



Technical Memorandum

To: Terry Fleck, Chairman
Burleigh County WRD

From: Michael H. Gunsch, PE
Craig Odenbach, P.E.

Date: May 20, 2014

Subject: Country Creek Maintenance Assessment
Preliminary Engineering Report

Background

The Burleigh County Water Resource District's (BCWRD) initial involvement with the Country Ridge 1st and Country Ridge 2nd Subdivisions was through a review of the Storm Water Master Plans (SWMP) submitted by the Developer. This review was requested by the Burleigh County Engineer and was to include review of the hydrologic analysis and consideration of downstream conveyance questions. Following this review, several complaints were filed with the BCWRD by residents of Country Creek 3rd Subdivision regarding the construction of two new residences south of Shoal Drive located on Lot 3 and Lot 4 Block 1 Country Creek 3rd Subdivision. While these complaints were resolved quickly, through the builder's response, additional questions then arose related to the inadequate capacity of the stormwater conveyance system in this area. These questions were associated with flood risks and prior flood impacts to adjoining residential properties. A general project area map is provided in **Figure 1**. The SWMP review and subsequent hydrologic and hydraulic evaluation revealed that the stormwater channel through this area was in fact inadequate to convey runoff under existing conditions without residential impacts. More importantly the proposed development of Country Ridge 1st and 2nd could increase the known flood risks; therefore, the conclusion was that corrective measures should be implemented prior to approving these new subdivisions. The BCWRD then sent letters to the Burleigh County Planning Commission and informed the residents along the stormwater easement regarding their findings and concerns; see **Appendix A**.

Initially the Developer of the Country Creek 3rd Subdivision (Apple Creek LLP) constructed Shoal Drive without consideration of the stormwater conveyance system authorized in the SWMP approved for this plat. Subsequently, the Developer proposed revisions to the SWMP, which were approved by the City of Bismarck for implementation. These revisions included diverting upstream flows through a constructed stormwater channel. Stormwater easements were obtained along the south side of the lots adjoining Shoal Drive and then south along the drainage on the west side of Skyline Estates. These stormwater easements were obtained from individual landowners and are not shown on the Country Creek 3rd Subdivision Plat. These easements were dedicated to Gibbs Township and the Public, thus any work completed within that corridor needs to be approved by the township. Gibbs Township has verbally approved the use of these easements for any required corrective measures to reconstruct this stormwater channel to meet reasonable design standards.

The proposed stormwater channel contained in the revised SWMP was ultimately constructed; however no engineering certification regarding it being constructed in accordance with the plan was provided to the City of Bismarck. Therefore, it is not known if it was constructed in compliance with the SWMP; however there are visual and survey indications that there were deficiencies in the final construction.

A number of complaints have been filed with the City of Bismarck and BCWRD since the original channel construction. These include concerns with excess flows, the flooding of several residences and septic systems, groundwater issues, and excessive erosion and sediments associated with upstream site development. These complaints were reviewed by the BCWRD; however no actions were taken because the jurisdictional authority

for the stormwater plan and permit compliance rested with the City of Bismarck, not the BCWRD. The City of Bismarck's actions in these matters was not reviewed for this report.

Recently, the planning jurisdiction for this area of Gibbs Township was transferred from the City of Bismarck to the new Burleigh County Planning Department; however, the County's authority to enforce a City of Bismarck approved SWMP after the fact is limited.

Based upon the technical review, the following factors have contributed to the flooding and increased flood risks in the area along the stormwater easements.

- Non-compliance with the original SWMP design (grading and capacity)
- Sediment accumulations (most likely resulting from upstream development)
- Snow accumulations (drifting north of tree rows creates an obstruction to flow)
- Residential construction at elevations that increase their susceptibility to flooding (too low)

As planning for the Country Ridge subdivisions continued, the Developer installed a steel plate over the east end of the existing 24" CMP located under 66th Street to reduce downstream peak flows. This action was recognition that there were flooding issues downstream under undeveloped conditions that needed to be addressed. The Developer recently provided SWMP reports for the Country Ridge 1st and 2nd Subdivisions indicating that projected peak flows from the new development, through Country Creek 3rd, would not increase from those occurring under existing conditions. However, even with the steel plate in place and peak flows reduced under existing conditions, flooding impacts were experienced by the residents along the stormwater easements in Country Creek 3rd. On that basis and due to the inadequacy of the downstream watercourse to convey flow from the proposed development, the BCWRD went on record opposing the proposed Country Ridge plats, see **Appendix A**.

A meeting was held on February 12, 2015 with the Developer, Burleigh County Engineer, and representatives from the BCWRD, County Commission, Burleigh County Planning Department and Gibbs Township. Based on the discussions at this meeting, a plan was developed to address both short and long term issues associated with stormwater management and channel maintenance in the area of concern. As a short term solution, the Developer agreed to provide construction services to restore and expand the capacity of the stormwater channel through Country Creek 2nd and 3rd. The BCWRD in turn has agreed to establish a project and form an assessment district through which ongoing maintenance of this channel could be assured and funded. This project would need to be authorized by a vote of the benefited properties. The Developer, through a developer's agreement, would assume much of the costs through a commitment to vote for the project and subsequent assessments. The resulting maintenance district assessments would fund the required engineering costs associated with project channel design, construction staking and management services, administrative and legal costs associated with forming the district, and would create a fund balance to be used for future maintenance. The BCWRD agreed to sponsor establishment of said assessment district, and passed a Resolution of Necessity for the project on March 6, 2014, **Appendix G** and amended it on May 13, 2014.

The Project

The project will include reconstruction of the stormwater channel to convey water through Country Creek 3rd Subdivision in order to reduce the risk of flooding of residences south of Scholl Drive. Three alternative routes were evaluated extending from Country Brook Road on the east to Runnel Road on the west, as illustrated in **Figure 2** and listed below. Preliminary plan and profile sheets for the three alternative routes are included in **Appendix B**.

- Alternative #1 – Original Stormwater Management Plan Route
- Alternative #2 – Stormwater Easement Route
- **Alternative #3 – Skyline Estates Route (Landowner Preferred)**

Based on feedback during an onsite meeting with several impacted landowners along Runnel Road, **Alternative #3** was determined to be the preferred route, although an additional easement will need to be obtained for the portion of the channel located outside the original easement corridor. The landowner of this parcel, Lot 7 Block 1 of Skyline Estates, verbally agreed to the easement based on the BCWRD setting a line of centerline cut stakes for him to review and concur with prior to signing the easement.

The benefited areas to be assessed are illustrated in **Appendix C**. This includes lots located in the Country Creek #2 and Country Creek #3 subdivisions, as well as the two proposed Country Ridge subdivisions. The Country Ridge properties are owned by a Landowner who is selling them to the Developer, who has indicated he will vote affirmatively for the creation of the assessment district. That action, which is included in the developer's agreement, is a requirement for the BCWRD's conditional position to consider approving the Country Ridge Preliminary Plats. Final plat approval by the County Commission should not occur until the developer's agreement is signed and the process of creating the maintenance assessment district has proceeded toward the public hearing.

Table 1 provides a summary of an opinion of values for the construction activities to be completed by the Developer. A more detailed breakdown of these costs is included in **Appendix D**.

Table 1 Opinion of Construction Cost Value Alternative #3 – Skyline Estates Route (Landowner Preferred)	
Total Construction Cost	\$27,506.85

A complete list of properties within the assessment district and their proposed assessment amount, based on benefit received, is included in **Appendix E**. The costs to be assessed against the properties identified in the benefitted area include engineering design, surveying, construction management services, as well as the legal and administrative costs of establishing the assessment district and maintenance funds as shown in **Table 2**. The majority of the lots are assigned a full or 100% value, while others that do not fully contribute runoff to the stormwater channel are assessed at a lesser value. The BCWRD will have to review and adopt the assessment benefit valuations for the project to proceed to publication for the Public Hearing.

Table 2 Country Creek Maintenance District Assessment Costs		
Assessment District and Report	\$ 8,000	Admin, Legal, Engineering
Engineering Design/Easement	\$12,500	Plan and Profile Development
Construction Management Services	\$13,800	Survey & Construction Observation
Maintenance Fund	\$10,000	Balance for Maintenance
Total Cost	\$44,300	
Note these are projected values as of 5-5-2014		

Downstream Impacts

The downstream terminus of the project is located at Runnel Road. With construction of the preferred alternative, this township roadway is still in compliance with the ND Stream Crossing Standards in that the 15-year event is passed within allowable headwater limitations. The pre- and post-project water surface elevations for various events are provided in **Table 3**. The 'Existing Conditions' assumed for these model results included the steel plate on the culvert under 66th Street.

Table 3 Runnel Road - Existing vs Proposed Conditions SSA 24-Hour SCS Type II ATLAS-14 Elevations in NAVD 88 Datum - Road Top = 1915.62						
Event	Existing Flows (cfs)	Proposed Flows (cfs)	Δ Flows (cfs)	Existing Elevation (ft)	Proposed Elevation (ft)	Δ Elevation (ft)
2-Yr	6.37	6.79	0.42	1912.72	1912.75	0.03
5-Yr	12.29	13.24	0.95	1913.07	1913.12	0.05
10-Yr	19.97	21.72	1.75	1913.48	1913.59	0.11
15-Yr	25.08	26.70	1.62	1913.87	1914.13	0.26
25-Yr	32.82	35.52	2.70	1914.31	1914.39	0.08
50-Yr	55.60	53.65	-1.95	1915.27	1915.17	-0.10
100-Yr	88.82	77.78	-11.04	1915.75	1915.71	-0.04
500-Yr	199.85	168.55	-31.30	1915.95	1915.88	-0.07

