1. The regular meeting of the Wild Rice Watershed District Board of Managers was held on **Wednesday, January 9, 2013**. Managers in attendance included Greg Holmvik, Duane Erickson, Curt Johannsen, Mike Christensen, John Austinson and Dean Spaeth. Absent: Raymond Hanson. In addition the following persons were in attendance: Administrator Kevin Ruud, Loretta Johnson, Engineer Jerry Bents, and various other interested taxpayers and landowners.

2. Chairman Holmvik called the meeting to order 8:30 a.m.

3. **Agenda Approval.** A motion was made by Manager Spaeth and seconded by Manager Christensen to approve the agenda with the addition with the addition of Hilde petition into Clay County #8 and Managers Protocol. Carried.

4. **Approval of Billings.** A motion was made by Manager Christensen and seconded by Manager Spaeth to approve payment of billings as presented. Carried.

5. Manager Hanson and Attorney Hanson arrived at 8:40 a.m.

6. **Meeting Minutes.** A motion was made by Manager Christensen and seconded by Manager Spaeth to approve the minutes of the December 12, 2012, regular meeting as distributed. Carried.

7. **Financial Report Dated December 31, 2012 and End of Year 2012.** The Financial Report dated December 30, 2012, and the End of Year 2012 were distributed to the Board of Managers and reviewed. Consensus of the Managers was to act on the current minutes and hold the end of year until later in the meeting. A motion was made by Manager Hanson and seconded by Manager Johannsen to approve the December 31, monthly report as distributed. Carried.

8. **Olson Agassiz Operating and Maintenance Agreement.** Administrator Ruud distributed a draft copy of the following proposed change to the O & M Plan as agreed upon at a meeting held on the 17th of December with landowners, DNR representatives and Watershed staff and Managers.

    **2013-2014 Two Year Operation Agreement – Olson Agassiz – WRWD Project No. 13**

    Between: Minnesota Department of Natural Resources and the Wild Rice Watershed District

    This Operation Agreement is between the Minnesota Department of Natural Resources (DNR) and the

    Wild Rice Watershed District (WRWD) regarding the Olson-Agassiz Project #13 on the Agassiz-

    Olson Wildlife Management Area (WMA). The Operation Agreement is for the two (2) year water

    level management of the existing outlet structure located in Section 21, Spring Creek Township

    (T146N-R45W), Norman County.
The following activities will occur in the 2013 & 2014 Calendar Years.

1. If flood conditions appear to be imminent, open the 2 x 3 foot gate at the base of the structure on, or as close to March 1, 2013 & 2014, as conditions of ice and safety will allow.

2. Close the 2 x 3 foot gate at the base of the structure and raise the adjustable sliding steel panel openings to a level of 971.75 feet three (3) days prior to the National Weather Service (NWS) predicted crest on the Marsh River at Shelly, MN as conditions of ice and safety will allow.

3. Adjust the level of the 971.00 feet on or before May 1, 2013, or when the National Weather Service flood readings at Halstad, Minnesota recede below flood stage as conditions for safety will allow.

4. Maintain the adjustable sliding steel panel openings on the structure at a level of 971.00 feet through the fall and winter of 2013-2015. DNR will evaluate changes in wetland wildlife habitat and assess the efficiency of managing cattails with this water elevation.

5. Schedule meeting to review the plan and information collected in December 2013 and 2014. Information collected will include seepage conditions in agricultural fields of Sections 17, 20 and 29 during this year with this pool elevation.

This agreement will run for a period of two (2) years from March 1, 2013 to February 28, 2014. Changes in this agreement must be agreed to by both parties. Termination of this agreement must be agreed to by both parties.

For The Wild Rice Watershed District:  

[Signature]

Name of Signer & Position

For The Minnesota DNR:  

[Signature]

Name of Signer & Position

A motion was made by Manager Erickson and seconded by Manager Hanson to approve the above O & M Plan. Carried.

