

Agenda Packet

NORTHEAST NEBRASKA SOLID WASTE COALITION

Wednesday, March 1, 2023
7:00 p.m.

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Notice of Meeting
Northeast Nebraska Solid Waste Coalition

The Northeast Nebraska Solid Waste Coalition will meet on Wednesday, March 1, 2023 at 7:00 p.m. at the Columbus City Council Chambers, 1369 25th Ave., Columbus, Nebraska.

The Coalition reserves the right to adjourn into closed session as per Section 84-1410 of the Nebraska Revised Statutes.

An agenda for such meeting, kept continuously current, is available at the office of the City Administrator, City of Norfolk, 309 N 5th St, Norfolk, Nebraska, during normal business hours.

Brianna Duerst
Norfolk City Clerk &
NNSWC Secretary

Publish (February 24, 2023)
1 P.O.P.

NORTHEAST NEBRASKA SOLID WASTE COALITION

AGENDA

March 01, 2023

Call meeting to order

1. (Inform the public about the location of the Open Meetings Act posted in the meeting room and accessible to members of the public.)

Roll call

Approval of agenda

Approval of minutes

2. Approval of the minutes of the April 20, 2022 Coalition meeting.

Unfinished business

Reports of Board of Directors, Officers and Committees

3. Financial statements from March 2022 to January 2023.

New business

4. Consideration of approval of a five (5) year contract extension with SCS Engineers to perform the required monitoring and reporting services for the NNSWC Landfill located in Stanton County, Nebraska for an estimated \$224,068.00. **Motion**
5. Consideration of approval of Authorization No. 59 with Burns and McDonnell Engineering Company, Inc. to perform Construction Administration Services on Area 6, Phase 1 expansion construction with a cost of \$220,000.00 **Motion**
6. Consideration of approval of Authorization No. 60 with Burns and McDonnell Engineering Company, Inc. to create an updated Storm Water Pollution Prevention Plan (SWPPP) at a cost not to exceed \$7,000. **Motion**
7. Consideration of approval of the Coalition's preliminary budget for the fiscal year ending September 30, 2023 for presentation at town hall meetings in the three largest Coalition communities. **Motion**
8. Consideration of accepting the bid of \$3,450,000 from J.J. Westhoff Construction Co. for the construction of a new landfill cell, Area 6, Phase 1. **Motion**
9. Consideration of authorizing the NNSWC Chairman to execute the agreement with J.J. Westhoff for construction of Area 6, Phase 1 upon receipt of the required documents from J.J. Westhoff and J.J. Westhoff's execution of the construction agreement. **Motion**

10. Consideration of approval of the draft Landfill Master Plan for presentation at stakeholder meetings to be held in Fremont, Columbus and Norfolk. **Motion**
11. Consideration of proposed changes to the Northeast Nebraska Solid Waste Coalition Interlocal Agreement, Bylaws, Host Agreement with Stanton County, and proposed rate resolution for presentation at stakeholder meetings to be held in Fremont, Columbus and Norfolk. **Motion**

Miscellaneous business and discussion

Adjournment

STAFF MEMORANDUM
NORTHEAST NEBRASKA SOLID WASTE COALITION
March 01, 2023

Call meeting to order

1. (Inform the public about the location of the Open Meetings Act posted in the meeting room and accessible to members of the public.)

Roll call

Approval of agenda

Approval of minutes

2. Approval of the minutes of the April 20, 2022 Coalition meeting.

See Enclosure 2.

Unfinished business

Reports of Board of Directors, Officers and Committees

3. Financial statements from March 2022 to January 2023.

At the last Coalition Board meeting on April 20, 2022, financial statements for September 2021 to February 2022 were included in the agenda packet. The current agenda packet has financial statements from March 2022 to January 2023.

See Enclosure 3.

New business

4. Consideration of approval of a five (5) year contract extension with SCS Engineers to perform the required monitoring and reporting services for the NNSWC Landfill located in Stanton County, Nebraska for an estimated \$224,068.00. **Motion**

This existing 5-year contract with SCS expired 12/31/22, SCS proposed an extension with estimated costs of \$224,068. All laboratory analytical fees will be billed directly to NNSWC so there will be no mark up from SCS. Estimated costs include laboratory analytical fees.

In 2017, three bids were opened and SCS Engineers were low bid with \$169,701.00, other bids were \$223,229 and \$223,280. SCS proposed extension is \$800 higher than the previous bidders estimate, 5 years ago.

Testing and reporting requirements include; bi-annual well monitoring as required by Nebraska Title 132 Regulations, yearly air reporting as required by Nebraska Title 129 Regulations, and yearly Greenhouse Gas Reporting as required by Federal Clean Air Act rules

Staff recommends approval.

See Enclosure 4.

5. Consideration of approval of Authorization No. 59 with Burns and McDonnell Engineering Company, Inc. to perform Construction Administration Services on Area 6, Phase 1 expansion construction with a cost of \$220,000.00 **Motion**

Consideration of approval of Authorization No. 59, with Burns and McDonnell Engineering Company, Inc. to perform Construction Administration Services during the construction of Area 6, Phase 1 at the NNSWC landfill with an estimated cost of \$220,000

Burns and McDonnell Engineering will provide a resident project representative to observe and document construction progress during all significant phases of the construction of the project for the estimated 20-week project. Engineer will be available to assist contractors with any issues that may arise, and report to NNSWC. Engineer will obtain all necessary approvals and documentation from the NDEE.

The Solid Waste Supervisor recommends approval.

See Enclosure 5.

6. Consideration of approval of Authorization No. 60 with Burns and McDonnell Engineering Company, Inc. to create an updated Storm Water Pollution Prevention Plan (SWPPP) at a cost not to exceed \$7,000. **Motion**

Consideration of approval of Authorization No. 60, with Burns and McDonnell Engineering Company, Inc. to prepare an updated SWPPP for the NNSWC Landfill to comply with newest requirements of the General Permit for Stormwater Discharges Associated with Industrial Activities, per NDEE and EPA.

Burns and McDonnell Engineering will provide one hard copy of the new SWPPP to NNSWC.

The Solid Waste Supervisor recommends approval.

See Enclosure 6.

7. Consideration of approval of the Coalition's preliminary budget for the fiscal year ending September 30, 2023 for presentation at town hall meetings in the three largest Coalition communities. **Motion**

According to the Northeast Nebraska Solid Waste Coalition interlocal agreement, a town hall meeting is held in the three largest communities each year to review the Coalition's proposed budget and rates. Included in the agenda packet is a proposed budget for the town hall meetings for the fiscal year ending September 30, 2023.

This budget assumes Waste Connections continues operation of the Coalition landfill. A 10% increase to Waste Connections was approved at the April 20, 2022, which became effective August 1, 2022. Tipping fees remain unchanged at \$24.00 per ton.

Balance forward increases \$1,199,878 going from \$7,172,468 last year to \$8,372,346 this year primarily due to normal operations of the Coalition.

Use fees decrease \$115,512 or 3.76% due to a 4,813 ton decrease in budgeted tonnage for regular waste. With tipping fees at \$24.00 per ton, budgeted use fees are \$2,955,331. Interest income increases \$50,000 due to an increase in budgeted interest rate from 0.15% last year to 1% this year.

Personnel costs increase \$958 or 0.96%. Personnel costs include a 6% cost of living adjustment and normal merit increase. This increase is partially offset by hiring a part-time scale clerk at a lower pay grade than the previous sale clerk. Disposal fees increase \$71,949 or 6.19% due to the increase in fee to Waste Connections. Other professional fees decrease \$28,319 due to a decrease in the fee for groundwater monitoring. This year's capital outlay is \$4,207,200 and consists of: \$3,831,200 for engineering and construction of cell 6, \$11,000 for installation of deep well pumps, and \$365,000 for vertical and lateral permit modifications.

Also included in the agenda packet is the Closure/Post Closure Care Fund budget. The transfer from the operating fund increases \$94,880 or 24.77% from \$383,120 last year to \$478,000 this year. Total funds available for closure/post closure increase 9.76% from \$10,525,996 last year to \$11,553,716 this year. Approximately half of the increase is due to interest earnings and half is due to current year funding.

See Enclosure 7.

8. Consideration of accepting the bid of \$3,450,000 from J.J. Westhoff Construction Co. for the construction of a new landfill cell, Area 6, Phase 1. **Motion**

Burns and McDonnell Engineering has developed, and reached out for bids to construct the next landfill cell, Area 6, Phase 1. Four construction firms attended the Pre-Bid meeting on February 8, 2023. One bid was received per requirements and one bid was received late and was not opened. J.J. Westhoff Construction was the low, responsible bidder with a bid of \$3,450,000 and a completion date of October 1st, 2023, per contract. The bid received was in line with the engineer's opinion of probable construction cost. J.J. Westhoff fully understands the scope of the project and they have the resources, equipment, and experience to complete the project.

