDEM receives a wetland delineation with wetland impacts clearly identified, it will then provide conditions and comments.

If you have any questions about the Department of Environmental Management's comments, please contact Marty Maupin at 317-409-7579. You can also contact the Office of Water Management through IDEM's Environmental Helpline at 1-800-451-6027.

In accordance with IC 36-9-27-53.5(g) a county surveyor or board that is aggrieved by the permit conditions disclosed under subsection (d)(3) has the right to enter into further negotiations with the Department of Natural Resources and the Department of Environmental Management in order to obtain a mutually agreeable set of permit conditions. To initiate the negotiations, please write a letter to Michael Neyer, PE, Director, Division of Water addressing the aggrieved portions of the comments and conditions included in this letter.

Thank you for your cooperation in this matter. If you should have any questions or would like to discuss modifications to the above comments, please contact me at our toll free number, 1-877-WATER55 (1-877-928-3755) or at (317) 232-4166.

Sincerely,

George C. Bowman

George C. Bowman, PE
Assistant Director
Division of Water

GCB/ELB

pc: Marty Maupin, Office of Water Management, IDEM
Paul Leffler, U.S. Army Corps of Engineers, Chicago District
Elizabeth McCloskey, U.S. Fish and Wildlife Service

Enclosures: SEA 368 Inspection Report
Permit application and Instructions

SEA 368 INSPECTION REPORT

State Form 51594 (2-04)

Indiana Department of Natural Resources,
Division of Water
402 West Washington Street, Room W264
Indianapolis, IN 46204
ph. (317) 232-4160 or toll free 1-877-928-3755
Fax (317) 233-4579

SEA # 912 DATE 9/27/2016

PROJECT INFORMATION

STREAM/LAKE Turkey Creek

LOCATION Beginning at the south side of Joliet Street. Working upstream for 625' ending at the north side of James Whittaker Drive.

DOWNSTREAM

Section 15 NW / NE / SW / SE; Township 35 N / S; Range 9 E / W

Quadrangle St. John UTM 4593505 N 463851 E

City/Town Schererville Civil Township St. John County Lake

UPSTREAM

Section 15 NW / NE / SW / SE; Township 35 N / S; Range 9 E / W

Quadrangle St. John UTM 4593337 N 463739 E

City/Town Schererville Civil Township St. John County Lake

DESCRIPTION:

One sided construction: ☐ Yes ☐ No Vegetated buffer strip: ☐ Yes ☐ No, If "yes", strip width _____ feet

Project purposes to clear and snag all trees and vegetation from the ditch bottom and both sides, slope repair, and install riprap in a 5' by 90' area along 625' of the stream.

-Meeting note - pull back bank and riprap ½ way up - seed above

ATTENDEES

		phone	fax
Water	John Kuntz	(317) 234 1096	( )
Fish & Wildlife	Erin Basiger	(317) 234-0586	( )
Soil Conservation		( )	( )
IDEM	Marty Maupin	(317) 233-2471	( )
County	Dan Bossman	(219) 755-3745	(219) 755-3750
SWCD		( )	( )
USF&WS	Elizabeth McCloskey	(219) 983-9753	( )
USACE	Paul Leffler	(317) 846 5529	( )
Other		( )	( )

FINDINGS

IDNR-SEA 368 FIELD REVIEW CONDITIONS

The following checked-off items are the Department of Natural Resources' comments in the form of conditions, as they would appear on a Construction in a Floodway Permit or a Ditch Reconstruction Permit for the project, or in response to the Corps of Engineers as a result of a Section 404 review.

Reference	Condition
☑ ER11	Revegetate all bare and disturbed areas, except for land that will be used for crop production in the next growing season, with a mixture of grasses (excluding all varieties of tall fescue) and legumes as soon as possible upon completion. Low endophyte tall fescue may be used in the ditch bottom and side slopes only
☑ ER16	Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Water's Environmental Unit
☐ ER17	For salmonid streams, do not work in the waterway from March 15 through June 15 and from July 15 through November 30 without the prior written approval of the Division of Water's Environmental Unit
☑ ER19	Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 3 inches in diameter, living or dead, with loose hanging bark or with cracks, crevices, or cavities) from April 1 through September 30
☐ ER20	Do not excavate or place spoil in any riparian wetland
☑ ER31	Limit any channel widening and bank disturbance to the least vegetated ~~(north/south/east/west)~~ side of the waterway
☑ ER65	Stabilize banks as work progresses so that no more than 200 lineal feet are left disturbed at the completion of the workday
☐ ER66	Revegetate all areas disturbed during debris and sediment removal. Permanent seed and fertilize disturbed ditch banks at the end of each day. Revegetate areas with one of the seeding mixtures or species listed in the VEGETATIVE STABILIZATION AND SEEDING PRACTICE of the INDIANA DRAINAGE HANDBOOK from the Division of Water, Indiana Department of Natural Resources (October 1996) or other species that are approved by the Department as being suitable to site and climate conditions. At the completion of the project, re-seed and fertilize areas that do not have sufficient vegetative cover to control erosion
☐ ER67	Protect newly seeded areas with anchored mulch at specified locations as listed under Special Conditions (page 7 of this form). Mulch materials, application rates, and anchoring methods must meet the criteria set forth in the INDIANA DRAINAGE HANDBOOK, Section 5.11 from the Division of Water, Indiana Department of Natural Resources (October 1996) or INDIANA HANDBOOK FOR EROSION CONTROL IN DEVELOPING AREAS, Sub-Section 3.1 from the Division of Soil Conservation, Indiana Department of Natural Resources (October 1992)
☑ ER70	Revegetate all spoil materials deposited in areas not used for crop production
☑ ER72	Use appropriate structural armament in channel straightening transition areas to blend with the existing channel. Use one of the appropriate structural armament practices listed in Section 5.5 of the INDIANA DRAINAGE HANDBOOK from the Division of Water, Indiana Department of Natural Resources (October 1996)
☐ ER73	Install appropriate armament below pipe outfalls
☐ ER74	Install drop structures where needed to convey runoff from adjacent areas to the channel without causing erosion
☐ ER75	Where vegetation alone is not sufficient to prevent erosion in channel bends, use one of the appropriate structural armament practices listed in Section 5.5 of the INDIANA DRAINAGE HANDBOOK from the Division of Water, Indiana Department of Natural Resources (October 1996)
☑ ER76	A representative of the Surveyor's Office or their contractor shall inspect erosion and sediment control practices daily and repair as necessary until all construction is complete and disturbed areas are permanently stabilized

IDNR-SEA 368 FIELD REVIEW CONDITIONS (continued)

The following checked-off items are the Department of Natural Resources' comments in the form of conditions, as they would appear on a Construction in a Floodway Permit or a Ditch Reconstruction Permit for the project, or in response to the Corps of Engineers as a result of a Section 404 review.

Reference	Condition
☑ ER78	Install appropriate sediment control measures to prevent the flow of sediment laden water, ~~resulting from dredging operations~~, back into the watercourse
☑ FW02	All work must conform with the existing bank at the upstream and downstream limits of the project site
☑ FW03	Except for trees cabled in-place for bank protection, do not leave felled trees, brush, or other debris in the floodway
☐ FW21	Align spoil piles parallel to flow; the toe of the spoil piles must be located at least 10 feet landward of the top of the streambank; and a _____-foot opening must be provided every _____-feet along the spoil piles' length
☐ FW33	The plans for the project must include information that demonstrates that the project will not result in the lowering of _____ Lake, below its: 1) legally established water level of _____ feet, NGVD 2) average normal water level of _____ feet, NGVD, as determined from USGS lake level records, or 3) average water level of _____ feet, NGVD, as determined by the action of the water that has marked upon the soil of the bed of the lake a character distinct from that of the bank with respect to vegetation as well as the nature of the soil
☐ FW34	Do not alter the average normal water level of _____ Lake; if the average normal water level of the lake is altered, it will be the responsibility of the _____ County Drainage Board to take corrective actions to restore the average normal water level of the lake and to mitigate for any damages incurred
☑ FW35	Place all excavated materials at least 10 feet landward of the top of the ditch bank; spread all excavated materials evenly to a thickness not to exceed 12" and slope landward from the channel or completely remove from the floodway
☐ NP01	Avoid adverse impacts to the following state listed species: _____
☐ OR03	This project will occur within a section of _____ that has been designated as a _____ under the Indiana Natural, Scenic, and Recreational River System (IC 14-29-6). The applicant must contact _____ at 317-232-4070 for more information regarding this permit

include wording "resulting from dredging operation" 12/11/10

IDEM-SEA 368 FIELD REVIEW CONDITIONS

The following checked-off items are the Department of Environmental Management's comments which, if a Department of the Army Section 404 permit is required, may appear as conditions on an IDEM Section 401 Water Quality Certification. These conditions may be subject to change following the receipt of a complete application.

Reference	Condition
☑ IDEM01	Submit an application to IDEM for Section 401 Water Quality Certification if the Corps requires an individual Section 404 permit, a Regional General Permit[1] for impacts greater than 0.1 acre, or a Nationwide Permit for which IDEM has denied Water Quality Certification. Application forms are available through the IDEM office. *[1] The activity will impact (fill) more than one-tenth (0.1) of an acre of Waters of the United States, including wetlands, special aquatic sites, creeks, ditches, streams, rivers, deep water areas, or open water areas; or the activity will impact (fill) more than 300 linear feet of stream channel or shoreline.*
☑ IDEM02	Avoid and minimize impacts (filling or mechanical clearing)[2] of jurisdictional wetlands to the greatest extent possible, and provide acceptable compensatory mitigation for all unavoidable impacts to jurisdictional wetlands greater than 0.1 acre. *[2] Mechanical clearing is the use of heavy equipment to push, pull, scrape, or excavate woody vegetation in order to remove it.*
☑ IDEM03	Field mark the area where the filling or mechanical clearing of wetlands is unavoidable.
☐ IDEM04	Use solid tile and anti-seep collars on the portion of the tile line that transects the wetland.
☑ IDEM05	Install appropriate sediment control measures to prevent the flow of sediment laden water, resulting from dredging operations, back into the watercourse.
☑ IDEM06	Limit the physical disturbance of banks, other soils, and existing vegetation to that which is necessary to achieve the purpose of the project.
☑ IDEM07	Deposit dredged material on upland, or old spoils that are considered upland.
☐ IDEM08	Revegetate all bare and disturbed areas, except for land that will be used for crop production in the next growing season, with a mixture of grasses (excluding all varieties of tall fescue) and legumes as soon as possible upon completion. Low endophyte tall fescue may be used in the ditch bottom and side slopes only.
☐ IDEM09	Perform daily seeding of the ditch banks if the project is conducted during the agricultural growing season; seed the ditch banks as soon as possible if the project activity occurs during the dormant season.
☑ IDEM10	Conduct logjam removal and tree preservation consistent with the practices established in the *Indiana Drainage Handbook*. The handbook was prepared in accordance with State of Indiana Public Law 329-1995 to serve as an administrative and technical guide for drainage activities within Indiana streams and ditches.
☐ IDEM11	Encourage landowners affected by this project to place grassed filter strips on land immediately bordering the stream. The federal *Conservation Reserve Program* offers competitive annual payments for this practice on a continual sign-up basis. In addition, certain areas may qualify for special cost share or incentive programs for the establishment of filter strips. Contact the local county Soil and Water Conservation District or the Natural Resources Conservation Service for program and practice specific information.
☐ IDEM12	Spread dredged material, where possible, in a manner that will not impede overland flow to the stream. This will help eliminate adjacent berm buildup and associated "points of concentrated flow" that are erosive and require expensive land treatment practices.
☑ IDEM13	Work from only one side of the stream, and where possible, from the side of the stream which does not have adjacent wetlands. If no wetlands are present, work from the side with the fewest trees and woody vegetation. If both banks are equally vegetated, work only from the north or east side, whichever is appropriate.

IDEM-SEA 368 FIELD REVIEW CONDITIONS (continued)

The following checked-off items are the Department of Environmental Management's comments which, if a Department of the Army Section 404 permit is required, may appear as conditions on an IDEM Section 401 Water Quality Certification. These conditions may be subject to change following the receipt of a complete application.

Reference	Condition
☑ IDEM14	Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Water's Environmental Unit.
☐ IDEM15	For salmonid streams, do not work in the waterway from March 15 through June 15 and from July 15 through November 30 without the prior written approval of the Division of Water's Environmental Unit.
☑ IDEM16	Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 3 inches in diameter, living or dead, with loose hanging bark or with cracks, crevices, or cavities) from April 1 through September 30
☐ IDEM17	Ensure that the contractor performing the work complies with Section 311 of the Federal Clean Water Act and with 327 IAC 2-6.1 concerning spills of oil and/or hazardous materials.

SEA 368 FIELD REVIEW SPECIAL CONDITIONS

The following checked-off items are:

☐ IDNR — *The Department of Natural Resources' comments in the form of conditions, as they would appear on a Construction in a Floodway Permit or a Ditch Reconstruction Permit for the project, or in response to the Corps of Engineers as a result of a Section 404 review.*

☐ IDEM — *The Department of Environmental Management's comments which, if a Department of the Army Section 404 permit is required, may appear as conditions on an IDEM Section 401 Water Quality Certification. These conditions may be subject to change following the receipt of a complete application.*

Agency		Reference	Condition
☐ IDNR	☒ IDEM	(SP01)-	IDEM will need a wetland delineation to make informed comments and conditions. When IDEM receives a wetland delineation with wetland impacts clearly identified, it will then provide conditions and comments.
☐ IDNR	☐ IDEM	(SP02)-	
☐ IDNR	☐ IDEM	(SP03)-	
☐ IDNR	☐ IDEM	(SP04)-	

ATTENDEE RECOMMENDATION

Signature of Attendee	Agree with all project conditions checked	Agree with all project conditions except the following	Disagree with all project conditions checked
Marty Mawpin ☐WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☑IDEM ☐COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☑		☐
[illegible] ☑WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☐COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☑		☐
Erin Breigen ☐WATER ☑FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☐COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☑		☐
☐WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☐COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☐		☐
☐WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☐COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☐		☐
☐WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☐COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☐		☐
☐WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☐COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☐		☐
☐WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☐COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☐		☐
☐WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☐COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☐		☐

ADDITIONAL COMMENTS

DISPUTED CONDITIONS

CODE	REASON

ATTENDEE RECOMMENDATION

Signature of Attendee	Agree with all project conditions checked	Agree with all project conditions except the following	Disagree with all project conditions checked
Marty Mawpin ☐WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☑IDEM ☐COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☑		☐
[illegible] ☑WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☐COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☑		☐
Evan Bruijes ☐WATER ☑FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☐COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☑		☐
Dan Stamen ☐WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☑COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☑		☐
☐WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☐COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☐		☐
☐WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☐COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☐		☐
☐WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☐COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☐		☐
☐WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☐COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☐		☐
☐WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☐COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☐		☐

ADDITIONAL COMMENTS

DISPUTED CONDITIONS

CODE	REASON

5-W-4
11-16-16

Indiana Department of Environmental Management
Office of Water Quality
Wetlands Section

Publication Date:
October 27, 2016

Closing Date:
November 17, 2016

PUBLIC NOTICE

IDEM ID Number:
2016-557-45-MTM-A

Corps of Engineers ID Number:

To all interested parties:

This letter shall serve as a formal notice of the receipt of an application for **Section 401 Water Quality Certification** by the Indiana Department of Environmental Management (IDEM). The purpose of the notice is to inform the public of active applications submitted for water quality certification under Section 401 of the Clean Water Act (33 U.S.C. § 1341) and to solicit comments and information on any impacts to water quality related to the proposed project. IDEM will evaluate whether the project complies with Indiana's water quality standards as set forth at 327 IAC 2.

1. Applicant: Lake County Surveyor
2293 North Main Street
Crown Point, IN 46307

2. Agent:

3. Project location: Northeast ¼, Section 15, Township 35 North, Range 9 West, St. John USGS Quad.
Turkey Creek between Joliet St. and James Wittchen Drive.

4. Affected waterbody: Turkey Creek

5. Project Description: The applicant proposes to place riprap approximately half way up the bank on both sides of Turkey Creek. The remaining portion will be covered with an erosion blanket. The length of the project is 625 linear feet. The purpose of the work is bank stabilization.

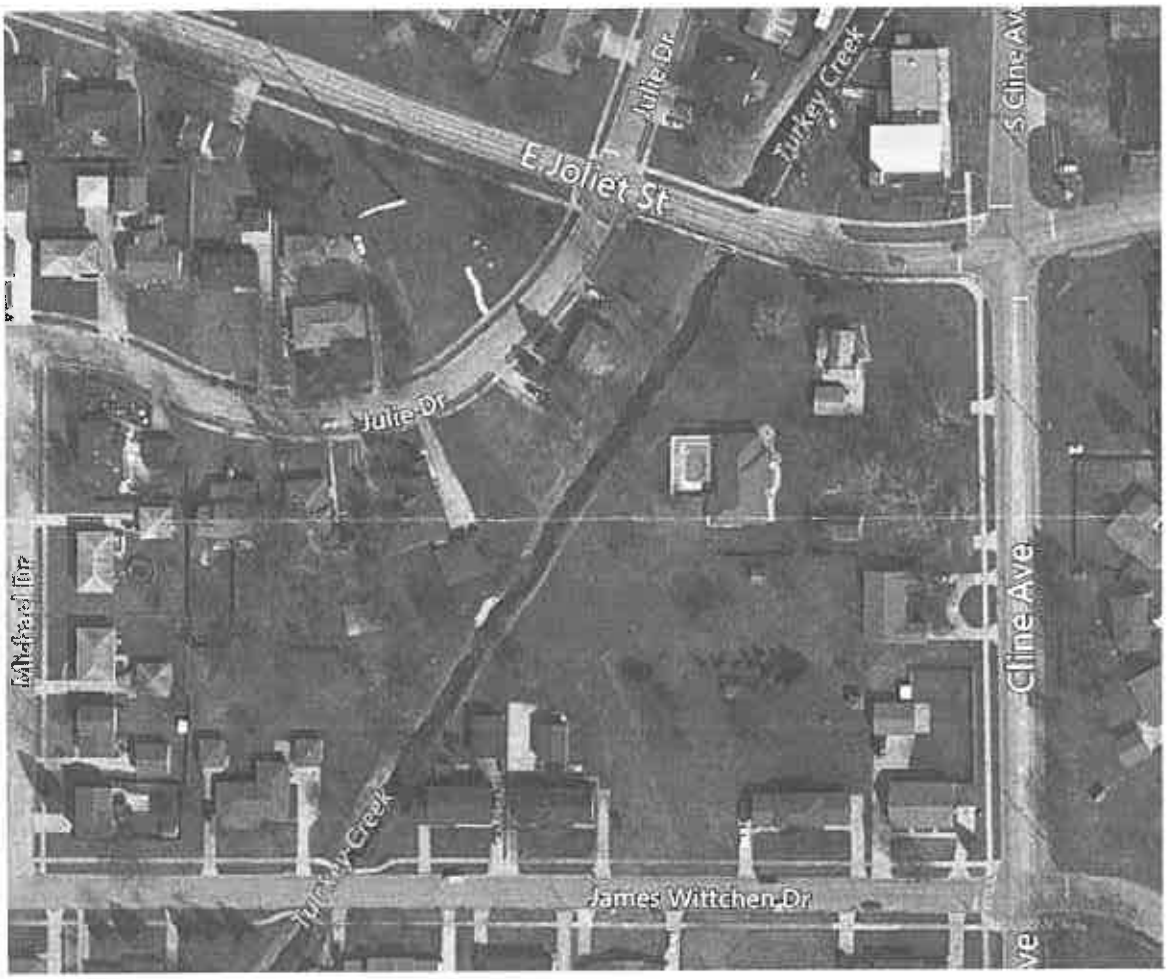
Comment period: Any person or entity who wishes to submit comments or information relevant to the aforementioned project may do so by the closing date noted above. Only comments or information related to water quality or potential impacts of the project on water quality can be considered by IDEM in the water quality certification review process.

Public Hearing: Any person may submit a written request that a public hearing be held to consider issues related to water quality in connection with the project detailed in this notice. The request for a hearing should be submitted within the comment period to be considered timely. The request should also state the reason for the public hearing as specifically as possible to assist IDEM in determining whether a public hearing is warranted.

Questions? Additional information may be obtained from Mr. Marty Maupin, Project Manager, by phone at 317-233-2471 or by e-mail at mmaupin@idem.in.gov. Please address all correspondence to the project manager and reference the IDEM project identification number listed on this notice. Indicate if you wish to receive a copy of IDEM's final decision. Written comments and inquiries may be forwarded to -

Indiana Department of Environmental Management
100 North Senate Avenue
MC65-42 WQS IGCN 1255
Indianapolis, Indiana 46204-2251 FAX: 317/232-8406

RECEIVED
OCT 31 2016
LAKE COUNTY SURVEYOR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Julie Dr
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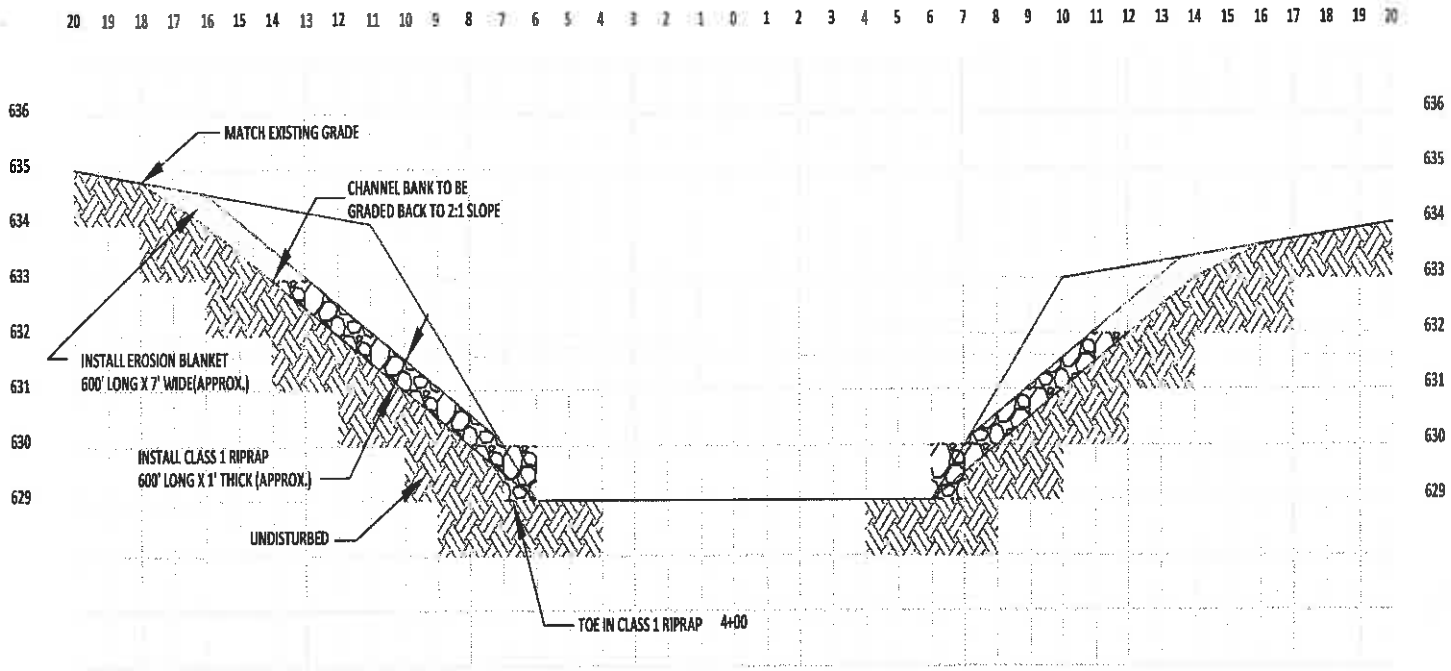
James Wittchen Dr
Turkey Creek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MATCH EXISTING GRADE
CHANNEL BANK TO BE GRADED BACK TO 2:1 SLOPE
INSTALL EROSION BLANKET 600' LONG X 7' WIDE(APPROX.)
INSTALL CLASS 1 RIPRAP 600' LONG X 1' THICK (APPROX.)
UNDISTURBED
TOE IN CLASS 1 RIPRAP
4+00

HanOOOT 5-U-4
11-16-16

From: MAUPIN, MARTY [mailto:MMAUPIN@idem.IN.gov]
Sent: Friday, September 23, 2016 3:30 PM
To: Jamie Cook <jcook@cbbel-in.com>
Subject: RE: Main Beaver Dam Ditch Stabilization, Lake Co.

IDEM has reviewed your Regional General Permit Notification form, received September 21, 2016, for the placement of riprap on the bank of Main Beaver Dam Ditch at Lat. 41.436552, Long -87.344071. Based on the submitted information, if executed as proposed the project will meet the terms and conditions of the Section 401 Water Quality Certification dated December 12, 2014, for U.S. Army Corps of Engineers' Regional General Permit No. 1. The IDEM number is 2016-571-45-MTM-X.

Marty Maupin
Office of Water Quality
Phone: 317-409-7579
E-Mail: mmaupin@idem.in.gov

5-D-5
11-16-16

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

CERTIFICATE OF APPROVAL
CONSTRUCTION IN A FLOODWAY

APPLICATION # : FW-28513 **MAILED: October 11, 2016**

STREAM : Main Beaver Dam Ditch

APPLICANT : Lake County Surveyors Office
Dan Gossman
2293 North Main Street, Suite A
Crown Point, IN 46307-1854

AGENT : Christopher B Burke Engineering LLC
Jamie Cook
Suite 1368 South
115 West Washington Street
Indianapolis, IN 46204

AUTHORITY : IC 14-28-1 with 312 IAC 10

DESCRIPTION : The project proposes log jam removal (clearing and snagging), channel bank fill (slope repair), channel bank stabilization (fabric wraps), vegetative stabilization, and riprap bank protection from Stations 0+00 to 1+29 on the south bank of the channel. Material removed shall be disposed of by a method approved by the Lake County Surveyor's Office. All work will be performed within the existing 75' easement. Details of the project are contained in information received electronically at the Division of Water on July 19, 2016 and in plans and information received at the Division of Water on August 4, 2016 and September 6, 2016.

LOCATION : Beginning approximately 1,650' upstream from Canter Ross Road (West 101st Avenue) working upstream and ending at a point 129' upstream located in Section 33, Township 35 North, Range 8 West, Ross Townhip, Lake County at Crown Point, Ross Township, Lake County
Section 33, T 35N, R 8W, Crown Point Quadrangle
UTM Coordinates: Downstream 4587280 North, 471268 East

APPROVED BY : Larissa Muellner
Larissa Muellner, CFM, Sr Environmental Manager
Division of Water

APPROVED ON : October 11, 2016

Included: Notice Of Right To Administrative Review - General Conditions - Special Conditions - Service List

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OCT 17 2016
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STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

NOTICE OF RIGHT TO ADMINISTRATIVE REVIEW

APPLICATION #: FW- 28513

This signed document constitutes the issuance of a permit by the Department of Natural Resources, subject to the conditions and limitations stated on the pages entitled "General Conditions" and "Special Conditions".

The permit or any of the conditions or limitations which it contains may be appealed by applying for administrative review. Such review is governed by the Administrative Orders and Procedures Act, IC 4-21.5, and the Department's rules pertaining to adjudicative proceedings, 312 IAC 3-1.

In order to obtain a review, a written petition must be filed with the Division of Hearings within 18 days of the mailing date of this notice. The petition should be addressed to:

Director
Division of Hearings
Indiana Government Center North, Room N501A
100 North Senate Avenue
Indianapolis, Indiana 46204

The petition must contain specific reasons for the appeal and indicate the portion or portions of the permit to which the appeal pertains.

If an appeal is filed, the final agency determination will be made by the Natural Resources Commission following a legal proceeding conducted before an Administrative Law Judge. The Department of Natural Resources will be represented by legal counsel.

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

GENERAL CONDITIONS

APPLICATION #: FW- 28513

(1) If any archaeological artifacts or human remains are uncovered during construction, federal law and regulations (16 USC 470, et seq.; 36 CFR 800.11, et al) and State Law (IC 14-21-1) require that work must stop and that the discovery must be reported to the Division of Historic Preservation and Archaeology within 2 business days.

Division of Historic Preservation and Archaeology
Room W274
402 West Washington Street
Indianapolis, IN 46204

Telephone: (317) 232-1646, FAX: (317) 232-8036

(2) This permit must be posted and maintained at the project site until the project is completed.

(3) This permit does not relieve the permittee of the responsibility for obtaining additional permits, approvals, easements, etc. as required by other federal, state, or local regulatory agencies. These agencies include, but are not limited to:

Agency	Telephone Number
Little Calumet River Basin Development Commission	(219) 595-0599
US Army Corps of Engineers	(502) 315-6686
Indiana Department of Environmental Management	(317) 233-8488 or (800) 451-6027
Local city or county planning or zoning commission	

(4) This permit must not be construed as a waiver of any local ordinance or other state or federal law.

(5) This permit does not relieve the permittee of any liability for the effects which the project may have upon the safety of the life or property of others.

(6) This permit may be revoked by the Department of Natural Resources for violation of any condition, limitation or applicable statute or rule.

) This permit shall not be assignable or transferable without the prior written approval of the Department of Natural Resources. To initiate a transfer contact:

Mr. Michael W. Neyer, PE, Director
Division of Water
Room W264
402 West Washington Street
Indianapolis, IN 46204

Telephone: (317) 232-4160, Toll Free: (877) 928-3755
FAX: (317) 233-4579

(8) The Department of Natural Resources shall have the right to enter upon the site of the permitted activity for the purpose of inspecting the authorized work.

(9) The receipt and acceptance of this permit by the applicant or authorized agent shall be considered as acceptance of the conditions and limitations stated on the pages entitled "General Conditions" and "Special Conditions".

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OCT 17 2016
LAKE COUNTY SURVEYOR

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

SPECIAL CONDITIONS

APPLICATION #: FW- 28513

PERMIT VALIDITY : This permit is valid for 24 months from the "Approved On" date shown on the first page. If construction work in the floodway has not been completed by October 11, 2018 the permit will become void. This permit may be renewed one (1) time if a written request is received by DNR, Division of Water prior to October 11, 2018. Thereafter the permit will become void and a new permit will be required in order to continue work on the project.

This permit becomes effective 18 days after the "MAILED" date shown on the first page. If both a petition for review and a petition for a stay of effectiveness are filed before this permit becomes effective, any part of the permit that is within the scope of the petition for stay is stayed for an additional 15 days.

CONFORMANCE : Other than those measures necessary to satisfy the "General Conditions" and "Special Conditions", the project must conform to the information received by the Department of Natural Resources on: July 19, 2016, August 4, 2016 and September 6, 2016. Any deviation from the information must receive the prior written approval of the Department.

Number	Special Condition
(1)	Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife's Environmental Unit.
(2)	Revegetate all bare and disturbed areas, except for land that will be used for crop production in the next growing season, with a mixture of grasses (excluding all varieties of tall fescue) and legumes as soon as possible upon completion. Low endophyte tall fescue may be used in the ditch bottom and side slopes only.
(3)	Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 3" in diameter, living or dead, with loose hanging bark or with cracks, crevices, or cavities) from April 1 through September 30.
(4)	Do not excavate or place spoil in any riparian wetland.
(5)	Limit any channel widening and bank disturbances to the least vegetated side of the waterway.
(6)	Revegetate all areas disturbed during debris and sediment removal. Permanent seed and fertilize disturbed ditch banks at the end of each day. Revegetate areas with one of the seeding mixtures or species listed in the VEGETATIVE STABILIZATION AND SEEDING PRACTICE of the INDIANA DRAINAGE HANDBOOK from the Division of Water, Indiana Department of natural Resources (October 1996) or other species that are approved by the Department as being suitable to site and climate conditions. At the completion of the project, re-seed and fertilize areas that do not have sufficient vegetative cover to control erosion.
(7)	Revegetate all spoil materials deposited in areas not used for crop production.
(8)	A representative of the Surveyor's Office or their contractor shall inspect erosion and sediment control practices daily and repair as necessary until all construction is complete and disturbed areas are permanently stabilized.
(9)	Install appropriate sediment control measures to prevent the flow of sediment laden water, resulting from dredging operations, back into the watercourse.

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

SPECIAL CONDITIONS

APPLICATION #: FW- 28513

(10) All work must conform with the existing bank at the upstream and downstream limits of the project site.

(11) Except for trees cabled in-place for bank protection, do not leave felled trees, brush, or other debris in the floodway.

(12) Keep all spoils out of the floodway as defined as that shown on Panels 18089C0261E and 18089C0262E of the Lake County and Incorporated Areas Flood Insurance Rate Map dated January 18, 2012.