9. Clay County Highway Department Policy. Administrator Ruud distributed a copy of the Clay County Highway Department Drainage Structure Policy Statement (a copy of which is at the end of these minutes), which Clay County Engineer Overbo requested that the District adopt. A motion was made by Manager Hanson and seconded by Manager Johannsen to adopt the following Resolution. Roll call taken with all Managers voting yes. Carried.

RESOLUTION

Resolution Supporting the Clay County Highway Department Drainage Structure Policy Statement

WHEREAS, the Wild Rice Watershed District has many drainage structures and bridges in Clay County; and

WHEREAS, Many of the structures are located on either private drives or field entrances that are positioned in both the road authority right-of-way and the legal drainage ditch right-of-way; and

WHEREAS, Those structures periodically need replacement due to the condition and integrity of the structure; and

WHEREAS, Structure that meet State Aid requirements and are placed in the National Bridge Inventory (NBI) are eligible for replacement dollars through the Bridge Bonding or Township Bridge program; and

NOW, THEREFORE, BE IT RESOLOVED that the Wild Rice Watershed District would like to see all the structures on private drives and private field entrances be inventoried, placed in the NBI and eligible for future State Aid replacement funds.
BE IT FURTHER RESOLVED that the Wild Rice Watershed District supports and agrees to cooperate with the Clay County Drainage Structure Policy as approved by the Clay County Board Highway Committee on Tuesday November 20, 2012.

Adopted this 9th day of January, 2013

Greg Holmvik, Chair, Wild Rice Watershed District

ATTEST:

I, KEVIN R. RUUD, hereby attest that the foregoing is a true and correct copy of a resolution adopted by the Wild Rice Watershed District Board of Managers, this 9th day of January, 2013, as recorded in the record of proceedings.

Kevin Ruud, Administrator

10. Clay County Ditch #8 Petition. A petition was filed by Charles Hilde to allow him drainage into the Clay County Ditch System. A public hearing must be held and noticed to the public allowing testimony into the request. A motion was made by Manager Hanson and seconded by Manager Erickson to schedule the hearing on the petition land into Clay County Ditch #8 for 11:00 a.m. on Wednesday, February 13, 2013, at the District’s regular board meeting. Carried.

11. Community Levees Flood Control Hendrum/Perley/Shelly. Engineer Bents reported that the Hendrum and Perley grant agreement contracts are still open due to some seeding issues. Discussions have been held with the State regarding Halstad and we have tentative agreements on funding for Halstad pending a closing of one of the District’s acquisition agreements. Discussion followed regarding Shelly and the hearing which will reconvene at 11:00 a.m. It was reported that after their public meeting, the City Council of Shelly held a meeting and voted to withdraw their petition for community levee protection. A teleconference by staff was held with State representatives regarding the amount of the cost share that Shelly is responsible for in withdrawing their petition at this late date. The extension of the grant agreement with Shelly and the State was not executed and discussion followed regarding the responsibility of payment. Manager Holmvik felt that Shelly should be billed for the balance spent, Manager Hanson disagreed and felt that Shelly should only be billed the $5,000. Manager Johanssen disagreed and stated that the District had moved forward with a good faith effort, and if they back out should be responsible. Administrator Ruud reported that the Mayor of Shelly stated following the Shelly hearing, that the Community of Shelly had the vote for quite some time to withdraw their petition, but didn’t. Manager Holmvik stated that historically when someone has petitioned this board, they have been made to pay the costs if withdrawn. Engineer Bents stated that he felt the Board of Managers owed Shelly an answer on the costs and expenses that they are responsible to pay at the hearing today. The discussion was tabled until 11:00 a.m. when the hearing is reconvened.
12. PERMIT APPLICATIONS
A motion was made by Manager Hanson and seconded by Manager Spaeth to approve the following permit applications with conditions as shown. Carried.