Staff and Burns and McDonnell recommend approval

See Enclosure 8.

9. Consideration of authorizing the NNSWC Chairman to execute the agreement with J.J. Westhoff for construction of Area 6, Phase 1 upon receipt of the required documents from J.J. Westhoff and J.J. Westhoff's execution of the construction agreement. **Motion**

This allows the Chair to sign the Agreement with J.J. Westhoff after Westhoff provides the contract documents required by Article 8 of the construction agreement.

Staff recommends approval

See Enclosure 9.

10. Consideration of approval of the draft Landfill Master Plan for presentation at stakeholder meetings to be held in Fremont, Columbus and Norfolk. **Motion**

At the May 21, 2020 Board meeting, the Board approved Authorization No. 52 with Burns & McDonnell for the development of a Master Plan for the Coalition landfill. Burns & McDonnell worked with representatives from Fremont, Norfolk and Columbus on the Master Plan. Burns & McDonnell provided a project update at the June 2, 2021 Coalition Board meeting and answered questions and received input from the Board. Included in the agenda packet is the draft Master Plan which is consistent with the June 20, 2021 update provided to the Board.

The Master Plan process provides for presentation of the draft Master Plan at stakeholder meetings to be held in the three largest Coalition communities of Fremont, Norfolk and Columbus. Input received at these public stakeholder meetings will be brought back to the Board along with any proposed changes to the Master Plan.

The Master Plan assumes a 1% annual growth in tonnage, which results in utilizing all the existing permitted capacity in 2049 or 54 years after the landfill began operations in 1995. The proposed Master Plan includes a conceptual on-site expansion that represents a 25-acre horizontal expansion and a 60-foot vertical expansion over current permitted levels, which equates to roughly 7.3 million cubic yards of additional air space, or about a 50% expansion of what is currently permitted extending landfill life about 28 years to 2078.

The Master Plan also looked at expanding off site to provide for waste disposal past the expected 2078 fill date. The options evaluated were expanding on land adjacent to the current site with options considered for expanding to the north, east, south and west. This evaluation recommends the south expansion option. This option has the ability to piggyback on the existing landfill and utilize the existing landfill infrastructure. The south option provides estimated available airspace of over 17.5 million cubic yards and almost 47 years of additional landfill life.

The Master Plan also looked at the Coalition's financial projections. These projections assume the same 1% increase in tonnage discussed earlier and a 2.5% inflation factor. These projections indicate the Coalition can maintain its current rate of \$24 per ton through 2073.

Another portion of the Master Plan is a review of existing Coalition agreements, bylaws and rates. This is considered in a separate agenda item immediately after this agenda item.

See Enclosure 10.

11. Consideration of proposed changes to the Northeast Nebraska Solid Waste Coalition Interlocal Agreement, Bylaws, Host Agreement with Stanton County, and proposed rate resolution for presentation at stakeholder meetings to be held in Fremont, Columbus and Norfolk. **Motion**

The Master Plan included a review of various Coalition agreements and the Coalition bylaws. The goal of this review is to bring these documents into agreement with how the Coalition is actually operating and eliminate or modify provisions that have become outdated over the last 30 years. The agenda packet contains the proposed revised Interlocal Agreement, Bylaws and Stanton County Host Agreement. In addition, the agenda packet includes "redlines" showing the changes from the current agreements and bylaws to the proposed agreements and bylaws. Also included is a proposed rate resolution.

The first agreement included under this agenda item is the Stanton County Host Agreement. This agreement was entered into in 1993 before the current landfill was permitted. Language is changed to reflect the landfill that has been permitted and in operation since 1995. The original host fee provided for

inflation adjustments and the proposed agreement reflects the current inflation adjusted fee and provides for future ongoing inflation adjustments. The current agreement provides for a discussion every 3 years of hard surfacing the access road to the landfill. Since these discussions haven't been taking place this provision is eliminated in the proposed agreement.

The original agreement provided that the only waste that could be disposed of at the landfill was waste generated in the jurisdiction of a Coalition member. As a practical matter, it's not possible to exclude all non-member waste. Packer trucks coming into the transfer stations often contain mixed loads of waste with the truck's route being both within and outside of a member's jurisdiction. It's not practicable to know the location where the waste on these trucks originated. The Coalition has also allowed waste from the City of Clarkson, which is not a Coalition member, to go into the landfill in order to be a good neighbor. Since it's not practical to know where the waste is actually generated that goes to the transfer stations, the requirement that only waste generated in the jurisdiction of Coalition members is eliminated from the proposed agreement to reflect actual transfer station and landfill operations.

The second agreement in the agenda packet is the interlocal agreement. This 1994 agreement was put in place before the Coalition was operational and it too contains outdated language that can be eliminated.

The current interlocal agreement has a maximum duration of 60 years. As discussed in the previous agenda, item the landfill will remain operational for an estimated 54 years under the current permit and much longer with the proposed changes. The Coalition needs to continue in existence for the 30 year post-closure period after the landfill stops accepting waste. The maximum 60 year duration is eliminated in the proposed agreement.

During the early years of the Coalition, it was not difficult getting a good turnout of members at the Coalition meetings. Now that the landfill has been operating smoothly for almost 30 years, most members don't show up to meetings. Normally it is Fremont, Norfolk & Columbus representatives at the meeting along with the Maple Creek Township representative. The proposed agreement provides for these 4 representatives being permanent Board members, with a representative selected annually by the other members to represent the non-permanent members.

There is a requirement in the interlocal agreement that the budget be reviewed at town hall meetings in the three largest Coalition communities. No one shows up at these town hall meetings and this provision is eliminated in the proposed agreement.

The proposed agreement provides for more rate flexibility as will be discussed in more detail later in this agenda item when the proposed rate resolution is discussed.

As required by the current interlocal agreement, the proposed interlocal agreement will have to be approved by all members. This is cumbersome and allows even the smallest of members to single handily veto any change to the interlocal agreement. The proposed agreement allows amendment upon approval by members representing 60% of the member population.

The third document under this agenda item is the bylaws. Changes were made to the bylaws to reflect the changes in the other agreements discussed. The Executive Committee, Management Advisory Committee and Finance Committee provisions were removed since these committees aren't being utilized. A provision was added to email a list of claims to Board members before they are paid and any Board member can object to paying a claim and have it placed on the agenda for the next Board meeting for consideration. The location of Board meetings is specified in the current bylaws as being in Norfolk, but the meetings are actually rotated between Columbus, Fremont and Norfolk. The proposed bylaws reflect the actual practice of rotating Board meeting locations.

The last document in the agenda packet is a proposed rate resolution. This resolution keeps the standard Coalition rate at \$24 per ton. It formalizes the \$8 per load inspection fee the Coalition is currently charging for inspecting loads not going through a member transfer station. It also formalizes the equipment use fee and special waste fee the landfill operator charges the Coalition. The Coalition pays these fees and bills the applicable party. The rate resolution provides for a \$2 fee for the Coalition to recoup the cost of billing and collecting the equipment use fee and special waste fees. The resolution provides for a minimum charge of the rate for 1 ton. This rate resolution formalizes the practice of qualifying waste that is not compatible with transfer station operations going directly to the landfill and paying the standard \$24 per ton rate plus the inspection fee. The rate resolution formalizes the current practice of charging for non-typical waste (light, bulky waste) based on estimated airspace used. The rate resolution formalizes the current practice of charging City of Clarkson waste transported directly to the landfill the "good neighbor" rate of \$24 per ton. This waste will be subject to the \$8 inspection fee since it bypasses a transfer station. The rate resolution also formalizes the definition of member transfer stations as member owned transfer stations or transfer stations located in the jurisdiction of a member and approved by the Coalition. This is current practice and there are currently two non-member owned transfer stations treated as member transfer stations: Bud's Sanitation by Newman Grove (in Madison County's jurisdiction) and Albracht Disposal in Madison. Any other waste is charged \$79 per ton plus inspection fee. This is based on the current highest

member transfer station rate of \$69 plus an additional \$10 to discourage this type of waste. This covers things such as local farmers wanting to dump at the landfill instead of driving to a transfer station.

See Enclosure 11.

Miscellaneous business and discussion

Adjournment

NORTHEAST NEBRASKA SOLID WASTE COALITION

The Northeast Nebraska Solid Waste Coalition Board of Directors in the Fremont City Council Chambers, 400 E Military Avenue, Fremont, Nebraska, on Wednesday April 20, 2022 at 7:00 p.m.