RECEIVED
OCT 17 2016
LAKE COUNTY SURVEYOR

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

SERVICE LIST

APPLICATION #: FW- 28513

Lake County Surveyors Office
Dan Gossman
2293 North Main Street, Suite A
Crown Point, IN 46307-1854

Christopher B Burke Engineering LLC
Jamie Cook
Suite 1368 South
115 West Washington Street
Indianapolis, IN 46204

Fatana M Arifee
1432 Edgewater Road
Crown Point, IN 46307

City of Crown Point
101 North East Street
Crown Point, IN 46307

Crown Point Plan Commission
Tris A Miles, PE
101 North East Street
Crown Point, IN 46307-4027

Christopher Echols
1414 Edgewater Road
Crown Point, IN 46307

Leandrew and Dionne Edwards
1427 Edgewater Road
Crown Point, IN 46307

Jonathan R Graves
1419 Edgewater Road
Crown Point, IN 46307

Raymond Paul and Janice M Guernse
1424 Edgewater Road
Crown Point, IN 46307

Keith and Kay Hauber
1420 Edgewater Road
Crown Point, IN 46307

Indiana Department of Natural Resources
Steve Davis
100 West Water Street
Michigan City, IN 46360-1310

Indiana Department of Natural Resources
Division of Law Enforcement
District 10 Headquarters
100 West Water Street
Michigan City, IN 46360

Lake County SWCD
880 East 99th Court, Suite A
Crown Point, IN 46307

Little Calumet River Basin Development Commission
Dan Repay
900 Ridge Road
Munster, IN 46321

Richard C and Karen L Maynard
1431 Edgewater Road
Crown Point, IN 46307

Mohammad Mukhtar
1432 Edgewater Road
Crown Point, IN 46307

Anna Novelli
1415 Edgewater Road
Crown Point, IN 46307

Peter J and Frances M Kovacik Living Trust
1428 Edgewater Road
Crown Point, IN 46307

Arnold and Gloria and Cal Reyes
1423 Edgewater Road
Crown Point, IN 46307

US Army Corps of Engineers
Louisville District
PO Box 59
Louisville, KY 40201-0059

Staff Assignment:

Administrative	: Nicholas Males
Fish and Wildlife	: Erin Basiger
Engineering	: Nicole Solitro

5-D-5
11-16-16

DEPARTMENT OF THE ARMY
CHICAGO DISTRICT, CORPS OF ENGINEERS
231 SOUTH LASALLE STREET, SUITE 1500
CHICAGO, ILLINOIS 60604

REPLY TO
ATTENTION OF:

October 19, 2016

Technical Services Division
Regulatory Branch
LRC-2016-605

SUBJECT: Regional General Permit for bank stabilization on Main Beaver Dam Ditch at 1423 Edgewater Road in Crown Point, Lake County, Indiana

Lake County Surveyor's Office
Attn: Mr. Daniel Gossman
2293 North Main Street
Crown Point, IN 46307

Dear Mr. Gossman:

The U.S. Army Corps of Engineers, Chicago District, has completed its review of your notification for authorization under the Regional General Permit (RGP). Under Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act, the Chicago, Louisville and Detroit Districts reissued Regional General Permit 1 on December 15th, 2014 for certain activities having minimal impacts in Indiana. We have verified that your proposed work shown on the submitted plans and described below is authorized under the RGP. This certification expires three (3) years from the date indicated above.

This verification authorizes you to remove debris within the ditch and vegetation on the slopes in order to regrade the bank and install riprap over geotextile fabric along 129 linear feet of shoreline as shown on the submitted plans prepared by Christopher B. Burke Engineering, LLC. Any construction activity other than that shown on the plans may not qualify for the Regional Permit. If your plan changes or additional activities from those depicted on the plans, please submit them to this office for review prior to construction.

For any additional information on the RGP, please access our website: www.lrc.usace.army.mil/co-r. If you have any questions, please contact Mr. Paul Leffler of my staff by telephone at 312-846-5529 or email at paul.m.leffler@usace.army.mil.

Sincerely,

Diedra Willis
Indiana Team Leader
Regulatory Branch

5-E-5
11-16-16

DNR Indiana Department of Natural Resources

Michael R. Pence., Governor
Cameron F. Clark, Director
Division of Water
402 W. Washington Street
Room W264
Indianapolis, IN 46204
Phone (317) 232-4160
Toll-free (877) 928-3755
Fax (317) 233-4579
www.in.gov/dnr/water/

October 26, 2016

Bill Emerson Jr.
Lake County Surveyor
2293 North Main Street
Crown Point, IN 46307

Re: SEA #909, Cedar Creek, Lake County

Dear Mr. Emerson:

This letter is written as a follow up to the September 27, 2016 field review for the reconstruction project on Cedar Creek. Attendees included Marty Maupin, Office of Water Quality, Indiana Department of Environmental Management; Elizabeth McCloskey, U.S. Fish and Wildlife Service; Paul Leffler U.S. Army Corps of Engineers, Chicago District; John Kuntz, Engineering Services Section, Division of Water; Erin Basiger, Division of Fish and Wildlife; and Dan Gossman, Lake County Surveyor's Office. A copy of the SEA 368 Inspection Report is enclosed.

IC 36-9-27-53.5 requires that prior to initiating work on a drainage project, which is subject to regulation under certain State and/or Federal environmental regulations, an on-site field review must occur. Within 30 days of the field review, the Department of Natural Resources is required to provide the county drainage board with a list of conditions that the Department of Environmental Management and the Department of Natural Resources would place on any permit for the proposed work. The Department of Natural Resources' conditions are valid for up to 2 years after the on-site field review provided a permit application is submitted within that time frame.

This letter is not approval for construction under any State or Federal Law.

Description: Along approximately 8,489' of the stream, the project proposes channel bottom dipping (sediment removal), channel bank excavation (slope repair), tree and debris removal, erosion control blanket and seeding, silt fencing, and mulched seeding. Channel bottom dipping work shall consist of dipping, dredging, and / or removing sediment at a depth of 0' – 2' from the channel bottom without disturbing the ditch banks. All work adjacent to wetland areas shall be performed from the banks opposite the wetland area when possible. All work shall be performed within the existing drainage board easement. The work shall also include the removal of sediment from identified culverts within the regulated drain. The contractor shall excavate the low flow channel below the existing flow line to the original channel bottom as shown on the Typical Ditch Cross Section Detail in the plans.

Location: Beginning at the north side of West 171st Avenue working upstream for 8,489' ending at the east side of West Main Street located in Sections 12 and 13, Township 33 North, Range 9 West, Cedar Creek Township, Lake County.

UTM Coordinates: Downstream North = 4575218, East = 465999
Upstream North = 4573052, East = 465948
(Lowell Quadrangle Map)

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Because the total stream length Cedar Creek is more than 10 miles, a Construction in a Floodway permit is required from the Indiana Department of Natural Resources (IDNR) under *IC 14-28-1, Flood Control Act.* Additionally, work for the project will occur within one-half (½) mile of a freshwater lake 10 acres or more in size and below the average normal water level, a Ditch Reconstruction permit is required from the Indiana Department of Natural Resources (IDNR) under *IC 14-26-5, Lowering of Ten Acre Lakes Act.*

The following are the Department of Natural Resources' comments as they would appear as conditions on a Construction in the Floodway Permit, a Ditch Reconstruction Permit, or in response to the Corps of Engineers as a result of a Section 404 review.

DEPARTMENT OF NATURAL RESOURCES COMMENTS

A field meeting was held with Dan Gossman, Lake County Surveyor's Office, on September 27, 2016 to discuss this project. The following comments were made.

1. Revegetate all bare and disturbed areas, except for land that will be used for crop production in the next growing season, with a mixture of grasses (excluding all varieties of tall fescue) and legumes as soon as possible upon completion. Low endophyte tall fescue may be used in the ditch bottom and side slopes only.

2. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife's Environmental Unit.

3. Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 3" in diameter, living or dead, with loose hanging bark or with cracks, crevices, or cavities) from April 1 through September 30.

4. Do not excavate or place spoil in any riparian wetland.

5. Limit any channel widening and bank disturbance to the least vegetated side of the waterway.

6. Stabilize banks as work progresses so that no more than 200 linear feet are left disturbed at the completion of the workday.

7. Revegetate all areas disturbed during debris and sediment removal. Permanent seed and fertilize disturbed ditch banks at the end of each day. Revegetate areas with one of the seeding mixtures or species listed in the VEGETATIVE STABILIZATION AND SEEDING PRACTICE of the INDIANA DRAINAGE HANDBOOK from the Division of Water, Indiana Department of Natural Resources (October 1996) or other species that are approved by the Department as being suitable to site and climate conditions. At the completion of the project, re-seed and fertilize areas that do not have sufficient vegetative cover to control erosion.

8. Revegetate all spoil materials deposited in areas not used for crop production.

9. A representative of the Surveyor's Office or their contractor shall inspect erosion and sediment control practices daily and repair as necessary until all construction is complete and disturbed areas are permanently stabilized.

10. Install appropriate sediment control measures to prevent the flow of sediment laden water, resulting from dredging operations, back into the watercourse.

11. All work must conform with the existing bank at the upstream and downstream limits of the project site.

12. Except for trees cabled in-place for bank protection, do not leave felled trees, brush, or other debris in the floodway.

13. Do not alter the average normal water level of Lake Dalecarlia; if the average normal water level of the lake is altered, it will be the responsibility of the Lake County Drainage Board to take corrective actions to restore the average normal water level of the lake and to mitigate for any damages incurred.

14. Place all excavated materials at least 10' landward of the top of the ditch bank; spread all excavated materials evenly to a thickness not to exceed 12" and slope landward from the channel or completely remove from the floodway.

15. Avoid adverse impacts to the following state listed species: Northern Long-eared Bat *Myotis septentrionalis*.

16. * Note: For regulatory purposes, the floodway of Cedar Creek is defined as that shown on PANELS 334, 341, and 342 of the Lake County and Incorporated Areas Flood Insurance Rate Map dated January 18, 2012.

The Indiana Department of Environmental Management has requested a wetland delineation with impacts clearly identified be done for the project area and be submitted for review. The Department of Natural Resources will provide additional comments if the wetland delineation identifies areas of concern within the floodway of Cedar Creek.

Additionally, the U.S. Fish and Wildlife Service has provided the following comment: Concerns about Northern Long-eared Bat habitat and proposed clearing along creek banks – need more information about what is proposed, how much clearing, what size and species of trees are proposed to be removed.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT COMMENTS

The following comments are directed toward the above-referenced project and are specific to the sections of the proposed project reviewed by IDEM.

1. Submit an application to IDEM for Section 401 Water Quality Certification if the Corps requires an individual Section 404 permit, a Regional General Permit for impacts greater than 0.1 acre, or a Nationwide Permit for which IDEM has denied Water Quality Certification. Application forms are available through the IDEM office.

2. Avoid and minimize impacts (filling or mechanical clearing) of jurisdictional wetlands to the greatest extent possible, and provide acceptable compensatory mitigation for all unavoidable impacts to jurisdictional wetlands greater than 0.1 acre.

3. Field mark the area where the filling or mechanical clearing of wetlands is unavoidable.

4. Install appropriate sediment control measures to prevent the flow of sediment laden water, resulting from dredging operations, back into the watercourse.

5. Limit the physical disturbance of banks, other soils, and existing vegetation to that which is necessary to achieve the purpose of the project.

6. Deposit dredged material on upland, or old spoils that are considered upland.

7. Conduct logjam removal and tree preservation consistent with the practices established in the *Indiana Drainage Handbook*. The handbook was prepared in accordance with State of Indiana Public Law 329-1995 to serve as an administrative and technical guide for drainage activities within Indiana streams and ditches.

8. Work from only one side of the stream, and where possible, from the side of the stream which does not have adjacent wetlands. If no wetlands are present, work from the side with the fewest trees and woody vegetation. If both banks are equally vegetated, work only from the north or east side, whichever is appropriate.

9. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife's Environmental Unit.

10. Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 3" in diameter, living or dead, with loose hanging bark or with cracks, crevices, or cavities) from April 1 through September 30.

11. The applicant needs to supply a wetland delineation with impacts clearly identified. IDEM will need a complete wetland delineation to make informed conditions and comments.

If you have any questions about the Department of Environmental Management's comments, please contact Marty Maupin at 317-409-7579. You can also contact the Office of Water Management through IDEM's Environmental Helpline at 1-800-451-6027.

In accordance with IC 36-9-27-53.5(g) a county surveyor or board that is aggrieved by the permit conditions disclosed under subsection (d)(3) has the right to enter into further negotiations with the Department of Natural Resources and the Department of Environmental Management in order to obtain a mutually agreeable set of permit conditions. To initiate the negotiations, please write a letter to Michael Neyer, PE, Director, Division of Water addressing the aggrieved portions of the comments and conditions included in this letter.

Thank you for your cooperation in this matter. If you should have any questions or would like to discuss modifications to the above comments, please contact me at our toll free number, 1-877-WATER55 (1-877-928-3755) or at (317) 232-4166.

Sincerely,

George C. Bowman

George C. Bowman, PE
Assistant Director
Division of Water

GCB/ELB

pc: Marty Maupin, Office of Water Management, IDEM
Paul Leffler, U.S. Army Corps of Engineers, Chicago District
Elizabeth McCloskey, U.S. Fish and Wildlife Service

Enclosures: SEA 368 Inspection Report
Permit application and Instructions

SEA 368 INSPECTION REPORT

State Form 51594 (2-04)

Indiana Department of Natural Resources,
Division of Water
402 West Washington Street, Room W264
Indianapolis, IN 46204
ph. (317) 232-4160 or toll free 1-877-928-3755
Fax (317) 233-4579

SEA # 909 DATE 9/26/2016

PROJECT INFORMATION

STREAM/LAKE Cedar Creek

LOCATION Beginning at the north side of West 171st Ave working upstream for 8,489' ending at the south side of West Main Street.

DOWNSTREAM

Section 13 NW / NE / SW / SE; Township 33 N / S; Range 9 E / W

Quadrangle Lowell UTM 4575218 N 465999 E

City/Town Lowell Civil Township Cedar Creek County Lake

UPSTREAM

Section 12 NW / NE / SW / SE; Township 33 N / S; Range 9 E / W

Quadrangle Lowell UTM 4573052 N 465948 E

City/Town Lowell Civil Township Cedar Creek County Lake

DESCRIPTION:

One sided construction: ☐ Yes ☐ No Vegetated buffer strip: ☐Yes ☐No, If "yes", strip width _____ feet

Proposes channel bottom dipping (sediment removal), channel bank excavation (slope repair), tree and debris removal, erosion control blanket and seeding, silt fencing, and mulch seeding. Channel bottom dipping work shall consist of dipping, dredging and/or removing sediment from the channel bottom without disturbing the ditch banks. All work adjacent to wetland areas shall be performed from the banks opposite the wetland area when possible. All work shall be performed within the existing drainage board easement. Work will also include removal of sediment from identified culverts up the drain. Contractor shall excavate the low flow channel below the existing flowline to the original channel bottom as shown on the Typical Ditch Cross Section Detail in the plans.

ATTENDEES

		phone		fax
Water	John Kuntz	(317) 234-1096	( )	
Fish & Wildlife	Erin Basiger	(317) 234-0586	( )	
Soil Conservation		( )	( )	
IDEM	Mardy Maupin	(317) 233-2471	( )	
County	Dan Bossman	(219) 755-3745	(219) 755-3750	
SWCD		( )	( )	
USF&WS	Elizabeth McCloskey	(219) 983-9753	( )	
USACE	Paul Leffler	(317) 840-5579	( )	
Other		( )	( )	

FINDINGS

- No work in Lake = All work downstream of dam.
- Hit for NLE BAT in woods toward center of project area. - found post-lactating female August 3, 2012 during surveys along the proposed Illiana Toll Road alignment (USFWS has info - will send to Heritage Data Base)

IDNR-SEA 368 FIELD REVIEW CONDITIONS

The following checked-off items are the Department of Natural Resources' comments in the form of conditions, as they would appear on a Construction in a Floodway Permit or a Ditch Reconstruction Permit for the project, or in response to the Corps of Engineers as a result of a Section 404 review.

Reference	Condition
☑ ER11	Revegetate all bare and disturbed areas, except for land that will be used for crop production in the next growing season, with a mixture of grasses (excluding all varieties of tall fescue) and legumes as soon as possible upon completion. Low endophyte tall fescue may be used in the ditch bottom and side slopes only
☑ ER16	Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Water's Environmental Unit
☐ ER17	For salmonid streams, do not work in the waterway from March 15 through June 15 and from July 15 through November 30 without the prior written approval of the Division of Water's Environmental Unit
☑ ER19	Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 3 inches in diameter, living or dead, with loose hanging bark or with cracks, crevices, or cavities) from April 1 through September 30
☑ ER20	Do not excavate or place spoil in any riparian wetland
☑ ER31	Limit any channel widening and bank disturbance to the ~~(north/south/east/west)~~ least vegetated side of the waterway
☑ ER65	Stabilize banks as work progresses so that no more than 200 lineal feet are left disturbed at the completion of the workday
☑ ER66	Revegetate all areas disturbed during debris and sediment removal. Permanent seed and fertilize disturbed ditch banks at the end of each day. Revegetate areas with one of the seeding mixtures or species listed in the VEGETATIVE STABILIZATION AND SEEDING PRACTICE of the INDIANA DRAINAGE HANDBOOK from the Division of Water, Indiana Department of Natural Resources (October 1996) or other species that are approved by the Department as being suitable to site and climate conditions. At the completion of the project, re-seed and fertilize areas that do not have sufficient vegetative cover to control erosion
☐ ER67	Protect newly seeded areas with anchored mulch at specified locations as listed under Special Conditions (page 7 of this form). Mulch materials, application rates, and anchoring methods must meet the criteria set forth in the INDIANA DRAINAGE HANDBOOK, Section 5.11 from the Division of Water, Indiana Department of Natural Resources (October 1996) or INDIANA HANDBOOK FOR EROSION CONTROL IN DEVELOPING AREAS, Sub-Section 3.1 from the Division of Soil Conservation, Indiana Department of Natural Resources (October 1992)
☑ ER70	Revegetate all spoil materials deposited in areas not used for crop production
☐ ER72	Use appropriate structural armament in channel straightening transition areas to blend with the existing channel. Use one of the appropriate structural armament practices listed in Section 5.5 of the INDIANA DRAINAGE HANDBOOK from the Division of Water, Indiana Department of Natural Resources (October 1996)
☐ ER73	Install appropriate armament below pipe outfalls
☐ ER74	Install drop structures where needed to convey runoff from adjacent areas to the channel without causing erosion
☐ ER75	Where vegetation alone is not sufficient to prevent erosion in channel bends, use one of the appropriate structural armament practices listed in Section 5.5 of the INDIANA DRAINAGE HANDBOOK from the Division of Water, Indiana Department of Natural Resources (October 1996)
☑ ER76	A representative of the Surveyor's Office or their contractor shall inspect erosion and sediment control practices daily and repair as necessary until all construction is complete and disturbed areas are permanently stabilized

IDNR-SEA 368 FIELD REVIEW CONDITIONS (continued)

The following checked-off items are the Department of Natural Resources' comments in the form of conditions, as they would appear on a Construction in a Floodway Permit or a Ditch Reconstruction Permit for the project, or in response to the Corps of Engineers as a result of a Section 404 review.

Reference	Condition
☑ ER78	Install appropriate sediment control measures to prevent the flow of sediment laden water, resulting from dredging operations, back into the watercourse
☑ FW02	All work must conform with the existing bank at the upstream and downstream limits of the project site
☑ FW03	Except for trees cabled in-place for bank protection, do not leave felled trees, brush, or other debris in the floodway
☐ FW21	Align spoil piles parallel to flow; the toe of the spoil piles must be located at least 10 feet landward of the top of the streambank; and a _____-foot opening must be provided every _____-feet along the spoil piles' length
☐ FW33	The plans for the project must include information that demonstrates that the project will not result in the lowering of _____ Lake, below its: 1) legally established water level of _____ feet, NGVD 2) average normal water level of _____ feet, NGVD, as determined from USGS lake level records, or 3) average water level of _____ feet, NGVD, as determined by the action of the water that has marked upon the soil of the bed of the lake a character distinct from that of the bank with respect to vegetation as well as the nature of the soil
☑ FW34	Do not alter the average normal water level of Lake Dalecarlia Lake; if the average normal water level of the lake is altered, it will be the responsibility of the Lake County Drainage Board to take corrective actions to restore the average normal water level of the lake and to mitigate for any damages incurred
☑ FW35	Place all excavated materials at least 10 feet landward of the top of the ditch bank; spread all excavated materials evenly to a thickness not to exceed 12" and slope landward from the channel or completely remove from the floodway
☑ NP01	Avoid adverse impacts to the following state listed species: Northern Long-Eared Bat (Myotis Septentrionalis)
☐ OR03	This project will occur within a section of _____ that has been designated as a _____ under the Indiana Natural, Scenic, and Recreational River System (IC 14-29-6). The applicant must contact _____ at 317-232-4070 for more information regarding this permit

IDEM-SEA 368 FIELD REVIEW CONDITIONS

The following checked-off items are the Department of Environmental Management's comments which, if a Department of the Army Section 404 permit is required, may appear as conditions on an IDEM Section 401 Water Quality Certification. These conditions may be subject to change following the receipt of a complete application.

Reference	Condition
☑ IDEM01	Submit an application to IDEM for Section 401 Water Quality Certification if the Corps requires an individual Section 404 permit, a Regional General Permit[1] for impacts greater than 0.1 acre, or a Nationwide Permit for which IDEM has denied Water Quality Certification. Application forms are available through the IDEM office. [1] *The activity will impact (fill) more than one-tenth (0.1) of an acre of Waters of the United States, including wetlands, special aquatic sites, creeks, ditches, streams, rivers, deep water areas, or open water areas; or the activity will impact (fill) more than 300 linear feet of stream channel or shoreline.*
☑ IDEM02	Avoid and minimize impacts (filling or mechanical clearing)[2] of jurisdictional wetlands to the greatest extent possible, and provide acceptable compensatory mitigation for all unavoidable impacts to jurisdictional wetlands greater than 0.1 acre. [2] *Mechanical clearing is the use of heavy equipment to push, pull, scrape, or excavate woody vegetation in order to remove it.*
☑ IDEM03	Field mark the area where the filling or mechanical clearing of wetlands is unavoidable.
☐ IDEM04	Use solid tile and anti-seep collars on the portion of the tile line that transects the wetland.
☑ IDEM05	Install appropriate sediment control measures to prevent the flow of sediment laden water, resulting from dredging operations, back into the watercourse.
☑ IDEM06	Limit the physical disturbance of banks, other soils, and existing vegetation to that which is necessary to achieve the purpose of the project.
☑ IDEM07	Deposit dredged material on upland, or old spoils that are considered upland.
☐ IDEM08	Revegetate all bare and disturbed areas, except for land that will be used for crop production in the next growing season, with a mixture of grasses (excluding all varieties of tall fescue) and legumes as soon as possible upon completion. Low endophyte tall fescue may be used in the ditch bottom and side slopes only.
☐ IDEM09	Perform daily seeding of the ditch banks if the project is conducted during the agricultural growing season; seed the ditch banks as soon as possible if the project activity occurs during the dormant season.
☑ IDEM10	Conduct logjam removal and tree preservation consistent with the practices established in the *Indiana Drainage Handbook*. The handbook was prepared in accordance with State of Indiana Public Law 329-1995 to serve as an administrative and technical guide for drainage activities within Indiana streams and ditches.
☐ IDEM11	Encourage landowners affected by this project to place grassed filter strips on land immediately bordering the stream. The federal *Conservation Reserve Program* offers competitive annual payments for this practice on a continual sign-up basis. In addition, certain areas may qualify for special cost share or incentive programs for the establishment of filter strips. Contact the local county Soil and Water Conservation District or the Natural Resources Conservation Service for program and practice specific information.
☐ IDEM12	Spread dredged material, where possible, in a manner that will not impede overland flow to the stream. This will help eliminate adjacent berm buildup and associated "points of concentrated flow" that are erosive and require expensive land treatment practices.
☑ IDEM13	Work from only one side of the stream, and where possible, from the side of the stream which does not have adjacent wetlands. If no wetlands are present, work from the side with the fewest trees and woody vegetation. If both banks are equally vegetated, work only from the north or east side, whichever is appropriate.

IDEM-SEA 368 FIELD REVIEW CONDITIONS (continued)

The following checked-off items are the Department of Environmental Management's comments which, if a Department of the Army Section 404 permit is required, may appear as conditions on an IDEM Section 401 Water Quality Certification. These conditions may be subject to change following the receipt of a complete application.

Reference	Condition
☑ IDEM14	Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Water's Environmental Unit.
☐ IDEM15	For salmonid streams, do not work in the waterway from March 15 through June 15 and from July 15 through November 30 without the prior written approval of the Division of Water's Environmental Unit.
☑ IDEM16	Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 3 inches in diameter, living or dead, with loose hanging bark or with cracks, crevices, or cavities) from April 1 through September 30
☐ IDEM17	Ensure that the contractor performing the work complies with Section 311 of the Federal Clean Water Act and with 327 IAC 2-6.1 concerning spills of oil and/or hazardous materials.

ATTENDEE RECOMMENDATION

Signature of Attendee	Agree with all project conditions checked	Agree with all project conditions except the following	Disagree with all project conditions checked
☐WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☐COUNTY ☐SWCD ☐USF&WS ☑USACE ☐OTHER	☑		☐
☐WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☑IDEM ☐COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☑		☐
☐WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☒COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☑		☐
☐WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☐COUNTY ☐SWCD ☒USF&WS ☐USACE ☐OTHER	☐		☐
☐WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☐COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☐		☐
☐WATER ☑FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☐COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☑		☐
☐WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☐COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☐		☐
☐WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☐COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☐		☐
☐WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☐COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☐		☐

ADDITIONAL COMMENTS

DISPUTED CONDITIONS

CODE	REASON

SEA 368 FIELD REVIEW SPECIAL CONDITIONS

The following checked-off items are:

☐ IDNR — *The Department of Natural Resources' comments in the form of conditions, as they would appear on a Construction in a Floodway Permit or a Ditch Reconstruction Permit for the project, or in response to the Corps of Engineers as a result of a Section 404 review.*

☐ IDEM — *The Department of Environmental Management's comments which, if a Department of the Army Section 404 permit is required, may appear as conditions on an IDEM Section 401 Water Quality Certification. These conditions may be subject to change following the receipt of a complete application.*

Agency	Reference	Condition
☐ IDNR ☑ IDEM	(SP01)-	The applicant need to supply a wetland delineation with impacts clearly identified. IDEM will need a complete wetland delineation to make informed conditions and comments IDEM
☒ IDNR ☐ IDEM USFWS Note	(SP02)-	Concerns about NLEB habitat and proposed clearing along creek banks - need more information about what is proposed, how much clearing, what size + species of trees are proposed to be removed; also need wetland delineation
☒ IDNR ☐ IDEM Note	(SP03)-	The applicant will need to supply a wetland delineation with impacts clearly identified. Additional comments/concerns may be applied upon review of the additional information.
☐ IDNR ☐ IDEM	(SP04)-	

5-E-6
11-16-16

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

TERMINATION NOTICE
CONSTRUCTION IN A FLOODWAY

MAILED: November 07, 2016

APPLICATION # : FW-28466

STREAM : McConnell Ditch

APPLICANT : Lake County Drainage Board
Dan Gossman
2293 North Main Street
Crown Point, IN 46307

AGENT : American Structurepoint Inc
Monica Del Real
7260 Shadeland Station
Indianapolis, IN 46256

AUTHORITY : IC 14-28-1 with 312 IAC 10

DESCRIPTION : The project proposes de-brushing, sediment removal, and bank repair along McConnell Ditch from 171st Avenue to Morse Street. Approximately 17,600 cubic yards of sediment will be removed. The sediment will be placed on top of the existing levee. None of the removed sediment will be placed within a floodway or wetland. Silt fencing, erosion control blankets, and seeding will be used on disturbed areas. Details of the project are contained in information received electronically at the Division of Water on June 20, 2016 and in plans and information received at the Division of Water on July 27, 2016 and August 2, 2016.

LOCATION : DOWNSTREAM: Along McConnell Ditch from 171st Avenue to Morse Street near Lowell, Cedar Creek Township, Lake County
Section 14, T 33N, R 9W, Lowell Quadrangle
UTM Coordinates: Downstream 4573059 North, 465168 East
UPSTREAM:
UTM Coordinates: Upstream 4574306 North, 464763 East

TERMINATED BY : Larissa Muellner
Larissa Muellner, CFM, Sr Environmental Manager
Division of Water

TERMINATED ON : November 07, 2016

Included: Notice Of Right To Administrative Review - Termination Reasons - Service List

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

NOTICE OF RIGHT TO ADMINISTRATIVE REVIEW

APPLICATION #: FW- 28466

This signed document constitutes the termination of your application by the Department of Natural Resources.

The termination may be appealed by applying for administrative review. The review will be governed by the Administrative Orders and Procedures Act, IC 4-21.5, and the Department's rules pertaining to adjudicative proceedings, 312 IAC 3-1.

In order to obtain a review, a written petition containing the specific reasons for the appeal must be filed with the Division of Hearings within 18 days of the mailing date of this notice. The petition should be addressed to:

Director
Division of Hearings
Indiana Government Center North, Room N501A
100 North Senate Avenue
Indianapolis, Indiana 46204

If an appeal is filed, the final agency determination will be made by the Natural Resources Commission following a legal proceeding conducted before an Administrative Law Judge. The Department of Natural Resources will be represented by legal counsel.

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

Termination Reasons

APPLICATION #: FW- 28466

Based on information received by the Department of Natural Resources on June 20, 2016, July 27, 2016, August 2, 2016 and November 1, 2016, this permit application was terminated on November 7, 2016 for the reason(s) listed below.

If there will be any deviation from the submitted information, or if work is proposed at the site in the future, the Department should be contacted to determine the potential permit requirements.

Number	Termination Reason
(1)	the project is exempt from the permitting provisions of the Flood Control Act; under IC 14-28-1-22(b)(1), a permit is not required for a reconstruction or maintenance project (as defined in IC 36-9-27) on a stream or an open regulated drain if the total length of the stream or open drain is not more than ten (10) miles

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

SERVICE LIST

APPLICATION #: FW- 28466

Lake County Drainage Board
Dan Gossman
2293 North Main Street
Crown Point, IN 46307

American Structurepoint Inc
Monica Del Real
7260 Shadeland Station
Indianapolis, IN 46256

Thomas Bibakis
17000 Red Oak Drive
Lowell, IN 46356-2087

Gregory and Sarasue Bulanda
16627 Morse Street
Lowell, IN 46356

Ronald E Chaffin
16519 Morse Street
Lowell, IN 46356

Hunter and Donna Crowley
16319 Morse Street
Lowell, IN 46356

Demotte State Bank
210 South Halleck Street
PO Box 400
Demotte, IN 46310

William and Gayle Elliot
16619 Morse Street
Lowell, IN 46356

Todd Erb
13701 173rd Avenue
Lowell, IN 46356

Charles W Evans
5944 172nd Avenue
Lowell, IN 46356

Nell Fabish
16509 Morse Street
Lowell, IN 46356

Mr. Carl Ferro
501 East Main Street
PO Box 157
Lowell, IN 46356

Donna L Hancock
16519 Morse Street
Lowell, IN 46356

Timothy and Lori Horsely
5936 172nd Avenue
Lowell, IN 46356

Indiana Department of Natural Resources
Division of Law Enforcement
District 10 Headquarters
100 West Water Street
Michigan City, IN 46360

ıliam and Nancy Kallas
16515 Morse Street
Lowell, IN 46356

Kankakee River Basin Commission
Jody M Melton
6100 Southport Road
Portage, IN 46368-6409

Kirk and Jill Maatman Living Trust
13212 Morse Street
Lowell, IN 46356

Lake County Plan Commission
Ned Kovachevich
2293 North Main Street, Suite A305
Crown Point, IN 46307-1854

Lake County SWCD
880 East 99th Court, Suite A
Crown Point, IN 46307

Jerry and Joanne Lambert
12801 Iowa Street
Crown Point, IN 46307

Sebastian and Sonia Navarro Pineda
5940 172nd Avenue
Lowell, IN 46356

John and Jan Piper
5948 172nd Avenue
Lowell, IN 46356

Ronald L Herz Trust
16523 Morse Street
Lowell, IN 46356

Saco Industries Inc
PO Box 342
Lowell, IN 46356

William and Diane Schrik
16313 Morse Street
Lowell, IN 46356

Michael S Smith
5924 172nd Avenue
Lowell, IN 46356

Joseph and Shannon Stanley
5928 172nd Avenue
Lowell, IN 46356

Conrad and Marilyn Sundeen
PO Box 229
Lowell, IN 46356

Steve and Linda Szany
16609 Morse Street
Lowell, IN 46356

Three M Development Co
4607 173rd Avenue
owell, IN 46356

Town of Cedar Lake
PO Box 707
Cedar Lake, IN 46303-0707

US Army Corps of Engineers
Chicago District
231 South LaSalle Street, Suite 1500
Chicago, IL 60604

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

SERVICE LIST

APPLICATION #: FW- 28466

John and Laura Wontorski
16895 Red Oak Drive
Lowell, IN 46356

John and Marilyn Zunica
5932 172nd Avenue
Lowell, IN 46356

Staff Assignment:

Administrative : Larissa Muellner, CFM
Fish and Wildlife : Erin Basiger

5-E-7
11-16-16

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

CERTIFICATE OF APPROVAL
CONSTRUCTION IN A FLOODWAY

MAILED: November 07, 2016

APPLICATION # : FW-28467

STREAM : Singleton Ditch

APPLICANT : Lake County Drainage Board
Dan Gossman
2293 North Main Street
Crown Point, IN 46307

AGENT : American Structurepoint Inc
Monica Del Real
7260 Shadeland Station
Indianapolis, IN 46256

AUTHORITY : IC 14-28-1 with 312 IAC 10

DESCRIPTION : Along approximately 19,658' of the stream, the project proposes channel bottom dipping (sediment removal), channel bank excavation (slope repair), tree and debris removal, erosion control blanket and seeding, silt fencing, and mulched seeding. Channel bottom dipping work shall consist of dipping, dredging, and / or removing sediment at a depth of 0' - 2' from the channel bottom without disturbing the ditch banks. All work adjacent to wetland areas shall be performed from the banks opposite the wetland area when possible. All work shall be performed within the existing drainage board easement. The work shall also include the removal of sediment from identified culverts within the regulated drain. The contractor shall excavate the low flow channel below the existing flow line to the original channel bottom as shown on the Typical Ditch Cross Section Detail in the plans. Details of the project are contained in information received electronically at the Division of Water on June 20, 2016 and in plans and information received at the Division of Water on July 27, 2016, August 2, 2016 and October 27, 2016.