- **Wayne Borgen, Section 13, Lee Township.** Permit #1-9-13-2 to install subsurface drain tile with the following conditions: Approved with the following recommendations and conditions:
  1. Recommendation that the applicant contact and coordinate with the NRCS/SWCD/FSA offices to ensure approval/clearance regarding any potential wetland issues (and with the USFW for installation of tile on any parcel that is under easement from the USFWS).
  2. Recommendation that the applicant obtain approval from the necessary road authorities (Township, county, state,...) for any work in the road R/W and the drainage authorities (county) for outlets into legal ditches not under the WRWD jurisdiction.
  3. Approved with the condition that the applicant is responsible for adequate erosion control measures at the outlet of the tile system. This should include the installation of riprap or other protection measures at pump outlets. It will remain the responsibility of the applicant to maintain this protection as long as the tile is in place and operating.
  4. Approved with the condition that all gravity outlets be installed above (however not more than 2-feet above) the elevation of the original design gradeline of the receiving ditch or channel.
  5. Pumped Outlets Only – Approved with the condition that the pump(s) not be operated during freezing conditions and during times of downstream flooding and that pumps and associated pipes will not be installed above ground and will not block vehicle traffic on the ROW of ditch systems. Also all disturbed areas in the ditch ROW’s will be restored and reseeded to preexisting conditions.

- **Lowell Johnson, Section 25, Pleasant View Twp.** Permit #1-9-13-6 to install a field approach and culvert with the condition that the pipe size is a 24" culvert.

13. Permitting Policies. Policies to follow regarding how long the District can hold tabled permits without action was discussed. Consensus of Managers was for Attorney Hanson, Administrator Ruud and Engineer Bents to work on a policy to be put in place and bring it to the Board for review in February.

14. A motion was made by Manager Hanson and seconded by Manager Johannsen to table the following permit applications. Carried with Managers Hanson and Spaeth opposed.

- **Brad Arends, Section 22, Mary Twp.** Permit to install subsurface drain tile.
- **Bob Brandt, Sections 22, 23, 26, McDonaldsville Twp.** Permit to install subsurface drain tile.
- **Clay County Highway Dept. Section 25, Georgetown Twp.** Permit to replace a bridge with a box culvert.
- **Bryan Klabunde, Sections 2, Popple Grove and 34-35 Pembina Twps.** Permit to install subsurface drain tile.
- **MNDOT Sections in Nora, Minerva Twps.** Permit to do a bituminous mill/overlay and culvert replacement on T.H. #92.
- **MN DOT Sections in McDonaldville, Pleasant View Twp.** Permit to do pavement reclamation and culvert replacement on T.H. #9.
- **Richard Oberg, Section 35, Pleasant View Twp.** Permit to install subsurface drain tile.
- **Adam Stalboerger, Section 12, Popple Grove Twp.** Permit to install a culvert un Highway #59 for a subsurface tile drainage system.
- **Ryan Zimmerman, Section 11, Georgetown Twp.** Permit to install subsurface drain tile.
15. **Terry Guttormson, Section 14, Georgetown Twp.** A motion was made by Manager Erickson and seconded by Manager Spaeth to approve Permit #1-9-13-5 to clean silt out of ditches within the Dalen Coulee Project. Approved pending applicant providing documentation of approval from BWSR or the SWCD on potential RIM/CRP issues. Carried.

16. **Goose Prairie Project/Redetermination of Benefits.** Manager Erickson stated that he felt the Goose Prairie Marsh Project, which would hold 1,000 acre feet of storage would be a good project, although because it is a wetland may be more difficult. This is to be a topic at the upcoming Project Team Meeting. Erickson also talked about Redetermination of Benefits and felt the Board should not force it upon landowners.