NNSWC Chairman Corey Granquist, Norfolk, called the meeting to order and informed the public about the location of the current copy of the Open Meetings Act posted in the meeting room and accessible to members of the public.

Roll call found the following Board members present: Charlie Bahr, representing Columbus; Mark Jensen, Fremont; Corey Granquist representing Norfolk and Dan Weddle representing Dodge County. A quorum of the Board of Directors was present since sixty percent (60%) of the combined population of all Coalition members were represented by members in attendance.

Others present were: NNSWC Treasurer Randy Gates, NNSWC Secretary Brianna Duerst, Norfolk staff: Public Works Director Steve Rames and Solid Waste Supervisor Rob Mercer. Fremont staff: Jody Sanders and Tyler Ficken. Columbus staff: Tara Vasicek and Chuck Silva.

NNSWC Chair Corey Granquist, Norfolk, presided and Brianna Duerst, Norfolk, recorded the proceedings.

Notice of the meeting was given in advance thereof by publication in the Norfolk Daily News, Norfolk, Nebraska, the designated method of giving notice, as shown by affidavit of publication.

Notification of the meeting was provided in advance to all Board members of the Northeast Nebraska Solid Waste Coalition. Availability of the agenda was communicated in the advance notice and in the notice to the Northeast Nebraska Solid Waste Coalition Board members. All proceedings hereafter shown were taken while the convened meeting was open to the attendance of the public.

Agenda

Charlie Bahr, Columbus, moved, seconded by Dan Weddle, Dodge County, to approve the agenda as printed. Roll call: All Ayes. Nays: None. Motion carried.

Minutes

September 27, 2021

Mark Jensen, Fremont, moved, seconded by Charlie Bahr, Columbus, to approve the minutes of the September 27, 2021 Coalition meeting held via teleconference as presented. Roll call: All Ayes. Nays: None. Motion carried.

Reports of Board of Directors, Officers and Committees

Financial Statements

No comments were received regarding the financial statements from September 2021 to February 2022, included in the agenda packet and presented by Treasurer Randy Gates.

Audited Financial Report

Treasurer Randy Gates provided information regarding the audited financial report for fiscal year ending September 30, 2021, included in the agenda packet. The Coalition's net position decreased \$1,084,409. An increase in assets of \$829,537 is primarily due to an increase in cash and investments. Cash and investments went from approximately \$6.39 million at the end of last year to \$7.29 million this year. This \$0.9 million increase is a result of cash provided from operations.

Restricted assets decreased \$899,186 or 6.9% due to an increase in cash and investments held for closure/post closure care costs. The rise in interest rates on long-term treasuries caused a decrease in fair market value of investments held for closure/post closure care costs. This was partially offset by the Coalition's current year funding of closure/post closure care costs of \$362,528 and interest on investments.

Current liabilities decreased \$57,307 or 25.5% primarily due to payables related to the landfill gas remediation project and landfill master plan in progress at the end of the prior year. Restricted net position decreased \$1,585,754 due to the decrease in fair market value of investments held for closure/post closure care costs and the increase in accrued closure/post closure care costs. Unrestricted net position increased \$863,261 going from \$6,554,955 last year to \$7,418,216 this year due to normal operations of the Coalition.

User charges decreased from \$2,907,612 last year to \$2,863,863 in the current year. Tonnage decreased 1,455 tons, which decreased user charges \$43,749 or 1.5% in the current year. The decrease in the current year indicates the debris clean up from the March 2019 flood and several storms was finished in the prior year. Disposal fees decreased \$19,183 or 1.7%, which corresponds with the decrease in tonnage received during the current year. General and administration increased \$135,645 or 46.8% primarily due to consultant fees for a landfill master plan.

The audit opinion on page 2 of the report is a clean opinion, stating the report complies with generally accepted accounting principles. The audit report on internal control on pages 25 and 26 notes a deficiency in internal control resulting from a prior period adjustment required for proper financial statement presentation. The Coalition previously reported cash and cash equivalents as demand deposit accounts and any certificates of deposit or U.S. Treasury obligations with original maturities of one year or less. To comply with generally accepted accounting principles, certificates of deposit and U.S. Treasury obligations with original maturities of three months or less are reported as cash equivalents and anything over three months is reported as investments. This required a prior period adjustment to reclassify \$3.5 million of certificates of deposit from cash equivalents to investments in fiscal year 2020.

New Business

Burns & McDonnell
(Authorization No. 56)

Chairman Granquist requested consideration of Authorization No. 56 with Burns & McDonnell Engineering Company, Inc. for preparation of Construction Design and Bidding Documents for Area 6 Phase 1 and related services, at an estimated cost of \$149,000, or at an estimated cost of \$161,200 if additional design work is needed based on conditions encountered in the test pits.

Gates provided information to board members. Construction for Area 6, Phase 1 will be bid this fall,

with construction to begin in the spring of 2023. Part of the pre-design services will be conducting test pit investigations. Depending on the results of these investigations, additional design work may be needed.

Mark Jensen, Fremont, moved, seconded by Corey Granquist, Norfolk, to approve Authorization No. 56 with Burns & McDonnell Engineering Company, Inc. for preparation of Construction Design and Bidding Documents for Area 6 Phase 1 and related services, at an estimated cost of \$149,000, or at an estimated cost of \$161,200 if additional design work is needed based on conditions encountered in the test pits. Roll call: All Ayes. Nays: None. Motion carried.

Burns & McDonnell
(Authorization No. 58)

Chairman Granquist requested consideration of Authorization No. 56 with Burns & McDonnell Engineering Company, Inc. to coordinate repairs of rips in the leachate pond liner and prepare the related regulatory documentation at an estimated cost of \$5900.

Gates said there are several rips in the leachate pond liner. This authorization is for Burns & McDonnell to coordinate the repair of these rips including: obtaining quotes to repair, coordination of the repair with NDEE and the repair company, and providing a letter report to NDEE documenting the repairs. This does not include the actual repair of the liner estimated to be \$6,000 to \$10,000 depending on the extent of the repairs and how far down the one tear goes that extends below the water line. If the tear goes below where sludge has accumulated, a specialized sludge pumping company may need to pump the pond down to completely expose the tear for repair.

Charlie Bahr, Columbus, moved, seconded by Dan Weddle, Dodge County, to approve Authorization No. 58 with Burns and McDonnell Engineering Company, Inc. to coordinate repairs of rips in the leachate pond liner and prepare the related regulatory documentation at an estimated cost of \$5900. Roll call: All Ayes. Nays: None. Motion carried.

Leachate pond liner system repairs

Chairman Granquist requested consideration of authorizing repairs to the leachate pond liner system in an amount not to exceed \$15,000 excluding engineering services.

Gates provided information to board members. As discussed in the previous agenda item, there are several tears in the leachate pond liner that need repaired. Although staff do not yet have a detailed cost estimate; or contractor for these repairs, the repairs should be done expeditiously and staff requests authorization to proceed with costs not to exceed \$15,000 excluding engineering services. Actual cost is expected to be closer to half this amount, but there is always the possibility of unforeseen problems.

Corey Granquist, Norfolk, moved, seconded by Dan Weddle, Dodge County, to approve authorizing repairs to the leachate pond liner system in an amount not to exceed \$15,000 excluding engineering services. Roll call: All Ayes. Nays: None. Motion carried.

Waste Connections US, Inc. Contract
(5-year operating contract extension with operating fee increase)

Chairman Granquist requested consideration of renewing the 5-year operating contract extension with CRD and Waste Connections US, Inc. (WCI) with one 10% increase in operating fee for three years and annual CPI adjustments thereafter, and removal of the \$480,000 cap on the variable portion of the operating fee.

Gates said a letter was received from Kelly Danielson with Waste Connections on November 19, 2021 requesting a 10% rate increase along with a history of WCI's operating results at the Coalition landfill going back to 2017. This history shows operating margin at the landfill declining from 45.3% in 2017 to 38% budgeted for 2022. WCI has not had a rate increase since the beginning of landfill operations in 1995. Staff initially questioned the need for this rate increase, since overall corporate operating margin for 2020 was only 30.5% compared to 2020 operating margin of 41.5% at NNSWC's landfill. Upon further discussion with WCI, staff learned shared equipment and employees from other WCI sites was not included in the financial information for the NNSWC landfill and not tracked in a way that is easily summarized. Staff and equipment from other WCI sites are frequently at the NNSWC landfill and this lowers operating margin if included in the history of operating results. Another consideration was the rapidly increasing inflation rate.