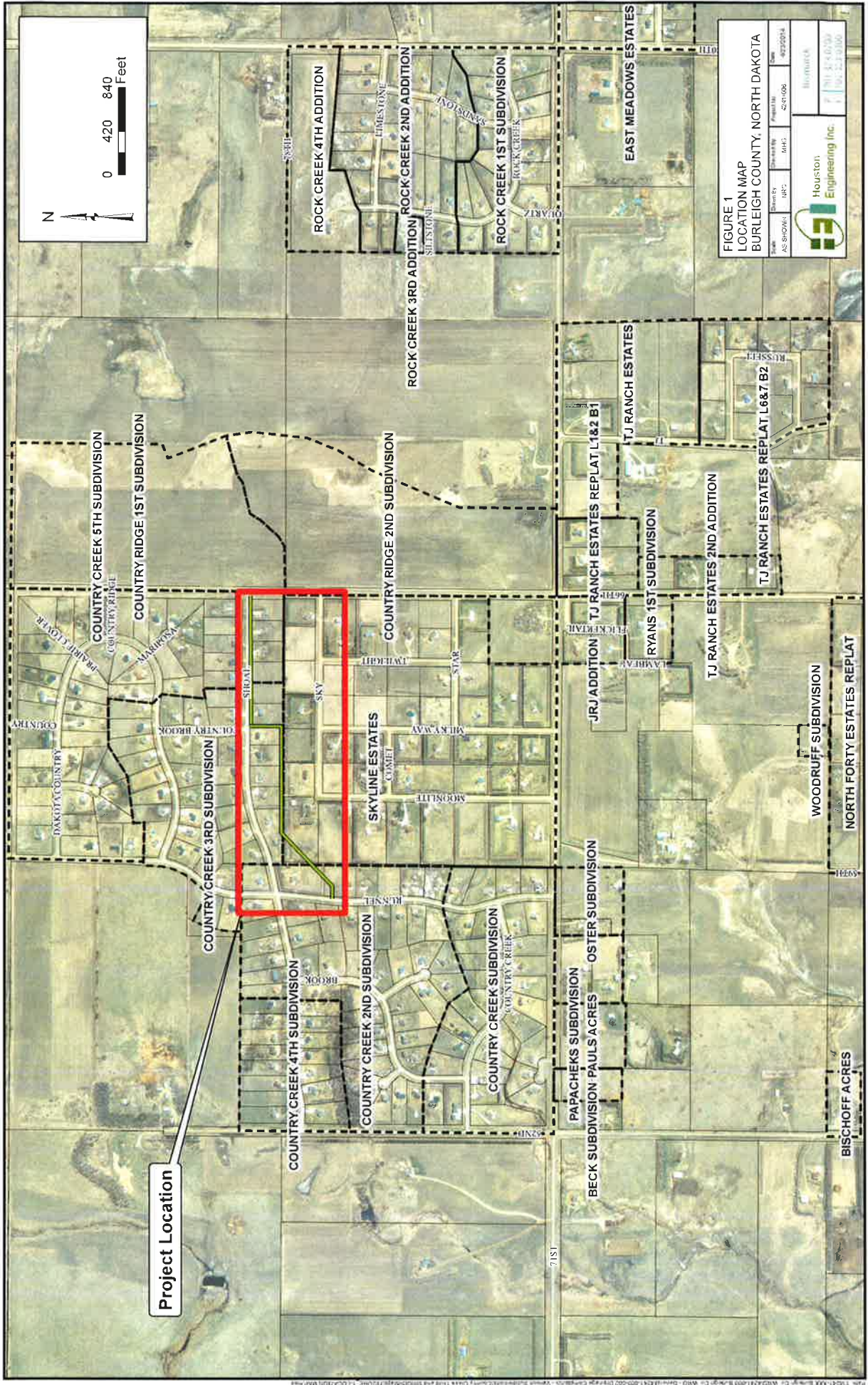
***Overtopping Road**

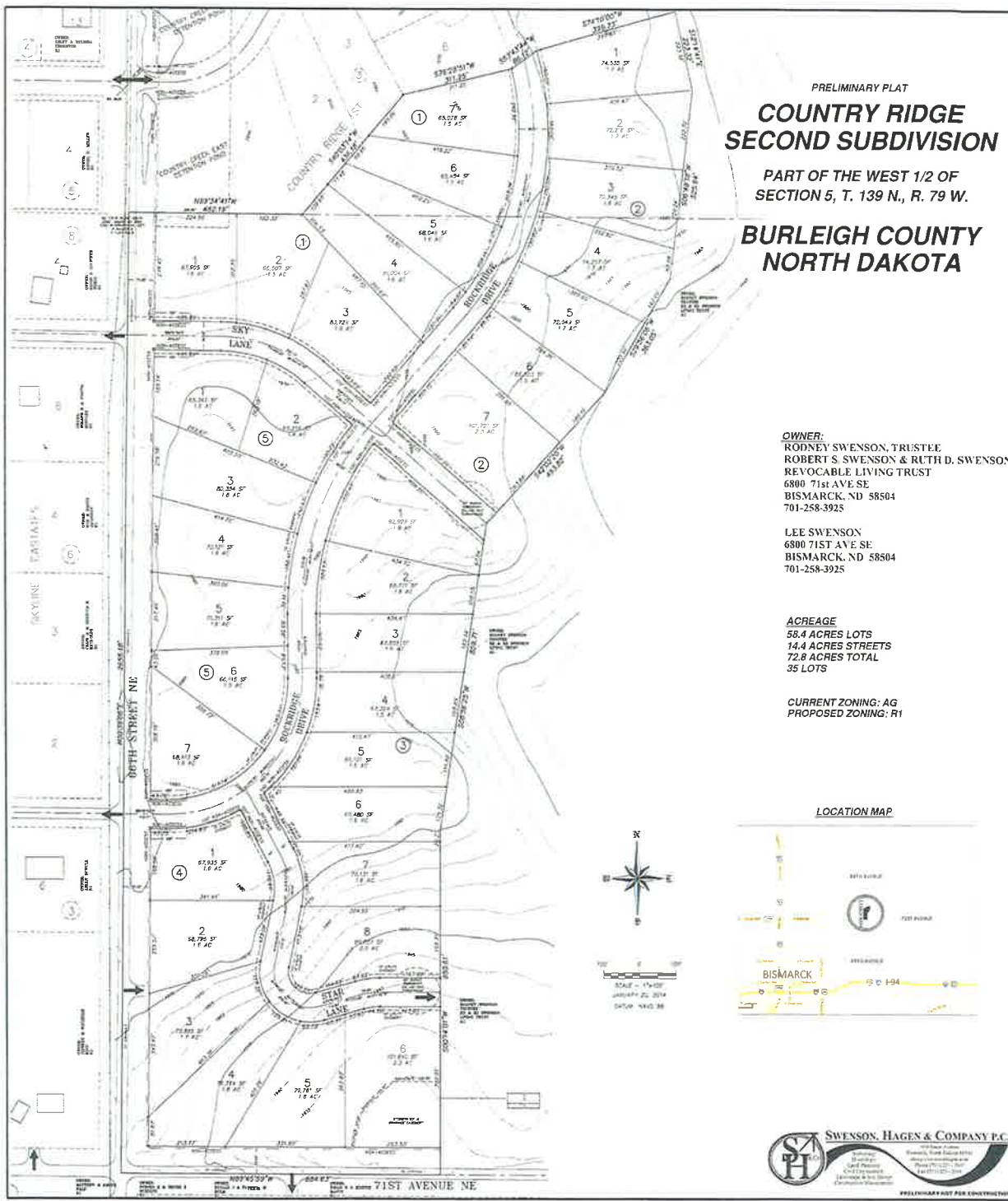
The Lowest Adjacent Grade (LAG) for each of the homes along the channel route are included on the Plan Sheets in **Appendix B**. All are above the projected water surface elevations noted above. Because the stream crossing standards are met with the current culvert installation and there would be no increased threat of flooding to upstream homes, it is recommended that the current culvert installation remain in place.

Next Steps

The next step in the process of establishing the proposed assessment district is for the BCWRD to accept this preliminary engineering report and adopt Resolution #2 to approve this preliminary engineering report and opinion of probable costs then directing the assessment of costs. A public hearing will then be scheduled followed by a vote of the benefited landowners. As a pre-requisite for the public hearing and vote, the assessment list would be published, provided to the Burleigh County Auditor and a copy mailed along with prospective ballots to the benefitted landowners.

There is also a public hearing and appeal process associated with the assessments that will occur after the vote is completed and the project approved.





PRELIMINARY PLAT
**COUNTRY RIDGE
SECOND SUBDIVISION**
PART OF THE WEST 1/2 OF
SECTION 5, T. 139 N., R. 79 W.
**BURLEIGH COUNTY
NORTH DAKOTA**

OWNER:
RODNEY SWENSON, TRUSTEE
ROBERT S. SWENSON & RUTH D. SWENSON
REVOCABLE LIVING TRUST
6800 71st AVE SE
BISMARCK, ND 58504
701-258-3925

LEE SWENSON
6800 71st AVE SE
BISMARCK, ND 58504
701-258-3925

ACREAGE
58.4 ACRES LOTS
14.4 ACRES STREETS
72.8 ACRES TOTAL
35 LOTS

CURRENT ZONING: AG
PROPOSED ZONING: R1

LOCATION MAP

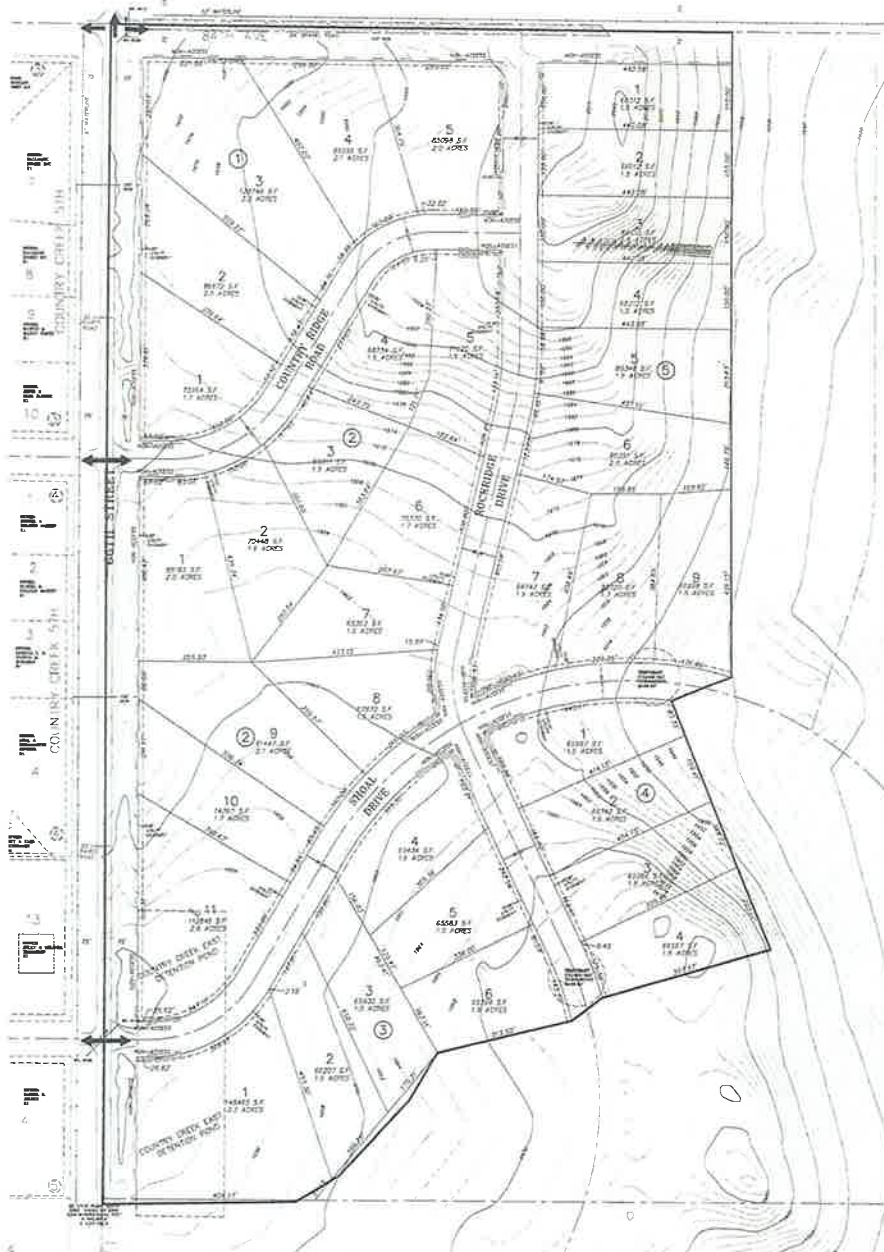




SWENSON, HAGEN & COMPANY P.C.
Surveyors, Engineers, Architects
1000 1st Avenue SE
Bismarck, ND 58504
701-258-3925
www.swhc.com

PRELIMINARY PLAT FOR CONSTRUCTION

PRELIMINARY PLAT
COUNTRY RIDGE FIRST SUBDIVISION
 PART OF THE NORTHWEST 1/4 OF SECTION 5, T. 139 N., R. 79 W.
BURLEIGH COUNTY, NORTH DAKOTA



OWNER:
 ROONEY SWENSON TRUST
 6800 71ST AVE NE
 BISMARCK, ND 58504
 701-258-3925

APPLE CREEK DEVELOPERS
 1771 WEST CAVALRY DR
 BISMARCK, ND 58504
 701-258-3925

ACREAGE
 62.5 ACRES LOTS
 15.5 ACRES STREETS
 78.4 ACRES TOTAL
 35 LOTS

CURRENT ZONING: AG
 PROPOSED ZONING: R1



NOTE: RESTRICTED USE ON STORM WATER EVIDENT
 STORM WATER EVIDENT AND CONSIDERED TO
 COLLECT STORM WATER AND FOR THAT STORM
 WATER EVIDENT. THIS IS CONSIDERED TO BE
 OF LIFT FLOOD DAMAGE AND EQUIPMENT DAMAGE
 TO PROPERTY BOTH WITHIN AND OUTSIDE OF THE
 PLAT.
 PROPERTY OWNERS SHALL NOT PLACE ANY TYPE OF
 FILL, WATER, OR MUD ANYWHERE NEAR TO THE
 PERMANENTLY VEGETATED EROSION ON THE EROSION AND
 OPEN FILL AREAS WILL BE ALLOWED. THEY
 SHALL NOT PLANT ANY TREES OR SHRUBS WITHIN THE
 EROSION. WITHIN THE EROSION TO PROTECT A
 DOWN SLOPE SLOPE. ADDITIONAL NOTES AND NOTES
 MAY BE PLACED WITHIN THE EROSION WITHIN THE
 PROOF APPROVAL OF THE COUNTY ENGINEER.
 PROPERTY OWNERS SHALL NOT CONSTRUCT ANY PART
 OF STRUCTURE INCLUDING GARAGES, OUTBUILDINGS,
 BARN, DRIVEWAY, FENCE, LANDSCAPING,
 GARDENS AND OTHER FIELDS OF OTHER FEATURES
 THAT INTERFERE WITH THE PROPOSED USE OF THE
 STORM WATER EVIDENT.