17. **Long Term Flood Solutions (LTFS).** Discussion was held regarding the Red River Basin discussion on the need for a 20% reduction in long term flood solutions. A roll call vote was taken on Managers who supported or didn’t support the 20% reduction. The following Managers supported the need for a 20% reduction: Christensen, Johannsen and Holmvik. Manager Erickson stated that he supported it only if there is a benefit cost ratio of one or better. The following Managers opposed the 20% reduction: Spaeth, Austinson and Hanson.

18. **Wayne Borgen, Section 19, Hendrum Twp.** A motion was made by Manager Erickson and seconded by Manager Johannsen to approve Permit #1-9-13-13 to install subsurface drain tile 1. Recommendation that the applicant contact and coordinate with the NRCS/SWCD/FSA offices to ensure approval/clearance regarding any potential wetland issues (and with the USFW for installation of tile on any parcel that is under easement from the USFWS). 2. Recommendation that the applicant obtain approval from the necessary road authorities (Township, county, state....) for any work in the road R/W and the drainage authorities (county) for outlets into legal ditches not under the WRWD jurisdiction. 3. Approved with the condition that the applicant is responsible for adequate erosion control measures at the outlet of the tile system. This should include the installation of riprap or other protection measures at pump outlets. It will remain the responsibility of the applicant to maintain this protection as long as the tile is in place and operating. 4. Approved with the condition that all gravity outlets be installed above (however not more than 2-feet above) the elevation of the original design gradeline of the receiving ditch or channel. 5. Pumped Outlets Only – Approved with the condition that the pump(s) not be operated during freezing conditions and during times of downstream flooding and that pumps and associated pipes will not be installed above ground and will not block vehicle traffic on the ROW of ditch systems. Also all disturbed areas in the ditch ROW’s will be restored and reseeded to preexisting conditions. And the requirement that the applicant provide documentation that no tile lines will be installed within City of Hendrum Flood Control Project R/W limits (copies of R/W maps are available from the WRWD). Documentation should include measurements from the centerline of levee to nearest tile line. After receipt of the documentation, the WRWD shall provide written approval of the location before project can proceed.

19. **Shelly Reconvened Hearing.** The Hearing for the Community of Shelly was reconvened at 11:00 a.m. Considerable discussion was held by both Shelly residents and the Managers regarding the responsibility of Shelly and/or the Watershed District in paying the extra costs associated in withdrawing their petition for a flood protection levee. Landowners and residents in attendance voiced their objections to the proposed project.
Residents in the Shelly area also received a letter in the mail from someone, who encouraged people to call the Watershed District and give them a pro and/or a con for the project. Administrator Ruud noted that sixteen people called the office stating that they were for the project and three against. The total cost of the flood protection project was approximately $3.1 million and the local cost share for Shelly was $61,500. A motion was made by Manager Johannsen to recess the hearing until 9:00 a.m. on Wednesday, February 13, 2013, at the regular Board meeting. Carried. Prior to the Shelly City Council meeting on February 4, 2013, they will be notified the amount the District is requesting them to pay for withdrawing their petition.

20. Watershed District Rural Acquisition Sites. Manager Erickson stated that he wanted the issue regarding the sites the District acquired through the FEMA program that cannot be sold brought to MAWD for possible legislation. Erickson wanted to change the legislation to allow the property to be sold. It was noted that FEMA is a Federal Program and lobbying State legislators would not bring assistance. Federal legislators would need to be brought in to request assistance.

21. Special Meeting Minutes, Shelly Hearing. A motion was made by Manager Spaeth and seconded by Manager Christensen to approve the minutes of the December 13, 2012, hearing at Shelly. Carried.

22. Managers Per Diems and Expenses. A motion was made by Manager Austinson and seconded by Manager Hanson to approve Managers Per Diems and Expenses as distributed. Carried.

23. Managers Protocol. Managers were asked to notify staff if they were unable to attend a meeting, be it regular, special, hearing or committee or if they were going to be late.

24. Year End Financial Report. A motion was made by Manager Hanson and seconded by Manager Johannsen to approve the 2012 End of Year Financial Report as distributed. Carried.