A second letter was received from Kelly Danielson on December 8, 2021 requesting removal of the tonnage cap. The original landfill operating contract provided a fixed fee of \$480,000 annually and a variable fee of \$4.00 per ton of waste. The variable fee was capped at \$480,000 annually due to IRS regulations considering the landfill a private activity if more than half the fee is variable. This makes interest on Coalition bonds taxable to bond holders and significantly increases Coalition interest expense. At the time, landfill volumes were way below where this would become an issue, running around 80,000 tons annually. In several recent years the cap was reached because volume was more than 120,000 tons annually. The Coalition now has no debt and none envisioned anytime soon, so this currently is not an issue but this will need to be readdressed in the future if the Coalition issues tax-exempt bonds.

Dan Weddle, Dodge County, moved, seconded by Mark Jensen, Fremont, to approve renewing the 5-year operating contract extension with CRD and Waste Connections US, Inc. (WCI) with one 10% increase in operating fee for three years and annual CPI adjustments thereafter, and removal of the \$480,000 cap on the variable portion of the operating fee. Roll call: All Ayes. Nays: None. Motion carried.

There being no further business, Chairman Granquist adjourned the meeting at 7:32 p.m.

Attest:

_____, Chairman
NNSWC

NNSWC Secretary

(S E A L)

Fund 604 NE NEBR SOLID WASTE COAL

GL Number	Description	Balance
*** Assets ***		
Cash		
604-000-111.009	RETURNED CHECKS	153.00
604-000-113.021	NNSWC PRIMARY ACT-MIDWEST 6709	5,389,431.86
604-000-116.001	U.S. TREASURIES	2,982,762.06
Cash		<u>8,372,346.92</u>
Accounts Receivable		
604-000-121.003	ACCOUNTS RECEIVABLE	17,424.23
Accounts Receivable		<u>17,424.23</u>
Fixed Assets		
604-000-151.001	LAND	1,218,051.00
604-000-151.002	BUILDINGS&IMPROVEMENTS	10,852,287.31
604-000-151.005	FURNITURE & EQUIPMENT	26,154.08
Fixed Assets		<u>12,096,492.39</u>
Accum. Depreciation		
604-000-155.001	ACCUMULATED DEPRECIATION	(7,648,033.69)
Accum. Depreciation		<u>(7,648,033.69)</u>
Other Assets		
Other Assets		<u>0.00</u>
Due From Other Funds		
604-000-138.009	DUE FROM DISB. FUND	(1,214.78)
Due From Other Funds		<u>(1,214.78)</u>
Deferred Outflows		
Deferred Outflows		<u>0.00</u>
Total Assets		<u>12,837,015.07</u>
*** Liabilities ***		
Accounts Payable		
604-000-221.001	ACCOUNTS PAYABLE	214,467.47
Accounts Payable		<u>214,467.47</u>
Liabilities-ST		
Liabilities-ST		<u>0.00</u>
Liabilities-LT (over 1 year)		
Liabilities-LT (over 1 year)		<u>0.00</u>
Deferred Inflows		
Deferred Inflows		<u>0.00</u>
Total Liabilities		<u>214,467.47</u>
*** Fund Balance ***		
Unassigned		
604-000-295.001	RETAINED EARN.-UNRESERV	11,606,015.43

Fund 604 NE NEBR SOLID WASTE COAL

GL Number	Description	Balance
*** Fund Balance ***		
	Unassigned	<u>11,606,015.43</u>
	Restricted	<u>0.00</u>
	Total Fund Balance	<u>11,606,015.43</u>
	Beginning Fund Balance	11,606,015.43
	Net of Revenues VS Expenditures	1,016,532.17
	Ending Fund Balance	12,622,547.60
	Total Liabilities And Fund Balance	12,837,015.07

PERIOD ENDING 09/30/2022

ACCOUNT DESCRIPTION	ACTIVITY FOR		YTD BALANCE	AVAILABLE	
	2021-22 AMENDED BUDGET	MONTH 09/30/20 INCREASE (DECR)	09/30/2022 NORMAL (ABNORM)	BALANCE NORMAL (ABNORM)	% BDGT USED
Fund 604 - NE NEBR SOLID WASTE COAL					
Dept 000					
PROPRIETARY FUND USE CHARGES					
367.001 USE FEES	3,070,843.00	268,515.67	2,939,493.13	131,349.87	95.72
PROPRIETARY FUND USE CHARGES	3,070,843.00	268,515.67	2,939,493.13	131,349.87	95.72
OTHER REVENUE					
374.008 LATE CHARGES	0.00	1.95	5.62	(5.62)	100.00
OTHER REVENUE	0.00	1.95	5.62	(5.62)	100.00
OTHER INTEREST INCOME					
388.001 OTHER INTEREST INCOME	17,000.00	28,834.23	54,378.13	(37,378.13)	319.87
OTHER INTEREST INCOME	17,000.00	28,834.23	54,378.13	(37,378.13)	319.87
Net - Dept 000	3,087,843.00	297,351.85	2,993,876.88	93,966.12	
Dept 229 - NE NEBR SOLID WASTE COAL					
PERSONNEL COSTS					
511.000 SALARIES & WAGES	86,575.00	6,979.71	82,202.70	4,372.30	94.95
514.000 PENSION	6,060.00	370.74	4,530.92	1,529.08	74.77
515.000 FICA	6,623.00	533.95	6,288.52	334.48	94.95
516.000 WORKERS' COMPENSATION	831.00	0.00	808.00	23.00	97.23
PERSONNEL COSTS	100,089.00	7,884.40	93,830.14	6,258.86	93.75
OPER. SUP. AND MATERIALS					
524.000 VEHICULAR FUEL & LUBE	1,750.00	148.71	1,415.03	334.97	80.86
526.000 MINOR APPARATUS & TOOLS	500.00	0.00	136.07	363.93	27.21
OPER. SUP. AND MATERIALS	2,250.00	148.71	1,551.10	698.90	68.94
OTHER OPERATING COSTS					
532.000 GARBAGE FEES	1,163,087.00	227,288.83	1,155,287.29	7,799.71	99.33
OTHER OPERATING COSTS	1,163,087.00	227,288.83	1,155,287.29	7,799.71	99.33
UTILITIES & MAINTENANCE					
541.000 ELECTRICITY	4,000.00	265.79	2,331.93	1,668.07	58.30
546.000 BLDG, GRND & PLANT MAINT	17,540.00	239.27	5,699.15	11,840.85	32.49
547.000 MACHINERY & VEH. MAINT	750.00	114.19	3,147.99	(2,397.99)	419.73
548.000 OFFICE EQUIP. MAINT.	2,500.00	0.00	0.00	2,500.00	0.00
UTILITIES & MAINTENANCE	24,790.00	619.25	11,179.07	13,610.93	45.10
LEGISLATIVE AFFAIRS					
553.000 TRAVEL AND TRAINING	1,724.00	0.00	292.31	1,431.69	16.96
555.000 DUES AND PUBLICATIONS	650.00	0.00	350.69	299.31	53.95
LEGISLATIVE AFFAIRS	2,374.00	0.00	643.00	1,731.00	27.09
OTHER ADMIN. & OVERHEAD					
561.000 INSURANCE	13,313.00	0.00	13,753.38	(440.38)	103.31
562.000 TELEPHONE & TELETYPE	2,650.00	110.00	1,813.75	836.25	68.44
563.000 POSTAGE	1,000.00	19.80	219.26	780.74	21.93
564.000 OFFICE SUPPLIES	3,105.00	213.27	845.51	2,259.49	27.23
565.000 LEGAL NOTICES&ADVERTISE	500.00	0.00	209.83	290.17	41.97
568.000 OTHER PROFESSIONAL FEES	262,698.00	37,382.39	255,523.06	7,174.94	97.27
OTHER ADMIN. & OVERHEAD	283,266.00	37,725.46	272,364.79	10,901.21	96.15
GOV. SUBSIDIES & TRANS					
578.000 INTERFUND TRANS. OUT	383,120.00	0.00	393,013.00	(9,893.00)	102.58
GOV. SUBSIDIES & TRANS	383,120.00	0.00	393,013.00	(9,893.00)	102.58
CAPITAL OUTLAY					
587.000 INFRA-STRUCTURE	520,000.00	45,152.74	49,476.32	470,523.68	9.51
CAPITAL OUTLAY	520,000.00	45,152.74	49,476.32	470,523.68	9.51
Net - Dept 229 - NE NEBR SOLID WASTE COAL	(2,478,976.00)	(318,819.39)	(1,977,344.71)	(501,631.29)	