Appendices

Appendix A – BCWRD Correspondence

Appendix B – Preliminary Plan & Profile Sheets

Appendix C – Benefitted and Assessed Area Map

Appendix D – Opinion of Probable Cost

Appendix E – Assessment List

Appendix F – Developer’s Agreement & Kastet Easement (unsigned)

Appendix G – BCWRD Time Line & Resolutions

Appendix A

BCWRD Correspondence

February 17, 2014 - Landowner Letter

February 7, 2014 - Landowner Letter

January 24, 2014 – Letter to Burleigh County Planning

July 5, 2013 – Letter to Art Goldhammer

December 6, 2011 – Drainage Complaint



Burleigh County Water Resource District

**1811 East Thayer Avenue
Bismarck, North Dakota 58501**

TO: Country Creek 3rd and Country Creek 2nd – Stormwater Easement Holders
FROM: Burleigh County Water Resource District
SUBJECT: Stormwater Maintenance Assessment District
DATE: February 17, 2014

On February 12th the Burleigh County Highway Department held a meeting with the Developer of the proposed County Ridge subdivisions, representatives from the BCWRD, Burleigh County Commission, and Burleigh County Planning Commission, as well as several engineering consultants that were involved in the Country Creek subdivisions or are currently working on the County Ridge subdivisions. Two primary items were discussed. First was the need to conduct maintenance to reconstruct the stormwater channel in the noted stormwater easements prior to final approval of the County Ridge subdivisions. Second was to establish an entity that would be responsible for future maintenance in this area.

The result of this meeting is that the Developer has agreed to develop and sign a developer's agreement that would provide a means and method to reconstruct the stormwater channel. In turn the BCWRD's representative agreed to present options related to the creation of an assessment district to the BCWRD Board to address the long term maintenance of this stormwater channel.

The details of this process remain to be fully defined; however the discussions were productive towards resolving the current issues. At this stage the BCWRD is not opposed to approving the preliminary plat for the County Ridge 1st and 2nd Subdivisions, subject to the preparation and signing of the developer's agreement and implementation of the assessment district, that would occur prior to the final plat being approved and recorded.

Sincerely,

A handwritten signature in black ink, appearing to read "Terry Fleck".

Terry Fleck, Chairman
Burleigh County Water Resource District

cc: Marcus Hall, PE, County Engineer
Art Mariner, Apple Creek LLP
Greg Mariner, Apple Creek Developers, LLP
Shoal Drive and Runnel Road Residents
Linda Oster, PE, City of Bismarck
Michael H. Gunsch, PE, Houston Engineering, Inc.
Jason Petryszyn, PE, Swenson, Hagen & Co.
John Hauke, Chairman Gibbs Township

Current Board Members:

Terry Fleck, Chairman, Bismarck 223-9768 Cary Backstrand, Vice Chairman, Bismarck 471-9134 Kathleen Jones, Secretary/Treasurer, Bismarck 258-1477
Gordon Weixel, Manager, Bismarck 258-5390 Dennis Reep, Manager, Bismarck 557-9621



Burleigh County Water Resource District

**1811 East Thayer Avenue
Bismarck, North Dakota 58501**

TO: Country Creek 3rd and Country Creek 2nd – Stormwater Easement Holders
FROM: Burleigh County Water Resource District
SUBJECT: Storm Water Management Complaints
DATE: February 7, 2014

The Burleigh County Water Resource District (BCWRD) has received complaints from residents from the Country Creek 3rd along Shoal Drive and Country Creek 2nd Subdivision along Runnel Road regarding obstructions to the flow of water through the constructed storm water channel within the subdivision. The channel has been obstructed to some degree by the deposition of sediment and is commonly obstructed by snow accumulation during the spring snowmelt.

The channel was constructed by the developer of your subdivision, Apple Creek LLP, as a result of a revision to the original Stormwater Master Plan (SWMP). That revision was approved by the City of Bismarck. The Burleigh County Water Resource District was provided an opportunity to review and comment on the revised SWMP, but was never involved in the implementation or its construction. It is unclear whether or not the channel was ever constructed in accordance with the SWMP, as no certification documentation has been provided.

The stormwater easements for the channel were obtained by the developer and were granted to "Gibbs Township and the Public". These easements were obtained directly from the individual landowners after the plat had been approved and were recorded after the fact, and therefore not shown on the plat.

The issue of who has the authority and who has the responsibility to maintain this channel is a question not easily answered. The BCWRD does not have statutory authority to enforce the conditions of an approved SWMP, and it has no authority to order the developer to remedy the situation. Burleigh County also has no responsibility to maintain the channel and probably limited authority to do so, as the easements are in the name of Gibb's Township. Clearly, because the easements are held by Gibbs Township they do have the authority to access the channel and to conduct maintenance activities. It is unclear whether or not they ever formally accepted these easements. The Developer who constructed this channel no longer holds any property interests along its route. There are those who point to the Developer's or Builder's construction activities upstream as the mostly likely source for the sediments deposited within the channel. Though that actual cause and effect is difficult to quantify. Regardless of any potential culpability in relation to the sediment deposition, the Developer cannot be held responsible for clearing snow from the channel in perpetuity. Lastly, the landowners have the right, and state law suggests some responsibility, to maintain the channel through their property. In addition some of the residences were constructed with finished floor elevations and septic system locations that were probably inappropriate for the setting, which resulted in them being more susceptible to flooding problems.

Our recommendation is that the impacted landowners meet directly with representatives from Apple Creek LLP to discuss a potential remedy and willingness to participate in a resolution to this matter. These discussions should focus on two key problems, both of which require short term and long term solutions, specifically. The first is the removal of sediment and restoration of the channel gradient and capacity, while the second is routine snow removal.

Current Board Members:

Terry Fleck, Chairman, Bismarck 223-9768 Cary Backstrand, Vice Chairman, Bismarck 471-9134 Kathleen Jones, Secretary/Treasurer, Bismarck 258-1477
Gordon Weixel, Manager, Bismarck 258-5390 Dennis Reep, Manager, Bismarck 557-9621

While Apple Creek LLP may or may not share some responsibility for removing the sediment, the responsibility for snow removal at this point lies with the landowners. While there is a need to develop a plan for immediate sediment and snow removal, there also needs to be a long term process established for the future maintenance of this facility. The responsibility for future maintenance will likely continue to lie solely with the landowner's, while some process for funding and implementing those future maintenance activities needs to be established.

The BCWRD is available to help facilitate those discussions, if desired. We are also willing to work with you to identify an appropriate mechanism for long term maintenance. If petitioned, we could establish an assessment district for maintenance, although the success of that approach would be contingent on a positive vote of the parties that would be assessed. The process of establishing an assessment district in accordance with statutory requirements would also add considerable costs that would be borne by the benefitted parties (e.g., residences within the watershed/benefitted area). It would save costs if a mechanism could be identified without going through the formal assessment district process.

This has been a difficult and complex problem to address. There is an apparent loophole or gap in these situations where the City of Bismarck had authority over the SWMP's in the four mile extra-territorial area, but claims no enforcement responsibilities for erosion control. Neither the BCWRD nor the Burleigh County Highway Department had any direct authority to enforce the SWMP or erosion control approved by the City of Bismarck under their permitting process. Under the new County Planning Department this authority now lies with the County, however the situation that now exists is an after the fact condition. Ultimately, the solution needs to come from the landowners themselves, hopefully working cooperatively with Apple Creek LLP and with the approval of Gibbs Township. The BCWRD has provided what they see as the engineering design solution to the issue to the Burleigh County Highway Department for consideration. The implementation of these measures and who pays for them remains to be determined.

The BCWRD has reviewed the County Ridge First and Second Subdivision plats which are currently under review by the Burleigh County Planning Department. These two subdivisions discharge stormwater into the channel that has been an issue in Country Creek 3rd along Shoal Drive as well as residences along Runnel Road. Currently there is a steel plate on the east end of the 24" CMP under 66th Street that restricts flows from the upstream watershed. The SWMP for these subdivisions includes detention facilities designed so as not to increase peak flows downstream. Our engineering consultant has reviewed the proposed SWMP and concurs that the design as proposed would not increase peak flows from these areas. However, we are on record as being opposed to approval of these plats until a remedy has been implemented for the current obstruction and issues along the stormwater easements. *The reason is that under existing conditions, even with the culvert blocked, the downstream conveyance is inadequate to accommodate these flows without risks to residential structures.* Subsequently, removing the block would result in increased flows, which is not acceptable. We expressed that position to the Burleigh County Planning Commission in a letter dated January 24, 2014, which was sent to you separately.

Sincerely,



Terry Fleck, Chairman
Burleigh County Water Resource District

cc: Marcus Hall, PE, County Engineer
Art Mariner, Apple Creek LLP
Shoal Drive and Runnel Road Residents
Linda Oster, PE, City of Bismarck
Michael H. Gunsch, PE, Houston Engineering, Inc.
Jason Petryszyn, PE, Swenson, Hagen & Co.
John Hauke, Chairman Gibbs Township



Burleigh County Water Resource District

**1811 East Thayer Avenue
Bismarck, North Dakota 58501**

January 24, 2014

Ray Ziegler, Director
Burleigh County Planning Commission
221 North 5th Street
Bismarck, ND 58506-5501

Re: Country Ridge First and Second Subdivisions

Dear Mr. Zeigler:

The Burleigh County Water Resource District (BCWRD) has completed a detailed review of the Country Ridge First and Second Subdivision Stormwater Management Plans (SMWP) and an independent watershed analysis at the request of the Burleigh County Engineer. The SWMP indicates the projected peak discharges from these new development areas will not increase when compared to existing conditions. These results were generally confirmed by our engineer's review. The primary concern, in this situation however, is the adequacy of the downstream stormwater system, through the Country Creek Third and Second Subdivisions, to convey either the existing or projected flows. Significant concerns and capacity questions have been previously noted to the City of Bismarck, BCWRD, and Burleigh County Engineer related to downstream conveyance within the stormwater easements located south of Shoal Drive and south along the east side of the Skyline Subdivision then west to Runnel Road. The BCWRD has also received complaints from landowners along Shoal Drive and along Runnel Road downstream. Subsequently, we offer the following summary related to the issues in this area:

- Initially the Developer of the Country Creek Third Subdivision (Apple Creek, LLP) constructed Shoal Drive without consideration for the conveyance system authorized in the SWMP, which was to have been implemented for this plat. Subsequently, the Developer through their engineer (KLJ), proposed revision to the SWMP and submitted it to the City of Bismarck, who subsequently approved it for implementation. This revision included diverting upstream flows through a constructed stormwater channel. To complete this project, the Developer obtained stormwater easements along the south side of the lots along Shoal Drive and south along the drainage on the west side of Skyline Estates, which then entered a platted stormwater easement west to Runnel Road. These stormwater easements were obtained from the individual landowners and were not included on the original Country Creek 3rd Subdivision plat. These easements were dedicated to Gibbs Township for public use, and any work within this area should be authorized by the township.
- The stormwater diversion channel was then constructed; however we have not seen the engineering certification required by the City's stormwater ordinance, stating that this was constructed in accordance with the approved SWMP revision. The timing of this certification requirement may affect why one was not provided. The BCWRD was provided the opportunity to review and provided comments on the SWMP revision, but was not involved in its implementation nor oversight of construction.