25. A motion was made by Manager Hanson and seconded by Manager Austinson to adjourn the meeting. Carried. There being no further business to be brought before the Board of Managers, Chairman Holmvik adjourned the meeting at 12:00 noon.

John Austinson, Secretary
<table>
<thead>
<tr>
<th>Date</th>
<th>Num</th>
<th>Name</th>
<th>Memo</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec 13-'12 - Jan 9, 13</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/13/2012</td>
<td>14669</td>
<td>Norman County Treasurer/Auditor</td>
<td>Acquisition Property Paquin</td>
<td>1,064.88</td>
</tr>
<tr>
<td>12/13/2012</td>
<td>14670</td>
<td>Cardmember Service</td>
<td>MAWD &amp; Technical Equip</td>
<td>410.42</td>
</tr>
<tr>
<td>12/13/2012</td>
<td>DD</td>
<td>PERA</td>
<td>PERA</td>
<td>76.29</td>
</tr>
<tr>
<td>12/13/2012</td>
<td>DD</td>
<td>QuickBooks Payroll Service</td>
<td>Created by Payroll Service on 12/17/2012</td>
<td>4,604.81</td>
</tr>
<tr>
<td>12/18/2012</td>
<td>DD</td>
<td>QuickBooks Payroll Service</td>
<td>PERA</td>
<td>566.72</td>
</tr>
<tr>
<td>12/20/2012</td>
<td>14671</td>
<td>Barry Malme</td>
<td>purchase option - City of Shelly</td>
<td>500.00</td>
</tr>
<tr>
<td>12/31/2012</td>
<td>DD</td>
<td>QuickBooks Payroll Service</td>
<td>Created by Payroll Service on 12/28/2012</td>
<td>9,172.62</td>
</tr>
<tr>
<td>01/04/2013</td>
<td>14618</td>
<td>Arvg</td>
<td>utilities</td>
<td>147.04</td>
</tr>
<tr>
<td>01/08/2013</td>
<td>14675</td>
<td>Ada City</td>
<td>utilities</td>
<td>224.84</td>
</tr>
<tr>
<td>01/08/2013</td>
<td>14676</td>
<td>Cardmember Service</td>
<td>Managers MAWD</td>
<td>628.46</td>
</tr>
<tr>
<td>01/08/2013</td>
<td>14677</td>
<td>Clay County SWCD</td>
<td>Clean Water Legacy</td>
<td>7,563.00</td>
</tr>
<tr>
<td>01/08/2013</td>
<td>14678</td>
<td>Gordon Construction, Inc.</td>
<td>Ditch Cleaning</td>
<td>18,717.71</td>
</tr>
<tr>
<td>01/08/2013</td>
<td>14679</td>
<td>Houston Engineering, Inc</td>
<td>Engineering Fees</td>
<td>39,365.19</td>
</tr>
<tr>
<td>01/08/2013</td>
<td>14680</td>
<td>Kns Versdahl</td>
<td>Web Site Hosting</td>
<td>250.00</td>
</tr>
<tr>
<td>01/08/2013</td>
<td>14690</td>
<td>Loretel Systems</td>
<td>utilities</td>
<td>323.11</td>
</tr>
<tr>
<td>01/08/2013</td>
<td>14691</td>
<td>MARCO, Inc.</td>
<td>Office Equipment</td>
<td>614.53</td>
</tr>
<tr>
<td>01/08/2013</td>
<td>14692</td>