LOCATION : DOWNSTREAM: Beginning at the east side of Monon Road working upstream for 19,658' ending at the west side of Mississippi Street near Lowell, Cedar Creek Township, Lake County
Section 7, T 32N, R 8W, Schneider Quadrangle
UTM Coordinates: Downstream 4564824 North, 468215 East
UPSTREAM:
UTM Coordinates: Upstream 4567245 North, 473640 East

APPROVED BY : Larissa Muellner
Larissa Muellner, CFM, Sr Environmental Manager
Division of Water

APPROVED ON : November 7, 2016

Included: Notice Of Right To Administrative Review - General Conditions - Special Conditions - Service List

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

CERTIFICATE OF APPROVAL
CONSTRUCTION IN A FLOODWAY

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

NOTICE OF RIGHT TO ADMINISTRATIVE REVIEW

APPLICATION #: FW- 28467

This signed document constitutes the issuance of a permit by the Department of Natural Resources, subject to the conditions and limitations stated on the pages entitled "General Conditions" and "Special Conditions".

The permit or any of the conditions or limitations which it contains may be appealed by applying for administrative review. Such review is governed by the Administrative Orders and Procedures Act, IC 4-21.5, and the Department's rules pertaining to adjudicative proceedings, 312 IAC 3-1.

In order to obtain a review, a written petition must be filed with the Division of Hearings within 18 days of the mailing date of this notice. The petition should be addressed to:

Director
Division of Hearings
Indiana Government Center North, Room N501A
100 North Senate Avenue
Indianapolis, Indiana 46204

The petition must contain specific reasons for the appeal and indicate the portion or portions of the permit to which the appeal pertains.

If an appeal is filed, the final agency determination will be made by the Natural Resources Commission following a legal proceeding conducted before an Administrative Law Judge. The Department of Natural Resources will be represented by legal counsel.

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

GENERAL CONDITIONS

APPLICATION #: FW- 28467

(1) If any archaeological artifacts or human remains are uncovered during construction, federal law and regulations (16 USC 470, et seq.; 36 CFR 800.11, et al) and State Law (IC 14-21-1) require that work must stop and that the discovery must be reported to the Division of Historic Preservation and Archaeology within 2 business days.

Division of Historic Preservation and Archaeology
Room W274
402 West Washington Street
Indianapolis, IN 46204

Telephone: (317) 232-1646, FAX: (317) 232-8036

(2) This permit must be posted and maintained at the project site until the project is completed.

(3) This permit does not relieve the permittee of the responsibility for obtaining additional permits, approvals, easements, etc. as required by other federal, state, or local regulatory agencies. These agencies include, but are not limited to:

Agency	Telephone Number
Kankakee River Basin Commission	(219) 763-0696
US Army Corps of Engineers	(312) 846-5539
Indiana Department of Environmental Management	(317) 233-8488 or (800) 451-6027
Local city or county planning or zoning commission	

(4) This permit must not be construed as a waiver of any local ordinance or other state or federal law.

(5) This permit does not relieve the permittee of any liability for the effects which the project may have upon the safety of the life or property of others.

(6) This permit may be revoked by the Department of Natural Resources for violation of any condition, limitation or applicable statute or rule.

7) This permit shall not be assignable or transferable without the prior written approval of the Department of Natural Resources. To initiate a transfer contact:

Mr. Michael W. Neyer, PE, Director
Division of Water
Room W264
402 West Washington Street
Indianapolis, IN 46204

Telephone: (317) 232-4160, Toll Free: (877) 928-3755
FAX: (317) 233-4579

(8) The Department of Natural Resources shall have the right to enter upon the site of the permitted activity for the purpose of inspecting the authorized work.

(9) The receipt and acceptance of this permit by the applicant or authorized agent shall be considered as acceptance of the conditions and limitations stated on the pages entitled "General Conditions" and "Special Conditions".

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

SPECIAL CONDITIONS

APPLICATION #: FW- 28467

PERMIT VALIDITY : This permit is valid for 24 months from the "Approved On" date shown on the first page. If construction work in the floodway has not been completed by November 07, 2018 the permit will become void. This permit may be renewed one (1) time if a written request is received by DNR, Division of Water prior to November 07, 2018. Thereafter the permit will become void and a new permit will be required in order to continue work on the project.

This permit becomes effective 18 days after the "MAILED" date shown on the first page. If both a petition for review and a petition for a stay of effectiveness are filed before this permit becomes effective, any part of the permit that is within the scope of the petition for stay is stayed for an additional 15 days.

CONFORMANCE : Other than those measures necessary to satisfy the "General Conditions" and "Special Conditions", the project must conform to the information received by the Department of Natural Resources on: June 20, 2016, July 27, 2016, August 2, 2016 and October 27, 2016. Any deviation from the information must receive the prior written approval of the Department.

Number	Special Condition
(1)	revegetate all bare and disturbed areas, except for land that will be used for crop production in the next growing season, with a mixture of grasses (excluding all varieties of tall fescue) and legumes as soon as possible upon completion; low endophyte tall fescue may be used in the ditch bottom and side slopes only
(2)	do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife's Environmental Unit
(3)	do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 3 inches in diameter, living or dead, with loose hanging bark or with cracks, crevices, or cavities) from April 1 through September 30
(4)	limit any channel widening and bank disturbance to the least vegetated side of the waterway
(5)	stabilize banks as work progresses so that no more than 200 linear feet are left disturbed at the completion of the workday
(6)	revegetate all areas disturbed during debris and sediment removal; permanently seed and fertilize disturbed ditch banks at the end of each day; revegetate areas with one of the seeding mixtures or species listed in the VEGETATIVE STABILIZATION AND SEEDING PRACTICE of the Indiana Drainage Handbook from the Division of Water, Indiana Department of Natural Resources (October 1996) or other species that are approved by the Department as being suitable to site and climate conditions; at the completion of the project, re-seed and fertilize areas that do not have sufficient vegetative cover to control erosion
(7)	revegetate all spoil materials deposited in areas not used for crop production
(8)	a representative of the Surveyor's Office or their contractor shall inspect erosion and sediment control practices daily and repair as necessary until all construction is complete and disturbed areas are permanently stabilized

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

SPECIAL CONDITIONS

APPLICATION #: FW- 28467

(9) install appropriate sediment control measures to prevent the flow of sediment laden water, resulting from dredging operations, back into the watercourse

(10) all work must conform with the existing bank at the upstream and downstream limits of the project site

(11) except for trees cabled in place for bank protection, do not leave felled trees, brush, or other debris in the floodway *

(12) place all excavated materials at least 10 feet landward of the top of the ditch bank; spread all excavated materials evenly to a thickness not to exceed 12 inches and slope landward from the channel or completely remove from the floodway *

(13) * Note: for regulatory purposes, the floodway is defined as the Special Flood Hazard Area shown on Panels 375, 435 and 455 of the Lake County and Incorporated Areas Flood Insurance Rate Map dated January 18, 2012

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

SERVICE LIST

APPLICATION #: FW- 28467

Lake County Drainage Board
Dan Gossman
2293 North Main Street
Crown Point, IN 46307

American Structurepoint Inc
Monica Del Real
7260 Shadeland Station
Indianapolis, IN 46256

Annette Belstra
11111 1000 West
Demotte, IN 46310

Debra Curtis
20910 Monon Road
Lowell, IN 46356

Warren R DeJong
275 Margraf Court
Dyer, IN 46311

Edward Fraikin
21509 Harrison Street
Lowell, IN 46356-9744

Cheryl Hayden
23310 Whitcomb Street
Lowell, IN 46356

David A Hoffman
4024 181st Avenue
Hebron, IN 46341

David and Janet Hoffman
5260 500 North
Rensselaer, IN 47978

Indiana Department of Natural Resources
Division of Law Enforcement
District 10 Headquarters
100 West Water Street
Michigan City, IN 46360

Indiana Land Trust Company Trust 120074
21306 Chase Street
Lowell, IN 46356

Johnston Properties
8600 West North Avenue
Melrose Park, IL 60160

Frank and Lee Kalvaitis
2214 West 203rd Avenue
Lowell, IN 46356-9749

Mike Kalvaitis
2214 West 203rd Avenue
Lowell, IN 46356

Matthew Kalvaitis
2214 203rd Avenue
Lowell, IN 46356

ankakee River Basin Commission
Jody M Melton
6100 Southport Road
Portage, IN 46368-6409

Daniel and Beth Kingma
10020 1100 West
Demotte, IN 46310

Patrick and Leigh Kouns
1091 West 203rd Avenue
Lowell, IN 46356

Ned Kovachevich
2293 North Main Street
Crown Point, IN 46307-1854

Lake County Land Holdings LLC
14850 County Road Suite 500
Wheatfield, IN 46392

Lake County SWCD
880 East 99th Court, Suite A
Crown Point, IN 46307

Lake County Trust
PO Box 193
Lowell, IN 46356

Lake County Trust Company
9800 Connecticut Drive, B2-900
Crown Point, IN 46307

Lake County Trust Company Trust 5452
1769 185th Street
Lansing, IL 60438

Marta Lopez
502 205th Avenue
Hebron, IN 46341

Robert Lovell
20910 Monon Road
Lowell, IN 46356

Maize Living Trust
909 203rd Avenue
Lowell, IN 46356

Moon Island LLC
2214 203rd Avenue
Lowell, IN 46356

William John Nichols
1403 203rd Avenue
Lowell, IN 46356

James and Vicky Nichols
1403 203rd Avenue
Lowell, IN 46356

William J Nichols
1006 203rd Street
owell, IN 46356

Glenn R Peterson
PO Box 193
Lowell, IN 46356

Postma Farms
Thomas and Bonnie Postma
14621 North 700 West
Demotte, IN 46310

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

SERVICE LIST

APPLICATION #: FW- 28467

Ruth M Utley Revocable Trust
5205 101st Avenue
Crown Point, IN 46307

Nathan and Megan Thomas
2053 172nd Avenue
Lowell, IN 46356

Lyle and Janet Trembly
4024 181st Avenue
Hebron, IN 46431

US Army Corps of Engineers
Chicago District
231 South LaSalle Street, Suite 1500
Chicago, IL 60604

Jacky and Katheryne Virgin
3404 Kentucky
60401, IL 60401

Larry and Evelyn Wagner
21827 Austin Street
Lowell, IN 46356

Wietbrock Joint Revocable Living Trust
3276 181st Avenue
Lowell, IN 46356

Christopher Zunica
P O Box 302
Lowell, IN 46356-0302

Staff Assignment:

Administrative	: Larissa Muellner, CFM
Fish and Wildlife	: Erin Basiger
Engineering	: John W Kuntz

5-E-7
11-14-16

DNR Indiana Department of Natural Resources

Michael R. Pence., Governor
Cameron F. Clark, Director
Division of Water
402 W. Washington Street
Room W264
Indianapolis, IN 46204
Phone (317) 232-4160
Toll-free (877) 928-3755
Fax (317) 233-4579
www.in.gov/dnr/water/

October 26, 2016

Bill Emerson Jr.
Lake County Surveyor
2293 North Main Street
Crown Point, IN 46307

Re: SEA #911, Singleton Ditch, Lake County

Dear Mr. Emerson:

This letter is written as a follow up to the September 27, 2016 field review for the reconstruction project on Singleton Ditch. Attendees included Marty Maupin, Office of Water Quality, Indiana Department of Environmental Management; Elizabeth McCloskey, U.S. Fish and Wildlife Service; Paul Leffler U.S. Army Corps of Engineers, Chicago District; John Kuntz, Engineering Services Section, Division of Water; Erin Basiger, Division of Fish and Wildlife; and Dan Gossman, Lake County Surveyor's Office. A copy of the SEA 368 Inspection Report is enclosed.

IC 36-9-27-53.5 requires that prior to initiating work on a drainage project, which is subject to regulation under certain State and/or Federal environmental regulations, an on-site field review must occur. Within 30 days of the field review, the Department of Natural Resources is required to provide the county drainage board with a list of conditions that the Department of Environmental Management and the Department of Natural Resources would place on any permit for the proposed work. The Department of Natural Resources' conditions are valid for up to 2 years after the on-site field review provided a permit application is submitted within that time frame.

This letter is not approval for construction under any State or Federal Law.

Description: Along approximately 19,658' of the stream, the project proposes channel bottom dipping (sediment removal), channel bank excavation (slope repair), tree and debris removal, erosion control blanket and seeding, silt fencing, and mulched seeding. Channel bottom dipping work shall consist of dipping, dredging, and / or removing sediment at a depth of 0' – 2' from the channel bottom without disturbing the ditch banks. All work adjacent to wetland areas shall be performed from the banks opposite the wetland area when possible. All work shall be performed within the existing drainage board easement. The work shall also include the removal of sediment from identified culverts within the regulated drain. The contractor shall excavate the low flow channel below the existing flow line to the original channel bottom as shown on the Typical Ditch Cross Section Detail in the plans.

Location: Beginning at the east side of Monon Road working upstream for 19,658' ending at the west side of Mississippi Street located in Sections 3, 4, 7, 8, and 9, Township 32 North, Range 8 West, Lake County.

UTM Coordinates: Downstream North = 4564824, East = 468208
Upstream North = 4567240, East = 473640
(Schneider, Shelby, and LeRoy Quadrangle Maps)

Because the total stream length Singleton Ditch is more than 10 miles, a Construction in a Floodway permit is required from the Indiana Department of Natural Resources (IDNR) under *IC 14-28-1, Flood Control Act.*

The following are the Department of Natural Resources' comments as they would appear as conditions on a Construction in the Floodway Permit or in response to the Corps of Engineers as a result of a Section 404 review.

DEPARTMENT OF NATURAL RESOURCES COMMENTS

A field meeting was held with Dan Gossman, Lake County Surveyor's Office, on September 27, 2016 to discuss this project. The following comments were made.

1. Revegetate all bare and disturbed areas, except for land that will be used for crop production in the next growing season, with a mixture of grasses (excluding all varieties of tall fescue) and legumes as soon as possible upon completion. Low endophyte tall fescue may be used in the ditch bottom and side slopes only.

2. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife's Environmental Unit.

3. Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 3" in diameter, living or dead, with loose hanging bark or with cracks, crevices, or cavities) from April 1 through September 30.

4. Limit any channel widening and bank disturbance to the least vegetated side of the waterway.

5. Stabilize banks as work progresses so that no more than 200 linear feet are left disturbed at the completion of the workday.

6. Revegetate all areas disturbed during debris and sediment removal. Permanent seed and fertilize disturbed ditch banks at the end of each day. Revegetate areas with one of the seeding mixtures or species listed in the VEGETATIVE STABILIZATION AND SEEDING PRACTICE of the INDIANA DRAINAGE HANDBOOK from the Division of Water, Indiana Department of Natural Resources (October 1996) or other species that are approved by the Department as being suitable to site and climate conditions. At the completion of the project, re-seed and fertilize areas that do not have sufficient vegetative cover to control erosion.

7. Revegetate all spoil materials deposited in areas not used for crop production.

8. A representative of the Surveyor's Office or their contractor shall inspect erosion and sediment control practices daily and repair as necessary until all construction is complete and disturbed areas are permanently stabilized.

9. Install appropriate sediment control measures to prevent the flow of sediment laden water, resulting from dredging operations, back into the watercourse.

10. All work must conform with the existing bank at the upstream and downstream limits of the project site.

11. Except for trees cabled in-place for bank protection, do not leave felled trees, brush, or other debris in the floodway.

12. Place all excavated materials at least 10' landward of the top of the ditch bank; spread all excavated materials evenly to a thickness not to exceed 12" and slope landward from the channel or completely remove from the floodway.

13. * Note: For regulatory purposes, the floodway of Singleton Ditch is defined as the Special Flood Hazard Area shown on PANELS 375, 435, and 455 of the Lake County and Incorporated Areas Flood Insurance Rate Map dated January 18, 2012.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT COMMENTS

The following comments are directed toward the above-referenced project and are specific to the sections of the proposed project reviewed by IDEM.

1. Submit an application to IDEM for Section 401 Water Quality Certification if the Corps requires an individual Section 404 permit, a Regional General Permit for impacts greater than 0.1 acre, or a Nationwide Permit for which IDEM has denied Water Quality Certification. Application forms are available through the IDEM office.

2. Avoid and minimize impacts (filling or mechanical clearing) of jurisdictional wetlands to the greatest extent possible, and provide acceptable compensatory mitigation for all unavoidable impacts to jurisdictional wetlands greater than 0.1 acre.

3. Field mark the area where the filling or mechanical clearing of wetlands is unavoidable.

4. Install appropriate sediment control measures to prevent the flow of sediment laden water, resulting from dredging operations, back into the watercourse.

5. Limit the physical disturbance of banks, other soils, and existing vegetation to that which is necessary to achieve the purpose of the project.

6. Deposit dredged material on upland, or old spoils that are considered upland.

7. Revegetate all bare and disturbed areas, except for land that will be used for crop production in the next growing season, with a mixture of grasses (excluding all varieties of tall fescue) and legumes as soon as possible upon completion. Low endophyte tall fescue may be used in the ditch bottom and side slopes only.

8. Perform daily seeding of the ditch banks if the project is conducted during the agricultural growing season; seed the ditch banks as soon as possible if the project activity occurs during the dormant season.

9. Conduct logjam removal and tree preservation consistent with the practices established in the *Indiana Drainage Handbook*. The handbook was prepared in accordance with State of Indiana Public Law 329-1995 to serve as an administrative and technical guide for drainage activities within Indiana streams and ditches.

10. Encourage landowners affected by this project to place grassed filter strips on land immediately bordering the stream. The federal *Conservation Reserve Program* offers competitive annual payments for this practice on a continual sign-up basis. In addition, certain areas may qualify for special cost share or incentive programs for the establishment of filter strips. Contact the local county Soil and Water Conservation District or the Natural Resources Conservation Service for program and practice specific information.

11. Spread dredged material, where possible, in a manner that will not impede overland flow to the stream. This will help eliminate adjacent berm buildup and associated "points of concentrated flow" that are erosive and require expensive land treatment practices.

12. Work from only one side of the stream, and where possible, from the side of the stream which does not have adjacent wetlands. If no wetlands are present, work from the side with the fewest trees and woody vegetation. If both banks are equally vegetated, work only from the north or east side, whichever is appropriate.

13. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife's Environmental Unit.

14. Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 3" in diameter, living or dead, with loose hanging bark or with cracks, crevices, or cavities) from April 1 through September 30.

If you have any questions about the Department of Environmental Management's comments, please contact Marty Maupin at 317-409-7579. You can also contact the Office of Water Management through IDEM's Environmental Helpline at 1-800-451-6027.

In accordance with IC 36-9-27-53.5(g) a county surveyor or board that is aggrieved by the permit conditions disclosed under subsection (d)(3) has the right to enter into further negotiations with the Department of Natural Resources and the Department of Environmental Management in order to obtain a mutually agreeable set of permit conditions. To initiate the negotiations, please write a letter to Michael Neyer, PE, Director, Division of Water addressing the aggrieved portions of the comments and conditions included in this letter.

Thank you for your cooperation in this matter. If you should have any questions or would like to discuss modifications to the above comments, please contact me at our toll free number, 1-877-WATER55 (1-877-928-3755) or at (317) 232-4166.

Sincerely,

George C Bowman

George C. Bowman, PE
Assistant Director
Division of Water

GCB/ELB

pc: Marty Maupin, Office of Water Management, IDEM
Paul Leffler, U.S. Army Corps of Engineers, Chicago District
Elizabeth McCloskey, U.S. Fish and Wildlife Service

Enclosures: SEA 368 Inspection Report
Permit application and Instructions

SEA 368 INSPECTION REPORT

State Form 51594 (2-04)

Indiana Department of Natural Resources,
Division of Water
402 West Washington Street, Room W264
Indianapolis, IN 46204
ph. (317) 232-4160 or toll free 1-877-928-3755
Fax (317) 233-4579

SEA # 911 DATE Singleton Ditch

PROJECT INFORMATION

STREAM/LAKE Singleton Ditch

LOCATION Beginning at the east side of Marion Road working upstream for 19,658' ending at the west side of Mississippi Street.

DOWNSTREAM

Section 7 NW / NE / SW / SE; Township 32 (N) / S; Range 8 E / (W)

Quadrangle Schneider UTM 4564824 N 468208 E

City/Town Leroy Civil Township Cedar Creek County Lake

UPSTREAM

Section 3 NW / NE / SW / SE; Township 32 (N) / S; Range 8 E / (W)

Quadrangle Leroy UTM 4567240 N 473640 E

City/Town Lowell Civil Township Eagle Creek County Lake

DESCRIPTION:

One sided construction: ☐ Yes ☐ No Vegetated buffer strip: ☐ Yes ☐ No, If "yes", strip width _____ feet

Channel bottom dipping (sediment removal), channel bank excavation (slope repair), tree and debris removal, erosion control blanket and seeding, silt fencing, and mulched seeding. Channel bottom dipping work shall consist of dipping/dredging and/or removing sediment from the channel bottom without disturbing the ditch bank. All work adjacent to wetland areas shall be performed from the banks opposite the wetland area when possible. Work will also include removal of sediment from identified culverts within the regulated drain. The contractor shall excavate the low flow channel below the existing flow line to the original channel bottom as shown on Typical Bible Cross Section Detail in the plans. All work shall be performed w/in the existing drainage board easement.

ATTENDEES

		phone	fax
Water	John Kuntz	(317) 234-1096	( )
Fish & Wildlife	Erin Basiger	(317) 234-0586	( )
Soil Conservation		( )	( )
IDEM	Marty Maupin	(317) 233-2471	( )
County	Dan Bossman	(219) 755-3745	(219) 755-3750
SWCD		( )	( )
USF&WS	Elizabeth McCloskey	(219) 983-9753	( )
USACE	Paul Zeffler	(317) 946 5529	( )
Other		( )	( )

FINDINGS

propose use of filter socks vs silt fencing

Notes from meeting: 2 Quarrys = man made on either side of the ditch
- minimal tree clearing / if any

IDNR-SEA 368 FIELD REVIEW CONDITIONS

The following checked-off items are the Department of Natural Resources' comments in the form of conditions, as they would appear on a Construction in a Floodway Permit or a Ditch Reconstruction Permit for the project, or in response to the Corps of Engineers as a result of a Section 404 review.

Reference	Condition
☑ ER11	Revegetate all bare and disturbed areas, except for land that will be used for crop production in the next growing season, with a mixture of grasses (excluding all varieties of tall fescue) and legumes as soon as possible upon completion. Low endophyte tall fescue may be used in the ditch bottom and side slopes only
☑ ER16	Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Water's Environmental Unit
☐ ER17	For salmonid streams, do not work in the waterway from March 15 through June 15 and from July 15 through November 30 without the prior written approval of the Division of Water's Environmental Unit
☑ ER19	Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 3 inches in diameter, living or dead, with loose hanging bark or with cracks, crevices, or cavities) from April 1 through September 30
☐ ER20	Do not excavate or place spoil in any riparian wetland
☑ ER31	Limit any channel widening and bank disturbance to the ~~(north/south/east/west)~~ least vegetated side of the waterway
☑ ER65	Stabilize banks as work progresses so that no more than 200 lineal feet are left disturbed at the completion of the workday
☑ ER66	Revegetate all areas disturbed during debris and sediment removal. Permanent seed and fertilize disturbed ditch banks at the end of each day. Revegetate areas with one of the seeding mixtures or species listed in the VEGETATIVE STABILIZATION AND SEEDING PRACTICE of the INDIANA DRAINAGE HANDBOOK from the Division of Water, Indiana Department of Natural Resources (October 1996) or other species that are approved by the Department as being suitable to site and climate conditions. At the completion of the project, re-seed and fertilize areas that do not have sufficient vegetative cover to control erosion
☐ ER67	Protect newly seeded areas with anchored mulch at specified locations as listed under Special Conditions (page 7 of this form). Mulch materials, application rates, and anchoring methods must meet the criteria set forth in the INDIANA DRAINAGE HANDBOOK, Section 5.11 from the Division of Water, Indiana Department of Natural Resources (October 1996) or INDIANA HANDBOOK FOR EROSION CONTROL IN DEVELOPING AREAS, Sub-Section 3.1 from the Division of Soil Conservation, Indiana Department of Natural Resources (October 1992)
☑ ER70	Revegetate all spoil materials deposited in areas not used for crop production
☐ ER72	Use appropriate structural armament in channel straightening transition areas to blend with the existing channel. Use one of the appropriate structural armament practices listed in Section 5.5 of the INDIANA DRAINAGE HANDBOOK from the Division of Water, Indiana Department of Natural Resources (October 1996)
☐ ER73	Install appropriate armament below pipe outfalls
☐ ER74	Install drop structures where needed to convey runoff from adjacent areas to the channel without causing erosion
☐ ER75	Where vegetation alone is not sufficient to prevent erosion in channel bends, use one of the appropriate structural armament practices listed in Section 5.5 of the INDIANA DRAINAGE HANDBOOK from the Division of Water, Indiana Department of Natural Resources (October 1996)
☑ ER76	A representative of the Surveyor's Office or their contractor shall inspect erosion and sediment control practices daily and repair as necessary until all construction is complete and disturbed areas are permanently stabilized

IDNR-SEA 368 FIELD REVIEW CONDITIONS (continued)

The following checked-off items are the Department of Natural Resources' comments in the form of conditions, as they would appear on a Construction in a Floodway Permit or a Ditch Reconstruction Permit for the project, or in response to the Corps of Engineers as a result of a Section 404 review.

Reference	Condition
☑ ER78	Install appropriate sediment control measures to prevent the flow of sediment laden water, resulting from dredging operations, back into the watercourse
☑ FW02	All work must conform with the existing bank at the upstream and downstream limits of the project site
☑ FW03	Except for trees cabled in-place for bank protection, do not leave felled trees, brush, or other debris in the floodway
☐ FW21	Align spoil piles parallel to flow; the toe of the spoil piles must be located at least 10 feet landward of the top of the streambank; and a _____-foot opening must be provided every _____-feet along the spoil piles' length
☐ FW33	The plans for the project must include information that demonstrates that the project will not result in the lowering of _____ Lake, below its: 1) legally established water level of _____ feet, NGVD 2) average normal water level of _____ feet, NGVD, as determined from USGS lake level records, or 3) average water level of _____ feet, NGVD, as determined by the action of the water that has marked upon the soil of the bed of the lake a character distinct from that of the bank with respect to vegetation as well as the nature of the soil
☐ FW34	Do not alter the average normal water level of _____ Lake; if the average normal water level of the lake is altered, it will be the responsibility of the _____ County Drainage Board to take corrective actions to restore the average normal water level of the lake and to mitigate for any damages incurred
☑ FW35	Place all excavated materials at least 10 feet landward of the top of the ditch bank; spread all excavated materials evenly to a thickness not to exceed 12" and slope landward from the channel or completely remove from the floodway
☐ NP01	Avoid adverse impacts to the following state listed species: _____
☐ OR03	This project will occur within a section of _____ that has been designated as a _____ under the Indiana Natural, Scenic, and Recreational River System (IC 14-29-6). The applicant must contact _____ at 317-232-4070 for more information regarding this permit

IDEM-SEA 368 FIELD REVIEW CONDITIONS

The following checked-off items are the Department of Environmental Management's comments which, if a Department of the Army Section 404 permit is required, may appear as conditions on an IDEM Section 401 Water Quality Certification. These conditions may be subject to change following the receipt of a complete application.

Reference	Condition
☑ IDEM01	Submit an application to IDEM for Section 401 Water Quality Certification if the Corps requires an individual Section 404 permit, a Regional General Permit[1] for impacts greater than 0.1 acre, or a Nationwide Permit for which IDEM has denied Water Quality Certification. Application forms are available through the IDEM office. [1] *The activity will impact (fill) more than one-tenth (0.1) of an acre of Waters of the United States, including wetlands, special aquatic sites, creeks, ditches, streams, rivers, deep water areas, or open water areas; or the activity will impact (fill) more than 300 linear feet of stream channel or shoreline.*
☑ IDEM02	Avoid and minimize impacts (filling or mechanical clearing)[2] of jurisdictional wetlands to the greatest extent possible, and provide acceptable compensatory mitigation for all unavoidable impacts to jurisdictional wetlands greater than 0.1 acre. [2] *Mechanical clearing is the use of heavy equipment to push, pull, scrape, or excavate woody vegetation in order to remove it.*
☑ IDEM03	Field mark the area where the filling or mechanical clearing of wetlands is unavoidable.
☐ IDEM04	Use solid tile and anti-seep collars on the portion of the tile line that transects the wetland.
☑ IDEM05	Install appropriate sediment control measures to prevent the flow of sediment laden water, resulting from dredging operations, back into the watercourse.
☑ IDEM06	Limit the physical disturbance of banks, other soils, and existing vegetation to that which is necessary to achieve the purpose of the project.
☑ IDEM07	Deposit dredged material on upland, or old spoils that are considered upland.
☑ IDEM08	Revegetate all bare and disturbed areas, except for land that will be used for crop production in the next growing season, with a mixture of grasses (excluding all varieties of tall fescue) and legumes as soon as possible upon completion. Low endophyte tall fescue may be used in the ditch bottom and side slopes only.
☑ IDEM09	Perform daily seeding of the ditch banks if the project is conducted during the agricultural growing season; seed the ditch banks as soon as possible if the project activity occurs during the dormant season.
☑ IDEM10	Conduct logjam removal and tree preservation consistent with the practices established in the *Indiana Drainage Handbook*. The handbook was prepared in accordance with State of Indiana Public Law 329-1995 to serve as an administrative and technical guide for drainage activities within Indiana streams and ditches.
☑ IDEM11	Encourage landowners affected by this project to place grassed filter strips on land immediately bordering the stream. The federal *Conservation Reserve Program* offers competitive annual payments for this practice on a continual sign-up basis. In addition, certain areas may qualify for special cost share or incentive programs for the establishment of filter strips. Contact the local county Soil and Water Conservation District or the Natural Resources Conservation Service for program and practice specific information.
☑ IDEM12	Spread dredged material, where possible, in a manner that will not impede overland flow to the stream. This will help eliminate adjacent berm buildup and associated "points of concentrated flow" that are erosive and require expensive land treatment practices.
☑ IDEM13	Work from only one side of the stream, and where possible, from the side of the stream which does not have adjacent wetlands. If no wetlands are present, work from the side with the fewest trees and woody vegetation. If both banks are equally vegetated, work only from the north or east side, whichever is appropriate.

IDEM-SEA 368 FIELD REVIEW CONDITIONS (continued)

The following checked-off items are the Department of Environmental Management's comments which, if a Department of the Army Section 404 permit is required, may appear as conditions on an IDEM Section 401 Water Quality Certification. These conditions may be subject to change following the receipt of a complete application.