Current Board Members:

Terry Fleck, Chairman, Bismarck 223-9768 Cary Backstrand, Vice Chairman, Bismarck 471-9134 Kathleen Jones, Secretary/Treasurer, Bismarck 258-1477
Gordon Weixel, Manager, Bismarck 258-5390 Dennis Reep, Manager, Bismarck 557-9621

- Following the channel's construction this development was the subject of a number of complaints related to concerns with excess flows within this channel, flooding of several residences and septic systems, groundwater issues, and excessive erosion and sediments associated with upstream residential site development and inadequate erosion control measures being implemented. These complaints were reviewed by the BCWRD, however the jurisdictional authority and oversight for the stormwater permit (i.e., erosion control) and compliance with the SWMP rested with the City of Bismarck, as they had planning and zoning jurisdiction over this area at the time the SWMP was approved. This recently changed as this area is now under the jurisdiction of the Burleigh County Planning and Zoning Department.
- There were numerous discussions related to these concerns and the BCWRD stated to the City of Bismarck and Burleigh County that it did not have jurisdictional authority to address the issues that were presented. We understand at the time the County expressed a similar position.
- The flooding that has occurred in this area appears to be the result of a combination of the following items:
 - Noncompliance with the original channel design that was approved in the SWMP
 - It is unknown if the channel was ever properly constructed
 - Construction certification has not been documented
 - Sediment accumulations are associated with upstream development
 - These are likely attributable to the lack of implementing adequate sediment and erosion control measures during construction activities
 - Snow accumulations associated with the shelterbelt to the south and channel conditions associated with current inadequate grading, sediment accumulations and inadequate construction have compounded flood risks
 - The construction of residential structures without regard to site topography and flood risks. Several of these residences were constructed too low and septic systems were placed within flood susceptible locations
- It was our understanding that after the Developer was made aware of the flooding concerns he installed a steel plate over the end of the 24" CMP located under 66th Street to significantly reduce downstream flows. We also understand that flooding occurred after its placement, therefore its removal, as part of the development of the proposed Country Ridge Subdivision plats, would increase flood risks in this downstream conveyance system. This increase in risks is contrary to the intent and purpose of the Burleigh County Stormwater Ordinance, and is unacceptable. Even if peak flows are controlled to existing conditions the downstream conveyance is inadequate and must be restored to its originally intended capacity prior to approval of these new plats.

Ray Ziegler, Director
Burleigh County Planning Commission
Re: Country Ridge First and Second Subdivisions
January 24, 2014
Page -3-

- The BCWRD's engineering consultant has evaluated the downstream system's conveyance and identified a means to restore the capacity intended by the SWMP revision, and other options that would further reduce flood risks in this area. These have been provided to the Burleigh County Engineer and are enclosed with this letter. The primary flood risks during snowmelt runoff would remain, to some extent, if the channel becomes blocked by heavy snow accumulations. As it currently stands the residents along this stormwater easement are responsible to remove the snow from the channel. The BCWRD does not currently have jurisdictional authority allowing them to participate in maintenance work on this channel or snow removal. The ability of the Burleigh County Highway Department to conduct such work is also limited.
- The BCWRD will be providing a separate letter to those residents who have filed complaints with the Board, which will also address the various issues and complexity associated with channel maintenance.

Again the BCWRD is opposed to the approval of the Country Ridge First and Second Subdivisions until the downstream capacity and conveyance issue are corrected. Given the extended history of the flooding problems in this area, we would continue to oppose further consideration of the proposed plats until there is a specific agreement for the implementation of the necessary corrective measures. In addition no construction should be allowed to occur on any facilities within the Country Ridge First and Second Subdivisions until the corrective measures are completed.

If you have any questions, please contact me.

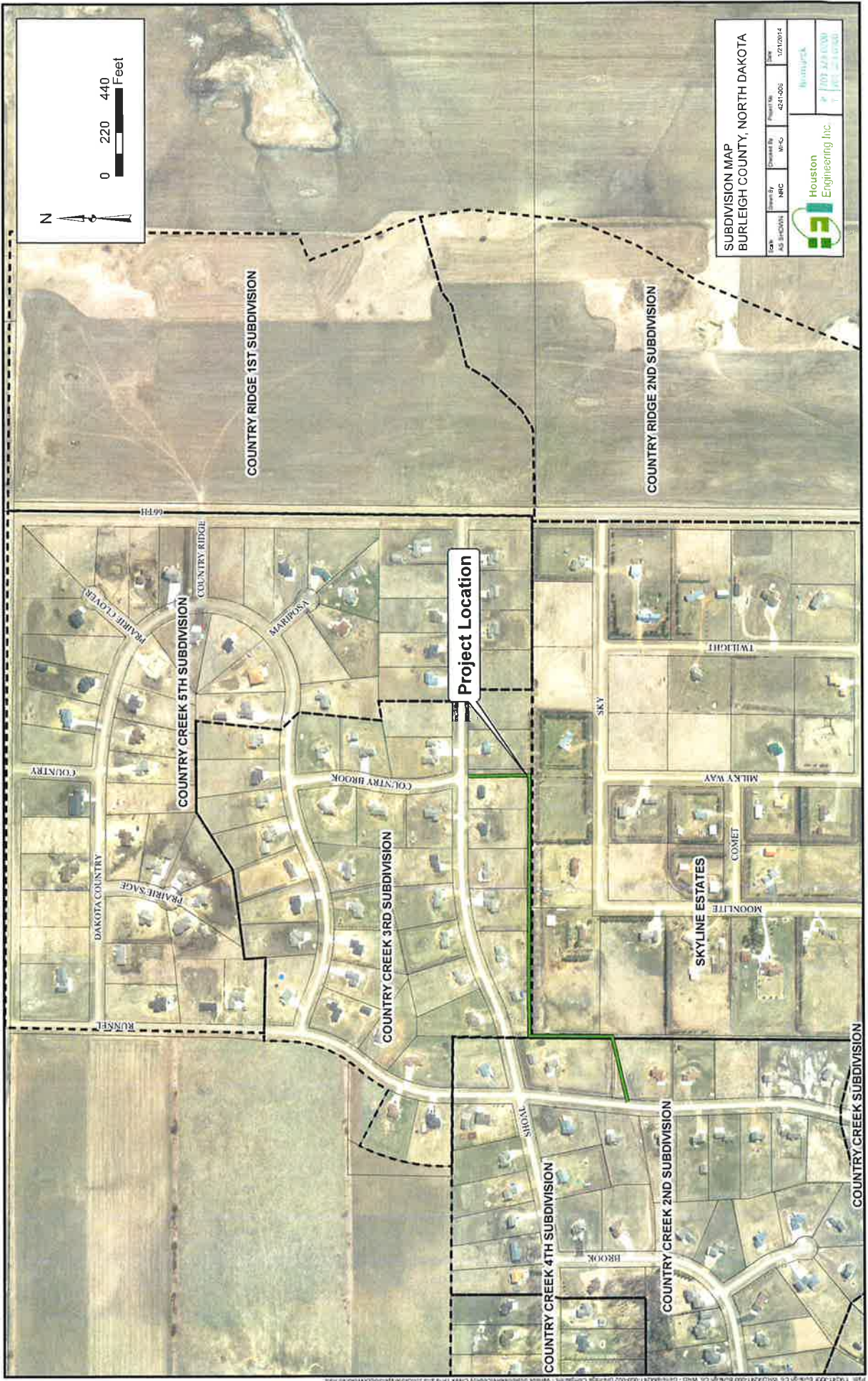
Sincerely,

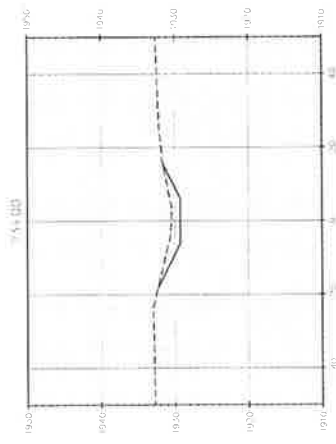
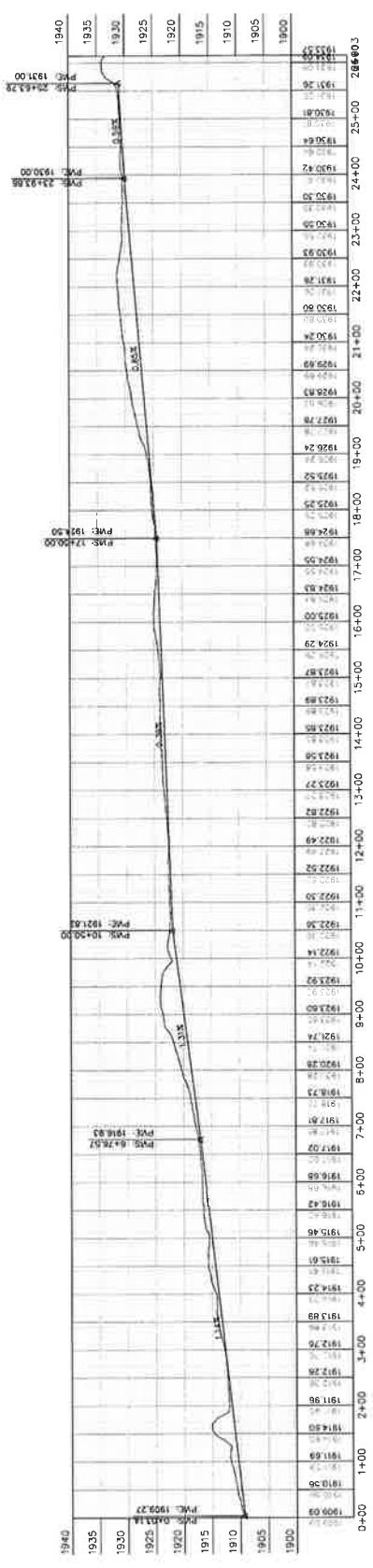


Terry Fleck, Chairman
Burleigh County Water Resource District

Enclosure

cc: Marcus Hall, PE, County Engineer
Art Mariner, Apple Creek LLP
Shoal Drive and Runnel Road Residents (7 names and addresses)
Linda Oster, PE, City of Bismarck
Michael H. Gunsch, PE, Houston Engineering, Inc.
Jason Petryszyn, PE, Swenson, Hagen & Co.
John Hawke, Chairman Gibbs Township