ACCOUNT DESCRIPTION	2021-22 AMENDED BUDGET	ACTIVITY FOR		YTD BALANCE		AVAILABLE		% BDGT USED
		MONTH 09/30/20	INCREASE (DECR	09/30/2022	NORMAL (ABNORM	BALANCE	NORMAL (ABNORM	
Fund 604 - NE NEBR SOLID WASTE COAL								
TOTAL REVENUES	3,087,843.00	297,351.85		2,993,876.88		93,966.12		96.96
TOTAL EXPENDITURES	2,478,976.00	318,819.39		1,977,344.71		501,631.29		79.76
NET OF REVENUES & EXPENDITURES	608,867.00	(21,467.54)		1,016,532.17		(407,665.17)		166.95

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FROM 604-000-113.002 TO 604-229-598.000
TRANSACTIONS FROM 03/01/2022 TO 09/30/2022

JE #	Date	Description	Reference #	OFFSETTING GL	DEBIT	CREDIT
604-000-113.021 NNSWC PRIMARY ACT-MIDWEST 6709						
Journal CD: Cash Disbursements						
319558	03/07/2022	CASEY'S MAIL SERVICE LLC	8598	604-000-221.001		23.94
319559	03/07/2022	ROB MERCER	8599	604-000-221.001		14.04
320337	03/21/2022	CASEY'S MAIL SERVICE LLC	8600	604-000-221.001		7.54
320338	03/21/2022	FAIRBANKS SCALES INC	8601	604-000-221.001		1,567.88
320339	03/21/2022	ROB MERCER	8602	604-000-221.001		45.05
320340	03/21/2022	SCS ENGINEERS	8603	604-000-221.001		3,367.00
320341	03/21/2022	WASTE CONNECTIONS OF NE	8604	604-000-221.001		77,906.17
321731	04/04/2022	BURNS & MCDONNELL INC	8606	604-000-221.001		1,464.96
322554	04/18/2022	CAROLINA SOFTWARE	8607	604-000-221.001		166.67
322555	04/18/2022	NE DEPT OF ENVIRONTL QLTY AND	8608	604-000-221.001		37,169.39
322556	04/18/2022	SCS ENGINEERS	8609	604-000-221.001		2,128.47
322557	04/18/2022	STANTON CO TREASURER	8610	604-000-221.001		24,407.47
322558	04/18/2022	WASTE CONNECTIONS OF NE	8611	604-000-221.001		88,299.42
323303	05/02/2022	CASEY'S MAIL SERVICE LLC	8613	604-000-221.001		3.48
323304	05/02/2022	ROB MERCER	8614	604-000-221.001		39.78
324978	05/16/2022	BKD, LLP	8615	604-000-221.001		7,850.00
324979	05/16/2022	CASEY'S MAIL SERVICE LLC	8616	604-000-221.001		18.52
324980	05/16/2022	FAIRBANKS SCALES INC	8617	604-000-221.001		720.00
324981	05/16/2022	WASTE CONNECTIONS OF NE	8618	604-000-221.001		78,159.38
326934	06/06/2022	BURNS & MCDONNELL INC	8620	604-000-221.001		3,295.28
326935	06/06/2022	NE DEPT OF ENVIRONMENT & ENER	8621	604-000-221.001		612.00
326936	06/06/2022	SCS ENGINEERS	8622	604-000-221.001		11,403.36
327901	06/21/2022	WASTE CONNECTIONS OF NE	8623	604-000-221.001		84,945.76
330255	07/05/2022	CASEY'S MAIL SERVICE LLC	8625	604-000-221.001		6.96
330256	07/05/2022	JC RAMSDELL ENVIRO SERVICES IN	8626	604-000-221.001		5,237.50
330257	07/05/2022	SANITAS TECHNOLOGIES	8627	604-000-221.001		395.00
331054	07/18/2022	BURNS & MCDONNELL INC	8628	604-000-221.001		1,857.40
331055	07/18/2022	CAROLINA SOFTWARE	8629	604-000-221.001		166.67
331056	07/18/2022	CASEY'S MAIL SERVICE LLC	8630	604-000-221.001		6.96
331057	07/18/2022	NE DEPT OF ENVIRONMENT & ENER	8631	604-000-221.001		40,032.66
331058	07/18/2022	STANTON CO TREASURER	8632	604-000-221.001		26,287.66
331059	07/18/2022	WASTE CONNECTIONS OF NE	8633	604-000-221.001		85,546.22
332644	08/01/2022	SCS ENGINEERS	8635	604-000-221.001		2,807.20
333681	08/15/2022	BURNS & MCDONNELL INC	8636	604-000-221.001		4,323.58
333682	08/15/2022	WASTE CONNECTIONS OF NE	8637	604-000-221.001		82,549.27
335866	09/06/2022	BURNS & MCDONNELL INC	8639	604-000-221.001		3,085.85
335867	09/06/2022	CASEY'S MAIL SERVICE LLC	8640	604-000-221.001		36.14
335868	09/06/2022	NE DEPT OF ENVIRONMENT & ENER	8641	604-000-221.001		7,500.00
335869	09/06/2022	SCS ENGINEERS	8642	604-000-221.001		4,385.91
336597	09/19/2022	BAIRD HOLM	8643	604-000-221.001		1,375.00
336598	09/19/2022	CASEY'S MAIL SERVICE LLC	8644	604-000-221.001		9.00
336599	09/19/2022	SCS ENGINEERS	8645	604-000-221.001		614.55
336600	09/19/2022	WASTE CONNECTIONS OF NE	8646	604-000-221.001		93,603.69

Journal Totals

0.00 783,442.78

Journal CR: Cash Receipts						
318284	03/01/2022	NNSWC LANDFILLNNSWC LANDFILL G	100341591	604-000-367.001	105.00	
318285	03/01/2022	NNSWC LANDFILLNNSWC LANDFILL G	100341591	604-000-367.001	12.00	
318286	03/01/2022	NNSWC LANDFILLNNSWC LANDFILL G	100341591	604-000-367.001	13.00	
318325	03/02/2022	COLFAX COUNTY HWY DEPT22-00991	100341653	604-000-121.003	39.85	
318334	03/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100341659	604-000-367.001	2,035.00	
318335	03/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100341659	604-000-367.001	25.00	
318336	03/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100341659	604-000-367.001	1,682.00	
318337	03/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100341659	604-000-367.001	24.00	
318338	03/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100341659	604-000-367.001	132.00	
318339	03/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100341659	604-000-367.001	36.00	
318477	03/04/2022	ASSOCIATED WHOLESALE GROCERS22	100341867	604-000-121.003	354.49	
318478	03/04/2022	NUCOR22-0099352	100341868	604-000-121.003	181.68	
318530	03/07/2022	NNSWC LANDFILLNNSWC LANDFILL G	100342130	604-000-367.001	2,411.00	
318531	03/07/2022	NNSWC LANDFILLNNSWC LANDFILL G	100342131	604-000-367.001	12.00	
318663	03/08/2022	NNSWC LANDFILLNNSWC LANDFILL G	100342304	604-000-367.001	80.88	
319632	03/10/2022	DEG ENTERPRISES22-0099357	100342814	604-000-121.003	12.65	
319633	03/10/2022	DAVE HOLLATZ CONSTRUCTION22-00	100342815	604-000-121.003	12.33	
319663	03/10/2022	NUCOR22-0099352	100342848	604-000-121.003	98.16	
319682	03/10/2022	NNSWC LANDFILLNNSWC LANDFILL G	100342875	604-000-367.001	74.00	
319683	03/10/2022	NNSWC LANDFILLNNSWC LANDFILL G	100342875	604-000-367.001	71.00	
319775	03/11/2022	NUCOR22-0099352	100343099	604-000-121.003	194.64	
319840	03/14/2022	MIDWEST WIRE SOLUTIONS22-00993	100343490	604-000-121.003	18.00	
319841	03/14/2022	JOHNS DISPOSAL INC22-0099191	100343491	604-000-121.003	2,684.61	
319864	03/15/2022	NNSWC LANDFILLNNSWC LANDFILL G	100343610	604-000-367.001	1,024.00	
320002	03/17/2022	PILGER, VILLAGE OF22-0099346	100344080	604-000-121.003	319.21	
320040	03/18/2022	U&I SANITATION22-0099353	100344284	604-000-121.003	420.01	
320044	03/18/2022	WASTE CONNECTIONS - NORFOLK22-	100344293	604-000-121.003	795.61	
320045	03/18/2022	WASTE CONNECTIONS - FREMONT22-	100344294	604-000-121.003	1,374.82	
320083	03/21/2022	BUDS SANITARY SERVICE LLC22-00	100344732	604-000-121.003	12,519.50	
320356	03/22/2022	NNSCW LANDFILLNNSWC LANDFILL G	100344885	604-000-367.001	636.00	
320357	03/22/2022	NNSCW LANDFILLNNSWC LANDFILL G	100344886	604-000-367.001	42.00	
320367	03/23/2022	ASSOCIATED WHOLESALE GROCERS22	100345040	604-000-121.003	300.72	
320392	03/23/2022	NORFOLK, CITY OF22-0099342	100345091	604-000-121.003	55,932.75	
320456	03/25/2022	COLUMBUS, CITY OF22-0099345	100345489	604-000-121.003	45,025.53	