Reference	Condition
☑ IDEM14	Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Water's Environmental Unit.
☐ IDEM15	For salmonid streams, do not work in the waterway from March 15 through June 15 and from July 15 through November 30 without the prior written approval of the Division of Water's Environmental Unit.
☑ IDEM16	Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 3 inches in diameter, living or dead, with loose hanging bark or with cracks, crevices, or cavities) from April 1 through September 30
☐ IDEM17	Ensure that the contractor performing the work complies with Section 311 of the Federal Clean Water Act and with 327 IAC 2-6.1 concerning spills of oil and/or hazardous materials.

SEA 368 FIELD REVIEW SPECIAL CONDITIONS

The following checked-off items are:

☐ IDNR — *The Department of Natural Resources' comments in the form of conditions, as they would appear on a Construction in a Floodway Permit or a Ditch Reconstruction Permit for the project, or in response to the Corps of Engineers as a result of a Section 404 review.*

☐ IDEM — *The Department of Environmental Management's comments which, if a Department of the Army Section 404 permit is required, may appear as conditions on an IDEM Section 401 Water Quality Certification. These conditions may be subject to change following the receipt of a complete application.*

Agency		Reference	Condition
☐ IDNR	☐ IDEM	(SP01)-	
☐ IDNR	☐ IDEM	(SP02)-	
☐ IDNR	☐ IDEM	(SP03)-	
☐ IDNR	☐ IDEM	(SP04)-	

ATTENDEE RECOMMENDATION

Signature of Attendee	Agree with all project conditions checked	Agree with all project conditions except the following	Disagree with all project conditions checked
Marty Maupin ☐WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☑IDEM ☐COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☑		☐
[illegible] ☐WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☐COUNTY ☐SWCD ☐USF&WS ☒USACE ☐OTHER	☑		☐
Dan Sherman ☐WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☒COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☑		☐
Elizabeth McCloskey ☐WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☐COUNTY ☐SWCD ☒USF&WS ☐USACE ☐OTHER	☑		☐
Erin Baziger ☐WATER ☒FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☐COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☑		☐
[illegible] ☑WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☐COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☑		☐
☐WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☐COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☐		☐
☐WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☐COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☐		☐
☐WATER ☐FISH & WILDLIFE ☐SOIL CONSERVATION ☐IDEM ☐COUNTY ☐SWCD ☐USF&WS ☐USACE ☐OTHER	☐		☐

ADDITIONAL COMMENTS

DISPUTED CONDITIONS

CODE	REASON

Handout 4-A
11-16-16

DLZ
ARCHITECTURE • ENGINEERING • PLANNING
SURVEYING • CONSTRUCTION SERVICES

INNOVATIVE IDEAS
EXCEPTIONAL DESIGN
UNMATCHED CLIENT SERVICE

October 31, 2016

Bill Emerson, Jr.
Lake County Surveyor
2293 N. Main Street
Crown Point, IN 46307

RE: Gesiakowski Petition for Obstruction of Private Drainage

Dear Mr. Emerson;

Per our discussion on 10/27/16, DLZ Indiana, LLC (DLZ) has reviewed the Lake County GIS data with respect to the above referenced petition. The petition requests investigation into obstruction of a drainage way affecting the property at 10353 Cline Avenue.

DLZ has reviewed the 1998 contour data and 2013 contour data derived from the 2013 Indiana Digital Elevation Model (DEM). As shown on the enclosed drawing, the 1998 contour data shows a natural flow path to the north through what is now a subdivision (blue line). The 2013 contour data indicates the overland flow was re-routed around the subdivision, presumably during subdivision construction (red line). The 2013 contour data also indicates a high point on the east side of the re-routed flow. This high point may be the result of a culvert or other underground conveyance having been constructed.

DLZ recommends the Lake County Surveyor's Office (LCSO) conduct a field survey of the re-routed drainage way. This field survey should include:

- Topographic survey of the centerline of the re-routed drainage way (the red line on the attached drawing);
- Cross-sections of the re-routed drainage way, in particular at any high points;
- Documentation of any culvert crossings including size(s) and material of construction;
- Photographic documentation of general conditions and crossings.

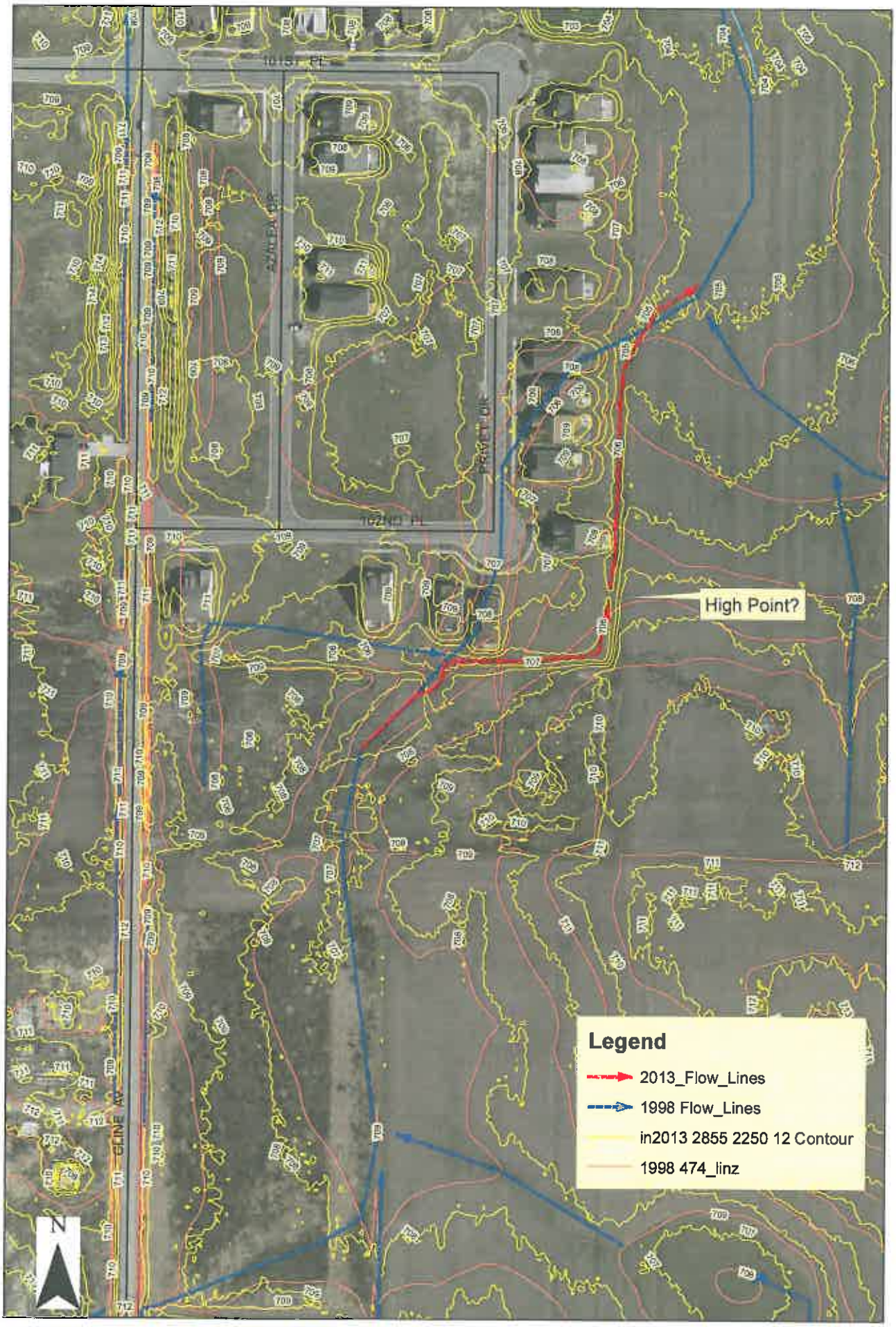
Upon completion of the survey, the LCSO should review the results to assist in determining if an obstruction of the overland flow exists.

Sincerely,

Frank Stewart

Frank D. Stewart, P.E.
Project Engineer

Encl: Drawing
CC: File



Lake County, Indiana

Gesiakowski Petition
10353 Cline Ave

6-A
11-16-16

RECEIVED
SEP 19 2016
LAKE COUNTY SURVEYOR

LAKE COUNTY DRAINAGE BOARD

RE: The Obstruction of Private Drainage

Comes now Paul + Christine Gesiakowski, who petitions the Lake County Drainage Board, per IC 36-9-27.4, for removal of drainage obstruction(s). Petitioner, in support of the petition, advised the Board that:

1. Petitioner is the owner of tract Lot 4 in JAMAR Estates per the records of the Lake County Auditor and that said tract is upstream of a drainage obstruction within a private tile drain or a defined natural surface water channel, causing an adverse effect on petitioners tract.

2. An obstruction to drainage exists on the downstream tract owned by See attached sheet which is listed on the Auditors Records as tract number See attached sheet and whose address is shown as see attached sheet. Said obstruction is caused by See attached and is located see attached

3. The petitioner has requested in writing & sent return receipt requested to the above named downstream owner, to remove the obstruction and at this time the obstruction has not been removed. In support of this there is attached a copy of the letter requesting the removal of the obstruction with the original return receipt. It has been thirty (30) or more days since the receipt of the letter by the above downstream owner.

4. Petitioner has submitted a copy of the Auditors Tax Map showing location of drain; location of obstruction; drainage shed of drain; and size of drain if tiled.

5. Petitioner has submitted a list of owners within the drainage shed of the private tile or natural stream showing names of owners; owners address; parcel number; and acres in tract. All of this information is per the Auditors Record. Also included is the estimated acres benefited by the drain for each tract listed.

6. Petitioner believes that the obstruction was: (Mark One)
   ____ Caused intentionally by the downstream owner.
   X Not caused intentionally by the downstream owner.

Paul Gesiakowski
Signed

Paul Gesiakowski
Printed

(219) 689-6831 (219) 801-6648
Phone Number(s)

Christine Gesiakowski
Signed

Christine Gesiakowski
Printed

10353 Cline Avenue
Address Crown Point

Lake County Drainage Board Petition

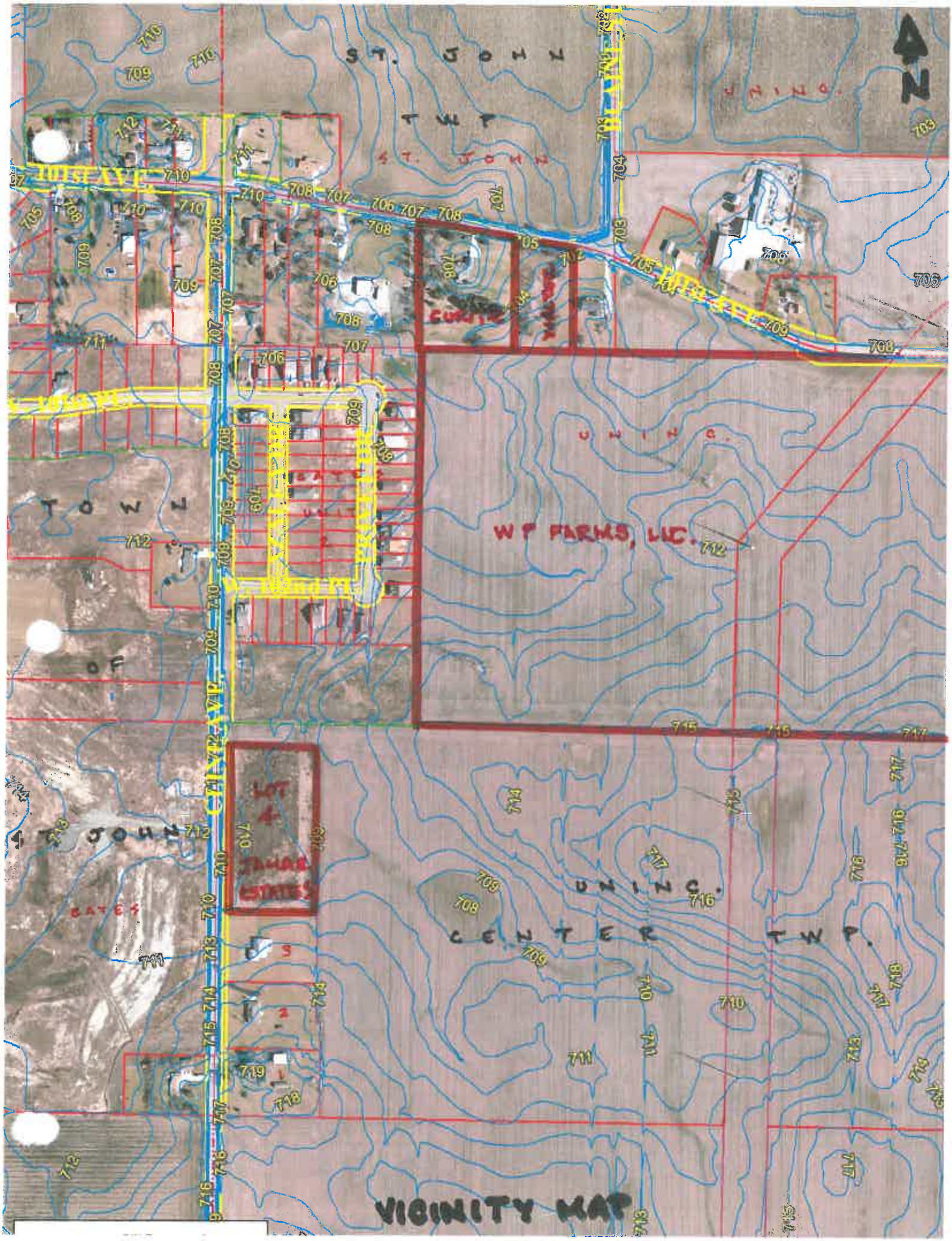
#2

James, Andrew
Parcel # 45-15-02-100-007.000-041
7411 W. 101st Avenue Crown Point IN 46307

Guritz, James O. + Patricia J.
Parcel # 45-11-35-352-006.000-032
7715 W. 101st Avenue Crown Point IN 46307

Walter, Christine A.
Parcel # 45-11-35-352-007.000-032
7635 W. 101st Avenue Crown Point IN 46307

Paul + Christine Gesiakowski
Lot 4 JAMAR Estates
10353 Cline Avenue Crown Point IN 46307
(219) 689-6831 + (219) 801-6648


ST. JOHN TWP
ST. JOHN
UNING.
N
TOWN
OF
ST JOHN
GATES
UNIT 2
WP FARMS, LLC.
LOT 4
JAMAR ESTATES
UNING.
CENTER TWP.
VICINITY MAP

Dear Christine Walter: July 7th, 2016

222 Ernest Street

Griffith, In 46319

This letter to you is to inform you of an attempt to reduce the risk of ongoing flooding that occurs on our property as the result of drainage flow issues that may exist on your property. We live at 10353 Cline Avenue and in March of 2015 we moved into the home we built there.

We have experienced multiple flooding events since then and have determined that storm water backs up out of the ground drains from north of where we live. The investigation with the Lake County Surveyors Office along with the Town of St. John has determined the natural overland flow through your property has obstructed the overland flow route from the Gates of St. John at the detention pond outfall to the intersection at the southwest corner of 101st Avenue and Blaine Street.

Per the Lake County Private Drain Petition procedure, which comes from the Indiana Drainage Code (I.C. 36-9-27.4), if after 30 days the obstruction or re-establishing the overland flow has not been removed or re-graded, the Lake County Drainage Board will be petitioned by us.

Any questions, please contact the Lake County Surveyors Office at 219.755.3745.

Sincerely,

Paul and Christine Gesiakowski

10353 Cline Avenue

Crown Point, IN 46307

Paul Gesiakowski
Christ Gesiakowski

RECEIVED
JUL 13 2016
LAKE COUNTY SURVEYOR

7015 3010 0002 0662 9097

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®

GRIFFITH, IN 46319

OFFICIAL USE

Certified Mail Fee $ $3.30	0373 12
Extra Services & Fees (*check box, add fee as appropriate*) $0.00	
☐ Return Receipt (hardcopy) $ $0.00	
☐ Return Receipt (electronic) $ $0.00	Postmark Here
☐ Certified Mail Restricted Delivery $ $0.00	
☐ Adult Signature Required $ $0.00	
☐ Adult Signature Restricted Delivery $	
Postage $ $0.47	07/07/2016
Total Postage and Fees $ $3.77	

Sent To

Street and Apt. No., or PO Box No.

City, State, ZIP+4®

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

Dear James and Patricia Guritz: July 7th, 2016

7715 101st Avenue

Crown Point, IN 46307

This letter to you is to inform you of an attempt to reduce the risk of ongoing flooding that occurs on our property as the result of drainage flow issues that may exist on your property. We live at 10353 Cline Avenue and in March of 2015 we moved into the home we built there.

We have experienced multiple flooding events since then and have determined that storm water backs up out of the ground drains from north of where we live. The investigation with the Lake County Surveyors Office along with the Town of St. John has determined the natural overland flow through your property has obstructed the overland flow route from the Gates of St. John at the detention pond outfall to the intersection at the southwest corner of 101st Avenue and Blaine Street.

Per the Lake County Private Drain Petition procedure, which comes from the Indiana Drainage Code (I.C. 36-9-27.4), if after 30 days the obstruction or re-establishing the overland flow has not been removed or re-graded, the Lake County Drainage Board will be petitioned by us.

Any questions, please contact the Lake County Surveyors Office at 219.755.3745.

Sincerely,

Paul and Christine Gesiakowski

10353 Cline Avenue

Crown Point, IN 46307

Paul Gesiakowski

Christine Gesiakowski

RECEIVED

JUL 13 2016

LAKE COUNTY SURVEYOR

7015 3010 0002 0662 9110

U.S. Postal Service™
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For delivery information visit our website at www.usps.com

CROWN POINT, IN 46307

OFFICIAL USE

Certified Mail Fee	$3.30	0373 12
$	$0.00	
Extra Services & Fees (check box, add fee as appropriate)		
☐ Return Receipt (hardcopy)	$ $0.00	
☐ Return Receipt (electronic)	$ $0.00	Postmark Here
☐ Certified Mail Restricted Delivery	$ $0.00	
☐ Adult Signature Required	$ $0.00	
☐ Adult Signature Restricted Delivery	$	
Postage	$0.47	
$		07/07/2016
Total Postage and Fees	$3.77	
$		

Sent To

Street and Apt. No., or PO Box No.

City, State, ZIP+4®

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

Dear W.P. Farms LLC:

July 7th, 2016

8051 Wicker Avenue Ste. A

St. John, IN 46373

This letter to you is to inform you of an attempt to reduce the risk of ongoing flooding that occurs on our property as the result of drainage flow issues that may exist on your property. We live at 10353 Cline Avenue and in March of 2015 we moved into the home we built there.

We have experienced multiple flooding events since then and have determined that storm water backs up out of the ground drains from north of where we live. The investigation with the Lake County Surveyors Office along with the Town of St. John has determined the natural overland flow through your property has obstructed the overland flow route from the Gates of St. John at the detention pond outfall to the intersection at the southwest corner of 101st Avenue and Blaine Street.

Per the Lake County Private Drain Petition procedure, which comes from the Indiana Drainage Code (I.C. 36-9-27.4), if after 30 days the obstruction or re-establishing the overland flow has not been removed or re-graded, the Lake County Drainage Board will be petitioned by us.

Any questions, please contact the Lake County Surveyors Office at 219.755.3745.

Sincerely,

Paul and Christine Gesiakowski

10353 Cline Avenue

Crown Point, IN 46307

Paul Gesiakowski

Christ Gesiakowski

RECEIVED

JUL 13 2016

LAKE COUNTY SURVEYOR

7015 3010 0002 0662 9103

U.S. Postal Service™
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SAINT JOHN, IN 46373

OFFICIAL USE

Certified Mail Fee $3.30

Extra Services & Fees (check box, add fee as appropriate)
- ☐ Return Receipt (hardcopy) $ $0.00
- ☐ Return Receipt (electronic) $ $0.00
- ☐ Certified Mail Restricted Delivery $ $0.00
- ☐ Adult Signature Required $ $0.00
- ☐ Adult Signature Restricted Delivery $

Postage $0.47

Total Postage and Fees $3.77

0373
12

Postmark Here

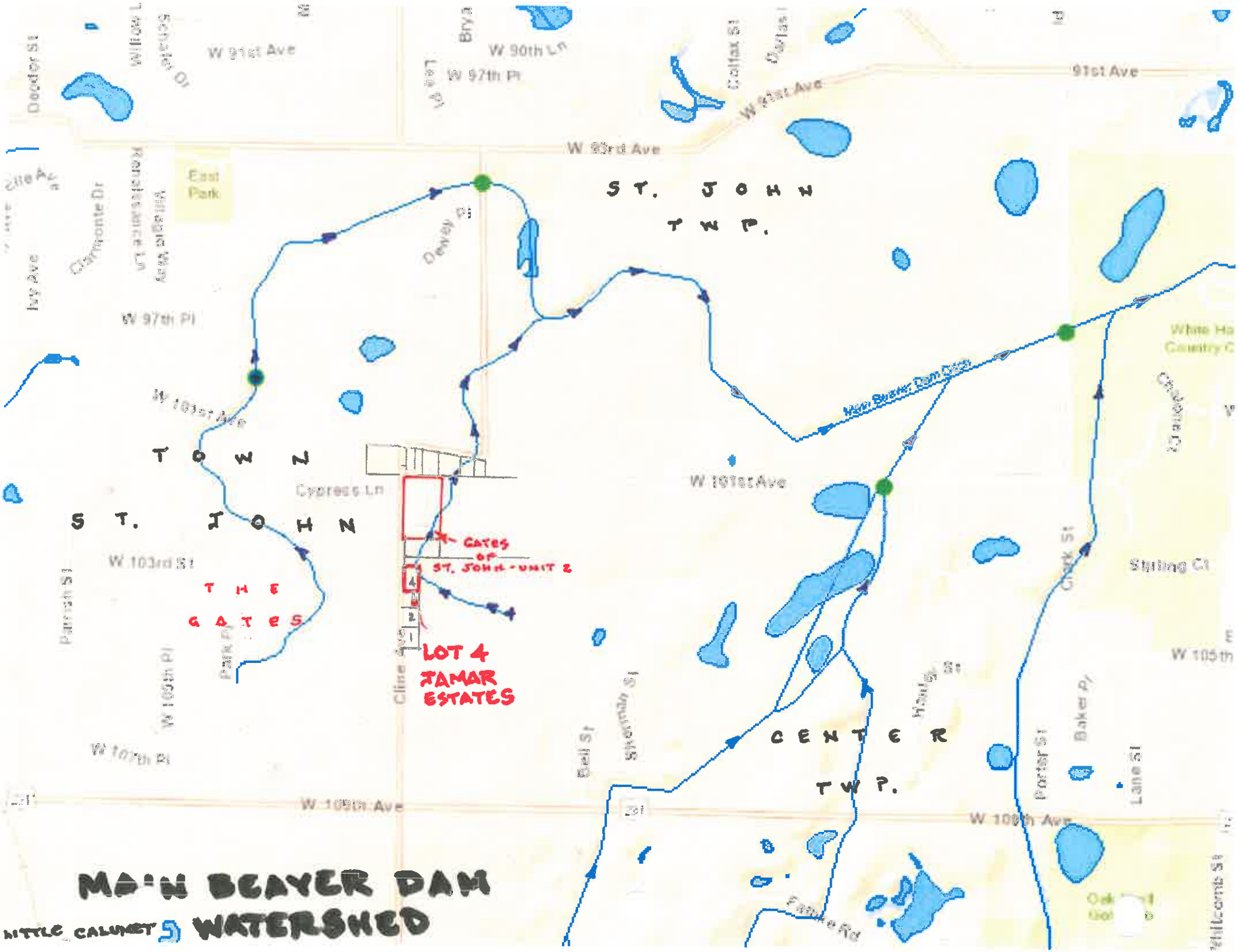
07/07/2016

Sent To

Street and Apt. No., or PO Box No.

City, State, ZIP+4®

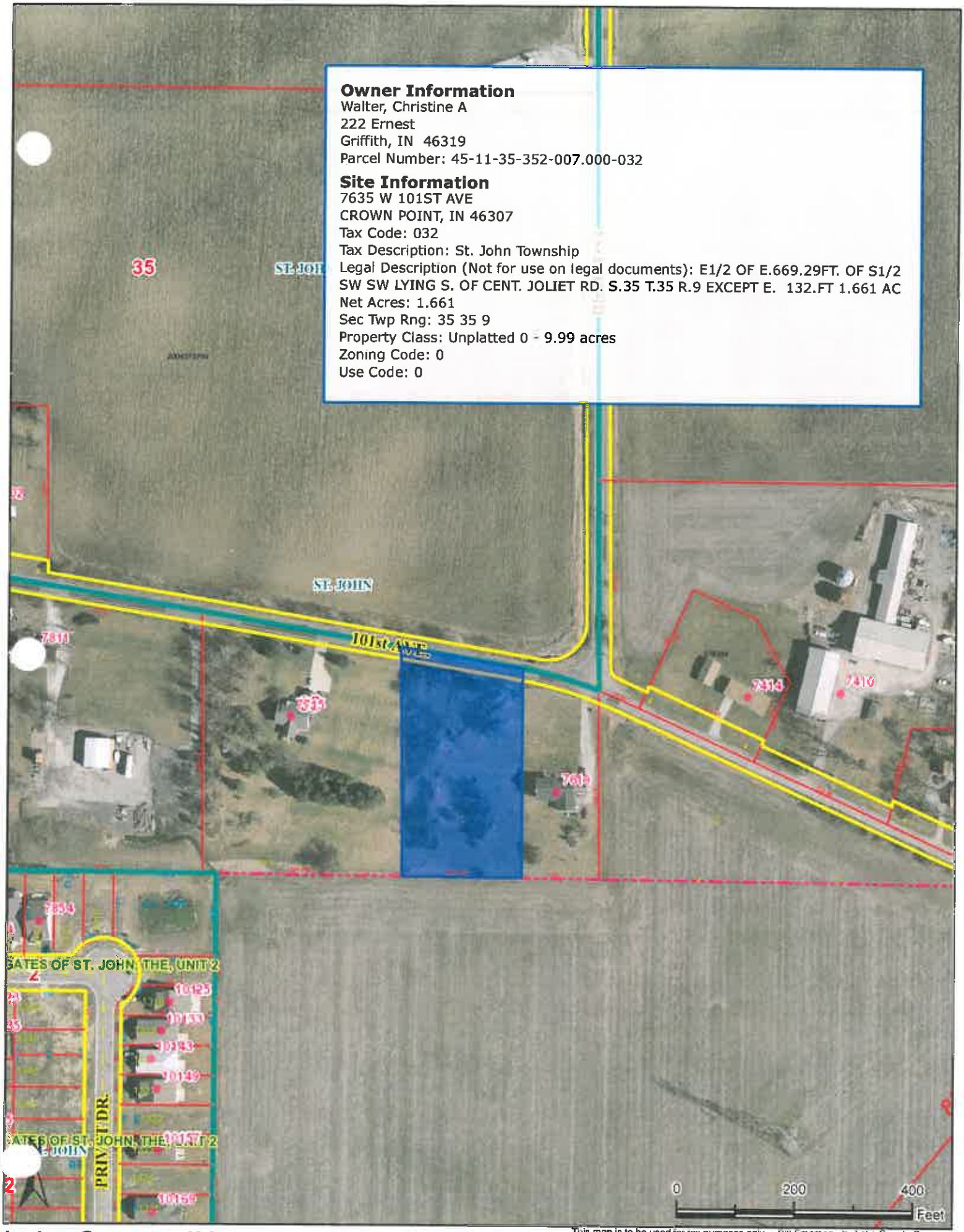
PS Form 3800, April 2015, PSN 7530-02-000-9047 See Reverse for Instructions



W 91st Ave
W 90th Ln
W 97th Pl
Colfax St
91st Ave
W 93rd Ave
East Park
ST. JOHN TWP.
Dewey Pl
W 97th Pl
W 101st Ave
TOWN
ST. JOHN
Cypress Ln
W 101st Ave
Main Beaver Dam Ditch
GATES OF ST. JOHN - UNIT 2
W 103rd St
THE GATES
LOT 4 JAMAR ESTATES
Cline Ave
Park Pl
W 109th Pl
W 107th Pl
Bell St
Sherman St
CENTER TWP.
Clark St
Stirling Ct
W 105th
Baker Pl
Porter St
Lane St
W 109th Ave
W 109th Ave
Fannie Rd
Whitcomb St
MAIN BEAVER DAM
WATERSHED

Owner Information
Walter, Christine A
222 Ernest
Griffith, IN 46319
Parcel Number: 45-11-35-352-007.000-032

Site Information
7635 W 101ST AVE
CROWN POINT, IN 46307
Tax Code: 032
Tax Description: St. John Township
Legal Description (Not for use on legal documents): E1/2 OF E.669.29FT. OF S1/2 SW SW LYING S. OF CENT. JOLIET RD. S.35 T.35 R.9 EXCEPT E. 132.FT 1.661 AC
Net Acres: 1.661
Sec Twp Rng: 35 35 9
Property Class: Unplatted 0 - 9.99 acres
Zoning Code: 0
Use Code: 0

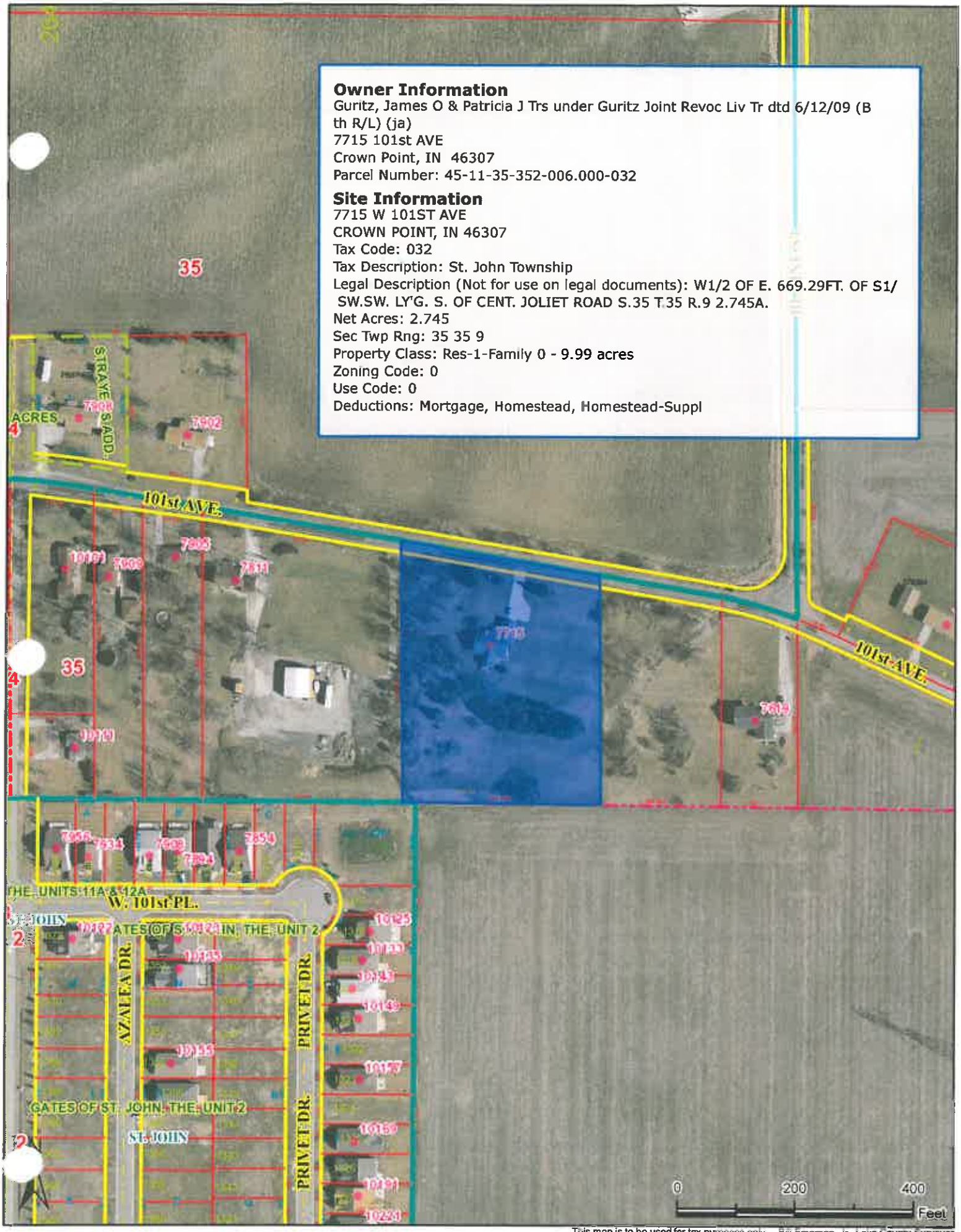


This map is to be used for tax purposes only. - Bill Emerson, Jr., Lake County Surveyor