<td>Minnesota Energy Resources Corp.</td>
<td>Utilities</td>
<td>91.87</td>
</tr>
<tr>
<td>01/08/2013</td>
<td>14693</td>
<td>Norman County Treasurer/Auditor</td>
<td>Bond Payment Hendrum</td>
<td>11,618.16</td>
</tr>
<tr>
<td>01/08/2013</td>
<td>14694</td>
<td>Northwest Beverage, Inc.</td>
<td>Supplies</td>
<td>42.25</td>
</tr>
<tr>
<td>01/08/2013</td>
<td>14695</td>
<td>Office Supplies Plus</td>
<td>Office Supplies</td>
<td>75.62</td>
</tr>
<tr>
<td>01/08/2013</td>
<td>14696</td>
<td>Ralph's Food Pride</td>
<td>Supplies</td>
<td>52.88</td>
</tr>
<tr>
<td>01/08/2013</td>
<td>14697</td>
<td>Renae Kappes</td>
<td>Cleaning</td>
<td>120.00</td>
</tr>
<tr>
<td>01/08/2013</td>
<td>14698</td>
<td>The Forum</td>
<td>Subscription Fargo Forum</td>
<td>141.00</td>
</tr>
<tr>
<td>01/08/2013</td>
<td>14699</td>
<td>Clay County Union</td>
<td>Subscription</td>
<td>35.00</td>
</tr>
<tr>
<td>01/08/2013</td>
<td>14700</td>
<td>Wambach &amp; Hanson</td>
<td>Legal Fees</td>
<td>3,156.70</td>
</tr>
<tr>
<td>01/08/2013</td>
<td>14702</td>
<td>AmeriPride</td>
<td>Office Maintenance</td>
<td>70.37</td>
</tr>
<tr>
<td>01/08/2013</td>
<td>14703</td>
<td>Darlene Hauge</td>
<td>Permanent &amp; Temporary Easements</td>
<td>6,039.20</td>
</tr>
<tr>
<td>01/08/2013</td>
<td>14704</td>
<td>Raymond Arneson</td>
<td>Temporary &amp; Permanent Easement</td>
<td>37,150.80</td>
</tr>
<tr>
<td>01/09/2013</td>
<td>14710</td>
<td>Michael K Christensen</td>
<td>Managers Per Diems &amp; Exp</td>
<td>278.84</td>
</tr>
<tr>
<td>01/09/2013</td>
<td>14707</td>
<td>Duane L Erickson</td>
<td>Managers Per Diems &amp; Exp</td>
<td>319.04</td>
</tr>
<tr>
<td>01/09/2013</td>
<td>14708</td>
<td>Gregory R Holmvik</td>
<td>Managers Per Diems &amp; Exp</td>
<td>181.76</td>
</tr>
<tr>
<td>01/09/2013</td>
<td>14711</td>
<td>Raymond M Hanson</td>
<td>Managers Per Diems &amp; Exp</td>
<td>89.60</td>
</tr>
<tr>
<td>01/09/2013</td>
<td>14709</td>
<td>John D Austinson</td>
<td>Managers Per Diems &amp; Exp</td>
<td>233.44</td>
</tr>
<tr>
<td>01/09/2013</td>
<td>14706</td>
<td>Dean P Spaeth</td>
<td>Managers Per Diems &amp; Exp</td>
<td>260.39</td>
</tr>
<tr>
<td>01/09/2013</td>
<td>14705</td>
<td>Curt Johannsen</td>
<td>Managers Per Diems &amp; Exp</td>
<td>63.22</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td>145,053.84</td>
</tr>
</tbody>
</table>
CLAY COUNTY HIGHWAY DEPARTMENT
DRAINAGE STRUCTURE POLICY STATEMENT