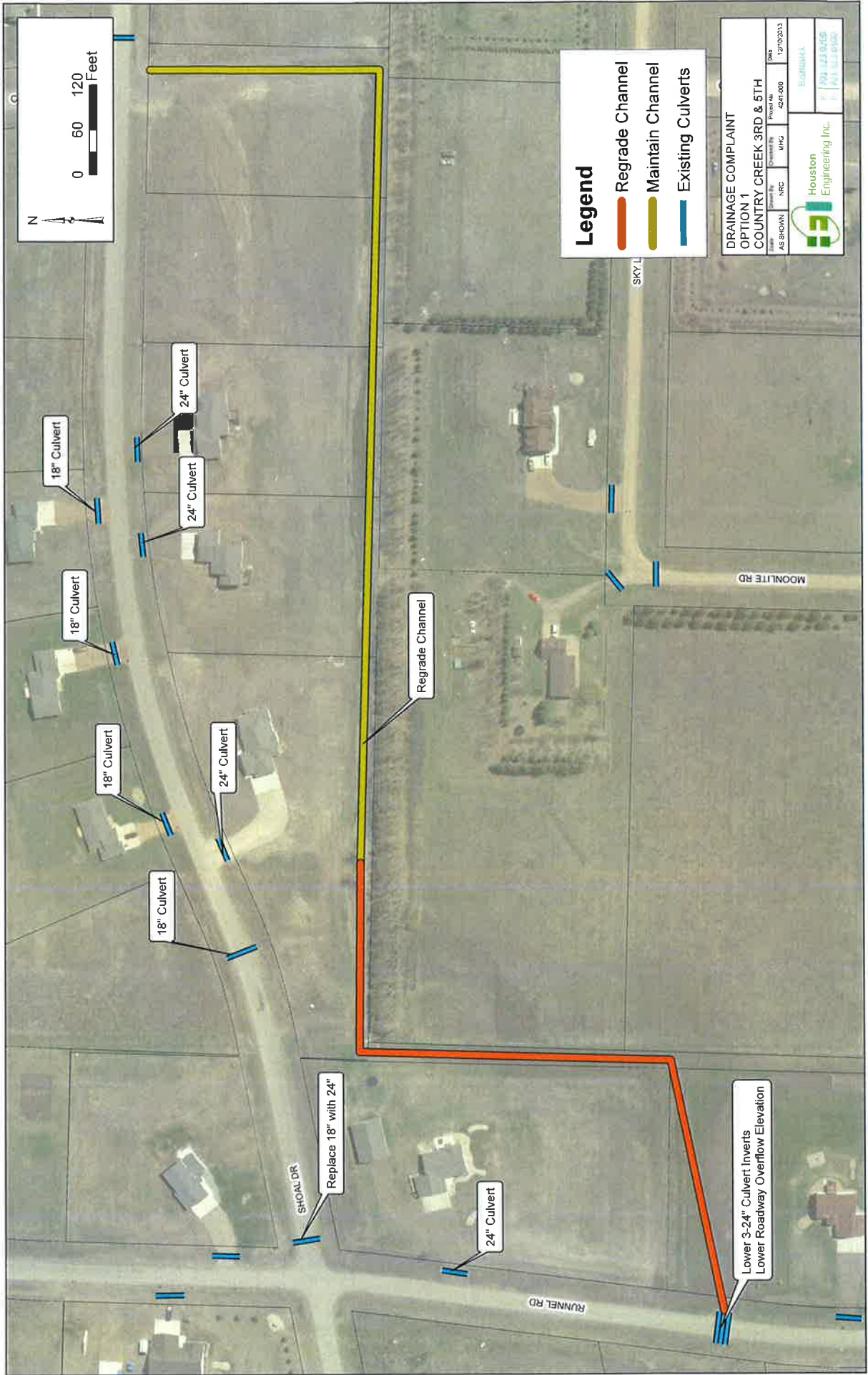


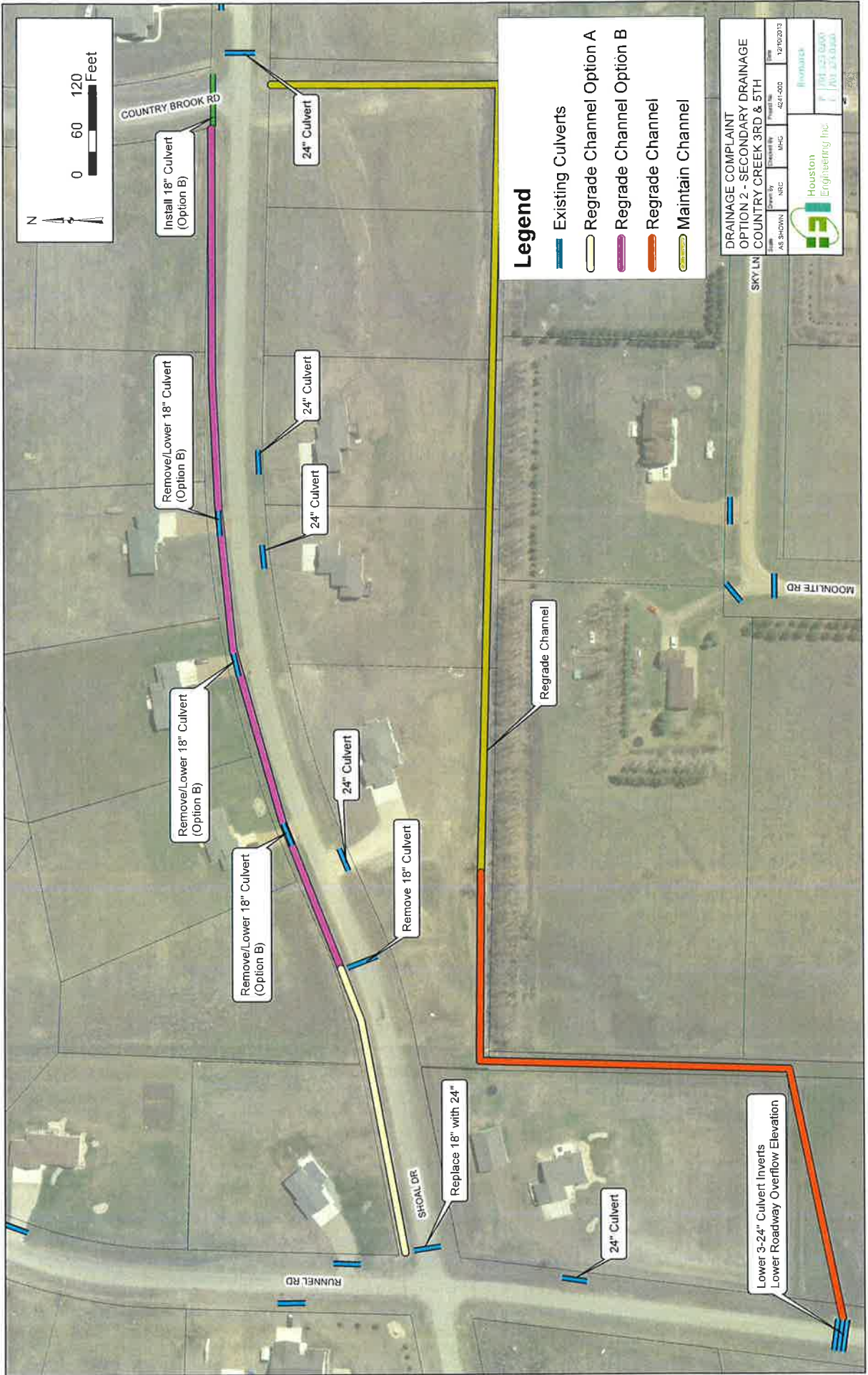


TYPICAL SECTION

This document is preliminary and not for construction or implementation purposes.

PROJECT NO. 4241-000		SHEET 2 OF 3	
COUNTRY CREEK SECOND & THIRD DRAINAGE COMPLAINT		DATE 12-11-13	
BURLING COUNTY, ND		DRAWN BY NRC	
		CHECKED BY MHG	
		SCALE AS SHOWN	
		Houston Engineering Inc.	
		No. Revision	
		Date	
		By	





July 5, 2013

Sent via email – original by mail

Art Goldhammer
Reddoor Homes - North Dakota
3100 North 14th Street, Suite 1
Bismarck, ND 58503

Dear Mr. Goldhammer:

Cary Backstrand, Burleigh County Water Resource District (BCWRD) and I met on site with Dan Schriock, Assistant County Engineer on July 2, regarding the two residences that you are constructing on Lot 3 and Lot 4, Block 1 Country Creek Third Subdivision. These residences are located south of Shoal Drive and just west of a critical storm water easement and flood control channel. As we discussed by phone the earthwork you completed breached the earthen berm east of Lot 3. This was in direct violation of the storm water management plan for this subdivision. This berm is a mandatory control feature and must remain in place, as its removal would place a number of residential structures to the west, including yours at risk of flooding during larger runoff events. On behalf of the BCWRD and Burleigh County thank you for your cooperation and restoration of the earthen berm in a timely manner.

The BCWRD is researching additional background regarding storm water management issues in this area and is reviewing concerns regarding recurring flood concerns through this area. This includes evaluating the proposed development of the Country Ridge First and Second Subdivision Plats, which are to be located east of 66th Street. Given the important nature of this situation you are requested to appear before the Board on July 9th to further discuss the drainage issues associated with your lots. As discussed there are both regional storm water a local drainage concerns to be considered. The meeting starts at 8 am on Tuesday in the Tom Baker Meeting room in the City/County Building.

If you have any questions prior to the meeting, please contact me at 527-2134 or Cary Backstrand at 471-9134. Again we appreciate your cooperation and discussion regarding the drainage issues in this area and restoration of the berm.

Sincerely,



Michael H. Gunsch, PE
Senior Project Manager

c: Marcus Hall, PE, County Engineer
BCWRD Board Members
Brad Steier, 6007 Shoal Drive

Drainage Complaint

Investigations Memorandum



To: Gailen Narum, Chairman BCWRD

From: Michael Gunsch, PE
Senior Project Manager

Date: December 6, 2011

Subject: County Creek 3rd Subdivision
Landies Drainage Complaint
Surface Water / Groundwater

The Burleigh County Water Resource District received a drainage complaint from Allen and Rene'e Landies, 6310 Sky Lane, Bismarck, North Dakota on September 19, 2011. This complaint was referred to Houston Engineering to prepare a brief summary of the situation and conduct an investigation of the complaint. Mrs. Landeis previously contacted me on several occasions related to issues associated with the development and impacts from the Country Creek 3rd Subdivision. These were related to past concerns they and others expressed during the original plat approval process, including anticipated problems related to stormwater management and drainage, and more recently flooding that has occurred since its development and increased groundwater levels around their residence.

As noted in the complaint, the Country Creek 3rd (CC3) subdivision has suffered from a number of drainage problems and developer noncompliance with the approved Stormwater Management Plan (SWMP). The City of Bismarck approved the CC3 SWMP; however the roadways were not constructed in accordance to the SWMP. Subsequently, surface drainage that was to have been directed and accommodated by the roadway ditches along Scholl Drive continued to overflow south into and through the natural drainage and lower topography in this area. This resulted in a number of newer residences being flooded during heavy rainfall and snowmelt runoff. The City of Bismarck investigated this problem and other concerns expressed by impacted residents. This process documented the noncompliance, and corrective measures were taken, which essentially included construction of a surface water diversion channel to accommodate flows from the development through this area. Other documented flood issues included problems with septic systems and channel maintenance concerns.

The BCWRD was involved in the discussions and resolution of the SWMP noncompliance questions. The developer, in response to the flooded residences, elected to construct the stormwater channel to convey the flows south of the roadway and along the back side of the residences. This channel relocated the flows from along Scholl drive into a shallow constructed waterway along the south side of the development and north of the Landeis residence. This new construction was completed and approved by the City via an amended SWMP.

The constructed channel has suffered from a number of issues in heavy snow fall years related to blockages and restricted conveyance capacity during spring runoff. The result has been surface water flooding and septic system impacts, even though the system design indicates an adequate capacity was provided. We are not aware of any flow obstructions or related issues contained in this complaint that are under the BCWRD's jurisdictional authority.

Another concern expressed by the Landies' is that the relocation of flows has increased the surface water flood risks to their property. While the flows have been relocated, the principal flow pattern remains within the general area of the original natural flow. The SWMP analysis also indicates that a reasonable level of flow control has been provided within the development. Although there are increases in the flow volumes due to the land use conversion, the peak flows are controlled. There has been a concern that the reduction in storage or ponding associated with the in-stream storage component of the watershed has been compromised due to new residential construction. While it is true storage in some locations has been affected, the SWMP reasonably accounts for this function in its flow assessment.

As with most developments there are changes in field conditions that result in visible impacts to flows, principally more flow or volume and a longer duration. It is clear that, while the drainage pattern as modified by this subdivision, (i.e., a constructed channel) is not the most desirable alternative for this location, it is functional. The City and County have since considered redirected drainage patterns and recommended changes to policy and ordinances be considered to avoid the construction of channels that convey or move flows out of their natural path.

More recently the Landies' expressed concerns related to groundwater problems around their residence that they feel are attributable to the County Creek 3rd development. The level of information available related to groundwater and soils conditions is inadequate to make any specific determination relative to such impacts. The past several years have resulted in significant groundwater issues in many areas within Burleigh County and there is no evidence of any direct correlation between the development of CC3 and groundwater impacts. While there is a coincidental correlation, the BCWRD has no jurisdictional authority to evaluate such issues.

In conclusion, while the BCWRD has authority over surface water drainage, nothing presently exists within this subdivision that would require action under their jurisdictional authority. On the other side of the equation, the City of Bismarck has authority over the SWMP, including constructed features, and at this point modifications were made to accommodate known and documented issues. The long term success and effectiveness of this installation remains to be determined. Should additional action be required at a future date, the City and BCWRD could reconsider the system and require modifications if they are deemed necessary.

Therefore, while respecting the Landies' concerns regarding impacts to their residence, the BCWRD does not have jurisdiction over the issues presented in the complaint based on current site conditions. Subsequently, it is recommended the BCWRD provide a copy of this memorandum to the Landies', the City of Bismarck Engineering Department and the Burleigh County Engineer noting no additional action will be taken by the BCWRD regarding the complaint, but it recognizes that this area requires additional monitoring.