Lake County, IN
Date Printed: April 12, 2016

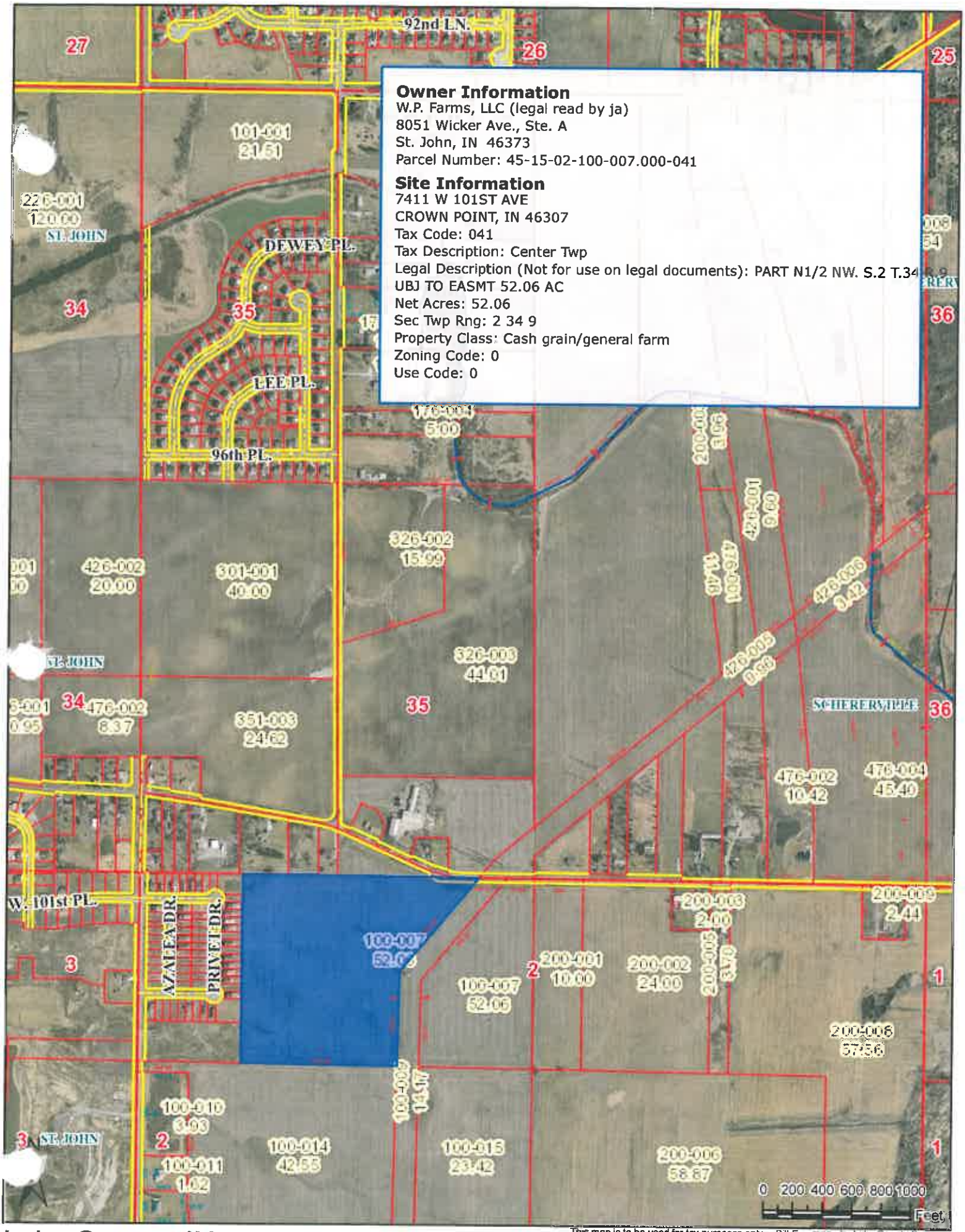
Owner Information
Guritz, James O & Patricia J Trs under Guritz Joint Revoc Liv Tr dtd 6/12/09 (B th R/L) (ja)
7715 101st AVE
Crown Point, IN 46307
Parcel Number: 45-11-35-352-006.000-032

Site Information
7715 W 101ST AVE
CROWN POINT, IN 46307
Tax Code: 032
Tax Description: St. John Township
Legal Description (Not for use on legal documents): W1/2 OF E. 669.29FT. OF S1/ SW.SW. LY'G. S. OF CENT. JOLIET ROAD S.35 T.35 R.9 2.745A.
Net Acres: 2.745
Sec Twp Rng: 35 35 9
Property Class: Res-1-Family 0 - 9.99 acres
Zoning Code: 0
Use Code: 0
Deductions: Mortgage, Homestead, Homestead-Suppl



This map is to be used for tax purposes only. - Bill Emerson, Jr., Lake County Surveyor

Lake County, IN
Date Printed: April 12, 2016



Owner Information
W.P. Farms, LLC (legal read by ja)
8051 Wicker Ave., Ste. A
St. John, IN 46373
Parcel Number: 45-15-02-100-007.000-041

Site Information
7411 W 101ST AVE
CROWN POINT, IN 46307
Tax Code: 041
Tax Description: Center Twp
Legal Description (Not for use on legal documents): PART N1/2 NW. S.2 T.34
UBJ TO EASMT 52.06 AC
Net Acres: 52.06
Sec Twp Rng: 2 34 9
Property Class: Cash grain/general farm
Zoning Code: 0
Use Code: 0

Lake County, IN
Date Printed: October 13, 2015

This map is to be used for tax purposes only. - Bill Emerson, Jr., Lake County Surveyor

6-B
11-16-16

Office of the Lake County Surveyor

Lake County Government Center • 2293 North Main Street • Crown Point, Indiana 46307
Phone: (219) 755-3745 • Fax: (219) 755-3750

Bill Emerson, Jr.
County Surveyor

LAKE COUNTY DRAINAGE BOARD
LAKE COUNTY, INDIANA
I.C. 36-9-27.4

RE: Obstruction of Private Drainage

Comes now Lake County Highway Department, who petitions the Lake County Drainage Board, per IC 36-9-27.4, for removal of drainage obstruction(s). Petitioner,in support of the petition, advised the Board that:

1. Petitioner is the owner of roads 133rd Avenue west of State Road 55 and 132nd Lane in South Point Estates 2nd Addition per the records of the Lake County Auditor and Indiana Department of Transportation and that said tract is upstream of a drainage obstruction within a private tile drain or a defined natural surface water channel, causing an adverse effect on petitioners tract.

2. An obstruction to drainage exists on the downstream tract owned by Addison, Guy and Judith Addison Revocable Living Trust which is listed on the Auditors Records as tract number 45-16-28-100-001.000-041 and whose address is shown as 13411 Grant Street, Crown Point, IN 46307. Said obstruction is caused by Failed Field Tile and Grassed Waterway and is located on and across the northern portion of said tract of land referenced above.

3. The petitioner has requested in writing & sent return receipt requested to the above named downstream owner, to remove the obstruction and at this time the obstruction has not been removed. In support of thisthere is attached a copy of the letter requesting the removal of the obstruction with the original return receipt. It has been thirty (30) or more days since the receipt of the letter by the above downstream owner.

4. Petitioner has submitted a copy of the Auditors Tax Map showing location of drain; location of obstruction; drainage shed of drain; and size of drain if tiled.

5. Petitioner has submitted a list of owners within the drainage shed of the private tile or natural stream showing names of owners; owners address; parcel number; and acres in tract. All of this information is per the Auditors Record. Also included is the estimated acres benefited by the drain for each tract listed.

6. Petitioner believes that the obstruction was: (Mark One)
   _____Caused intentionally by the downstream owner.
   __X_____Not caused intentionally by the downstream owner.

Signed

MARCUS W. MALCZEWSKI
Printed

219 663 0525
Phone Number(s)

11-8-2016
Signed

DUANE A. ALVERSON
Printed

LAKE COUNTY HIGHWAY DEPARTMENT
1100 E. MONITOR STREET
Address CROWN POINT, IN 46307

INSTRUCTIONS FOR FILING
OBSTRUCTIONOF PRIVATEDRAIN PETITION

The 1996 Indiana State Legislature provided some relief for property owners that are adversely affected due to downstream blockage(s) in a private drain or unregulated natural surface watercourse.

This new legislation isIndiana Code 36-9-27.4, effective July 1, 1996. Included in Indiana Code 36-9-27.4 is a process in which a landowner may petition the drainage board of the county in which an obstruction allegedly exists, to remove or authorize, or order, the removal of the obstruction.

The Lake County Surveyor's Office and the Lake County Drainage Board have a Private Drainage Petition form available to assist Lake County residents who wish to resolve private drainage issues through petitioning the Lake County Drainage Board.

The following information is provided to explain and guide residents through the petitioning process.

Before the Drainage Board can be petitioned the affected landowner must first request, in writing, via registered mail, that the owner of the land where the obstruction exists remove the obstruction.

If after 30 days the obstruction has not been removed, the affected landowner may petition the Drainage Board.

To complete the private drain petition the petitioner must include all required information in the spaces provided on the petition form.

Section 1 – the petitioner must provide the parcel number of the affected property. Thisinformation can be obtained at the County Auditor's Office.

Section 2 –requires the landowners name, parcel number, and mailing address of the property on which the obstruction exists. This information may also be obtained at the County Auditor's Office. In addition, a brief description of the nature of the blockage is requested as well as description of where on the property the obstruction is located.

Section 3 – is requesting a copy of the letter sent via registered mail to the downstream landowner. The original return receipt must also be submitted with the petition.

Section 4 – requires that a copy of the Auditors Tax Map be included showing location of the drain, location ofobstruction, drainage shed of drain, and size of tile if a tile drain.

The drainage shed refers to the area of land that is benefited, or area of land that flows surface water into the drain. The County Surveyor's Office or the Natural Resources Conservation Service may be able toassist the petitioner in determining the drainage shed if necessary.

Section 5 – requires that once the drainage shedhas been determined, a list of owners of all land within that watershed be submitted. In addition to the owners name this list shall also include the owners address, parcel number, and acres in the tract. This information can be obtained from the County Auditor's Office. Also required is the estimated acres of each tract that is benefited by the drain.

Section 6 – is to help define the nature of the obstruction and to determine if the petitioner believes that the obstruction was or was not created intentionally.

The petition must be signed by the petitioner(s).

A filing fee of $50 is required, check or money order, made payable to the Lake County Surveyor.

Office of the Lake County Surveyor

Lake County Government Center • 2293 North Main Street • Crown Point, Indiana 46307
Phone: (219) 755-3745 • Fax: (219) 755-3750

Bill Emerson, Jr.
County Surveyor

LAKE COUNTY DRAINAGE BOARD
FINDINGS OF FACT AND ORDER ON PETITION TO REMOVE
OBSTRUCTION PURSUANT TO I.C. 36-9-27.4-1 THROUGH 25

After a hearing on a petition identified as file number _ filed by _ (Names of Petitioners), the Lake County Drainage Board on the __ day of __ , __ heardevidence and now makes the following findings and order:

1. The obstruction of a **mutual drain** or a **natural surface watercourse** that isalleged in the petition exists. (I.C.36-9-27.4-14(a)(1)

   _____Yes _____No

   If Yes, proceed to number two ***If No, deny petition***

2. The removal of the obstruction will promote better drainage of thepetitioner's land. (I.C.36-9-27.4-14(a)(2)(A)

   _____Yes _____No

   If Yes, proceed to number three ***If No, deny petition***

3. The removal of the obstruction will not cause unreasonable damage to theland of therespondents. (I.C.36-9-27.4-14(a)(2)(B)

   _____Yes _____No

   If Yes, proceed to number four ***If No, deny petition***

4. Based upon a preponderance of the evidence presented, the Board findsthat the obstruction of the **mutual drain** or **natural surface watercourse** wascreated intentionally by one or more of the respondents. (LC. 36-9-27.4-15)

   _____Yes _____No

   If Yes, proceed to number five ***If No, proceed to number six***

5. Having found that the obstruction of the **mutual drain** or **natural surfacewatercourse** was created intentionally by at least one of the respondents,the Drainage Board orders:

   a. ___ the respondents to remove the obstruction at their expense
   b. ___ the county surveyor to remove the obstruction at the expenseof the respondents.

   (choose one)(I.C. 36-9-27.4-16)

   Stop, or proceed to number 11

6. Does the petition relate to a ___ "**Mutual Drain**" or a ___"**Natural SurfaceWatercourse**" (choose one)

   If **Natural Surface Watercourse** proceed to number seven
   If **Mutual Drain** proceed to number nine
   (I.C.36-9-27.4-18(a))

7. Having found that the obstruction of a natural surface watercourse was notcreated intentionally by any of the respondents, the Drainage Board, afterconsultation with the petitioner, respondents and County Surveyor:
   a. ___ authorizes the petitioner to remove the obstruction atthe expense of the petitioner. (I.C. 36-9-27.4-18(b) (1))
   b. ___ directs the county surveyor to remove the obstructionat the expense of the petitioner. (I.C. 36-9-27.4-18(b) (2))(choose one) - Proceed to number eight

8. If desired, the Drainage Board may order the petitioner to also bear theexpenses relating to the monetary value of the harm and inconvenience thatthe respondents will incur as a result of the removal of the obstruction fromthe **natural surface watercourse**. (It is not required that the respondents bepaid for the harm and inconvenience incurred.) (I.C.36-9-27.4-18(d))
   a. ___ Petitioners are to pay expenses of Respondents inthe sum of $ _____
   b. ___ Petitioners are not to pay any expenses ofRespondents. (choose one)

Stop or Proceed to number 11

9. Having found that the obstruction of a **mutual drain** was not createdintentionally by any of the respondents, the Drainage Board:
   a. ___ authorizes the petitioner to remove the obstruction.
   b. ___ authorizes the respondents to remove the obstruction.
   c. ___ directs the county surveyor to remove the obstruction.
   d. ___ directs the obstruction be removed through the jointefforts of at least two of the persons referred to in thissubsection. (fill in names)

   _____

   (choose one) (I.C.36-9-27.4-19)

Proceed to number 10

10. The cost of the obstruction of the **mutual drain** must be borne by the ownersof all tracts of land that are benefited by the drain. The benefited tracts areidentified as follows:
    a. The tracts of land benefited by the drain. _____

    _____

    b. The owners of the tracts of land referred to above _____

    _____

(the identity of the owners of the tracts of land referred to above arethose either known to the Drainage Board or whose identity can bedetermined through the records of the County Recorder.)

c. The percentage assigned to each tract for the cost of removing theobstruction must be equal to the ratio of the total length of theparticular segment of the drain that benefits the tract. The costs ofremoving the obstruction are apportioned as follows among thetracts of land that are benefited by the drain.

_____% to tract 1,___%to tract 2, ___% to tract 3,___% to tract 4,___% to tract 5,___% to tract 6,_% to tract 7,___% to tract 8,___% to tract 9,___% to tract 10.

d. The owners of each tract of land referred to above ordered to paytheir percentage. (total cost of removing obstruction multiplied by the percentageassigned to each tract above)(the percentage of the total costs assigned to a tract mustcorrespond to the ratio of the total length of the drain to the length ofthe particular segment of the drain that benefits the tract.) (I.C.36-9-27.4-19(c))

All owners of a particular tract of land that is the subject of an order regarding **amutual drain** obstruction are jointly and severally responsible for the payment of theamount apportioned to that tract. Any owner of a particular tract who pays all or a portionof the amount may bring an action to

obtain contribution from a co-owner of the same tractwho did not pay any equal or greater portion of the amount. (I.C.36-9-27.4-20)

Stop or proceed to number 11

11. Payment for removal of obstruction. Advance on general drainimprovement fund.

a._____ The Board may provide that the initial costs of the removalwork be paid by one or more persons subject to the order.The following persons will be responsible for the initialpayment of the cost of removal which will be reimbursed byone or more persons subject to the order.

_____

_____

_____

OR

b._____ The Board may authorize an advance from the general drainimprovement fund for the payment of the costs of theremoval work and said advance will be reimbursed by one or more persons subject to the order:

_____

_____

_____

(choose one) (I.C.36-9-27.4-12(2))

Recovery of Unpaid Expenses-Enforcement - (a) If a person who isrequired by an order of a drainage board under this chapter to pay anamount or bear an expense does not comply with the requirement, theamount for which the person is responsible may be recovered by:

(1) the drainage board, as custodian of the general drain improvementfund, if the amount wasadvanced from the general drainimprovement fund; or

(2) another person subject to the order who has paid the amount and isentitled to reimbursement.

(b) An amount may be recovered from a person under subsection (a) throughan action in a court having jurisdiction in the same manner that a creditormay recover an amount owed under a contract. In an action brought underthis subsection, the plaintiff may also be awarded costs and reasonableattorney's fees. (I.C. 36-9-27.4-22)

So ordered after hearing this_____ day of_____20_____.

LAKE COUNTY SURVEYOR

_____

BILL EMERSON, JR.

LAKECOUNTY DRAINAGE BOARD

_____

GERRY SCHEUB, CHAIRMAN

_____

KYLE ALLEN, SR., MEMBER

_____

MICHAEL C. REPAY, MEMBER

DEFINITIONS

"Mutual Drain"means a drain that:

(1) is located on two (2) or more tracts ofland that are under differentownership;

(2) was established by the mutual consent of all the owners; and

(3) was not established under or made subject to any drainage statute.

I.C.39·9·27-2

"Intentionally" means:

to do something purposely, and not accidentally or involuntarily. Person acts"intentionally" if he desires to cause consequences of his act or he believes consequencesare substantially certain to result. When used with reference to civil and criminalresponsibility, a person who contemplates any result, as not unlikely to follow from adeliberate act of his own, may be said to intend that result, whether he desires it or not.

PROPOSED BUDGET PRIORITIES – 2017
LITTLE CALUMET RIVER WATERSHED

HANDOUT 8 - A - 1
11-16-16

LAKE COUNTY COUNCIL TOTAL APPROPRIATION (BOTH WATERSHEDS)	**$**	**1,200,000.00**
LITTLE CALUMET RIVER WATERSHED 56%	**$**	**674,568**
LITTLE CALUMET ENGINEERING	**$**	**61,324**
LITTLE CALUMET CONSTRUCTION	**$**	**613,244**
TURKEY CREEK LATERAL NO. 6 ANNUAL MAINTENANCE - East side of I-65, Hobart (Hobart Twp)	**$**	**15,000.00**
SPRING STREET DITCH - Junction St to Avenue H, Schererville 0.95mi± (St John Twp)	$	85,320.00
CADY MARSH DITCH – Ross Rd to Grant St (2.24mi±)(Calumet Twp)	$	153,129.00
SCHERERVILLE DITCH/DYER DITCH - TEIBEL PONDS RESTORATION, Schererville (St John Twp)	$	110,000.00
GRAPER DITCH - from State St to confluence with Niles Dt, Winfield 0.95mi± (Winfield Twp)	$	80,480.00
TURKEY CREEK LATERAL NO. 6 BROOKWOOD POND - Brookwood Sub, Merrillville (Ross Twp)	$	75,000.00
BEAVER DAM DITCH LATERAL NO. 2 - Broadway to Madison, Crown Point .37mi± (Center Twp)	$	75,000.00
BEAVER RELOCATION	$	9,700.00
EMERGENCY DAM REMOVAL	$	9,615.00
TOTAL CONSTRUCTION	**$**	**613,244.00**
	$	-

APPROVED THIS 16th DAY OF NOVEMBER, 2016

Bill Emerson Jr., Lake County Surveyor

Gerry Scheub, Chairman

K.B.

Michael C. Repay, Member

D.H.

Kyle W. Allen Sr., Member

PROPOSED BUDGET PRIORITIES – 2017
KANKAKEE RIVER WATERSHED

HANDOUT 8 - B - 1
11-16-16

LAKE COUNTY COUNCIL TOTAL APPROPRIATION (BOTH WATERSHEDS)	**$**	**1,200,000.00**
KANKAKEE RIVER WATERSHED 44%	**$**	**525,431**
KANKAKEE ENGINEERING	**$**	**47,766**
KANKAKEE CONSTRUCTION	**$**	**477,665**
ERNIE NIEMEYER CREEK & LEVEE MAINTENANCE (Cedar Creek Twp.) U.S. 41 to Shelby Annual Maintenance 5.5± Miles	$	12,000.00
SINGLETON DITCH - I-65 to S.R. 2 (3.15 mi ±) (Cedar Creek Twp.) *TOTAL ESTIMATE $ 249,480.00 = $101,980 (LCDB) $59,000 (MS4)+ $88,500 (SS-LLC)*	$	101,980.00
WEST CREEK - 125th Ave to 109th Ave (2.1 mi ±) (Hanover Twp.)	$	106,320.00
BROWN LEVEE DITCH from S.R. 55 to Norfolk Southern Railroad (1.65 mi ±)(Eagle Creek Twp.)	$	90,680.00
GRIESEL DITCH LATERAL NO. 12 - east of Chase to south of Belshaw (0.9mi±)(Cedar Creek Twp)	$	47,520.00
MCCONNELL DITCH MAINTENANCE (Morse St to 171st Ave) (Cedar Creek Twp.) *TOTAL CONTRACT $430,311.85=$103,855.36 (2016 DB)$111,300.03 (2016 MS4) + $103,856.44 (2017 DB)$111,300.02 (2017 MS4)*	**$**	**103,856.44**
BEAVER RELOCATION	$	6,800.00
EMERGENCY DAM REMOVAL	$	8,508.56
TOTAL CONSTRUCTION	**$**	**477,665.00**

APPROVED THIS 16th DAY OF NOVEMBER, 2016

Bill Emerson, Jr., Lake County Surveyor

Gerry Scheub, Chairman

K.B.

Michael C. Repay, Member

D.H.

Kyle W. Allen Sr., Member

Handout 9 - B - 1
11-16-16

Bailey Arm Maintenance Phase I
W 221st Ave to Wicker Ave (US 41)
Lake County, Indiana

Specifications and Bid Documents

November 16, 2016

Prepared By:

American Structurepoint, Inc.
7260 Shadeland Station
Indianapolis, IN 46256
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Fax: 317-543-0270

Table of Contents

Section **Page**

1.0 SPECIAL INSTRUCTION TO BIDDERS 3

1.1 GENERAL INFORMATION 3

1.2 BIDDERS INFORMATION 3

1.3 RIGHT OF THE BOARD 7

2.0 GENERAL INFORMATION 8

2.1 PERMITS 8

2.2 CONSTRUCTION METHODS AND STANDARDS 8

2.3 WORK WITHIN EASEMENTS 8

2.4 MAINTENANCE OF DRAINWAYS 8

2.5 AUTHORIZATION TO PROCEED 8

2.6 CONTRACTOR'S SCHEDULE 8

2.7 CONTRACTOR'S EQUIPMENT AND METHOD OF CONSTRUCTION 8

3.0 TECHNICAL SPECIFICATIONS 9

3.1 CHANNEL BOTTOM DIPPING (SEDIMENT REMOVAL) 9

3.2 SILT FENCING / SILTWORM 10

3.3 MULCHED SEEDING 11

3.4 CHANNEL BANK EXCAVATION (SLOPE REPAIR) 11

3.5 EROSION CONTROL BLANKET AND SEEDING 12

3.6 TREE AND DEBRIS REMOVAL 13

BID DOCUMENTS

PLANS

1.0 SPECIAL INSTRUCTION TO BIDDERS

1.1 GENERAL INFORMATION

It is the intention of the *Lake County Drainage Board*, hereinafter referred to as the **BOARD**, to secure bids for maintenance work to be performed on the *Bailey Arm Maintenance Phase I* hereinafter referred to as the **PROJECT**, as identified and described herein and in the plans and specifications prepared by *American Structurepoint, Inc.*, hereinafter referred to as the **ENGINEER**.

All bids for the proposed work shall be submitted on a unit price as set forth on the bid proposal form attached herein, all in accordance with the **PROJECT** documents.

The **BOARD** intends to review all bids for the **PROJECT** and upon final review and determination, award the bid to the successful bidder. Among other considerations, the successful bidder will be determined by the lowest overall total bid as provided in the bid proposal form attached herein. The total quantity of work to be awarded by the **BOARD** will be based on the total dollars available at the time of contract award and the respective applicable unit prices of the successful bidder.

The bid proposal form to the **BOARD** consisting of 1 page, as set out hereinafter, shall be attached and submitted with Bid Form 96 and Form 95.

1.2 BIDDERS INFORMATION

It is the responsibility of all **PROJECT** bidders to review all bid documents to ascertain their effect on each bid.

It is the responsibility of all **PROJECT** bidders to carefully examine the **PROJECT** site and fully inform himself/herself with the limitations and conditions related to the work covered by his/her bid, and shall include in his/her bid a sum to cover the cost of all such items. It is the purpose and intent of the contract documents that a fully complete job be accomplished. It is the responsibility of each bidder to include all costs necessary to provide all labor, materials and equipment for the portion of the work bid upon, including incidentals, whether or not specifically called for in the **PROJECT** plans and specifications. Each bidder by making his/her bid represents that he/she has read and understands the bid documents and represents that he/she has visited the site and has familiarized himself/herself with all the conditions under which the work is to be performed.

It is the responsibility of all bidders to contact all utility companies and public and/or private agencies to become familiar with the specific locations of all existing utilities and systems that will affect the work. The successful bidder shall protect all such systems and

utilities, including all other improvements which may exist within or adjacent to the work area during the execution of the work. All existing improvements, utilities and systems that may be damaged during construction shall be repaired and/or replaced to a condition at least equal to that prior to such damage at no additional expense to the **BOARD**. All such companies shall be notified prior to commencement of the work in order that all such lines be located and identified by the affected companies.

All inquiries as to the documents, interpretations, substitutions, conflicts, discrepancies, omissions and questions shall be referred to the **ENGINEER**, representative of the **BOARD**, who in turn will refer same to the **BOARD**.

All bidders in doubt as to the true meaning of any part of the **PROJECT** documents shall submit to the **ENGINEER**, not less than seven (7) days before the bid deadline, a written request for interpretation and clarification.

Bidders are responsible for acquiring any and all issued addenda in time to incorporate them into their bid. Each bidder shall enumerate all addenda he has received in his bid.

All bidders and their subcontractors, if any, shall furnish proof, satisfactory to the **BOARD** that they are in good standing and are authorized to do business in the State of Indiana and that they are licensed to perform the work within the County of Lake. All bidders shall furnish a list of their subcontractors, if any, including name, address and telephone numbers.

The County's affirmative action program as adopted by the County of Lake, dated May 31, 1977, a copy of which is on file in the Lake County Auditor's office and the office of the Board of Commissioners of the County of Lake, is a condition of the **PROJECT** documents. The bidder shall submit, together with his/her bid, in writing, his/her affidavit, that he/she will comply with the County's affirmative action program.

It is recommended that all bidders attend any and all pre–bid conferences that may be scheduled by the **BOARD**.

The Lake County Surveyor and the **ENGINEER**, or their designated agents, will perform **PROJECT** supervision and periodic inspections to determine compliance with all **PROJECT** documents, percentages or inspections will include measurements and elevations of the completed work for compliance with the plans and specifications prior to payment recommendations to the **BOARD**.

The Contractor shall be permitted to submit claims for payment on a monthly basis as the work progresses, subject to a fifteen percent (15%) retainage, all as approved by the Lake

County Surveyor and the **ENGINEER**. Fifteen percent (15%) of the completed value of the work shall be withheld by the **BOARD** for a period of sixty (60) days after the completion of the work and its acceptance by the Lake County Surveyor and the **ENGINEER** for the purpose of securing payment of suppliers, laborers and subcontractors, if any. The Contractor shall be required to furnish a sworn statement of all indebtedness for labor and materials furnished, used or extended for said construction, the amount of due and to become due to each subcontractor and material supplier before issuance of any payment, and final waiver of lien and an affidavit showing all bills, on the issuance of the final payment. Upon certifications by the Lake County Surveyor and the **ENGINEER**, the **BOARD** shall pay to the Contractor, on account of the contract, the value of labor and materials incorporated into the work.

A bid security in the form of a certified check/cashier's check or a bid bond from an acceptable surety made payable to the **BOARD** shall accompany each bid. The bid security shall be in the penal amount of five percent (5%) of the total bid. Bid security shall be forfeited if the bid is withdrawn after closing time on the date for receiving bids. Out of state bidders must submit a certified check of ten percent (10%) of the total bid made payable to the **BOARD**.

Upon execution of the contract, the successful bidder shall give to the **BOARD** a bond payable to the **BOARD**, in an amount fixed by the board but not less than the amount of the bid, and with a corporate surety licensed to do business in Indiana. The bond must be conditioned on the faithful performance of the contract and the payment of all expenses and damages incurred under the contract, including payment of all suppliers, laborers, and subcontractors. However, in lieu of a corporate surety bond, the **BOARD** may accept:

(1) a cash bond;

(2) a property bond; or

(3) a bond from a sufficiently financed private bonding company.

All Contractors, including sub--contractors, shall carry full insurance coverage and certificates of insurance shall be delivered to the **BOARD**, upon signing of the contract.

Contractor shall have Workmen's Compensation, as required by applicable Federal and State laws

Contractor's Liability, including contractual liability, form of insurance shall be comprehensive general liability and comprehensive automobile liability $500,000 CSL; for bodily injury, property damage and personal injury, including complete operations

broad form; bodily injury and property damage, automobile liability, owned, non-owned and hired.

In addition to the above, the Contractor shall provide operations and products liability, XCU coverage and $1,000,000 umbrella liability.

At all times during the progress of the work, the Contractor shall maintain such insurance as will protect and save harmless the **BOARD**, and its agents, from claims under the Workmen's Compensation Act, from any and all other claims for damages for property damage, personal injury and/or death and patent infringement, which may arise from operation under the contract documents, whether such act or omission be by itself or by an employee or sub-contractor or anyone directly or indirectly employed by either of them; and certificates of such insurance as required by the **PROJECT** documents shall be filed with the **BOARD**.

Should the **BOARD** suffer any damage, cost or expense, including attorney's fees, in any manner, because of any wrongful act or negligence of the Contractor, or anyone employed by it or a subcontractor or the assertion of any claim of whatever nature which arises from operation under the contract documents, then the Contractor shall reimburse the **BOARD** for-any such damage and all reasonable attorney fees and expenses related to such claim and/or reimbursement thereto, all without relief from validation and appraisement laws.

1.3 RIGHT OF THE BOARD

The **BOARD** reserves the right to issue addenda changing, altering or supplementing the contract documents, at any time prior to the bid deadline.

The **BOARD** reserves the right to reject any or all bids and to waive any information or irregularity in any bid accepted.

The **BOARD** reserves the right to approve or reject any sub-contractor submitted by the bidders.

The **BOARD** reserves the right to award all or individual **PROJECTS** within the scope of work to comply with available funds.

APPROVED THIS 16 DAY OF november, 2016

LAKE COUNTY DRAINAGE BOARD

Kyle W. Allen Sr. D.H.

KYLE ALLEN, MEMBER

GERRY L. SCHEUB, CHAIRMAN

K.B.

MICHAEL C. REPAY, MEMBER

2.0 GENERAL INFORMATION

2.1 PERMITS

The **BOARD** will procure all necessary permits from the Indiana Department of Natural Resources, Indiana Department of Environmental Management and Army Corps of Engineers for the performance of the work. All such permits are considered part of the **PROJECT** documents and all work shall be performed in strict compliance with all provisions and conditions therein. In the event discrepancies exist between the **PROJECT** documents and the provisions and conditions of such permits, the Contractor shall immediately notify the Lake County Surveyor and the **ENGINEER** to resolve any such discrepancy.

2.2 CONSTRUCTION METHODS AND STANDARDS

All construction methods, standards and specifications, as adopted by the **BOARD** shall govern the performance of the work unless otherwise specified in the **PROJECT** documents.

2.3 WORK WITHIN EASEMENTS

All work shall be performed within the limits of the existing regulated drain easement for the **PROJECT** and within other access and work easements acquired by the **BOARD** as otherwise specified herein.

2.4 MAINTENANCE OF DRAINWAYS

All construction shall be performed in such a manner that will not interfere with existing drainage of the areas adjacent to the **PROJECT**. All work shall be performed in such a manner that will ensure proper drainage.

2.5 AUTHORIZATION TO PROCEED

No work shall be performed prior to receipt of "Authorization to Proceed" notification from the Lake County Surveyor.

2.6 CONTRACTOR'S SCHEDULE

The Contractor will be requested to attend a pre-construction conference to be scheduled by the Lake County Surveyor at which time the Contractor will be required to submit a construction schedule to the Lake County Surveyor prior to commencement of the work.