General Policy Guidelines

1. All openings or access connections shall also be consistent with standards and permitting processes per the Clay County Access Management Policy and applicable Clay County Development Code; and language herein is not intended to be interpreted in any other manner
2. All decisions will follow MN Drainage Law
3. Clay County will work with all affected parties to periodically review said Policy

Entrances to County and County State Aid Highways

1. Private - The Highway Department will provide the necessary culvert (per attachment B) and gravel surfacing for one entrance to a building site with the landowner responsible for the construction costs. Any additional entrances requested will require approval of the County Engineer as to location, size and condition of the proposed culvert, with the landowner responsible for all costs.
2. Field - The Highway Department will provide the necessary culvert (per attachment B) and gravel surfacing for one entrance every 1/2 mile, along the County road, with the landowner responsible for all construction costs. Any additional entrances requested will require approval of the County Engineer as to location, size and condition of the proposed culvert, with the landowner responsible for all costs.

Drainage Structures on Township or Municipal Roadways

1. Township Road - The Highway Department will provide the necessary repair or replacement of all drainage structures that cross the centerline of a Township Road, but are within the County Highway or County State Aid Highway right of way,

2. Structure Replacements eligible for Federal and/or State Funding - If a structure is eligible for replacement under the MNDOT State Aid Rules the Highway Department will administer all engineering to include preliminary survey, design, construction staking and construction inspection. All engineering costs exceeding $10,000 will be reimbursed by the Minnesota Department of Transportation Township Bridge program up to 25% of the construction cost.
Drainage Structures - County or Judicial Ditches under Watershed Jurisdiction *see drainage diagrams - "Attachment A"

1. Culverts into Ditches from County road ditches --- structure repair or replacement shall be the responsibility of the County Highway Department.

2. Culverts into Ditches through County roadways - structure repair or replacement shall be the responsibility of the County Highway Department.

3. County, Township or Municipal Roadways over Ditches - structure repair or replacement shall be the responsibility of the County Highway Department, Township or Municipality.

4. Existing Private or Field Entrances over Ditches - Repair costs to existing drainage structures adjacent to County roadways and within both the Judicial Ditch and County road right-of-way will be shared on a 50-50 basis between the County and the Watershed.

5. Proposed Private or Field Entrances over Ditches - The installation of future drainage structures shall be discouraged, unless it is the only access to the property and no other alternative access locations exist. If an alternative access can be constructed to eliminate the drainage structure all costs for the entrance will be shared on a 50-50 basis between the County and the Watershed. If an alternative access exists but cannot be agreed upon by the landowner then the proposed structure cost will be split 3 ways between the landowner, County and Watershed. If no alternative access locations exist the proposed structure costs will be shared on a 50-50 basis between the County and the Watershed.

Date

Chairman - Clay County Board of Commissioners
DRAINAGE STRUCTURES
COUNTY OR JUDICIAL DITCHES

1. COUNTY ROAD
   COUNTY ROAD
   COUNTY
   FIELD ENT.
   ROAD DITCH
   CULVERT

2. COUNTY ROAD
   COUNTY ROAD
   COUNTY
   COUNTY DITCH
   COUNTY DITCH

3. CO. RD.
   COUNTY
   DITCH
   BRIDGE OR CULVERT
   TWP. RD. OR MUNIC. ROADWAY

4 & 5. COUNTY ROAD OR TWP. ROAD
   COUNTY
   COUNTY DITCH
   BRIDGE OR CULVERT
   FIELD ENT.

4 & 5. COUNTY ROAD OR TWP. ROAD
   COUNTY
   COUNTY DITCH
   BRIDGE OR CULVERT
   HOME ENT.
ATTACHMENT B
ENTRANCE AND APPROACH DETAILS
(NO SCALE)

FIELD ENTRANCE
AGGREGATE SURFACING

R15'
26'

R5'

R15'

R5'

AGGREGATE SURFACING

FARM & HOME ENTRANCE
AGGREGATE SURFACING

R15'
28'

R5'

R15'

R5'

CONSTRUCTION NOTES
ALL INSLOPE WILL BE FINISHED TO 1:4 SLOPES.
CULVERT DIAMETER SHALL BE DETERMINED BY CLAY COUNTY WITH
APPROVAL FROM THE WATERSHED DISTRICT.
CULVERT PROFILE SHALL MATCH EXISTING GITCH PROFILE.

ENTRANCE DETAILS