Rec'd 9/19/2011
A

Complaint of Adverse Impact Obstruction to a Watercourse

Gailen Narum, Chairman
Burleigh County Water Resource District
221 North 5th Street
Bismarck, ND 58501

Location of Impacted Property 6200 Sky Lane - 6310 Sky Lane

Location of Project Causing Impact Country Creek Development - Shovel Dr.

Project Owner _____

Description of Adverse Impact and Obstruction:

Mariner Construction and various home builders have developed lots and built homes in Country Creek 5th addition. In doing this they have obstructed and rechanneled the natural flow and drainage of water and water runoff. This has created water backup, pooling, and increased water table levels in areas that would not normally have this. Houses are being built in natural water flow areas. Lot are being built up and the water is being pushed toward the bordering property. There have been numerous errors & flaws with the engineering, plat and development of Country Creek Development.

Complaint filed by: Name: Allen & Renee Handeis
Address: 6310 Sky Lane, Bis ND 58503
Phone: 255-6476

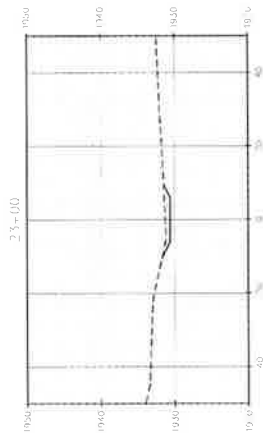
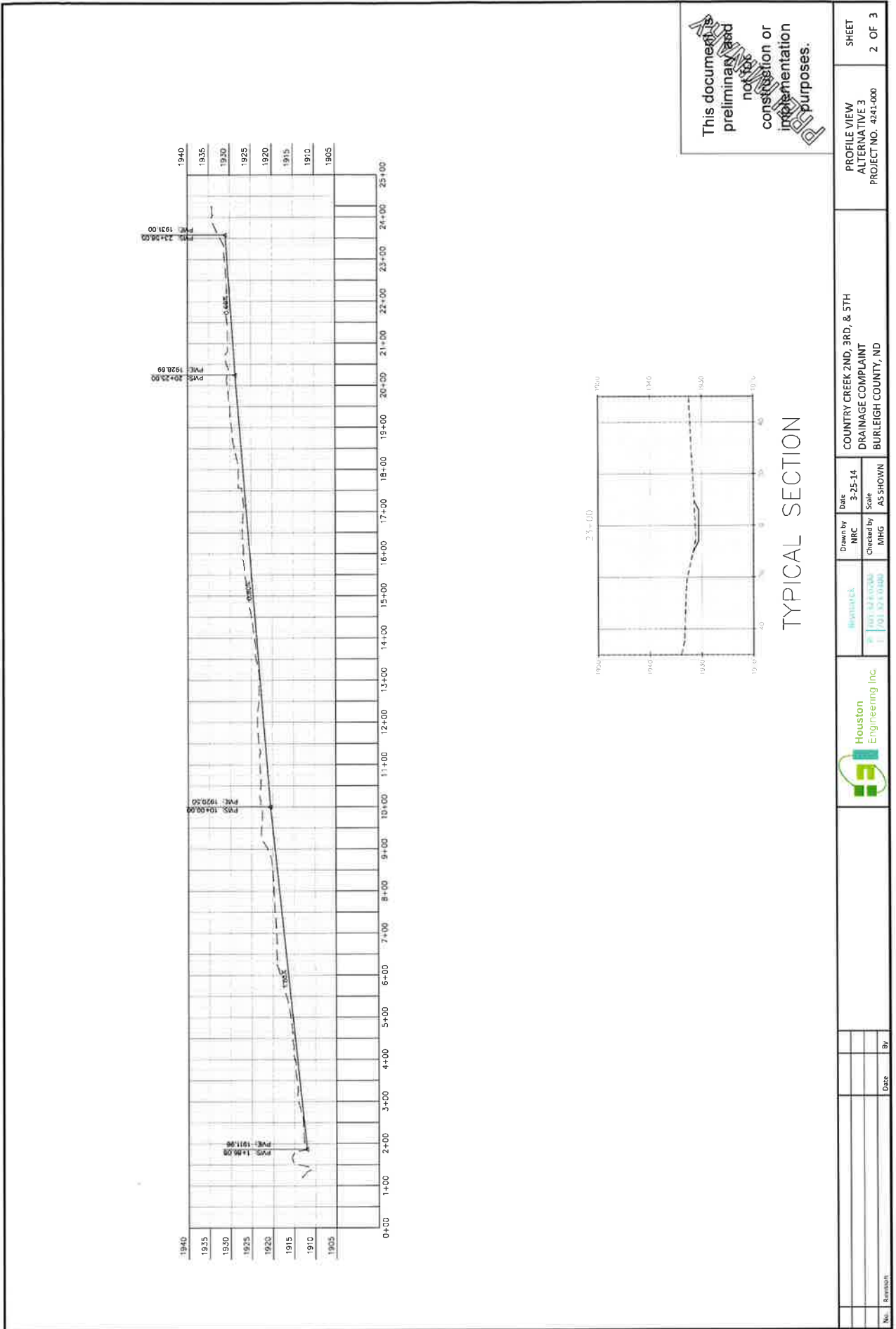
Complainant's Signature: Renee Handeis
Date: 7/14/11

Current Board Members:

Gailen Narum, Chair, Bismarck 323-0187 Terry Fleck, Vice Chair, Bismarck 223-9788 Ken Royse, Treas., Bismarck 258-1110 Cary Backstrand, Bismarck 471-9134 Reinold Ketter, Bismarck 425-6158

Appendix B

Preliminary Plan & Profile Sheets



TYPICAL SECTION

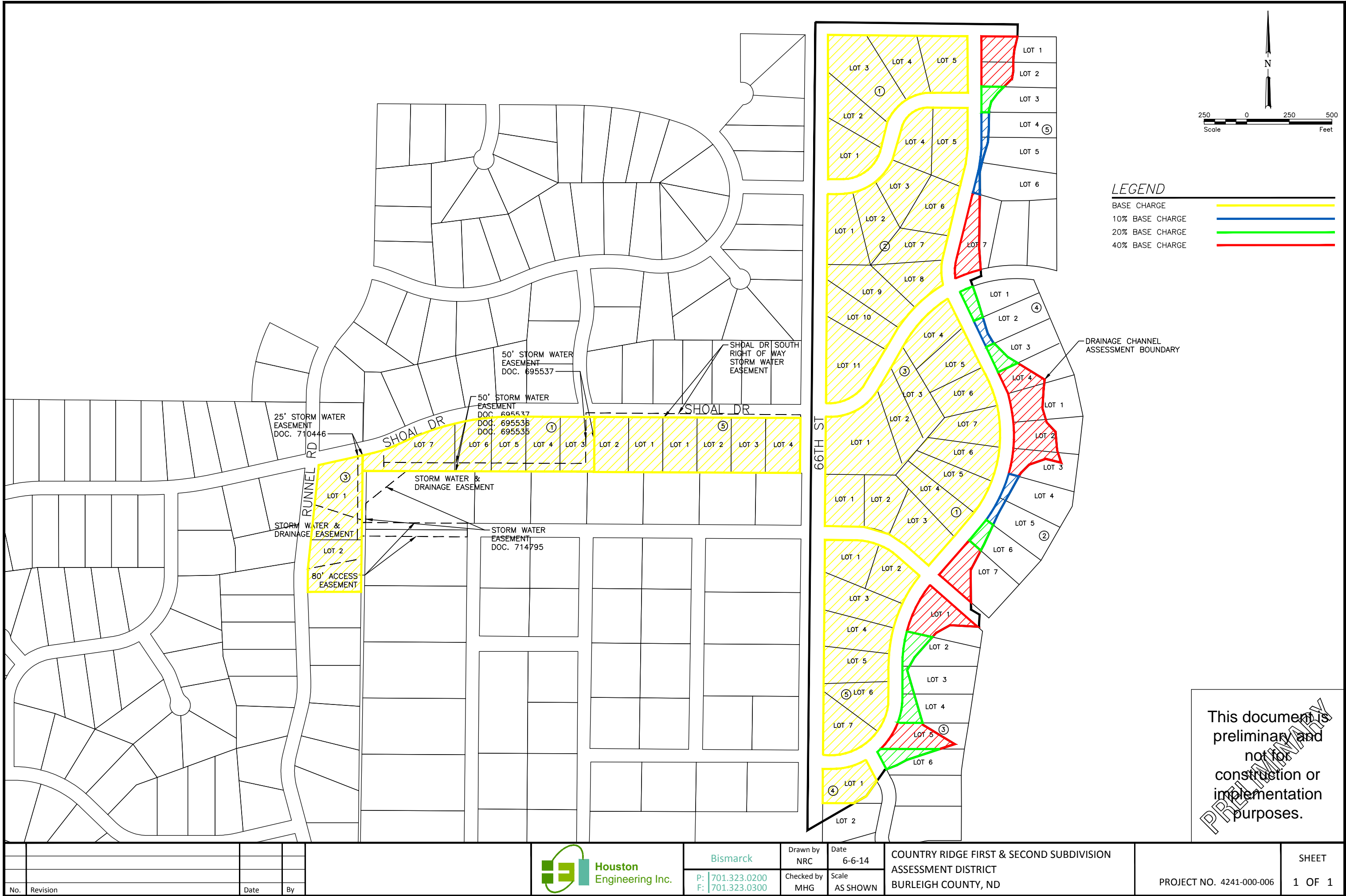
This document is preliminary and not for construction or instrumentation purposes.

No. Benthon		Date	By	Houston Engineering Inc.		Drawn by MRC	Date 3-25-14	COUNTRY CREEK 2ND, 3RD, & 5TH DRAINAGE COMPLAINT BURLEIGH COUNTY, ND		PROFILE VIEW ALTERNATIVE 3 PROJECT NO. 4241-000	SHEET 2 OF 3
						Checked by MHG	Scale AS SHOWN				

Appendix C

Benefitted and Assessed Area

T:\4241-XXX\Burleigh Co. WRD - General\4241-000-002 Drainage Complaints - Various Subdivisions\Country Creek Third and 5th\CAD\EASEMENTS\STORM WATER AND DRAINAGE.dwg-PLAN-6/6/2014 2:11 PM-(ncullen)



This document is preliminary and not for construction or implementation purposes.