2.7 CONTRACTOR'S EQUIPMENT AND METHOD OF CONSTRUCTION

The Contractor shall include with his bid a list of equipment available to perform the work. Each piece of equipment shall be listed by type of ownership. (Own, Lease or Rental). The Contractor shall also provide a detailed description of the proposed method of construction with his bid.

3.0 TECHNICAL SPECIFICATIONS

3.1 CHANNEL BOTTOM DIPPING (SEDIMENT REMOVAL)

General Requirements: This work shall be performed as described in detail in the Indiana Drainage Handbook (Section 5.6, Practice 601). A copy of the latest version of the Handbook is available online at http://www.in.gov/dnr/water/4893.htm.

Work shall be performed in accordance with the Special Conditions of the Indiana Department of Natural Resources Permit for Construction in a Floodway that will be secured for this project.

Description: This work shall consist of dipping, dredging, and/or removing sediment from the channel bottom by an excavator from one side of the channel without disturbing the ditch banks. All work adjacent to wetland areas (if applicable) shall be performed from the bank opposite of the wetland area when possible. All work shall be performed within the existing **DRAINAGE BOARD** easement. The work shall also include the removal of sediment from identified culverts within the regulated drain.

Excavation: The contractor shall excavate the low flow channel below the existing flow line to the original channel bottom as shown in the Typical Ditch Cross Section Detail in the plans. The depths of sediment estimated for removal in the bid proposal form are an average depth – the actual depth of sediment to be removed will vary across the cross-section of the channel and along the channel alignment.

Cross–section geometry should, in general, be trapezoidal with a flat, level channel bottom and a positive grade along the ditch channel. Side slopes of excavated low flow area should be cut away from the edge of water so as not to compromise channel bank stability and shall not exceed a maximum slope of 2:1 (2H: 1V). A minimum twenty (20) foot longitudinal transition shall be provided from the full–cut excavated area to the undisturbed ditch bottom.

To the extent feasible, the contractor shall also carefully remove any sediments deposited in the identified culverts that lie within the regulated drain. Feasibility of removal shall be determined based on the ability of the contractor to remove sediment without engaging confined space entry requirements. When the contractor is unable to clean the entire length of culvert, downstream of the culvert the contractor shall excavate the ditch an additional 3 feet for a length equivalent to the culvert length to serve as a sediment trap for any sediment that would be washed out of the culvert.

Spoil Material: **Spoil material shall not be placed in the floodway or in the wetlands.** Limits of jurisdictional wetlands, if present, are shown on the plans and copies of maps showing

floodway limits as delineated by FEMA are available at the Office of the Lake County Surveyor. Otherwise, spoil material shall be disposed of adjacent to the excavated area unless other written arrangements have been made with the adjacent landowner and approved by the Lake County Surveyor. Spoil shall be placed landward of the channel bank a distance of ten feet (or more, as needed to stay outside of the floodway limit) to allow for future maintenance access. Spoil shall be leveled to have a foreslope of 5:1 (5H:1V) or flatter so as not to severely impact stream system and applied erosion control measures. From the maximum height, the spoil shall have an 8:1 (8H:1V) back slope to existing grade. Grading of spoil material shall coincide with adjacent stream overbank topography. Spoil piles shall be notched to allow drainage away from adjacent properties.

Spoil material cannot be placed within 10 feet of the top of bank.

Where it becomes necessary to remove spoil from the area due to lack of dump space alongside drain, contractor is responsible to locate a dump site and remove this excess spoil from the jobsite. No extra payments will be made for this removal. This location must be in an uplands site. Wetlands, streams, any "Waters of the State", etc. will not be allowed for this dump site. Contractor is to provide an offsite dump plan and an erosion control plan as necessary for this dump site.

Measurement and Payment: Work shall be paid for at the contract unit price per cubic yard for CHANNEL BOTTOM DIPPING (SEDIMENT REMOVAL) which price shall include all excavation (including any sediment removal from within culverts), spoil disposal, off–site if necessary, and all other items necessary to complete the work to the satisfaction of the Lake County Surveyor.

3.2 SILT FENCING / SILTWORM

General Requirements: This SILT FENCING shall be installed as described in detail in the Indiana Drainage Handbook (Section 5.1, Practice 105). A copy of the latest version of the Handbook is available at http://www.in.gov/dnr/water/4893.htm. SILT WORM shall be installed in accordance with manufacturer's instructions available at www.siltworm.com.

Description: SILT FENCING is a temporary barrier of entrenched geotextile fabric stretched across and attached to supporting post used to intercept sediment – laden runoff from drainage areas of disturbed soil.

SILTWORM is a wood-filled tubular sock used as an alternative to silt fence. The Indiana Department of Environmental Management considers this as a feasible

alternative to silt fence in some cases. SILTWORM or approved equal will be allowed as an alternative to silt fence on this project.

Location: Along ditch side of spoil piles.

Materials/installation: This work shall be in accordance with Practice 105 as referenced above and with Section 205 of the INDIANA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, latest edition and manufacturer's instructions (More information is available at www.siltworm.com).

Payment: This work shall be paid for at the contract unit price per foot for SILT FENCING / SILTWORM which price shall be payment in full for constructing this item as specified, including all materials, labor and equipment necessary to perform this work including complete removal after vegetation has been established.

3.3 MULCHED SEEDING

Description: Application of seed, fertilizer, mulch and water to spoils piles and disturbed areas.

Location: Top of spoil pile and other areas on the overbank disturbed by machinery.

Materials Installation: This work shall be in accordance with Section 621 of the INDIANA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS (INDOT Specifications), latest edition, except that 100% perennial rye-grass shall be used as follows:

Spoils Pile Cover and Bank Stabilization		
Common Name	**Botanic Name**	**Seeding Rate**
Perennial Rye-Grass	Lolium perenne	24 lb/ac

Application of seed, mulch (2 tons/acre), fertilizer (800 lbs/acre), and water shall be performed according to INDOT Specifications Section 621.05.

Payment: This work shall be paid for at the contract unit price per acre for MULCHED SEEDING which price shall be payment in full for constructing this item as specified, including all materials, labor, and equipment.

3.4 CHANNEL BANK EXCAVATION (SLOPE REPAIR)

Certain areas of the ditch bank have partially failed and are in need of repair. This work is to correct those areas and repair the channel geometry to its original dimensions.

General Requirements: This work shall be performed as described in detail in the Indiana Drainage Handbook (Section 5.6, Practice 602). A copy of the latest version of the Handbook is available at http://www.in.gov/dnr/water/4893.htm.

Description: This work shall consist of regrading failed slopes where bank repair is specified in the plans within the regulated drain.

Excavation: The contractor shall excavate the failed bank sections as shown on the plans. To the extent practical, collect and preserve the top soil removed from the area of bank repair. After completion of the slope repair, return topsoil to the bank in order to prepare the site for seeding.

Cross-section geometry should, in general, be trapezoidal with positive grade. Side slopes should be cut away from the edge of water so as not to compromise channel bank stability and shall not exceed the maximum existing bank slope.

Payment: This work shall be paid for at the contract unit price per linear foot of CHANNEL BANK EXCAVATION (SLOPE REPAIR) which price shall be payment in full for constructing this item as specified, including all materials, labor and equipment necessary to perform this work.

3.5 EROSION CONTROL BLANKET AND SEEDING

General Requirements: This work shall be performed as described in detail in the Indiana Drainage Handbook (Section 5.11, Practice 1104). A copy of the latest version of the Handbook is available at http://www.in.gov/dnr/water/4893.htm.

Description: This work shall consist of furnishing all labor, materials, tools and equipment necessary to seed and place EROSION CONTROL BLANKET on locations requiring bank repair as shown in the plans. The blanket provides temporary stabilization of bank soils until vegetation can be established.

The erosion control blanket shall be biodegradable organic or synthetic mulch incorporated into a polypropylene or similar netting material. Material may be biodegradable, photodegradable, or permanent.

Location: Areas of bank repair on the drainage ditch banks.

Materials/installation: This work shall be in accordance with Practice 1104 as referenced above. EROSION CONTROL BLANKET shall be of an appropriate type and weight to fit the site conditions.

Prepare the seedbed, fertilize and seed bank repair areas. Seed and fertilize according to the MULCHED SEEDING specification above (but do not mulch) immediately after CHANNEL BANK EXCAVATION has been performed. Lay blankets on seeded areas following manufacturer's directions. Blankets should be laid so they are in continuous contact with the soil, and upslope or upstream blankets should overlap the lower ones

by at least 8". Tuck the uppermost edge of the upper blankets into a check slot (slit trench) and backfill with soil. Tamp down.

Anchor blankets as specified by the manufacturer for the existing slope and soil at the site. This usually involves driving 6"- 8" wood or metal staples into the ground in a pattern determined by site conditions. Wood staples are preferable to metal staples. Wood staples will swell and hold better.

Payment: This work shall be paid for at the contract unit price per square yard of EROSION CONTROL BLANKET which price shall be payment in full for constructing this item as specified, including all materials, labor and equipment necessary to perform this work.

3.6 TREE AND DEBRIS REMOVAL

General Requirements: This work shall be performed as described in detail in the Indiana Drainage Handbook (Section 5.1 Practices 103 and 107, Section 5.4 Practices 401 and 402, and Section 5.13 Practice 1301). A copy of the latest version of the Handbook is available at http://www.in.gov/dnr/water/4893.htm.

Description: This work shall consist of removing accumulations of logs, root wads, trees in danger of falling into the stream or obstructing the flow, and other debris that span the waterway and/or the remainder of the drainage easement using hand-operated and/or heavy equipment from one side of the channel without disturbing the ditch banks. All work shall be performed within the existing **DRAINAGE BOARD** easement.

The scope of this work includes removal of all trees between the top of banks. The scope also includes removal of additional debris as shown on plans.

Access: Access to and within the work site shall be within the existing drainage easement. Care shall be taken to limit tree removal (for the purpose of gaining access to the work site) to an absolute minimum. Access shall not cross a waterway or traverse a wetland as indicated on the jurisdictional wetland map, unless pads are used as specified in *Practice 103, Temporary Wetland Crossing*.

Equipment: Hand-operated equipment, such as axes, chain saws, and portable winches shall be used for removal of obstructions, unless determined impracticable. Where heavy equipment is necessary for removal of obstructions, only suitable equipment not equipped for excavation such as small tractors, backhoe equipped with a hydraulic thumb, bulldozer with its blade up, or a log skidder shall be used.

Removal of Trees, Tree Parts, and Foreign Material: The Contractor shall cut, relocate and remove from the channel, any free logs or affixed logs, including foreign material that are

crossway in the channel. Logs shall be removed with minimal damage to existing vegetation. Limits of jurisdictional wetlands are shown on the plans and copies of maps showing floodway limits are available at the Office of the Lake County Surveyor. Severely damaged, dead, leaning or other trees, which are in immediate danger of failing into the waterway, shall be cut and removed along with all trees between the top of ditch banks.

The root system and stump of the tree shall be left in place. Stumps shall be cut as low as possible and parallel with the slope of the bank but in no case higher than twelve inches, unless authorized by the County Surveyor Office. Stump splinters shall also be cut off. It shall be the contractor's responsibility to walk the site and estimate the size and number of these trees to be removed. Cut stumps shall be treated with herbicide as soon as possible after cutting, preferably less than two (2) hours. Stumps should be saturated, especially in the cambial area. Cut stumps shall be treated with Tordon 101, Tordon K or Garlon 4. The herbicide used to treat the cut stumps must include a colored, chemical dye to indicate clearly the proper application of the product.

Removed Tree, Tree Parts, and Debris: All trees, logs and other tree parts cut, broken, and/or removed by the contractor shall be disposed of off-site unless other written arrangements have been made with the adjacent landowner and approved by the Lake County Surveyor. The removed trees and brush may be mulched (chipped) and spread on top of the ditch bank, outside of the floodway and wetland limits, in a manner approved by the Lake County Surveyor's office. As described in *Practice 1301, Debris Disposal* non-toxic debris such as broken concrete may be disposed of onsite if it is buried a minimum of 2' deep. If the contractor chooses to remove materials from the site, the materials shall be disposed of by the contractor in an approved manner at an approved disposal site, all of which must be approved by the Lake County Surveyor's office.

Measurement and Payment: This work shall be paid for at the contract LUMP SUM price which shall include all cutting, relocation and removing of trees, tree parts and foreign material, Including disposal and all other items necessary to complete the work to the satisfaction of the Lake County Surveyor.

BID DOCUMENTS

Supplemental Bid Proposal Form (To be attached and made part of Form 96)

Project: Bailey Arm Maintenance Phase I

The undersigned, having reviewed the local contract documents, comprised of the project documents for the Project known as BAILEY ARM MAINTENANCE PHASE I, Kankakee River Watershed, Lake County, Indiana (November 2016).

The undersigned has carefully inspected the site of the proposed work and can perform the various Items of work for the prices stipulated. All prices include any incidental work that may be necessary to complete the project in accordance with the provisions of the plans and specifications, as may be amended.

Item No.	Item						Quantity	Unit	Unit Price	Total
1	**Channel Bottom Dipping (Sediment Removal by Dragline Excavation)**						8,812	CY	$	$
	From Station	To Station	Distance (LF)	Depth (FT)	Width (FT)	Volume (CY)				
	+0	+21	21	1.0	20	16				
	+21	2+98	277	2.5	20	513				
	2+98	3+25	27	2.5	25	63				
	3+98	4+61	63	2.5	25	146				
	4+61	10+00	539	3.0	25	1,497				
	10+00	15+60	560	3.5	25	1,815				
	15+60	21+53	593	3.0	30	1,977				
	21+53	26+67	514	2.5	20	952				
	26+67	31+62	495	3.0	20	1,100				
	31+62	36+58	496	2.0	20	735				
2	**Silt Fencing / Siltworm**						3,658	LF	$	$
	From Station	To Station	Distance (LF)							
	+0	36+58	3,658							
3	**Mulched Seeding**						4.0	AC	$	$
	From Station	To Station	Distance (LF)	Width (FT)		Area (AC)				
	+0	36+58	3,658	40		3.36				
4	**Channel Bank Excavation (Slope Repair)**						1,110	LF	$	$
	From Station	To Station	Distance (LF)							
	2+24	2+64	40							
	256+00	256+25	25							
	270+30	271+25	95							
	273+00	273+20	20							
	274+00	274+35	35							
	275+20	275+55	35							
	276+50	281+85	535							
	283+75	285+00	125							
	333+00	333+35	35							
	339+80	340+00	20							
	421+70	422+20	50							
	422+70	423+35	65							
	424+25	424+55	30							
5	**Erosion Control Blanket and Seeding**						53	SY	$	$
	From Station	To Station	Distance (LF)	Width (FT)		Area (SY)				
	2+24	2+64	40	12		53				
6	**Tree and Debris Removal**						1	LS	$	$
									Total Bid Price	$

Bidder's proposal in words for making entire improvement:

This proposal is submitted this _____ day of _____, 2016.

Corporation: _____

Address: _____

By (Printed Name): _____ By (Signature): _____

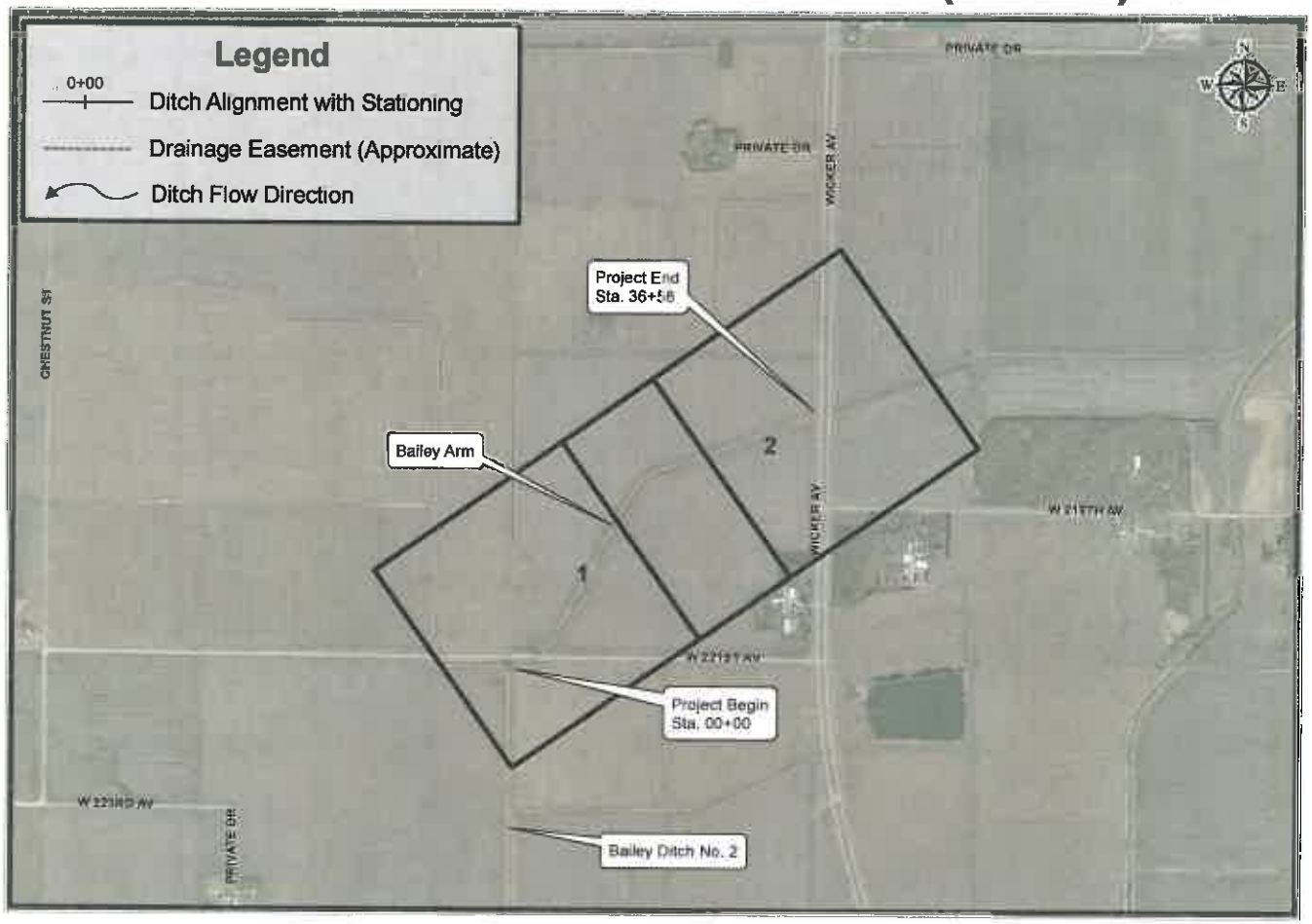
Title: _____

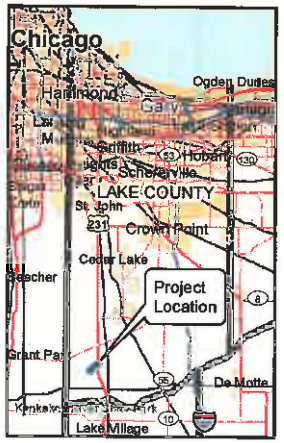
PLANS

Lake County, Indiana

Bailey Arm Maintenance Phase 1

W 221st Ave to Wicker Ave (US 41)





NOTES:

DRAINAGE EASEMENTS ARE LOCATED 75 FEET FROM TOP OF BANK ON EACH SIDE OF THE DITCH.

EASMENT LOCATIONS AS SHOWN IN FIGURES ARE APPROXIMATE.

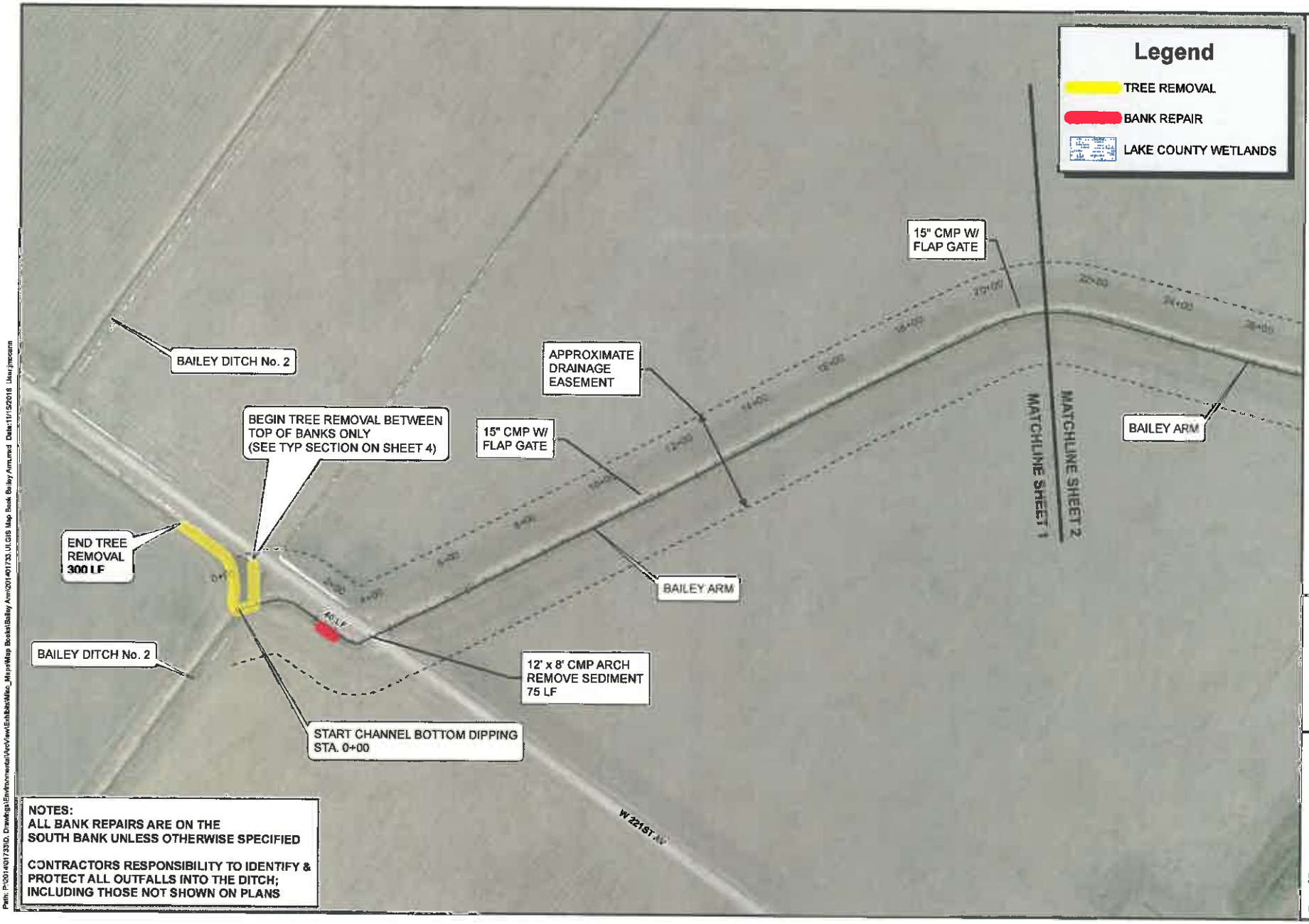
DRAFT

Jeremy C. Schmitt
Registered Professional Engineer
No. 10500081
State of Indiana

Prepared By:

AMERICAN STRUCTUREPOINT INC

Printed:
November 11, 2016



Sheet - 1

Bailey Arm
Phase I
Lake County, Indiana

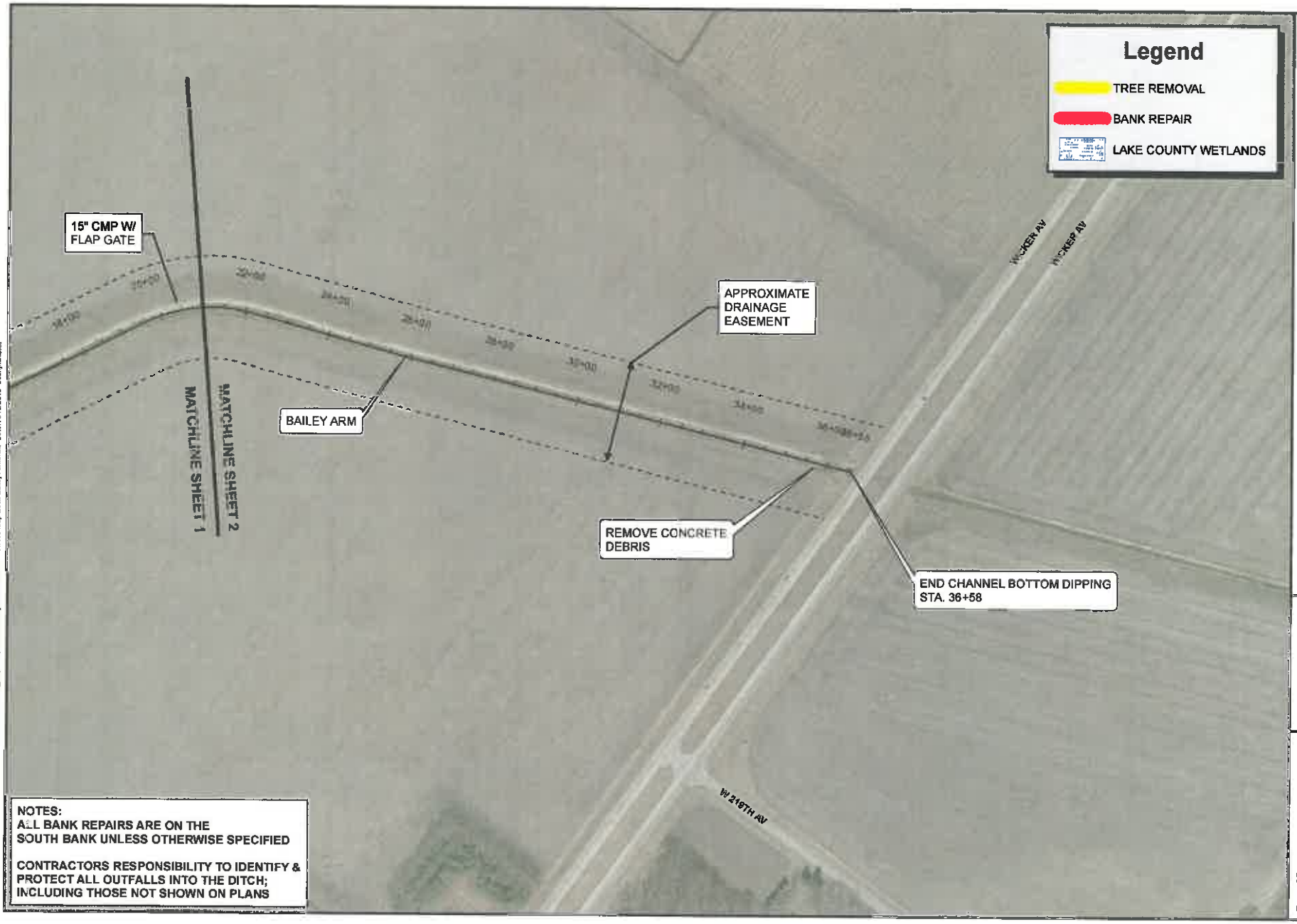
1 inch = 200 feet

Prepared For:
Lake County Indiana

Prepared By:
AMERICAN STRUCTUREPOINT INC.

Printed: November 11, 2016

Path: P:\2014\01733\D_Drawings\Environmental\Arc\View\Exhibits\Misc_Maps\Map Books\Bailey Arm\2014\01733_UI_GIS Map Book Bailey Arm.mxd Date:11/15/2016 User:jmccarn



NOTES:
ALL BANK REPAIRS ARE ON THE SOUTH BANK UNLESS OTHERWISE SPECIFIED

CONTRACTORS RESPONSIBILITY TO IDENTIFY & PROTECT ALL OUTFALLS INTO THE DITCH; INCLUDING THOSE NOT SHOWN ON PLANS

Path: P:\2014\01733\D. Drawings\Environmental\ArcView\Exhibits\Misc_Maps\Map Books\Bailey Arm\201401733.UI.GIS Map Book Bailey Arm.mxd Date:11/15/2016 User:jmcann

Sheet - 2

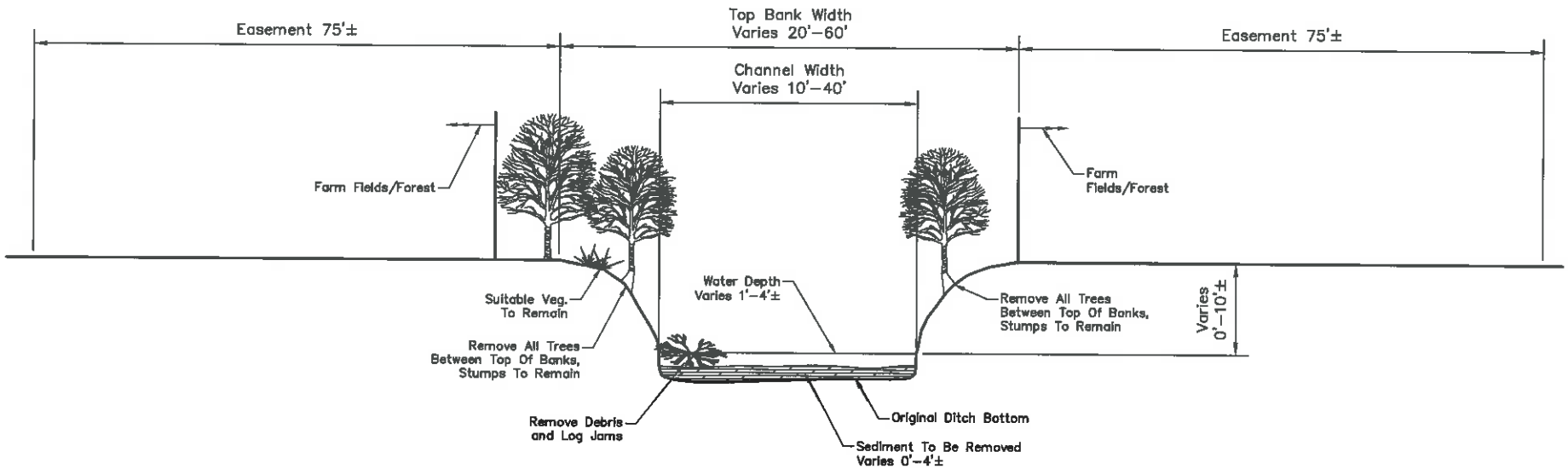
Bailey Arm
Phase I
Lake County, Indiana

1 inch = 200 feet

Prepared For:
Lake County Indiana

Prepared By:
AMERICAN STRUCTUREPOINT INC.

Printed: November 11, 2016



AMERICAN STRUCTUREPOINT INC.

TYPICAL DITCH CROSS SECTION
BAILEY ARM

Lake County Surveyor
1100 East Monitor Street
Crown Point, Indiana 46307

Lake County
Bailey Arm Maintenance Phase 1
W 221st Ave to Wicker Ave (US 41)

Date: 11/11/2016

Sheet 3

10-A-1
11-16-16

POTENTIAL BIDDERS
2016 HART DITCH MAINTENANCE
PARK MANOR DRIVE (STATION 25+98 TO 28+27)
ST. JOHN TWP., LAKE COUNTY, IN

	R.A. OROS 8244 Greenwood Avenue Munster, IN 46321	$_____
✓	GOUGH, INC. 2200 E. 88th Drive Merrillville, IN 46410	$188,706.01
✓	AUSTGEN EQUIPMENT 11309 Broadway, Suite C3 Crown Point, IN 46307	$145,382.00
	GRIMMER CONSTRUCTION 2619 Main Street Highland, IN 46322	$_____
✓	GARIUP CONSTRUCTION CO. 3965 Harrison Street Gary, IN 46408	$354,700.00
	MISCH EXCAVATING 9608 Randolph Street Crown Point, IN 46307	$_____
	CONSTRUCT CONNECT 30 Technology Parmkway Suth #100 Norcross, Georgia 30092 [1 SQ FT]	$_____
	CARETACKER LANDSCAPING & LAWN P.O. Box 324 Michigan City, IN 46360	$_____
✓	DELTA III, Inc. 2063 W. 1250 S Hanna, IN 46340	$134,519.00

10-A-1
11-16-16

ADDENDUM #1

HART DITCH
PARK MANOR DRIVE
2016

November 10, 2016

Please revise the contract documents as follows:

I. It is the LCSO's preference that all required rip-rap be locally sourced.

II. Rip-rap sizes have been noted on Sheet 3 of the originally advertised plan set. The cross-sections note that rip-rap should vary in size from the toe to the top of bank; generally, smaller gradation at the top of bank to larger gradation at the toe of slope (12" to 36" rock). These gradations will vary from INDOT Revetment to Class II rip-rap. Please note that smaller stone is also required to fill gaps between the larger rip-rap. These sizes are noted from ¾" to 3" stone or #9 to #2 coarse gradation as noted in INDOT specifications.