3/1/2023

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FROM 604-000-113.002 TO 604-229-598.000
TRANSACTIONS FROM 03/01/2022 TO 09/30/2022

JE #	Date	Description	Reference #	OFFSETTING GL	DEBIT	CREDIT
604-000-113.021 NNSWC PRIMARY ACT-MIDWEST 6709						
Journal CD: Cash Disbursements						
320457	03/25/2022	OAKLAND, CITY OF22-0099344	100345490	604-000-121.003	1,040.64	
320601	03/29/2022	NNSWC LANDFILLNNSWC LANDFILL G	100346103	604-000-367.001	956.00	
320602	03/29/2022	NNSWC LANDFILLNNSWC LANDFILL G	100346103	604-000-367.001	35.00	
320603	03/29/2022	NNSWC LANDFILLNNSWC LANDFILL G	100346103	604-000-367.001	13.00	
320673	03/30/2022	ALBRACHT DISPOSAL SERVICE22-00	100346342	604-000-121.003	8,642.02	
320691	03/30/2022	NUCOR22-0099352	100346367	Multiple	19,425.42	
320716	03/31/2022	NNSWC LANDFILLNNSWC LANDFILL G	100346597	604-000-367.001	107.00	
320717	03/31/2022	NNSWC LANDFILLNNSWC LANDFILL G	100346597	604-000-367.001	75.00	
320718	03/31/2022	NNSWC LANDFILLNNSWC LANDFILL G	100346597	604-000-367.001	12.00	
320719	03/31/2022	NNSWC LANDFILLNNSWC LANDFILL G	100346597	604-000-367.001	21.00	
320720	03/31/2022	NNSWC LANDFILLNNSWC LANDFILL G	100346597	604-000-367.001	98.00	
320721	03/31/2022	NNSWC LANDFILLNNSWC LANDFILL G	100346597	604-000-367.001	28.00	
320788	04/01/2022	FREMONT, CITY OF22-0099343	100346896	604-000-121.003	54,737.79	
320876	04/04/2022	NNSWC LANDFILLNNSWC LANDFILL G	100347365	604-000-367.001	263.00	
321809	04/06/2022	ASSOCIATED WHOLESALE GROCERS22	100347712	604-000-121.003	353.05	
321810	04/06/2022	NUCOR22-0099555	100347713	604-000-121.003	136.08	
321811	04/06/2022	VULCRAFT22-0099549	100347714	604-000-121.003	142.83	
321952	04/08/2022	ASSOCIATED WHOLESALE GROCERS22	100348050	604-000-121.003	200.40	
321953	04/08/2022	HILAND ROBERTS22-0099556	100348051	604-000-121.003	1,157.04	
322064	04/12/2022	NNSWC LANDFILLNNSWC LANDFILL G	100348427	604-000-367.001	57.00	
322065	04/12/2022	NNSWC LANDFILLNNSWC LANDFILL G	100348427	604-000-367.001	13.00	
322066	04/12/2022	NNSWC LANDFILLNNSWC LANDFILL G	100348427	604-000-367.001	29.00	
322067	04/12/2022	NNSWC LANDFILLNNSWC LANDFILL G	100348427	604-000-367.001	15.00	
322068	04/12/2022	NNSWC LANDFILLNNSWC LANDFILL G	100348427	604-000-367.001	17.00	
322069	04/12/2022	NNSWC LANDFILLNNSWC LANDFILL G	100348427	604-000-367.001	33.00	
322070	04/12/2022	NNSWC LANDFILLNNSWC LANDFILL G	100348427	604-000-367.001	16.00	
322165	04/14/2022	JOHNS DISPOSAL INC22-0099348	100348693	604-000-121.003	3,371.98	
322199	04/15/2022	FREMONT, CITY OF22-0099545	100348834	604-000-121.003	69,357.54	
322249	04/18/2022	NNSWC LANDFILLNNSWC LANDFILL G	100349076	604-000-367.001	155.00	
322401	04/19/2022	MIDWEST WIRE SOLUTIONS22-00995	100349213	604-000-121.003	46.81	
322410	04/19/2022	PILGER, VILLAGE OF22-0099548	100349222	604-000-121.003	546.26	
322411	04/19/2022	BUDS SANITARY SERVICE LLC22-00	100349223	604-000-121.003	15,867.66	
322438	04/19/2022	NUCOR22-0099555	100349280	604-000-121.003	70.80	
322576	04/20/2022	WASTE CONNECTIONS - FREMONT22-	100349455	604-000-121.003	1,444.62	
322577	04/20/2022	WASTE CONNECTIONS - NORFOLK22-	100349456	604-000-121.003	955.44	
322634	04/21/2022	NORFOLK, CITY OF22-0099544	100349676	604-000-121.003	67,654.29	
322640	04/21/2022	COLUMBUS, CITY OF22-0099547	100349697	604-000-121.003	57,415.97	
322641	04/21/2022	U&I SANITATION22-0099558	100349698	604-000-121.003	231.36	
322859	04/26/2022	OAKLAND, CITY OF22-0099546	100350294	604-000-121.003	1,134.00	
322874	04/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100350311	604-000-367.001	91.00	
322875	04/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100350311	604-000-367.001	50.00	
322876	04/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100350311	604-000-367.001	76.00	
322994	04/28/2022	NNSWC LANDFILLNNSWC LANDFILL G	100350664	604-000-367.001	125.00	
322995	04/28/2022	NNSWC LANDFILLNNSWC LANDFILL G	100350664	604-000-367.001	131.00	
322996	04/28/2022	NNSWC LANDFILLNNSWC LANDFILL G	100350665	604-000-367.001	12.00	
322997	04/28/2022	NNSWC LANDFILLNNSWC LANDFILL G	100350665	604-000-367.001	48.00	
322998	04/28/2022	NNSWC LANDFILLNNSWC LANDFILL G	100350666	604-000-367.001	12.00	
322999	04/28/2022	NNSWC LANDFILLNNSWC LANDFILL G	100350666	604-000-367.001	1,410.00	
323022	04/29/2022	ALBRACHT DISPOSAL SERVICE22-00	100350798	604-000-121.003	11,239.30	
323094	05/02/2022	DEG ENTERPRISES22-0099562	100351134	604-000-121.003	68.32	
323252	05/03/2022	NNSWC LANDFILLNNSWC LANDFILL G	100351244	604-000-367.001	152.00	
323253	05/03/2022	NNSWC LANDFILLNNSWC LANDFILL G	100351244	604-000-367.001	121.00	
323254	05/03/2022	NNSWC LANDFILLNNSWC LANDFILL G	100351244	604-000-367.001	63.00	
323606	05/06/2022	ELKHORN RURAL PUBLIC POWER DIS	100351855	604-000-121.003	163.20	
323607	05/06/2022	ASSOCIATED WHOLESALE GROCERS22	100351859	604-000-121.003	257.52	
323608	05/06/2022	ASSOCIATED WHOLESALE GROCERS22	100351860	604-000-121.003	154.32	
323609	05/06/2022	NUCOR22-0099689	100351862	604-000-121.003	70.80	
323610	05/06/2022	NUCOR22-0099689	100351863	604-000-121.003	69.84	
323611	05/06/2022	MADISON COUNTY CLERK22-0099687	100351864	604-000-121.003	222.96	
323792	05/11/2022	WASTE CONNECTIONS - NORFOLK22-	100352365	604-000-121.003	1,127.30	
323795	05/11/2022	NNSWC LANDFILLNNSWC LANDFILL G	100352376	604-000-367.001	242.00	
323796	05/11/2022	NNSWC LANDFILLNNSWC LANDFILL G	100352376	604-000-367.001	15.00	
323797	05/11/2022	NNSWC LANDFILLNNSWC LANDFILL G	100352376	604-000-367.001	13.00	
323798	05/11/2022	NNSWC LANDFILLNNSWC LANDFILL G	100352376	604-000-367.001	23.00	
323799	05/11/2022	NNSWC LANDFILLNNSWC LANDFILL G	100352376	604-000-367.001	43.00	
323800	05/11/2022	NNSWC LANDFILLNNSWC LANDFILL G	100352376	604-000-367.001	12.00	
323801	05/11/2022	NNSWC LANDFILLNNSWC LANDFILL G	100352376	604-000-367.001	103.00	
323802	05/11/2022	NNSWC LANDFILLNNSWC LANDFILL G	100352376	604-000-367.001	13.00	
323836	05/12/2022	JOHNS DISPOSAL INC22-0099551	100352468	604-000-121.003	3,715.48	
323854	05/12/2022	PILGER, VILLAGE OF22-0099680	100352564	604-000-121.003	568.08	
323882	05/13/2022	BUDS SANITARY SERVICE LLC22-00	100352724	604-000-121.003	14,652.58	
323930	05/16/2022	PORTER CONSTRUCTION22-0099686	100352914	604-000-121.003	690.97	
323931	05/16/2022	U&I SANITATION22-0099692	100352915	604-000-121.003	495.61	
323932	05/16/2022	ENVIRONMENTAL SERVICES INC22-0	100352916	604-000-121.003	214.97	
324983	05/17/2022	NNSWC LANDFILLNNSWC LANDFILL G	100353135	604-000-367.001	227.00	
324984	05/17/2022	NNSWC LANDFILLNNSWC LANDFILL G	100353135	604-000-367.001	50.00	
324985	05/17/2022	NNSWC LANDFILLNNSWC LANDFILL G	100353135	604-000-367.001	154.00	
324986	05/17/2022	NNSWC LANDFILLNNSWC LANDFILL G	100353135	604-000-367.001	46.00	
324987	05/17/2022	NNSWC LANDFILLNNSWC LANDFILL G	100353135	604-000-367.001	65.00	