					Bismarck	Drawn by NRC	Date 6-6-14	COUNTRY RIDGE FIRST & SECOND SUBDIVISION ASSESSMENT DISTRICT BURLEIGH COUNTY, ND	PROJECT NO. 4241-000-006	SHEET 1 OF 1
No.	Revision	Date	By		P: 701.323.0200 F: 701.323.0300	Checked by MHG	Scale AS SHOWN			

Appendix D

Opinion of Probable Cost

Country Creek 2nd, 3rd, & 5th Channel Improvements

Alternative 3 - Opinion of Probable Cost

HEI# 4241-006

Monday, March 24, 2014

Item No.	Description	Quantity	Unit	Unit Price	Amount
1	Contract Bond	1	L SUM	\$ 1,195.95	\$ 1,195.95
2	Mobilization	1	L SUM	\$ 2,391.90	\$ 2,391.90
3	Remove, Stockpile, & Replace Topsoil	2.35	Acre	\$1,500	\$ 3,525.00
4	Excavation Waste	2239	CY	\$ 6.00	\$ 13,434.00
5	Tree Removal	1	LS	\$ 3,000.00	\$ 3,000.00
6	Seeding	2.35	Acre	\$ 1,100	\$ 2,585.00
7	Bio Rolls (channel bottom)	500	LF	\$ 2.75	\$ 1,375.00
Construction Cost =					\$ 27,506.85

Appendix E

Assessment List

32-139-79-00-05-600	Swenson Trust	Country Ridge 2	2	5	6800 71ST AVE NE	Bismarck	58503	0.1	\$80.25
32-139-79-00-05-600	Swenson Trust	Country Ridge 2	2	6	6800 71ST AVE NE	Bismarck	58503	0.2	\$160.51
32-139-79-00-05-600	Swenson Trust	Country Ridge 2	2	7	6800 71ST AVE NE	Bismarck	58503	0.4	\$321.01
32-139-79-00-05-600	Swenson Trust	Country Ridge 2	3	1	6800 71ST AVE NE	Bismarck	58503	0.4	\$321.01
32-139-79-00-05-600	Swenson Trust	Country Ridge 2	3	2	6800 71ST AVE NE	Bismarck	58503	0.2	\$160.51
32-139-79-00-05-600	Swenson Trust	Country Ridge 2	3	3	6800 71ST AVE NE	Bismarck	58503	0.2	\$160.51
32-139-79-00-05-600	Swenson Trust	Country Ridge 2	3	4	6800 71ST AVE NE	Bismarck	58503	0.2	\$160.51
32-139-79-00-05-600	Swenson Trust	Country Ridge 2	3	5	6800 71ST AVE NE	Bismarck	58503	0.4	\$321.01
32-139-79-00-05-600	Swenson Trust	Country Ridge 2	3	6	6800 71ST AVE NE	Bismarck	58503	0.2	\$160.51
32-139-79-00-05-600	Swenson Trust	Country Ridge 2	4	1	6800 71ST AVE NE	Bismarck	58503	1	\$802.54
32-139-79-00-05-600	Swenson Trust	Country Ridge 2	5	1	6800 71ST AVE NE	Bismarck	58503	1	\$802.54
32-139-79-00-05-600	Swenson Trust	Country Ridge 2	5	2	6800 71ST AVE NE	Bismarck	58503	1	\$802.54
32-139-79-00-05-600	Swenson Trust	Country Ridge 2	5	3	6800 71ST AVE NE	Bismarck	58503	1	\$802.54
32-139-79-00-05-600	Swenson Trust	Country Ridge 2	5	4	6800 71ST AVE NE	Bismarck	58503	1	\$802.54
32-139-79-00-05-600	Swenson Trust	Country Ridge 2	5	5	6800 71ST AVE NE	Bismarck	58503	1	\$802.54
32-139-79-00-05-600	Swenson Trust	Country Ridge 2	5	6	6800 71ST AVE NE	Bismarck	58503	1	\$802.54
32-139-79-00-05-600	Swenson Trust	Country Ridge 2	5	7	6800 71ST AVE NE	Bismarck	58503	1	\$802.54
32-139-79-07-01-010	Kinn, Jeff & Rachelle	Country Creek 3	1	1	6550 71ST AVE NE	Bismarck	58503-6768	1	\$802.54
32-139-79-07-01-020	Mitchell, Brett M & Sarah L	Country Creek 3	1	2	PO BOX 1493	Bismarck	58502-1493	1	\$802.54
32-139-79-07-01-030	Larsen, Aaron L & Lyndsey N	Country Creek 3	1	3	6109 Shoal Dr.	Bismarck	58503	1	\$802.54
32-139-79-07-01-040	Nelson, Ryan & Tanya	Country Creek 3	1	4	6023 Shoal Dr.	Bismarck	58503	1	\$802.54
32-139-79-07-01-050	Steier, Bradley & Nola	Country Creek 3	1	5	6007 Shoal Dr.	Bismarck	58503	1	\$802.54
32-139-79-07-01-060	Wurtz, Jerry R & Rachel N	Country Creek 3	1	6	5925 Shoal Dr.	Bismarck	58503	1	\$802.54
32-139-79-07-01-070	Gullickson, Corwin K & Stephanie M	Country Creek 3	1	7	5901 Shoal Dr.	Bismarck	58503	1	\$802.54
32-139-79-20-03-010	Wescom, Lance C & Myla J	Country Creek 2	3	1	7701 Runnel Rd.	Bismarck	58503	1	\$802.54
32-139-79-20-03-020	Anderson, Jason & Kappedal, Kami	Country Creek 2	3	2	7529 Runnel Rd.	Bismarck	58503	1	\$802.54
32-139-79-06-05-010	Red Door Homes of Bismarck LLC	Country Creek 5	5	1	3100 N 14TH ST	Bismarck	58503	1	\$802.54
32-139-79-06-05-020	Salsbery, Ryan & Janessa	Country Creek 5	5	2	6317 Shoal Dr.	Bismarck	58503	1	\$802.54
32-139-79-06-05-030	Kovar, Herman W JR & Shaylene	Country Creek 5	5	3	6415 Shoal Dr.	Bismarck	58503	1	\$802.54
32-139-79-06-05-040	Miller, Daniel D	Country Creek 5	5	4	6501 Shoal Dr.	Bismarck	58503	1	\$802.54
TOTALS								Total Assessed Cost	\$44,300.00

Project Costs

Assessment District and Report	\$8,000.00
Engineering Design/Easement	\$12,500.00
Construction Management Services	\$13,800.00
Maintenance Fund	\$10,000.00
Total Costs	\$44,300.00

Subject to Revision 4-3-2014

Appendix F

Developer's Agreement

Kastet Easement (unsigned)

DEVELOPMENT AGREEMENT

County of Burleigh, Burleigh County Water Resource District, Gibbs Township, Apple Creek Developers, LLC, Rodney Swenson Trustee, (Robert S Swenson and Ruth D Swenson, Revocable Living Trust) and Lee Swenson

This DEVELOPMENT AGREEMENT ("Agreement") is made and entered into this ____ day of May 2014, by and between the undersigned County of Burleigh (County), Burleigh County Water Resource District (BCWRD), Gibbs Township (Township), Apple Creek Developers, LLC ("Developer") and, Rodney Swenson, Trustee (Robert S. Swenson and Ruth D. Swenson, Revocable Living Trust) and Lee Swenson (Landowners). The Landowners own property located in the west half of Section 5 Township 139 North, Range 79 West, Burleigh County, North Dakota, which lies adjoining to and east of 66th Street NE. This property is defined as those lands located within the boundaries of the proposed preliminary plat for the Country Ridge First and Country Ridge Second Subdivisions. The location of said properties is illustrated on **Exhibit #1** and **Exhibit #2**.

The Landowner and Developer wish to develop said properties and have submitted preliminary plats and related stormwater management plans to the Burleigh County Planning Commission for consideration.

County requested the BCWRD review the Stormwater Management Plan (SWMP) for Country Ridge First Subdivision and Country Ridge Second Subdivision for compliance and design considerations. The SWMP features and proposed design was found to be in compliance with County design standards; however the conveyance capacity of the outlet into which said development runoff discharges was determined to be inadequate.

The BCWRD has determined that a drainage problem and unacceptable flood risks exist downstream from the proposed plats, which has been documented as an existing stormwater diversion channel. This channel is located along the eastern property line of Lot 1, Block 3 and the southern property line of Lot 1 through Lot 7 Block 1 of the Country Creek Third Addition, and the eastern and southern property line of Lot 1 Block 3 Country Creek Second Subdivision. This diversion channel is contained within stormwater easements that were conveyed to Township and the Public, Burleigh County, North Dakota. The locations of these easements are illustrated on **Exhibit #3**, and the associated recorded documents are considered part of this Agreement by reference. In addition a new stormwater easement was granted by one landowner to reconstruct the diversion channel in a different location than under the original SWMP for the Country Creek 3rd Subdivision, **Exhibit #4**.

The existing stormwater diversion channel has become constricted by sediments originating from the upstream watershed through associated rural residential development. The BCWRD has determined that even after upgrading this diversion channel periodic maintenance will be required in the future and that there is a need to create a formal means to fund said maintenance.

The culverts at Runnel Road at the downstream end of this diversion channel were evaluated to determine the need to improve their capacity and reduce backwater flood risks as part of this agreement. The BCWRD has determined this crossing to be in compliance with the North Dakota Stream Crossing Standards for township roadways thus no modification is required.

BCWRD has stipulated that a Maintenance Assessment District can be established to restore and maintain the existing channel. The initial resolution establishing this project was approved by the BCWRD at their meeting on March 6, 2014.

Township does hereby permit and grant authority to the BCWRD, County and Developer to access said stormwater easements for the purpose of reconstructing said stormwater channel and for future maintenance. Channel reconstruction will occur in the spring of 2014, and will be designed to accommodate projected flows based on existing conditions and additional flows from the proposed development of the Country Ridge First and Country Ridge Second Subdivisions. Future maintenance within the designated stormwater detention area and drainage channel, including snow removal within the channel when such is required, will be completed via funding provided through the Maintenance Assessment District.

In consideration of the approval of the Country Ridge First and Country Ridge Second Subdivisions plats, the Developer hereby agrees to reconstruct the diversion channel to the design grades as provided by the BCWRD. Those costs associated with said reconstruction will be borne by the Developer under this Agreement. These grades shall be in accordance with the plan set included in the Engineering Report prepared for the Maintenance Assessment District. The Developer acknowledges that these plans incorporate channel modifications necessary to address concerns expressed by residents related to the need to reduce flood risks associated with the original channel and the adjacent residential structures. The costs associated with lowering the channel grade to accommodate residences that are flood prone; along with the costs associated with establishing the project and future maintenance provisions via the BCWRD, including administrative, legal, design services, construction staking and observation will be assessed to the benefited properties through the Maintenance Assessment District.

Developer agrees to install a screw gate on the culvert to provide the ability to control discharges from the stormwater detention area located east of 66th Street. The Developer agrees to construct the designated stormwater detention area such that no storage located within the 66th Street ROW is included in that required to comply with the stormwater design standards. Maintenance responsibility for the stormwater detention area will remain with the Developer until the lots are sold. Developer agrees to either expressly convey that responsibility to the new owners when the lots are sold or to expressly retain the right and responsibility for mowing and maintaining the detention area for its intended purposes.

IN WITNESS WHEREOF, the Chairman of the Burleigh County Commission hereby acknowledges that the County Commission of Burleigh County, North Dakota does hereby acknowledge and has approved the agreement described herein.

[illegible]

Notary Public, Burleigh County ND

[illegible]

Page 3 of 5

**John Hauke Chairman
Gibbs Township**

Notary Public, Burleigh County ND

_____, Partner
Apple Creek Developers

Notary Public, Burleigh County ND

Rodney Swenson, Trustee
Robert S. Swenson and Ruth D. Swenson
Revocable Living Trust

On this ____ day of May 2014, before me personally appeared _____, known to me to be the person who is described in and who executed the within instrument and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, Lee Swenson hereto has caused this Agreement to be executed under proper authority:

[illegible]

On this ____ day of May 2014, before me personally appeared _____, known to me to be the person who is described in and who executed the within instrument and acknowledged to me that he executed the same.

Page 5 of 5

EXHIBIT A
LOT 1 BLOCK 7
SKYLINE ESTATES SUBDIVISION
BURLEIGH COUNTY, NORTH DAKOTA

OWNERS: TYLER L. KASTET
BRANDI R. KASTET
ADDRESS: 6100 Sky Lane

STORM WATER AND DRAINAGE EASEMENT

This document Replaces existing Storm Water Easement Doc. 714795 on file at the Burleigh Co. Registrar of Deeds.

WITNESSETH: _____ TYLER L. KASTET and BRANDI R. KASTET, for and in consideration of the sum of \$1.00 or other valuable consideration, does by these presents grant and convey unto Gibbs Township, Burleigh County and the Public, a 50.00 foot strip of land for their use to construct and maintain said land as a storm water and drainage easement, described as follows:

A STRIP OF LAND 50.00 FEET IN WIDTH, LYING 25.00 FEET ON BOTH SIDES OF THE FOLLOWING DESCRIBED CENTERLINE:
COMMENCING AT THE NORTHWEST CORNER OF LOT 1 BLOCK 7 OF SKYLINE ESTATES, BURLEIGH COUNTY, NORTH DAKOTA; THENCE NORTH 89 DEGREES 35 MINUTES 22 SECONDS EAST, ALONG THE NORTH LINE OF SAID LOT 1, A DISTANCE OF 267.04 FEET TO THE POINT OF BEGINNING AND SAID CENTERLINE; THENCE SOUTH 46 DEGREES 03 MINUTES 46 SECONDS WEST, ALONG SAID CENTERLINE, A DISTANCE OF 374.99 FEET, MORE OR LESS TO THE WEST LINE OF SAID LOT 1, SAID POINT BEING SOUTH 00 DEGREES 39 MINUTES 58 SECONDS WEST, A DISTANCE OF 258.30 FEET FROM THE NORTHWEST CORNER OF SAID LOT 1. THE SIDES OF SAID EASEMENT SHALL BE LENGTHENED OR SHORTENED TO INTERSECT THE NORTH AND WEST LINE OF SAID LOT 1.