III. Jersey barriers are currently located within Hart Ditch and within the limits of this project. The LCSO is not requiring these obstructions be removed from the waterway; however, we do request that they be incorporated into the toe of the slope of the stabilized bank. The relocation of the jersey barriers to the toe of the slope is considered incidental and part of the Channel Bank Excavation (Slope Preparation for Rip-Rap).

IV. A temporary ditch crossing is required to access the project site from Park Manor Drive. A 36" diameter Reinforced Concrete Pipe (Class III or greater) should be used to span the outlet channel of the Berens-Monaldi flood control project. The 36" RCP should be long enough to allow for safe crossing of the channel. Sufficient revetment rip-rap should be placed on either side of the pipe to protect the pipe and provide adquate crossing. Once all work has been completed on this job, the pipe and rip-rap should be removed and the channel shall be restored to existing conditions. An additional line item has been added to the bid proposal form. All work necessary to construct to the temporary crossing and restore the channel should be included in this line item cost.

V. All heavy equipment should remain off the Berens-Monaldi berm line. This berm line is shown on the cross-sections (Plan Sheet 3). The Contractor should remain a minimum of 10 ft. away from the highpoint of the berm.

VI. As always, it is highly recommended to review the site previous to the bid opening.

VII. Bids are due at 9:00am on November 16, 2016 at the Lake County Surveyors Office.

SUPPLEMENTAL BID PROPOSAL FORM (TO BE ATTACHED & MADE PART OF FORM 96)

PROJECT: HART DITCH PARK MANOR DRIVE – 2016 (Sta. 25+98 to 28+27)

The undersigned, having familiarized himself/herself/themselves with local contract documents, comprised of the following:

1. Project documents for the project known as HART DITCH PARK MANOR DRIVE – 2016 (Sta. 25+98 to 28+27), Little Calumet River Watershed, Lake County, Indiana.

The undersigned has carefully inspected the site of the proposed work and can perform the various items of work for the unit prices/lump sums stipulated. All prices listed include any incidental work that may be necessary to complete the project in accordance with the provisions of the plans and specifications, as may be amended.

Item No.	Description and Calculation	Unit	Qty.	Unit Price	Total
1	**Rip-Rap Bank Protection** STA 25+98 to 28+27 (South Bank) = 229 LF	TON	1275		
2	**Channel Bank Excavation (Slope Preparation for Rip-Rap)** STA 25+98 to 28+27 (South Bank) = 229 LF	CYS	840		
3	**Mulched Seeding *(stabilizing matrix species mix)*** Disturbed Areas	AC	0.2		
4	**Erosion Blanket (Common)** STA 23+95 to 28+27 = 444 LF (432')(13') = (5,616 SF) / 9 = 624 SY	SY	624		
5	**Temporary Crossing**	LS	1		
Total Bid Price		$			

BIDDERS PROPOSAL FOR MAKING ENTIRE IMPROVEMENT

$_____

(WORDS)

This proposal submitted this _____ day of _____, 2016.

Corporate Name: _____

Address: _____

_____

By: _____

Title: _____

SUPPLEMENTAL BID PROPOSAL FORM (TO BE ATTACHED & MADE PART OF FORM 96)

PROJECT: HART DITCH PARK MANOR DRIVE – 2016 (Sta. 25+98 to 28+27)

POTENTIAL BIDDERS
2016 CADY MARSH DITCH MAINTENANCE
COLFAX TO ROSS (STATION 193+25 TO 233+50)
CALUMET TWP., LAKE COUNTY, IN

✓ R.A. OROS 8244 Greenwood Avenue Munster, IN 46321	$ 113,249.00
✓ GOUGH, INC. 2200 E. 88th Drive Merrillville, IN 46410	$ 169,672.52
✓ AUSTGEN EQUIPMENT 11309 Broadway, Suite C3 Crown Point, IN 46307	$ 139,168.00
GRIMMER CONSTRUCTION 2619 Main Street Highland, IN 46322	$
✓ GARIUP CONSTRUCTION CO. 3965 Harrison Street Gary, IN 46408	$ 521,413.30
MISCH EXCAVATING 9608 Randolph Street Crown Point, IN 46307	$
CONSTRUCT CONNECT 30 Technology Parmkway Suth #100 Norcross, Georgia 30092 [1 SQ FT]	$
CARETACKER LANDSCAPING & LAWN P.O. Box 324 Michigan City, IN 46360	$
HOMER TREE SERVICE, INC. 16464 West 143rd Street Lockport, IL 60441	$
✓ DELTA III, Inc. 2063 W. 1250 S Hanna, IN 46340	$ 202,159.00

10-A-3
11-16-16

POTENTIAL BIDDERS
2016 TURKEY CREEK LATERAL 6 MAINTENANCE
GEORGIA TO I-65
CALUMET TWP., LAKE COUNTY, IN

✓ R.A. OROS 8244 Greenwood Avenue Munster, IN 46321	$ 133,150.50
GOUGH, INC. 2200 E. 88th Drive Merrillville, IN 46410	$
✓ AUSTGEN EQUIPMENT 11309 Broadway, Suite C3 Crown Point, IN 46307	$ 202,080.00
GRIMMER CONSTRUCTION 2619 Main Street Highland, IN 46322	$
✓ GARIUP CONSTRUCTION CO. 3965 Harrison Street Gary, IN 46408	$ 465,935.00
MISCH EXCAVATING 9608 Randolph Street Crown Point, IN 46307	$
CONSTRUCT CONNECT 30 Technology Parmkway Suth #100 Norcross, Georgia 30092 [1 SQ FT]	$
CARETACKER LANDSCAPING & LAWN P.O. Box 324 Michigan City, IN 46360	$
HOMER TREE SERVICE, INC. 16464 West 143rd Street Lockport, IL 60441	$
✓ DELTA III, Inc. 2063 W. 1250 S Hanna, IN 46340	$ 173,891.00

10-A-3
11-16-16

ADDENDUM #1

PRE-BID MEETING MINUTES

Turkey Creek Lateral #6 – East of Georgia Street
Gary, IN

Time:
Held on Wednesday, November 2, 2016
9:45 a.m.

Location:
Lake County Surveyor's Office
Lake County Government Center
2293 N. Main Street
Crown Point, Indiana

Attendees: See attached Sign-In Sheet

****Additional information is italicized***

The Pre-Bid Meeting for the Turkey Creek Lateral #6 Channel Improvements was held to provide an opportunity for all interested bidders to receive the plans and specifications and ask questions regarding the project.

Dan Gossman explained that the Lake County Surveyor's Office was looking to complete channel bottom dipping and remove log jams and beaver dams to improve the conveyance of Lateral #6 which conveys flow from the east side of I-65 to the west.

A detailed map was not available at the time of the meeting. This Addendum shows 3700 feet of Lateral #6 that will be addressed. Between Stations 30+80 to 37+00 matting must be used. Spoils must be deposited in an upland area outside wetlands. Wetland areas are indicated on the exhibit. Significant tree and brush clearing will be required along the south and west side of Lateral #6 to obtain access. The sediment removal quantity has changed to 2 feet from the original plans.

Bidders shall sign this sheet acknowledging receipt of Addendum #1 and attach to the bid.

_____ _____
Company *Date*

N:\INDIANA\93169\2016\Turkey Creek Lateral 6\Pre-Bid Meeting Minutes 111016.doc

CHRISTOPHER B. BURKE ENGINEERING, LLC.
One Professional Center, Suite 314, Crown Point, Indiana 46307 Tel (219) 663-3410 Fax (219) 663-3450

CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 W. Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

LAKE COUNTY SURVEYOR'S OFFICE

TURKEY CREEK LATERAL #6–EAST OF GEORGIA STREET

DATE: 11/10/2016

EXHIBIT

SUPPLEMENTAL BID PROPOSAL FORM (TO BE ATTACHED AND MADE PART OF FORM 96)

PROJECT: TURKEY CREEK LATERAL 6 – GEORGIA TO I-65– 2016

The undersigned, having familiarized himself/herself/themselves with local contract documents, comprised of the following:

1. Project documents for the project known as TURKEY CREEK LATERAL 6, GEORGIA TO I-65 – 2016, Little Calumet River Watershed, Lake County, In.

The undersigned has carefully inspected the site of the proposed work and can perform the various items of work for the unit prices/lump sums stipulated. All prices listed include any incidental work that may be necessary to complete the project in accordance with the provisions of the plans and specifications, as may be amended.

Item No.	Description And Calculation	Unit	Quantity	Unit Price	Total
1	**Log Jam Removal (Clearing and Snagging)** STA 0+00 to 37+00 = 3,700 LFT	LFT	3,700		
2	**Channel Bottom Dipping (Sediment Removal) -** STA 0+00 to 37+00 = 3,700 LFT (3,700)(2' avg.)(20' avg.) = 148,000cf / 27 = 5,481 CY	CY	5,481		
3	**Erosion Control Blanket (Common)** ***Spoil Piles*** STA 0+00 to 37+00 = 3,700 LFT (3,700)(13) = 48,100 sf / 9 = 5,344 SY	SY	5,344		
4	**Mulched Seeding *(stabilizing matrix species mix)*** ***Spoil Piles*** STA 0+00 to 37+00 = 3,700 LFT (3,700)(13) = 48,100 sf / 43,560 = 1.1 AC	AC	1.1		
5	**Silt Fence** STA 0+00 to 37+00 = 3,700 LFT	LFT	3,700		
6	**Matting** STA 30+80 to 37+00 = 620 LFT	LFT	620		

SUPPLEMENTAL BID PROPOSAL FORM (TO BE ATTACHED AND MADE PART OF FORM 96)

PROJECT: TURKEY CREEK LATERAL 6 – GEORGIA TO I-65– 2016

Item No.	Description And Calculation	Unit	Quantity	Unit Price	Total
Total Bid Price				**$**	

SUPPLEMENTAL BID PROPOSAL FORM (TO BE ATTACHED AND MADE PART OF FORM 96)

PROJECT: TURKEY CREEK LATERAL 6 – GEORGIA TO I-65– 2016

BIDDERS PROPOSAL FOR MAKING ENTIRE IMPROVEMENT

$_____

(WORDS)

This proposal submitted this _____ day of _____, 2016.

Corporate Name: _____

Address: _____

_____

By: _____

Title: _____

1-Specs - TC Lat 6 Georgia I-65

Office of the Lake County Surveyor

Lake County Government Center • 2293 North Main Street • Crown Point, Indiana 46307
Phone: (219) 755-3745 • Fax: (219) 755-3750

Bill Emerson, Jr.
County Surveyor

POTENTIAL CONTRACTORS
2016 & 2017 TURKEY CREEK LATERAL NO. 6 ANNUAL MAINTENANCE
EAST OF I-65
HOBART TOWNSHIP, LAKE COUNTY, IN

AUSTGEN EQUIPMENT
11309 Broadway, Suite C3
Crown Point, IN 46307
$_____

✓ **DELTA III, INC**
2063 W. 1250 S
Hanna, IN 46340
$ 600/hr.

DYER CONSTRUCTION
1716 Sheffield Avenue
Dyer, IN 46311
$_____

✓ **R.A. OROS, INC**
8244 Greenwood Avenue
Munster, IN 46321
$ 350/hr.

WILTJER EXCAVATING, INC.
18333 Dante Avenue
Lansing, IL 60438
$_____

WUNDERINK RIVERSIDE FARMS
24121 Whitcomb Street
Lowell, IN 46356
$_____

Office of the Lake County Surveyor

Lake County Government Center • 2293 North Main Street • Crown Point, Indiana 46307
Phone: (219) 755-3745 • Fax: (219) 755-3750

Bill Emerson, Jr.
County Surveyor

November 4, 2016

John Dumbsky
Austgen Equipment
11309 Broadway, Suite C3
Crown Point, Indiana 46307

RE: Turkey Creek Lateral No. 6
Annual Maintenance 2016 & 2017

Dear John,

Enclosed are specifications and location maps for the above referenced project. The Lake County Surveyor/Lake County Drainage Board is seeking bid proposals for the work and hereby asks, if interested, that you familiarize yourself with the documents and visit the site to develop an understanding of the intent of the specifications. Access to certain areas of the work may be difficult, and you are therefore asked to contact our office for assistance.

Proposals are to be submitted to the Lake County Drainage Board by Wednesday November 16, 2016 before 9:00am for review. The Drainage Board will award the contract to the most responsive and responsible bidder.

Please note that the contract awarded will be for a period of one (2) years, 2016 & 2017, subject to the Lake County Council funding for the years.

Sincerely,

Daniel V. Gossman
Drainage Administrator

Encl

Cc: Bill Emerson, Jr., Lake County Surveyor
Lake County Drainage Board & Advisory Committee
Peter Katic, Drainage Board Attorney

Office of the Lake County Surveyor

Lake County Government Center • 2293 North Main Street • Crown Point, Indiana 46307
Phone: (219) 755-3745 • Fax: (219) 755-3750

Bill Emerson, Jr.
County Surveyor

November 4, 2016

Michael Eaton
Delta III, Inc.
2063 West 1250 South
Hanna, Indiana 46340

RE: Turkey Creek Lateral No. 6
Annual Maintenance 2016 & 2017

Dear Mike,

Enclosed are specifications and location maps for the above referenced project. The Lake County Surveyor/Lake County Drainage Board is seeking bid proposals for the work and hereby asks, if interested, that you familiarize yourself with the documents and visit the site to develop an understanding of the intent of the specifications. Access to certain areas of the work may be difficult, and you are therefore asked to contact our office for assistance.

Proposals are to be submitted to the Lake County Drainage Board by Wednesday November 16, 2016 before 9:00am for review. The Drainage Board will award the contract to the most responsive and responsible bidder.

Please note that the contract awarded will be for a period of one (2) years, 2016 & 2017, subject to the Lake County Council funding for the years.

Sincerely,

Daniel V. Gossman
Drainage Administrator

Encl

Cc: Bill Emerson, Jr., Lake County Surveyor
Lake County Drainage Board & Advisory Committee
Peter Katic, Drainage Board Attorney

Office of the Lake County Surveyor

Lake County Government Center • 2293 North Main Street • Crown Point, Indiana 46307
Phone: (219) 755-3745 • Fax: (219) 755-3750

Bill Emerson, Jr.
County Surveyor

November 4, 2016

Greg Furman
Dyer Construction
1716 Sheffield Avenue
Dyer, Indiana 46311

RE: Turkey Creek Lateral No. 6
Annual Maintenance 2016 & 2017

Dear Greg,

Enclosed are specifications and location maps for the above referenced project. The Lake County Surveyor/Lake County Drainage Board is seeking bid proposals for the work and hereby asks, if interested, that you familiarize yourself with the documents and visit the site to develop an understanding of the intent of the specifications. Access to certain areas of the work may be difficult, and you are therefore asked to contact our office for assistance.

Proposals are to be submitted to the Lake County Drainage Board by Wednesday November 16, 2016 before 9:00am for review. The Drainage Board will award the contract to the most responsive and responsible bidder.

Please note that the contract awarded will be for a period of one (2) years, 2016 & 2017, subject to the Lake County Council funding for the years.

Sincerely,

Daniel V. Gossman
Drainage Administrator

Encl

Cc: Bill Emerson, Jr., Lake County Surveyor
Lake County Drainage Board & Advisory Committee
Peter Katic, Drainage Board Attorney

Office of the Lake County Surveyor

Lake County Government Center • 2293 North Main Street • Crown Point, Indiana 46307
Phone: (219) 755-3745 • Fax: (219) 755-3750

Bill Emerson, Jr.
County Surveyor

November 4, 2016

Emil Poppa
R. A. Oros, Inc.
8244 Greenwood Avenue
Munster, Indiana 46321

RE: Turkey Creek Lateral No. 6
Annual Maintenance 2016 & 2017

Dear Emil,

Enclosed are specifications and location maps for the above referenced project. The Lake County Surveyor/Lake County Drainage Board is seeking bid proposals for the work and hereby asks, if interested, that you familiarize yourself with the documents and visit the site to develop an understanding of the intent of the specifications. Access to certain areas of the work may be difficult, and you are therefore asked to contact our office for assistance.

Proposals are to be submitted to the Lake County Drainage Board by Wednesday November 16, 2016 before 9:00am for review. The Drainage Board will award the contract to the most responsive and responsible bidder.

Please note that the contract awarded will be for a period of one (2) years, 2016 & 2017, subject to the Lake County Council funding for the years.

Sincerely,

Daniel V. Gossman
Drainage Administrator

Encl

Cc: Bill Emerson, Jr., Lake County Surveyor
Lake County Drainage Board & Advisory Committee
Peter Katic, Drainage Board Attorney

Office of the Lake County Surveyor

Lake County Government Center • 2293 North Main Street • Crown Point, Indiana 46307
Phone: (219) 755-3745 • Fax: (219) 755-3750

Bill Emerson, Jr.
County Surveyor

November 4, 2016

Lee Wiltjer
Wiltjer Excavating, Inc.
18333 Dante Avenue
Lansing, Illinois 60438

RE: Turkey Creek Lateral No. 6
Annual Maintenance 2016 & 2017

Dear Lee,

Enclosed are specifications and location maps for the above referenced project. The Lake County Surveyor/Lake County Drainage Board is seeking bid proposals for the work and hereby asks, if interested, that you familiarize yourself with the documents and visit the site to develop an understanding of the intent of the specifications. Access to certain areas of the work may be difficult, and you are therefore asked to contact our office for assistance.

Proposals are to be submitted to the Lake County Drainage Board by Wednesday November 16, 2016 before 9:00am for review. The Drainage Board will award the contract to the most responsive and responsible bidder.

Please note that the contract awarded will be for a period of one (2) years, 2016 & 2017, subject to the Lake County Council funding for the years.

Sincerely,

Daniel V. Gossman
Drainage Administrator

Encl

Cc: Bill Emerson, Jr., Lake County Surveyor
Lake County Drainage Board & Advisory Committee
Peter Katic, Drainage Board Attorney

Office of the Lake County Surveyor

Lake County Government Center • 2293 North Main Street • Crown Point, Indiana 46307
Phone: (219) 755-3745 • Fax: (219) 755-3750

Bill Emerson, Jr.
County Surveyor

November 4, 2016

Mark Wunderink
Wunderink Riverside Farms
24121 Whitcomb
Lowell, Indiana 46356

RE: Turkey Creek Lateral No. 6
Annual Maintenance 2016 & 2017

Dear Mark,

Enclosed are specifications and location maps for the above referenced project. The Lake County Surveyor/Lake County Drainage Board is seeking bid proposals for the work and hereby asks, if interested, that you familiarize yourself with the documents and visit the site to develop an understanding of the intent of the specifications. Access to certain areas of the work may be difficult, and you are therefore asked to contact our office for assistance.

Proposals are to be submitted to the Lake County Drainage Board by Wednesday November 16, 2016 before 9:00am for review. The Drainage Board will award the contract to the most responsive and responsible bidder.

Please note that the contract awarded will be for a period of one (2) years, 2016 & 2017, subject to the Lake County Council funding for the years.

Sincerely,

Daniel V. Gossman
Drainage Administrator

Encl

Cc: Bill Emerson, Jr., Lake County Surveyor
Lake County Drainage Board & Advisory Committee
Peter Katic, Drainage Board Attorney

9-A-4
10-19-16

Office of the Lake County Surveyor

Lake County Government Center • 2293 North Main Street • Crown Point, Indiana 46307
Phone: (219) 755-3745 • Fax: (219) 755-3750

Bill Emerson, Jr.
County Surveyor

SPECIFICATIONS FOR

TURKEY CREEK LATERAL NO. 6 ANNUAL MAINTENANCE FOR 2016 & 2017

LAKE COUNTY DRAINAGE BOARD

Gerry Scheub, Chairman
Michael C. Repay, Member
Kyle W. Allen Sr., Member

LAKE COUNTY SURVEYOR

Bill Emerson, Jr.

TURKEY CREEK LATERAL NO. 6 – ANNUAL MAINTENANCE
FOR 2016 AND 2017

TECHNICAL SPECIFICATIONS

A. GENERAL

1. The Contractor is to remove all overgrowth to eliminate future brush growth on both side slopes. Overgrowth is to be removed by means of mowing (brush hog) or other approved manner as approved by the Lake County Surveyor's Office.
   - Location No. 1 – The width is approximately 75 feet and the length is approximately 150 feet;
   - Location No. 2 – The width is approximately 75 feet and the length is approximately 200 feet;

2. The culvert under the railroad is to be cleared so a normal flow is established and no blockages remain.

3. All work described for this project is to be performed in a manner so as not to adversely affect adjoining land and adjacent property owners along the ditch.

4. In areas where erosion may occur, native materials shall be applied, compacted, fertilized and seeded.

5. In areas of severe erosion, revetment riprap stone (or approved equal) shall be placed.

6. In areas devoid of vegetative growth, grass seed shall be applied.

7. Any trees, snags, etc. in the ditch shall be removed and disposed of in an approved manner.

8. Remove excess sediment/sandbars.

The undersigned contractor has carefully inspected the site of the proposed work, and can perform the various items of work stipulated in the above technical specifications. The contract price includes any incidental work that may be necessary to complete the project in accordance with the above technical specifications and provisions. The price for this work shall be computed based on a unit (hourly) rate which includes the cost of all labor, equipment and materials. The unit (hourly) rate shall not exceed a total amount of $15,000.00 payable for 2016 & 2017.

_____ _____
Contractor Name Authorized Representative

_____
Address City State Zip

APPROVED THIS 19 DAY OF OCTOBER, 2016

LAKE COUNTY SURVEYOR

Bill Emerson, Jr.

LAKE COUNTY DRAINAGE BOARD

Gerry Scheub, Chairman

K.B.

Michael C. Repay, Member

D.H.

Kyle W. Allen Sr., Member

ATTACHMENT B

UNIT (HOURLY) RATE $_____

THIS PROPOSAL SUBMITTED THIS _____ DAY OF _____, 2016.

CORPORATE NAME: _____

ADDRESS: _____

_____

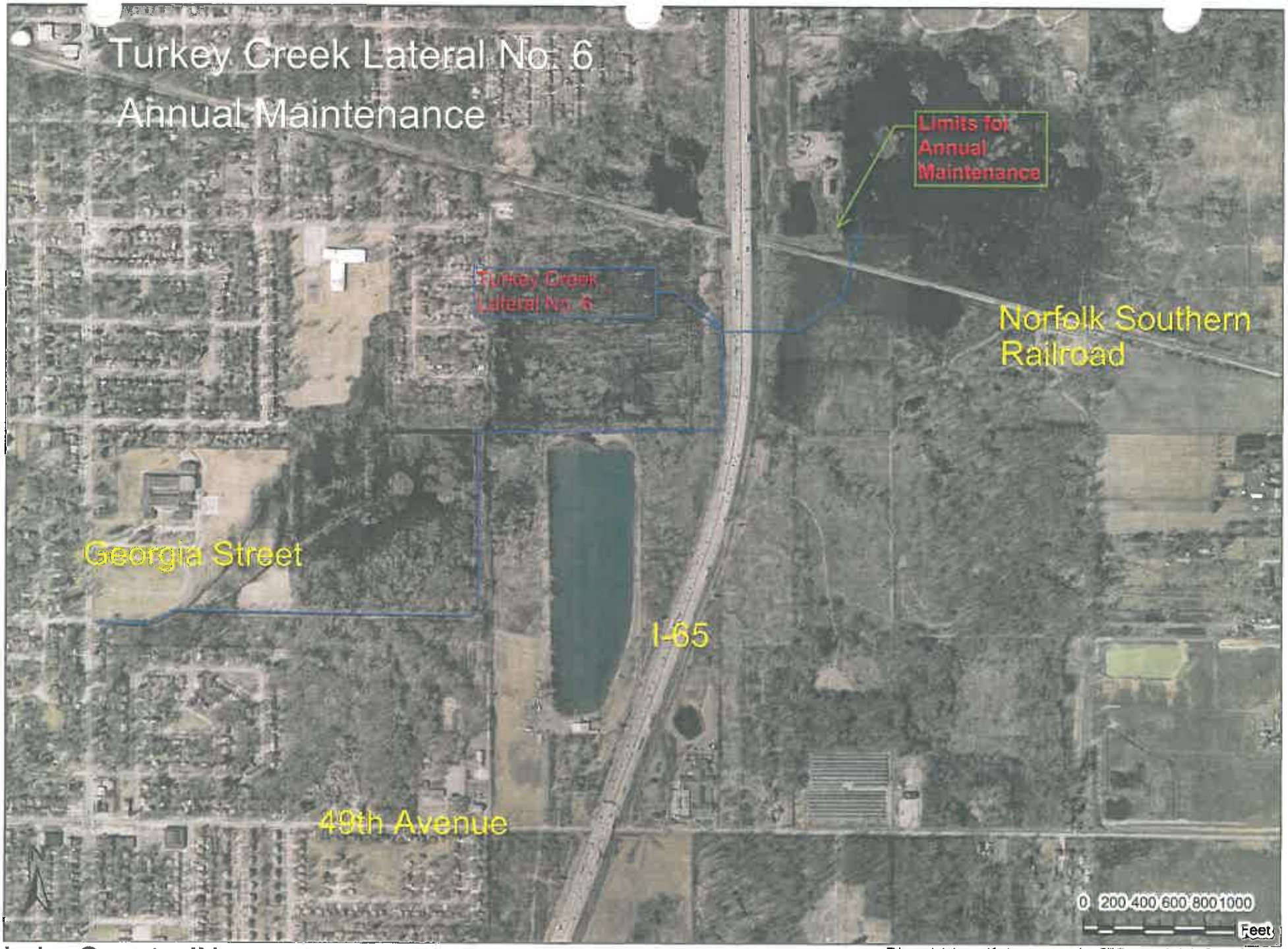
BY: _____
Printed Name

_____
Signature

TITLE: _____

PHONE: _____

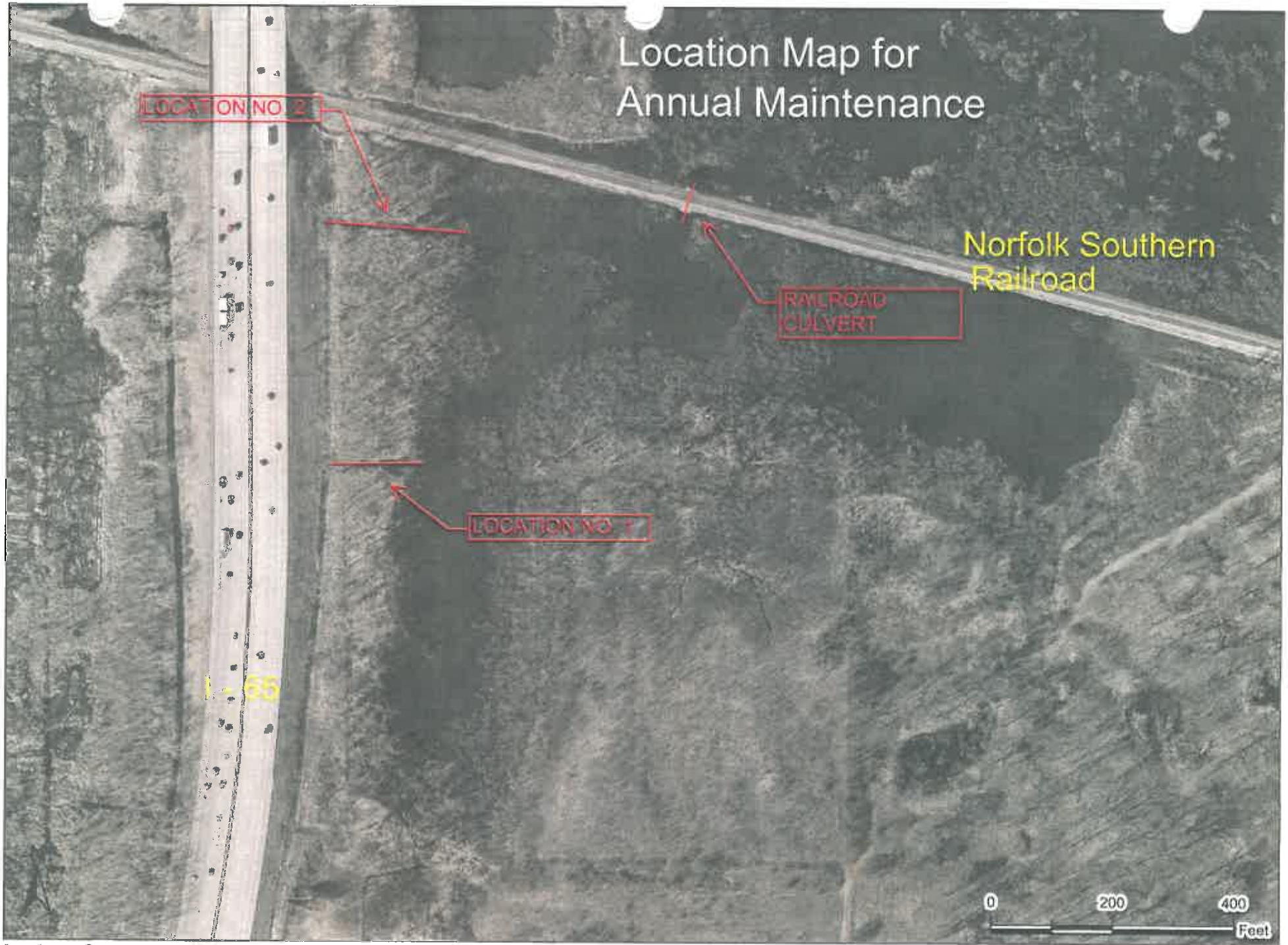
EMAIL: _____



Lake County, IN

Date Printed: October 20, 2016

This map is to be used for tax purposes only. - Bill Emerson, Jr., Lake County Surveyor



Lake County, IN
Date Printed: October 20, 2016

This map is to be used for tax purposes only. - Bill Emerson, Jr., Lake County Surveyor

Office of the Lake County Surveyor

Lake County Government Center • 2293 North Main Street • Crown Point, Indiana 46307
Phone: (219) 755-3745 • Fax: (219) 755-3750

Bill Emerson, Jr.
County Surveyor

NOTICE OF AWARD

November 16, 2016

Delta III, Inc.
2063 West 1250 South
Hanna, Indiana 46340

Emergency Project: 2016 Bruce Ditch – Emergency Bank Repair
West of Norfolk Southern Railroad near 10150 219th Avenue – West Creek Twp.
Amount: $22,125.00

The Lake County Surveyor's Office on behalf of the Lake County Drainage Board, in accordance with the provisions of the specifications general conditions, you are hereby notified of the 2016 Bruce Ditch – Emergency Bank Repair near 10150 219th Avenue, award to Delta III, Inc.

A notice to proceed will be sent.

Sincerely,

Daniel V. Gossman
Drainage Administrator

Cc: Bill Emerson, Jr., Lake County Surveyor
Cliff Duggan, Legal Advisor
Peter Katic, Drainage Board Attorney
Tom Regalado, Asst Drainage Admn
Harold Mussman, West Creek Township Advisory Committee Representative
Lake County Drainage Board & Advisory Committee

LAKE COUNTY DRAINAGE BOARD
Kyle W. Ahlen Sr. D.H.
Gerry Scheub
APPROVED THIS 16 DAY OF NOV 20 16

10-B-1
11-16-16

POTENTIAL BIDDERS
2016 BRUCE DITCH EMERGENCY BANK REPAIR
WEST OF NORFOLK SOUTHERN RAILROAD NEAR 10150 – 219TH AVENUE
WEST CREEK TWP., LAKE COUNTY, IN

R.A. OROS 8244 Greenwood Avenue Munster, IN 46321	$_____
✓ AUSTGEN EQUIPMENT 11309 Broadway, Suite C3 Crown Point, IN 46307	$ 30,489.00
* ✓ DELTA III, INC. 2063 West 1250 South Hanna, IN 46340	$ 22,125.00
✓ GARIUP CONSTRUCTION CO. 3965 Harrison Street Gary, IN 46408	$ 73,870.00
WUNDERINK RIVERSIDE FARMS 24121 Whitcomb Street Lowell, IN 46356	$_____
ELLAS CONSTRUCTION 9137 Elmwood Drive Munster, IN 46321	$_____

10-D-1
11-16-16

Office of the Lake County Surveyor

Lake County Government Center • 2293 North Main Street • Crown Point, Indiana 46307
Phone: (219) 755-3745 • Fax: (219) 755-3750

Bill Emerson, Jr.
County Surveyor

November 9, 2016

ADDENDUM NO. 1

2016 Bruce Ditch – Emergency Bank Repair
West of Norfolk Southern Railroad near 10150 219th Avenue
Lowell, West Creek Township, Lake County, Indiana

To the Following Contractors:

Via Email Notification

DELTA III INC.
2063 West 1250 South
Hanna, Indiana 46340
ATTN: Mike Eaton
(219) 797-4004
michael.eaton@delta3inc.com

GARIUP CONSTRUCTION
3965 Harrison Street
Gary, Indiana 46401
ATTN: Christine Johnsen
(219) 887-5233
christine.johnsen@gariup.com

AUSTGEN EQUIPMENT
11309 Broadway
Crown Point, Indiana 46307
ATTN: John Dumbsky
(219) 690-1850
john@austgenequipment.com

R.A. OROS INC
8244 Greenwood Avenue
Munster, Indiana 46321
ATTN: Emil Poppa
(219) 838-4942
elpop@comcast.net

WUNDERINK RIVERSIDE FARMS
24121 Whitcomb Street
Lowell, Indiana 46356
ATTN: Mark Wunderink
(219) 552-0266
mwunderink@yahoo.com

Ellas Construction
9137 Elmwood Drive
Munster, Indiana 46321
ATTN: John Eliopoulos
(219) 746-0983
john@ellasconstruction.com

1. **Bid Bond** - A bid security in the form of a certified check/cashier's check or a bid bond from an acceptable surety made payable to the **BOARD** shall accompany each bid. The bid security shall be in the penal amount of five percent (5%) of the total bid. Bid security shall be forfeited if the bid is withdrawn after closing time on the date for receiving bids. Out of state bidders must submit a certified check of ten percent (10%) of the total bid made payable to the **BOARD**.