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FROM 604-000-113.002 TO 604-229-598.000
TRANSACTIONS FROM 03/01/2022 TO 09/30/2022

JE #	Date	Description	Reference #	OFFSETTING GL	DEBIT	CREDIT
604-000-113.021 NNSWC PRIMARY ACT-MIDWEST 6709						
Journal CR: Cash Receipts						
324988	05/17/2022	NNSWC LANDFILLNNSWC LANDFILL G	100353135	604-000-367.001	68.00	
324989	05/17/2022	NNSWC LANDFILLNNSWC LANDFILL G	100353135	604-000-367.001	98.00	
324993	05/17/2022	DEG ENTERPRISES22-0099695	100353140	604-000-121.003	12.24	
324995	05/17/2022	ASSOCIATED WHOLESALE GROCERS22	100353142	604-000-121.003	495.84	
325044	05/18/2022	NORFOLK, CITY OF22-0099676	100353339	604-000-121.003	65,952.64	
325098	05/19/2022	COLUMBUS, CITY OF22-0099679	100353523	604-000-121.003	55,460.10	
325099	05/19/2022	MIDWEST WIRE SOLUTIONS22-00996	100353524	604-000-121.003	81.13	
325168	05/20/2022	OAKLAND, CITY OF22-0099678	100353792	604-000-121.003	1,138.56	
325243	05/24/2022	NNSWC LANDFILLNNSWC LANDFILL G	100354274	604-000-367.001	155.00	
325244	05/24/2022	NNSWC LANDFILLNNSWC LANDFILL G	100354274	604-000-367.001	70.00	
325245	05/24/2022	NNSWC LANDFILLNNSWC LANDFILL G	100354274	604-000-367.001	56.00	
325246	05/24/2022	NNSWC LANDFILLNNSWC LANDFILL G	100354274	604-000-367.001	25.00	
325247	05/24/2022	NNSWC LANDFILLNNSWC LANDFILL G	100354274	604-000-367.001	47.00	
325248	05/24/2022	NNSWC LANDFILLNNSWC LANDFILL G	100354274	604-000-367.001	12.00	
325357	05/25/2022	WASTE CONNECTIONS - FREMONT22-	100354533	604-000-121.003	1,302.25	
325396	05/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100354688	604-000-367.001	66.00	
325441	05/27/2022	ALBRACHT DISPOSAL SERVICE22-00	100354886	604-000-121.003	9,636.92	
325516	06/01/2022	NNSWC LANDFILLNNSWC LANDFILL G	100355479	604-000-367.001	296.00	
325517	06/01/2022	NNSWC LANDFILLNNSWC LANDFILL G	100355480	604-000-367.001	210.00	
325590	06/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100355681	604-000-367.001	149.00	
325591	06/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100355681	604-000-367.001	70.00	
325592	06/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100355681	604-000-367.001	135.00	
325593	06/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100355681	604-000-367.001	88.00	
325659	06/03/2022	FREMONT, CITY OF22-0099677	100355990	604-000-121.003	68,778.31	
325804	06/06/2022	NNSWC LANDFILLNNSWC LANDFILL G	100356497	604-000-367.001	126.00	
325805	06/06/2022	NNSWC LANDFILLNNSWC LANDFILL G	100356497	604-000-367.001	26.00	
325806	06/06/2022	NNSWC LANDFILLNNSWC LANDFILL G	100356497	604-000-367.001	13.00	
325807	06/06/2022	NNSWC LANDFILLNNSWC LANDFILL G	100356497	604-000-367.001	111.00	
325808	06/06/2022	NNSWC LANDFILLNNSWC LANDFILL G	100356497	604-000-367.001	106.00	
325809	06/06/2022	NNSWC LANDFILLNNSWC LANDFILL G	100356497	604-000-367.001	59.00	
325810	06/06/2022	NNSWC LANDFILLNNSWC LANDFILL G	100356497	604-000-367.001	90.00	
325811	06/06/2022	NNSWC LANDFILLNNSWC LANDFILL G	100356497	604-000-367.001	43.00	
326764	06/07/2022	CAH 200 LLCCOVIDIEN	100356702	604-000-121.003	169.45	
327087	06/08/2022	ASSOCIATED WHOLESALE GROCERS22	100357062	604-000-121.003	135.36	
327121	06/09/2022	NNSWC LANDFILLNNSWC LANDFILL G	100357278	604-000-367.001	458.00	
327248	06/13/2022	ASSOCIATED WHOLESALE GROCERS22	100357977	604-000-121.003	807.60	
327258	06/13/2022	JOHNS DISPOSAL INC22-0099682	100357998	604-000-121.003	2,961.58	
327363	06/15/2022	NNSWC LANDFILLNNSWC LANDFILL G	100358406	604-000-367.001	1,877.00	
327439	06/16/2022	DEG ENTERPRISES22-0099822	100358677	604-000-121.003	25.45	
327462	06/16/2022	NUCOR22-0099817	100358731	604-000-121.003	207.85	
327466	06/17/2022	NNSWC LANDFILLNNSWC LANDFILL G	100358794	604-000-367.001	3,066.00	
327467	06/17/2022	NNSWC LANDFILLNNSWC LANDFILL G	100358794	604-000-367.001	41.00	
327468	06/17/2022	NNSWC LANDFILLNNSWC LANDFILL G	100358794	604-000-367.001	108.00	
327469	06/17/2022	NNSWC LANDFILLNNSWC LANDFILL G	100358794	604-000-367.001	83.00	
327470	06/17/2022	NNSWC LANDFILLNNSWC LANDFILL G	100358794	604-000-367.001	106.00	
327471	06/17/2022	NNSWC LANDFILLNNSWC LANDFILL G	100358794	604-000-367.001	18.00	
327472	06/17/2022	NNSWC LANDFILLNNSWC LANDFILL G	100358794	604-000-367.001	12.00	
327496	06/17/2022	DOERNEMANN CONSTRUCTION22-0099	100358866	604-000-121.003	936.72	
327497	06/17/2022	DOERNEMANN CONSTRUCTION22-0099	100358867	604-000-121.003	2,195.39	
327498	06/17/2022	FREMONT, CITY OF22-0099808	100358868	604-000-121.003	78,723.76	
327580	06/20/2022	WASTE CONNECTIONS - FREMONT22-	100359138	604-000-121.003	1,404.04	
327581	06/20/2022	WASTE CONNECTIONS - NORFOLK22-	100359139	604-000-121.003	1,156.11	
327735	06/21/2022	PILGER, VILLAGE OF22-0099811	100359399	604-000-121.003	314.16	
327746	06/21/2022	U&I SANITATION22-0099819	100359410	604-000-121.003	515.05	
327793	06/21/2022	NNSWC LANDFILLNNSWC LANDFILL G	100359467	604-000-367.001	466.00	
327794	06/21/2022	NNSWC LANDFILLNNSWC LANDFILL G	100359467	604-000-367.001	107.00	
327795	06/21/2022	NNSWC LANDFILLNNSWC LANDFILL G	100359467	604-000-367.001	134.00	
327796	06/21/2022	NNSWC LANDFILLNNSWC LANDFILL G	100359467	604-000-367.001	50.00	
327797	06/21/2022	NNSWC LANDFILLNNSWC LANDFILL G	100359467	604-000-367.001	12.00	
327798	06/21/2022	NNSWC LANDFILLNNSWC LANDFILL G	100359467	604-000-367.001	12.00	
327799	06/21/2022	NNSWC LANDFILLNNSWC LANDFILL G	100359467	604-000-367.001	166.00	
327916	06/22/2022	NORFOLK, CITY OF22-0099807	100359588	604-000-121.003	79,019.01	
328213	06/23/2022	COLUMBUS, CITY OF22-0099810	100359731	604-000-121.003	67,296.36	
328214	06/23/2022	BUDS SANITARY SERVICE LLC22-00	100359733	604-000-121.003	17,663.09	
328226	06/23/2022	NNSWC LANDFILLNNSWC LANDFILL G	100359753	604-000-367.001	200.00	
328350	06/24/2022	NNSWC LANDFILLNNSWC LANDFILL G	100359920	604-000-367.001	218.00	
328499	06/27/2022	ENVIRONMENTAL SERVICES INC22-0	100360280	604-000-121.003	186.48	
328513	06/27/2022	OAKLAND, CITY OF22-0099809	100360301	604-000-121.003	1,383.84	
328572	06/28/2022	NNSWC LANDFILLNNSWC LANDFILL G	100360412	604-000-367.001	218.00	
328573	06/28/2022	NNSWC LANDFILLNNSWC LANDFILL G	100360412	604-000-367.001	104.00	
328574	06/28/2022	NNSWC LANDFILLNNSWC LANDFILL G	100360412	604-000-367.001	23.00	
328575	06/28/2022	NNSWC LANDFILLNNSWC LANDFILL G	100360412	604-000-367.001	49.00	
328576	06/28/2022	NNSWC LANDFILLNNSWC LANDFILL G	100360412	604-000-367.001	68.00	
328577	06/28/2022	NNSWC LANDFILLNNSWC LANDFILL G	100360412	604-000-367.001	124.00	
328578	06/28/2022	NNSWC LANDFILLNNSWC LANDFILL G	100360412	604-000-367.001	18.00	
328579	06/28/2022	NNSWC LANDFILLNNSWC LANDFILL G	100360412	604-000-367.001	43.00	
328580	06/28/2022	NNSWC LANDFILLNNSWC LANDFILL G	100360412	604-000-367.001	41.00	
328657	06/29/2022	ALBRACHT DISPOSAL SERVICE22-00	100360578	604-000-121.003	12,766.85	
330072	07/05/2022	ASSOCIATED WHOLESALE GROCERS22	100361190	604-000-121.003	423.84	