It is understood and agreed by the parties hereto that said easement is hereby granted and conveyed for Storm Water and Drainage purposes to the use of Gibbs Township, Burleigh County and the Public, to have and to hold the same together with all hereditaments and appurtenances hereunto belonging, or in anywise appertaining to the said party of the second part, so long as the above described premises are used for as Storm Water and Drainage Channel, and the party of the first part for their heirs, executors, administrators or assigns do covenant with the said party of the second part, that they are well seized in fee of the land and premises and have good right to convey the same in manner and form aforesaid, and the same are free from all encumbrances except as hereinafter mentioned.

And the above granted and conveyed premises the quiet and peaceable possession of said party of the second part against all persons lawfully claiming or to claim the whole or any part thereof. The said party of the first part will warrant and defend. That the party of the first part also agree to allow the party of the second part to build and maintain all structures necessary for the use of the above described Storm Water and Drainage Channel.

The Grantor will provide access to said easement by means of gates, if fenced, for maintenance of said easement.

NOTE:

Storm water easements are constructed to collect, store, convey, and/or treat storm water runoff. They are constructed to prevent flood damage and adverse environmental impacts to properties both within and outside the plat. Property owners shall not place any type of fill material or make any alterations to the permanent vegetative cover within the easement (I.E., no open tilled soil areas will be allowed). They shall not plant any trees or shrubs within the easement with the intent to screen or provide a snow shelter belt. Individual trees and shrubs may be planted within the easement with prior approval of the County Engineer. Property owners shall not construct any type of structure (E.G., including: houses, garages, outbuildings, sheds, driveways, parking pads, fences, landscaping gardens and septic tanks, ETC..) or any other feature that interferes with the intended use of the storm water easement.



STORM WATER AND DRAINAGE EASEMENT

PROJ NO.
4241-002

BURLEIGH COUNTY WATER RESOURCE DISTRICT
BURLEIGH COUNTY, NORTH DAKOTA

SHEET
1 OF 3

EXHIBIT A
LOT 1 BLOCK 7
SKYLINE ESTATES SUBDIVISON
BURLEIGH COUNTY, NORTH DAKOTA

OWNERS: TYLER L. KASTET
BRANDI R. KASTET
ADDRESS: 6100 Sky Lane

STORM WATER AND DRAINAGE EASEMENT

This document Replaces existing Storm Water Easement Doc. 714795 on file at the Burleigh Co. Registrar of Deeds.

IN WITNESS WHEREOF, this instrument is executed by the undersigned on this _____ day of _____ 2014.

TYLER L. KASTET

BRANDI R. KASTET

State of North Dakota)
) SS
County of Burleigh)

On this _____ day of _____ 2014, TYLER L. KASTET and BRANDI R. KASTET, personally appeared before me, known to me to the persons described in and who executed the within and foregoing instrument and acknowledged to me that they executed the same.

NOTARY PUBLIC

COUNTY, ND

MY COMMISSION EXPIRES: _____

I, Todd Marschall, ND PLS 4431, hereby certify that this and the accompanying documents were prepared and/or checked by me or under my direct supervision and that all the information shown hereon is true to the best of my knowledge.

Todd Marschall, PLS 4431



STORM WATER AND DRAINAGE EASEMENT

PROJ NO.
4241-002

BURLEIGH COUNTY WATER RESOURCE DISTRICT
BURLEIGH COUNTY, NORTH DAKOTA

SHEET
2 OF 3

OWNERS: TYLER L. KASTET
BRANDI R. KASTET
ADDRESS: 6100 SKY LANE

Houston
Engineering Inc.

SHEET
3 OF 3

Appendix G

BCWRD Timeline and Resolutions

MEMO

Technical Memorandum



**To: Terry Fleck, Chairman
Burleigh County WRD**

From: Craig Odenbach, P.E.

Date: April 24, 2014

**Subject: Country Creek 3rd
Assessment District Timeline**

The following is a potential time line for establishing an Assessment District for maintenance of the storm water conveyance corridor serving the Country Creek and Country Ridge Subdivisions.

Pass Resolution of Necessity	BCWRD Meeting March 6
Develop Preliminary Engineering Report & Assessment List	In time for May 13 BCWRD Meeting
BCWRD Approval of Engineering Report & Assessment List	BCWRD May 13 Meeting
Assessment List Filed with Auditor	May 19
Notice Published	May 20 & 27
Notice Mailed	May 19
Hearing	BCWRD June 10 Meeting
Vote Deadline	July 10
Order Establishing Project	Week of July 14 (Would require BCWRD Conference Call)
Publish Notice & Assessment List	July 22 & 29
Mail Notice	July 22
Final Assessment Hearing	BCWRD Meeting August 12



Resolution No. 1

BURLEIGH COUNTY WATER RESOURCE DISTRICT BURLEIGH COUNTY, NORTH DAKOTA

RESOLUTION OF NECESSITY FOR COUNTRY CREEK AND COUNTRY RIDGE SUBDIVISIONS STORM WATER MAINTENANCE PROJECT

BE IT RESOLVED by the Water Resource Board of the Burleigh County Water Resource District, Burleigh County, North Dakota (the "Board"), as follows:

1. There having been proposed through action of this Board, pursuant to Chapter 61-16.1 of the North Dakota Century Code, the maintenance of a project, hereafter to be known and referred to as the Country Creek and Country Ridge Subdivisions Storm Water Maintenance Project (the "Project"), which Project is proposed to be financed in whole or in part with funds raised through the collection of special assessments levied against lands and premises benefited by such Project, and this Board having examined the proposed Project, it is hereby declared that further proceedings are warranted and that it is necessary to construct and maintain the Project, which has the following nature and purpose:

The proposed Country Creek and Country Ridge Subdivisions Storm Water Maintenance Project would include the following:

A designated stormwater detention easement located within Lot 1 Block 3 and Lot 11 Block 2 of the proposed Country Ridge First Addition, then commencing from the southwest corner of Shoal Drive and North 66th Street west along Shoal Drive's southern right of way, north of Lots 1-4 of Block 5 and Lots 1 & 2 of Block 1 Country Creek Third Addition, thence along the diversion channel constructed within stormwater easement documents 695537, 695536, 695535, 710446, and an unrecorded easement that replaces document 714795 , terminating at the east side of Runnel Road, Country Creek Third Subdivision located in the NE¼ Section 6, Township 139 North, Range 79 West of the 5th Principle Meridian, Burleigh County, North Dakota for the purpose of maintaining these stormwater facilities.

2. Michael H. Gunsch, PE, of Houston Engineering, Inc., Bismarck, North Dakota, is hereby designated as the registered professional engineer to assist the Board with the Project and is hereby directed to prepare preliminary plans and a preliminary engineering report for the proposed Project and estimates of the total cost thereof, which estimates shall include the acquisition of any properties or necessary right-of-way and shall be in sufficient detail to allow the Board to determine the probable share of the total costs that will be assessed against each of the benefitted landowners within the proposed Project assessment district.

Adopted by Board the 13th day of May, 2014,

ATTEST:

BURLEIGH COUNTY WATER
RESOURCE DISTRICT

Secretary

Chairman, Water Resource Board

The governing body of the political subdivision acted on the foregoing resolution on May 13, 2014, as follows:

Adoption moved by _____ Seconded by _____.

Roll Call Vote (List Last Names)

“Aye” _____

“Nay” _____

Absent _____



Resolution No. 1 — 16-178

**BURLEIGH COUNTY WATER RESOURCE DISTRICT
BURLEIGH COUNTY, NORTH DAKOTA**

**RESOLUTION OF NECESSITY FOR
COUNTRY CREEK AND COUNTRY RIDGE SUBDIVISIONS STORM WATER MAINTENANCE PROJECT**

BE IT RESOLVED by the Water Resource Board of the Burleigh County Water Resource District, Burleigh County, North Dakota (the "Board"), as follows:

1. There having been proposed through action of this Board, pursuant to Chapter 61-16.1 of the North Dakota Century Code, the maintenance of a project, hereafter to be known and referred to as the Country Creek and Country Ridge Subdivisions Storm Water Maintenance Project (the "Project"), which Project is proposed to be financed in whole or in part with funds raised through the collection of special assessments levied against lands and premises benefited by such Project, and this Board having examined the proposed Project, it is hereby declared that further proceedings are warranted and that it is necessary to construct and maintain the Project, which has the following nature and purpose:

The proposed Country Creek and Country Ridge Subdivisions Storm Water Maintenance Project would include the following:

A designated stormwater detention easement located within Lot 1 Block 3 and Lot 11 Block 2 of the proposed Country Ridge First Addition, then commencing from the southwest corner of Shoal Drive and North 66th Street west along Shoal Drive's southern right of way, north of Lots 1-4 of Block 5 and Lots 1 & 2 of Block 1 Country Creek Third Addition, thence along the diversion channel constructed within stormwater easement documents 695537, 695536, 695535, 710446, and an unrecorded easement that replaces document 714795 , terminating at the east side of Runnel Road, Country Creek Third Subdivision located in the NE¼ Section 6, Township 139 North, Range 79 West of the 5th Principle Meridian, Burleigh County, North Dakota for the purpose of maintaining these stormwater facilities.

2. Michael H. Gunsch, PE, of Houston Engineering, Inc., Bismarck, North Dakota, is hereby designated as the registered professional engineer to assist the Board with the Project and is hereby directed to prepare preliminary plans and a preliminary engineering report for the proposed Project and estimates of the total cost thereof, which estimates shall include the acquisition of any properties or necessary right-of-way and shall be in sufficient detail to allow the Board to determine the probable share of the total costs that will be assessed against each of the benefitted landowners within the proposed Project assessment district.

Adopted by Board the 13th day of May, 2014,

ATTEST:


Secretary

BURLEIGH COUNTY WATER
RESOURCE DISTRICT


Chairman, Water Resource Board

The governing body of the political subdivision acted on the foregoing resolution on May 13, 2014, as follows:

Adoption moved by Dennis Reep Seconded by Kathleen Jones

Roll Call Vote (List Last Names)

"Aye" Reep, Jones, Weixel, Backstrand, Fleck

"Nay" N/A

Absent N/A



Resolution No. 2

BURLEIGH COUNTY WATER RESOURCE DISTRICT BURLEIGH COUNTY, NORTH DAKOTA

RESOLUTION APPROVING ENGINEER'S REPORT, PLANS, AND ESTIMATE OF COST AND DIRECTING THE ASSESSMENT OF THE COST FOR THE COUNTRY CREEK STORM WATER MAINTENANCE ASSESSMENT

BE IT RESOLVED by the Water Resource Board (the "Board") of the Burleigh County Water Resource District, Burleigh County, North Dakota, as follows:

1. The engineer's report, profiles, plans, and estimate of cost received by this Board for the proposed rehabilitation and maintenance of the **Country Creek Storm Water Maintenance Project (the "Project")** as amended to distribute costs on an equal basis, are hereby approved and the same shall be forthwith filed in the office of the Secretary.
2. The Board shall proceed with the assessment of the cost of the project and public hearing process in accordance with N.D.C.C. Section 61-16.1-21.

Dated this 13rd day of May, 2014

ATTEST:

BURLEIGH COUNTY WATER
RESOURCE DISTRICT

A handwritten signature in cursive script, appearing to read "Nathaniel Jones", written over a horizontal line.

Secretary

A handwritten signature in cursive script, appearing to read "Terry A. Fleck", written over a horizontal line.

Chairman, Water Resource Board

The governing body of the political subdivision acted on the foregoing resolution on this 13rd day of May, 2014, as follows:

Adoption moved by Jones Seconded by Backstrand

Roll Call Vote (List Last Names)

"Aye" Reep, Jones, Weixel, Backstrand, Fleck

"Nay" N/A

Absent N/A

...and after vote the presiding officer declared the resolution adopted.