2. **Performance Bond** - Upon execution of the contract, the successful bidder shall give to the **BOARD** a bond payable to the **BOARD**, in an amount fixed by the board but not less than the amount of the bid, and with a corporate surety licensed to do business in Indiana. The bond must be conditioned on the faithful performance of the contract and the payment of all expenses and damages incurred under the contract, including payment of all suppliers, laborers, and subcontractors. However, in lieu of a corporate surety bond, the **BOARD** may accept:
   (1) a cash bond;
   (2) a property bond; or
   (3) a bond from a sufficiently financed private bonding company.

3. **Haul Route** – The drive located west of 9804 West 219th Avenue at the Bruce Ditch is to be used to haul material to and from the site. All haul routes **MUST** be coordinated with Jody Herr (219) 712-5366.

10-B-1
11-16-16

Office of the Lake County Surveyor

Lake County Government Center • 2293 North Main Street • Crown Point, Indiana 46307
Phone: (219) 755-3745 • Fax: (219) 755-3750

Bill Emerson, Jr.
County Surveyor

November 14, 2016

ADDENDUM NO. 2

2016 Bruce Ditch – Emergency Bank Repair
West of Norfolk Southern Railroad near 10150 219th Avenue
Lowell, West Creek Township, Lake County, Indiana

To the Following Contractors: ***Via Email Notification***

DELTA III INC.
2063 West 1250 South
Hanna, Indiana 46340
ATTN: Mike Eaton
(219) 797-4004
michael.eaton@delta3inc.com

GARIUP CONSTRUCTION
3965 Harrison Street
Gary, Indiana 46401
ATTN: Christine Johnsen
(219) 887-5233
christine.johnsen@gariup.com

AUSTGEN EQUIPMENT
11309 Broadway
Crown Point, Indiana 46307
ATTN: John Dumbsky
(219) 690-1850
john@austgenequipment.com

R.A. OROS INC
8244 Greenwood Avenue
Munster, Indiana 46321
ATTN: Emil Poppa
(219) 838-4942
elpop@comcast.net

WUNDERINK RIVERSIDE FARMS
24121 Whitcomb Street
Lowell, Indiana 46356
ATTN: Mark Wunderink
(219) 552-0266
mwunderink@yahoo.com

Ellas Construction
9137 Elmwood Drive
Munster, Indiana 46321
ATTN: John Eliopoulos
(219) 746-0983
john@ellasconstruction.com

1. **Contract Days to Complete** – The standard contract language of 180 days to complete project will be reduced to **60 Days to Complete Project.**

2. **Inspection** – You **must** notify the Lake County Surveyor's Office prior to the installation of the riprap so a representative from the office can be on-site for an inspection of the installation.

9-B-1

COPY

Office of the Lake County Surveyor

Lake County Government Center • 2293 North Main Street • Crown Point, Indiana 46307
Phone: (219) 755-3745 • Fax: (219) 755-3750

Bill Emerson, Jr.
County Surveyor

October 19, 2016

To the Following Contractors:

Via Email Notification

DELTA III INC
2063 West 1250 South
Hanna, Indiana 46340
ATTN: Mike Eaton
(219) 797-4004
michael.eaton@delta3inc.com

GARIUP CONSTRUCTION
3965 Harrison Street
Gary, Indiana 46401
ATTN: Christine Johnsen
(219) 887-5233
christine.johnsen@gariup.com

AUSTGEN EQUIPMENT
11309 Broadway
Crown Point, Indiana 46307
ATTN: John Dumbsky
(219) 690-1850
john@austgenequipment.com

R.A. OROS INC
8244 Greenwood Avenue
Munster, Indiana 46321
ATTN: Emil Poppa
(219) 838-4942
elpop@comcast.net

WUNDERINK RIVERSIDE FARMS
24121 Whitcomb Street
Lowell, Indiana 46356
ATTN: Mark Wunderink
(219) 552-0266
mwunderink@yahoo.com

ELLAS CONSTRUCTION
9137 Elmwood Drive
Munster, Indiana 46321
ATTN: John Eliopoulos
(219) 746-0983
john@ellasconstruction.com

RE: Bruce Ditch – Emergency Bank Repair
West of Norfolk Southern Railroad near 10150 219th Avenue
Lowell, West Creek Township, Lake County, Indiana

The Lake County Surveyor/Lake County Drainage Board has been requested to solicit proposals for the Bruce Ditch – Emergency Bank Repair located north of 10150 219th Avenue and just west of the Norfolk Southern Railroad in West Creek Township. Therefore the Lake County Surveyor has scheduled a **Mandatory Meeting for Monday, October 24, 2016, at 11:00 AM Local Time at the project site. Your presence, or a representative of your company, is Mandatory in order to submit a proposal.**

Please note proposals will only be accepted from contractors attending the Mandatory meeting referenced above. Also indicate the earliest date you can begin work and the time to complete.

Proposals are to be submitted no later than Wednesday, November 16, 2016, by 9:00AM, Local Time to:

Lake County Surveyor's Office
ATTN: Dan Gossman
2293 North Main Street
Crown Point, Indiana 46307

Proposals must be received at the above address in a sealed envelope, labeled Bruce Ditch – Emergency Bank Repair. Proposals received after 9:00AM will be returned unopened.

The proposals will be opened at the Lake County Drainage Board meeting after 9:00AM Local time on Wednesday, November 17, 2016.

10-B-1
11-16-16

POTENTIAL BIDDERS
2016 BRUCE DITCH EMERGENCY BANK REPAIR
WEST OF NORFOLK SOUTHERN RAILROAD NEAR 10150 – 219TH AVENUE
WEST CREEK TWP., LAKE COUNTY, IN

R.A. OROS 8244 Greenwood Avenue Munster, IN 46321	$_____
AUSTGEN EQUIPMENT 11309 Broadway, Suite C3 Crown Point, IN 46307	$_____
DELTA III, INC. 2063 West 1250 South Hanna, IN 46340	$_____
GARIUP CONSTRUCTION CO. 3965 Harrison Street Gary, IN 46408	$_____
WUNDERINK RIVERSIDE FARMS 24121 Whitcomb Street Lowell, IN 46356	$_____
ELLAS CONSTRUCTION 9137 Elmwood Drive Munster, IN 46321	$_____

11-A-1
11-16-16

Office of the Lake County Surveyor

Lake County Government Center • 2293 North Main Street • Crown Point, Indiana 46307
Phone: (219) 755-3745 • Fax: (219) 755-3750

Bill Emerson, Jr.
County Surveyor

November 10, 2016

Bill Emerson, Jr.
Lake County Surveyor
2293 North Main Street
Crown Point, IN 46307

Gerry Scheub, Chairman
Lake County Drainage Board
2293 North Main Street
Crown Point, IN 46307

RE: 2016 Turkey Creek Bank Stabilization
Joliet Street to James Wittchen Drive
Schererville, St John Twp.

Dear Gentlemen,

A review of the proposals submitted for the above mentioned project revealed an error in calculation by Delta III, Inc. The proposal submitted from Delta III was $95,913.00, but the unit price per the line items totaled $85,113.00 (see attached spreadsheet). This brings Delta's proposal $13.00 less than Austgen Equipment's proposal of $85,126.00.

Also, the Indiana Department of Environmental Management has required a change in the amount of riprap and the amount of erosion blanket to be used in this project. While this change affects the quantity of 2 line items, it does not change the line item price.

I have reviewed and discussed these issues with County Surveyor Bill Emerson, Jr., Austgen Equipment and Delta III, and all are in agreement with the decision of the Lake County Surveyor, which is as follows:

1) Delta III, Inc. proposal submitted is corrected to $85,113.00; and
2) Revisions to the quantities per IDEM; and
3) Award to Delta III, Inc. for the revised amount per IDEM quantities of $52,246.00

Therefore, I would respectfully recommend that the 2016 Turkey Creek Bank Stabilization be awarded to Delta III, Inc. Should you have any questions or comments, please contact me.

Respectfully,

Daniel V. Gossman
Drainage Administrator

LAKE COUNTY DRAINAGE BOARD
Gerry Scheub V.P.
K.S.
Kyle W. Allen Sr. D.H.
APPROVED THIS 16 DAY OF NOV 2016

Cc: Tom Regalado, Asst Drainage Admn
Cliff Duggan, Legal Advisor
Jean Shepherd, St john Township Advisory Committee Representative
Lake County Drainage Board & Advisory Committee
Bob Volkmann, Schererville Town manager
Jeff Huet, Schererville Public Works Director
Michael Eaton, Delta III, Inc.
David Austgen, Austgen Equipment, Inc.

11-A-1
11-16-16

LAKE COUNTY DRAINAGE BOARD
LAKE COUNTY SURVEYOR'S OFFICE
2016 TURKEY CREEK - BANK STABILIZATION

Bids Opened: **9/21/2016**

Project Quantity Estimate				Engineer's Estimate		Austgen Equipment		R.A. Oros		Delta III		Gariup Construction	
Item	Description	Unit	Quantity	Unit Price	Cost	Unit Price	Cost	Unit Price	Cost	Unit Price	Cost	Unit Price	Cost
1	LOG JAM REMOVAL (CLEARING & SNAGGING)	LF	625.0	$ 10.00	$ 6,250.00	$ 33.00	$ 20,625.00	$ 15.00	$ 9,375.00	$ 9.00	$ 5,625.00	$ 35.00	$ 21,875.00
2	REVETMENT RIPRAP	TONS	1200.0	$ 40.00	$ 48,000.00	$ 43.80	$ 52,560.00	$ 55.00	$ 66,000.00	$ 55.00	$ 66,000.00	$ 60.00	$ 72,000.00
3	GEOTEXTILE FABRIC	SY	1400.0	$ 3.00	$ 4,200.00	$ 1.10	$ 1,540.00	$ 2.80	$ 3,920.00	$ 3.50	$ 4,900.00	$ 2.50	$ 3,500.00
4	EROSION CONTROL BLANKET (SPECIAL)	SY	1400.00	$ 3.00	$ 4,200.00	$ 1.84	$ 2,576.00	$ 3.50	$ 4,900.00	$ 3.00	$ 4,200.00	$ 10.00	$ 14,000.00
5	MULCHED SEEDING	AC	0.29	$ 1,000.00	$ 290.00	$ 15,500.00	$ 4,495.00	$ 8,000.00	$ 2,320.00	$ 3,450.00	$ 1,000.50	$ 38,000.00	$ 11,020.00
6	SILT FENCE	LF	625.0	$ 3.00	$ 1,875.00	$ 2.00	$ 1,250.00	$ 3.50	$ 2,187.50	$ 3.50	$ 2,187.50	$ 2.50	$ 1,562.50
7	INCIDENTALS	LS	1.0	$ 10,000.00	$ 10,000.00	$ 2,080.00	$ 2,080.00	$ 35,000.00	$ 35,000.00	$ 1,200.00	$ 1,200.00	$ 23,542.50	$ 23,542.50
BID TOTALS:					$ 74,815.00		$ 85,126.00		$ 123,702.50		$ 85,113.00		$ 147,500.00
											$ 95,913.00		

REVISED PER IDEM PERMIT REQUIREMENTS

Project Quantity Estimate				Engineer's Estimate		Austgen Equipment		R.A. Oros		Delta III		Gariup Construction	
Item	Description	Unit	Quantity	Unit Price	Cost	Unit Price	Cost	Unit Price	Cost	Unit Price	Cost	Unit Price	Cost
1	LOG JAM REMOVAL (CLEARING & SNAGGING)	LF	625.0	$ 10.00	$ 6,250.00	$ 33.00	$ 20,625.00	$ 15.00	$ 9,375.00	$ 9.00	$ 5,625.00	$ 35.00	$ 21,875.00
2	REVETMENT RIPRAP	TONS	600.0	$ 40.00	$ 24,000.00	$ 43.80	$ 26,280.00	$ 55.00	$ 33,000.00	$ 55.00	$ 33,000.00	$ 60.00	$ 36,000.00
3	GEOTEXTILE FABRIC	SY	700.0	$ 3.00	$ 2,100.00	$ 1.10	$ 770.00	$ 2.80	$ 1,960.00	$ 3.50	$ 2,450.00	$ 2.50	$ 1,750.00
4	EROSION CONTROL BLANKET (SPECIAL)	SY	2100.00	$ 3.00	$ 6,300.00	$ 1.84	$ 3,864.00	$ 3.50	$ 7,350.00	$ 3.00	$ 6,300.00	$ 10.00	$ 21,000.00
5	MULCHED SEEDING	AC	0.43	$ 1,000.00	$ 430.00	$ 15,500.00	$ 6,665.00	$ 8,000.00	$ 3,440.00	$ 3,450.00	$ 1,483.50	$ 38,000.00	$ 16,340.00
6	SILT FENCE	LF	625.0	$ 3.00	$ 1,875.00	$ 2.00	$ 1,250.00	$ 3.50	$ 2,187.50	$ 3.50	$ 2,187.50	$ 2.50	$ 1,562.50
7	INCIDENTALS	LS	1.0	$ 10,000.00	$ 10,000.00	$ 2,080.00	$ 2,080.00	$ 35,000.00	$ 35,000.00	$ 1,200.00	$ 1,200.00	$ 23,542.50	$ 23,542.50
BID TOTALS:					$ 50,955.00		$ 61,534.00		$ 92,312.50		$ 52,246.00		$ 122,070.00

Office of the Lake County Surveyor

Lake County Government Center • 2293 North Main Street • Crown Point, Indiana 46307
Phone: (219) 755-3745 • Fax: (219) 755-3750

Bill Emerson, Jr.
County Surveyor

CONTRACT #2016-LC-6

PROJECT NAME: 2016 TURKEY CREEK BANK STABILIZATION
Joliet Street to James Wittchen Drive
Schererville, St. John Township

This CONTRACT is made and entered into this 16th day of NOVEMBER, 2016 by and between DELTA III, INC. a(n) INDIANA Corporation hereinafter referred to as the "Contractor" and the Lake County Drainage Board, hereinafter referred to as the "Board".

NOW, THEREFORE, in consideration of the mutual promises contained herein, the Board and the Contractor do hereby mutually agree as follows:

I. SCOPE OF WORK

The Contractor shall provide the project services as described herein in Attachment A; in the approved plans and specifications, and any modifications or addenda thereof, which are attached hereto or otherwise incorporated herein by reference; in the terms contained in any permits obtained or not yet approved and any monies to be received from contributing municipalities; and in the Contractor's bid/response and any supplemental responses, and subsequent negotiations arising therefrom, all of which is incorporated herein by reference. Where there is an inconsistency between these terms, the term that is most beneficial to the Board shall control.

The Contractor shall perform the work covered by this Contract under the supervision of the Lake County Surveyor and/or its designee.

The Contractor shall comply with all plans, specifications, terms and conditions of this Contract. Deviation from said plans, specifications, terms or conditions shall be a basis for an immediate cease and desist notice of said unauthorized activity by the Board or the Lake County Surveyor's Office and, where appropriate as determined by the Board or the Lake County Surveyor's Office, cease and desist of contract activity until further action taken by the Board at its next public meeting.

The scope of work occurs on private property and/or within and upon a regulated drain and its easement as authorized by statute. The Contractor has the authority to keep unauthorized persons from the job site in order to avoid any potential liability arising therefrom. Should such persons fail to leave said site, the Contractor is to immediately contact the Lake County Surveyor's office, who may contact the Lake County Sheriff to maintain a safe work site and limit any liability of Lake County or the Contractor for any alleged claims or damages.

Soil Conditions

The Contractor agrees to accept full responsibility for its conclusions relative to the nature and probable difficulties of the work due to underground structures and soil conditions.

The results of subsurface soil investigations shown on the drawings or given in the specifications are for general information only. Neither the Lake County Drainage Board nor the engineer guarantees that materials other than those given in this information will not be encountered or that the proportions of the various materials will not vary from the information indicated on the plans or given in the specifications.

The Contractor shall be responsible for making its own subsurface soil investigations and shall make its own determinations from the investigations. The Contractor waives all claims for damages which it may suffer by reason of the inadequacies or discrepancies of the underground information shown on the plans or provided in the specifications. No compensation will be paid to the Contractor due to inadequacies or discrepancies in subsurface data furnished by Lake County Drainage Board or by the engineer.

Materials

No materials of any kind shall be used until they have been examined by the Lake County Surveyor or his engineer or other person authorized by the Lake County Surveyor, who shall have full power to condemn any work or materials not in accordance with these specifications, and to require the Contractor to remove any work or materials so condemned, and at the contractor's own expense to replace such condemned work or materials to the Lake County Surveyor or his engineer's satisfaction. The decision of the Lake County Surveyor or his engineer shall be final as to quality of workmanship and materials.

Clean up

During the time that the work is in progress the Contractor shall make every effort to maintain the site in a neat and orderly condition. All refuse, broken pipe, excess fill material, cribbing, etc., shall be removed as soon as practicable. Should the work not be maintained in a satisfactory condition the Lake County Surveyor or his engineer, or other person authorized by the Lake County Surveyor may cause the work to stop until the "clean-up" portion of the work has been done to the satisfaction of the Lake County Surveyor and/or its engineer.

The work will not be considered complete and the final payment certificate issued until all rubbish, unused material or equipment due to or connected with it shall have been removed and the premises left in a condition satisfactory to the Lake County Surveyor and/or its engineer.

II. PAYMENT OF SERVICE

a. For the services rendered by the Contractor, the Board shall pay to the Contractor the sum of FIFTY-TWO THOUSAND TWO HUNDRED AND FORTY-SIX DOLLARS and 00/100ths ($52,246.00), payable in accordance with the attached "Schedule of Payments".

b. No payment under paragraph (a) above shall be made until:

(1) The Lake County Surveyor has filed with the Board a written report approving the work performed by Contractor as required under this contract.

(2) The Contractor shall have filed with the Board a waiver of lien and verified statement that all expenses incurred for labor, material, and suppliers have been paid in full.

c. Billing for the services rendered under this contract shall be in the form and manner prescribed by the State of Indiana and the Board.

d. Approval of payment claims shall be made at a regular Board Meeting. Should there be a dispute regarding any invoice or payment thereof, the party raising the dispute shall notify the other party upon discovery thereof. Payment of any invoice shall not be a waiver of any right associated with a dispute with the invoice or payment, and any future payment may be modified accordingly to rectify any discovered discrepancy.

e. Fifteen percent (15%) of the contract price shall be withheld by the Board for a period of 60 days after completion of the work and its acceptance by the Lake County Surveyor for the purpose of securing payment of suppliers, laborers, and subcontractors, if any. However, if the Contractor files waivers of lien from all subcontractors, suppliers and laborers of this project, the 15% retainage may be paid along with the final payment under this contract.

f. The sources of funds for payment under this Contract is the Lake County Drainage Board and/or such other applicable and appropriate sources of funds as apply to the scope of work to be performed on behalf of the approved budget for this specific project, and more specifically the line item therein for the payment of these services. By execution of this Contract the Lake County Drainage Board or Lake County is not agreeing to use funds other than the funds in the budget for the purposes enunciated herein. The sources are restricted to those funds which have been appropriated for this purpose by the Lake County Council as applicable and approved by the Department of Local Government Finance, the State Board of Accounts and/or State Board of Tax Commissioners, as applicable. In this regard this Contract may be terminated, in whole or in part, when the Lake County Auditor makes a written determination that the funds are not appropriated or otherwise available to support continuation of performance. Such determination shall be final and conclusive. Notice shall be given to the Contractor as soon as the Board is aware of such a situation. However, the Board will make good faith efforts to provide funding for this Contract, and if such funding is available and appropriated, the Board shall fulfill its financial obligation, subject to all terms and conditions herein.

III. SUBLETTING AND ASSIGNMENT OF CONTRACT

No portion of the Contract shall be sublet, assigned or otherwise disposed of, except with the written consent of the Board. Consent to sublet, assign, or otherwise dispose of any portion of the Contract shall not be construed to relieve the Contractor of any responsibility for the fulfillment of the Contract.

IV. SUCCESSORS AND ASSIGNEES

The Contractor binds its successors, executors, administrators and assignees to all covenants of this Contract. The Contractor shall not assign, sublet or transfer its interest in this Contract without the prior written consent of the Board, except as above set forth.

V. TERM OF CONTRACT

Time is of the essence. The Contractor shall complete the work under and pursuant to this Contract within 180 days, including Saturdays, Sundays, and holidays. Should the Contractor fail to do so, the Lake County Drainage Board is entitled to and may retain, from compensation otherwise to be paid, or may otherwise pursue payment thereof, One Hundred Dollars ($100.00) for each day, Sundays and holidays not included, that the work remains uncompleted beyond the specified period, which sum is agreed on as the proper measure of liquidated damages that Board will sustain by the failure of contractor to complete the work in the time stipulated, and this sum is not to be construed in any sense as a penalty.

When good cause for a delay in the work is shown by the Contractor, the Lake County Surveyor shall determine the seriousness of the delay and extend the time of completion of the work accordingly and in his sole discretion. Such good cause may include, but is not limited to, changes in the work, strikes, lockouts, or other labor disputes; fire, earthquake, or other natural disasters; unavoidable casualty or damage to personnel, materials, or equipment; delay in receiving materials or equipment; acts or neglect of the Board, the Board's representative, or an employee of either; acts or neglect of another Contractor employed by the Board, or any other person not directly responsible to Contractor; or other such similar cause beyond the control of the Contractor.

Any claim by Contractor for an extension of time must be made in writing to the Lake County Surveyor not more than one (1) day following the development of the cause for delay. However, in the case of a continuing cause of delay, only one claim need be made. Whenever the Lake County Surveyor or its representative in his or her own discretion determines that circumstances warrant an extension of time, he or she may grant such an extension until a claim of delay has been submitted by the Contractor.

VI. CHOICE OF LAW

This Contract shall be construed in accordance with and governed by the laws of the State of Indiana and suit, if any must be brought in Lake County, State of Indiana.

VII. INSURANCE/SECURITY/INDEMNITY

The Contractor shall carry or require that there be carried Workmen's Compensation Insurance for all its employees and those of its subcontractors in accordance with state or territorial Workmen's Compensation laws.

The Contractor shall carry or require that there be carried public liability and property damage insurance in amounts as outlined in IC 34-4-16.5-1 et. seq. to protect the Board and County, the Contractor and its subcontractors from claims which may arise from work under this Contract. The Board shall be named as an additional insured and be fully protected thereunder.

All insurance as required herein shall be effective for acts occurring during and shall be maintained during the entire life of this Contract.

The Contractor shall maintain during the term of the Contract a performance bond, payable to the Lake County Drainage Board, providing security for the Contractor's performance obligations in the amount of the Contract. Said bond may be reduced to an amount not less than the amount of the remaining item costs in said Contract.

The Contractor agrees to indemnify and hold harmless Lake County, the Lake County Drainage Board, the Lake County Surveyor, its officials, its departments, its boards, its employees, and its agents and assigns against all actions, claims or demands for damages of any kind whatsoever, known or unknown, which may in any way be caused by the negligent acts of the Contractor, including but not limited to the negligent digging up of streets, alleys or public grounds, and by improper care of trees and shrubbery, or which may result from the default, carelessness or negligence of the Contractor, its agents, employees or workers under its control or direction in the performance of the work described herein, and shall refund and reimburse to the Lake County Drainage Board all sums which it may be obligated or adjudged to pay on any such claims or demands immediately upon such determination.

VIII. REMEDIES UPON DEFAULT

If either party of this Contract shall be in default of any of the terms and conditions hereof, the party complaining of the default shall notify the defaulting party in writing of the default complained of, and the defaulting party shall have ten (10) days from the date of receipt of said written notification in which to cure the default complained of therein. Only after the expiration of the ten (10) day period described herein may the parties resort to legal proceedings to enforce any of the terms and conditions of this Contract or to collect damages in a court of competent jurisdiction.

Should the Contractor be cited on three or more occasions by the Lake County Surveyor or Contract Engineer on the project, the Contract is subject to termination for cause, as determined by the Board at a public meeting.

IX. EQUAL OPPORTUNITY AND AFFIRMATIVE ACTION

The Contractor agrees by the execution of this contract that in regards to its operations:

a. No person shall, on the grounds of race, color, national origin or sex, be excluded from participation or be denied the benefits thereof, or be subject to discrimination.
b. The principals of equal opportunity in employment and delivery of services are applicable and the contractor commits to a policy and practice of nondiscrimination and affirmative action based upon age, military service, ancestry, color, national origin, physical handicap, political affiliation, race, religion and sex.
c. The provisions of the Affirmative Action Program adopted by the Board of Commissioners of the County of Lake on May 31, 1977, as applicable, are incorporated by reference as part of this Contract.
d. The provisions of all Federal Civil Rights laws and the Indiana Civil rights laws as applicable are incorporated by reference as part of this Contract.
e. Breach of any of the equal opportunity and/or the nondiscrimination provisions of the Contract may be regarded as a material breach of the Contract.
f. Where applicable, nondiscriminatory clauses and affirmative action clauses shall be made a part of any agreement, contract or lease between Contractor and any organization, corporation, subcontractor or other legal entity that benefits from the funds paid to contractor by this Contract.

X. LIMITATION OF AUTHORITY

The Contractor has no authority to obligate the Board on any contract or agreement of any kind, character or nature, nor for any expense, except as otherwise delineated in this Contract.

XI. PERSONNEL/INDEPENDENT CONTRACTOR

The Contractor represents that he has, or will secure at his own expense, all personnel required in performing the services under this Contract. Such personnel shall not be employees of or have any contractual relationship with the Board. All of the services required hereunder will be performed by the Contractor or under his supervision, and all personnel engaged in the work shall be fully qualified to perform such services.

XII. ADDITIONAL SERVICES

In the event that any additional services are required of the Contractor that are over and above those described in the Contract and attachments hereto, the services shall not be performed without the express prior written agreement between the Board and Contractor. The scope of additional services and fees to be charged shall be specified in any such written authorization.

XIII. SUBSTANTIAL PERFORMANCE

This Contract shall be deemed to have been substantially performed only when fully performed according to its terms and conditions and any modification thereof.

XIV. WAIVER OF RIGHTS

No right conferred on either party under this Contract shall be deemed waived and no breach of this Contract excused, unless such waive or excuse shall be in writing and signed by the party claimed to have waived such right.

XV. E-VERIFICATION

A. IC 22-5-1.7 Chapter 1.7. Public Contract Services, Business Entities; Unauthorized Aliens.
B. IC 22-5-1.7.2 "Contractor" As used in this chapter, "contractor" means a person that has or is attempting to enter into a public contract for services with a state agency or political subdivision.
C. IC 22-5-1.7-3 "E-Verify program" As used in this chapter, "E-Verify program" means the electronic verification of work authorization program of the Illegal Immigration Reform and Immigration Responsibility Act of 1996 (P.L. 104-208), Division C, Title IV,s. 403(a), as amended, operated by the United States Department of Homeland Security or a successor work authorization program designated by the United States Department of Homeland Security or other federal agency authorized to verify the work authorization status of newly hired employees under the Immigration Reform and Control.
D. IC 22-5-1.7-4 "Person" As used in this chapter, "person" means an individual, a corporation, a limited liability company, a partnership, or another legal entity.
E. IC 22-5-1.7-5 "Political subdivision" As used in this chapter, "political subdivision" has the meaning set forth in IC 36-1-2-13.
F. IC 22-5-1.7-6 "Public contract for services" As used in this chapter, "public contract for services" means any type of agreement between a state agency or a political subdivision and a contractor for the procurement of services.
G. IC 22-5-1.7-9 "Unauthorized alien" As used in this chapter, "unauthorized alien" has the meaning set forth in 8 U.S.C. 1324a(h)(3).

H. IC 22-5-1.7-11 Contractors with public contract for services required to use E-Verify program; business entities that receive certain grants required to use E-Verify program Sec. 11.
   a. This subsection applies only to a public contract for services entered into or renewed after June 30, 2011. A state agency or political subdivision may not enter into or renew a public contract for services with a contractor unless:
      1. the public contract contains:
         A. a provision requiring the contract to enroll in and verify the work eligibility status of all newly hired employees of the contractor through the E-Verify program; and
         B. a provision that provides that a contractor is not required to verify the work eligibility status of all newly hired employees of the contractor through the E-Verify program if the E-Verify program no longer exists; and
      2. the contractor signs an affidavit affirming that the contractor does not knowingly employ an unauthorized alien.
   b. A state agency or political subdivision may not award a grant of more than one thousand dollars ($1,000) to a business entity unless the business entity:
      1. signs a sworn affidavit that affirms that the business entity has enrolled and is participating in the E-Verify program;
      2. provides documentation to the state agency or political subdivision that the business entity has enrolled and is participating in the E-Verify program; and
      3. signs an affidavit affirming that the business entity does not knowingly employ an unauthorized alien

I. IC 22-5-1.7-15 Certification by subcontractor. If a contractor uses a subcontractor to provide services for work the contractor is performing under a public contract for services, the subcontractor shall certify to the contractor in a manner consistent with federal law that the subcontractor, at the time of certification:
   1. does not knowingly employ or contract with an unauthorized alien; and
   2. has enrolled and is participating in the E-Verify program.

J. Affidavit by Contractor. By execution of this contract I swear under the penalties of perjury that my company does not knowingly employ an unauthorized alien.

XVI. MISCELLANEOUS PROVISIONS

This Contract represents the entire understanding between the parties, and modifications of this Contract shall not be effective unless reduced to writing and signed by both parties. In the event any portion or portions of this Contract are found to be void or voidable portions, these portions shall be stricken and the remaining portions enforced.

All provisions of State Law applicable to the County and/or governmental entity or entities which is/are a party to this Contract are incorporated by reference as a part of this contract.

In the event this Contract is not fully executed and approved prior to the date of commencement, it shall be deemed retroactive in force and effect to the date of commencement upon and after the full execution, approvals, required filing and recordation.

XVII. TERMINATION

Termination of Agreement. The County shall have the right to terminate this Contract, with or without cause, by giving written notice to the Consultant of such termination and specifying the effective date thereof, at least fourteen (14) days before the effective date of such termination. In addition, the Consultant may, for any cause, also terminate this Contract by giving written notice to the Lake County Surveyor of such termination and specifying the effective date thereof, at least fourteen (14) days before the effective date of such termination.

IN WITNESS WHEREOF, the parties hereto have caused this Contract to be executed by their duly authorized officers on the day and date first above written.

LAKE COUNTY DRAINAGE BOARD

GERRY SCHEUB, CHAIRMAN

KYLE ALLEN, SR., MEMBER

MICHAEL C. REPAY, MEMBER

LAKE COUNTY SURVEYOR

WILLIAM EMERSON, JR

CONTRACTOR

DELTA III, INC.

CORPORATE NAME

2063 W 1250 S

ADDRESS

Hanna, IN 46340

CITY, STATE, ZIP CODE

(219) 797-4004

PHONE NUMBER

Michael Easton, President

michael.eaton@delta3inc.com

EMAIL

ATTEST:

MARY ELLEN KUPSIK, SECRETARY,
LAKE COUNTY DRAINAGE BOARD

Contract prepared by: Clifford E. Duggan, Jr., Legal Advisor, Lake County Surveyor's Office, Lake County, IN

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