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FROM 604-000-113.002 TO 604-229-598.000
TRANSACTIONS FROM 03/01/2022 TO 09/30/2022

JE #	Date	Description	Reference #	OFFSETTING GL	DEBIT	CREDIT
604-000-113.021 NNSWC PRIMARY ACT-MIDWEST 6709						
Journal CR: Cash Receipts						
330073	07/05/2022	ASSOCIATED WHOLESALE GROCERS22	100361191	604-000-121.003	139.92	
330074	07/05/2022	ASSOCIATED WHOLESALE GROCERS22	100361192	604-000-121.003	255.12	
330075	07/05/2022	ASSOCIATED WHOLESALE GROCERS22	100361193	604-000-121.003	241.92	
330076	07/05/2022	NUCOR22-0100035	100361194	604-000-121.003	360.49	
330084	07/05/2022	NNSWC LANDFILLNNSWC LANDFILL G	100361201	604-000-367.001	244.00	
330085	07/05/2022	NNSWC LANDFILLNNSWC LANDFILL G	100361201	604-000-367.001	81.00	
330086	07/05/2022	NNSWC LANDFILLNNSWC LANDFILL G	100361201	604-000-367.001	24.00	
330087	07/05/2022	NNSWC LANDFILLNNSWC LANDFILL G	100361201	604-000-367.001	114.00	
330088	07/05/2022	NNSWC LANDFILLNNSWC LANDFILL G	100361201	604-000-367.001	37.00	
330089	07/05/2022	NNSWC LANDFILLNNSWC LANDFILL G	100361201	604-000-367.001	119.00	
330090	07/05/2022	NNSWC LANDFILLNNSWC LANDFILL G	100361201	604-000-367.001	206.00	
330095	07/05/2022	NNSWC LANDFILLNNSWC LANDFILL G	100361208	604-000-367.001	219.00	
330096	07/05/2022	NNSWC LANDFILLNNSWC LANDFILL G	100361208	604-000-367.001	132.00	
330097	07/05/2022	NNSWC LANDFILLNNSWC LANDFILL G	100361208	604-000-367.001	113.00	
330139	07/06/2022	ASSOCIATED WHOLESALE GROCERS22	100361426	604-000-121.003	142.80	
330379	07/08/2022	ASSOCIATED WHOLESALE GROCERS22	100361793	604-000-121.003	540.49	
330389	07/08/2022	NNSWC LANDFILLNNSWC LANDFILL G	100361811	604-000-367.001	202.00	
330390	07/08/2022	NNSWC LANDFILLNNSWC LANDFILL G	100361811	604-000-367.001	110.00	
330391	07/08/2022	NNSWC LANDFILLNNSWC LANDFILL G	100361811	604-000-367.001	51.00	
330392	07/08/2022	NNSWC LANDFILLNNSWC LANDFILL G	100361811	604-000-367.001	23.00	
330479	07/11/2022	DAVE HOLLATZ CONSTRUCTION22-01	100362017	604-000-121.003	79.93	
330516	07/12/2022	NNSWC LANDFILLNNSWC LANDFILL G	100362111	604-000-367.001	251.00	
330517	07/12/2022	NNSWC LANDFILLNNSWC LANDFILL G	100362111	604-000-367.001	22.00	
330518	07/12/2022	NNSWC LANDFILLNNSWC LANDFILL G	100362111	604-000-367.001	49.00	
330519	07/12/2022	NNSWC LANDFILLNNSWC LANDFILL G	100362111	604-000-367.001	116.00	
330520	07/12/2022	NNSWC LANDFILLNNSWC LANDFILL G	100362111	604-000-367.001	110.00	
330521	07/12/2022	NNSWC LANDFILLNNSWC LANDFILL G	100362111	604-000-367.001	12.00	
330522	07/12/2022	NNSWC LANDFILLNNSWC LANDFILL G	100362111	604-000-367.001	56.00	
330523	07/12/2022	NNSWC LANDFILLNNSWC LANDFILL G	100362111	604-000-367.001	137.00	
330630	07/14/2022	JOHNS DISPOSAL INC22-0099823	100362375	604-000-121.003	3,007.19	
330632	07/14/2022	MIDWEST WIRE SOLUTIONS22-01000	100362377	604-000-121.003	39.36	
330633	07/14/2022	DEG ENTERPRISES22-0100043	100362379	604-000-121.003	27.37	
330691	07/15/2022	FREMONT, CITY OF22-0100025	100362529	604-000-121.003	76,202.31	
330700	07/15/2022	NNSWC LANDFILLNNSWC LANDFILL G	100362544	604-000-367.001	144.00	
330701	07/15/2022	NNSWC LANDFILLNNSWC LANDFILL G	100362544	604-000-367.001	130.00	
330702	07/15/2022	NNSWC LANDFILLNNSWC LANDFILL G	100362544	604-000-367.001	13.00	
330703	07/15/2022	NNSWC LANDFILLNNSWC LANDFILL G	100362544	604-000-367.001	28.00	
330704	07/15/2022	NNSWC LANDFILLNNSWC LANDFILL G	100362544	604-000-367.001	42.00	
330705	07/15/2022	NNSWC LANDFILLNNSWC LANDFILL G	100362544	604-000-367.001	55.00	
330706	07/15/2022	NNSWC LANDFILLNNSWC LANDFILL G	100362544	604-000-367.001	44.00	
330707	07/15/2022	NNSWC LANDFILLNNSWC LANDFILL G	100362544	604-000-367.001	38.00	
330708	07/15/2022	NNSWC LANDFILLNNSWC LANDFILL G	100362544	604-000-367.001	116.00	
330716	07/15/2022	WASTE CONNECTIONS - NORFOLK22-	100362562	604-000-121.003	837.62	
330750	07/18/2022	NNSWC LANDFILLNNSWC LANDFILL G	100362775	604-000-367.001	310.00	
330751	07/18/2022	NNSWC LANDFILLNNSWC LANDFILL G	100362775	604-000-367.001	18.00	
330752	07/18/2022	NNSWC LANDFILLNNSWC LANDFILL G	100362775	604-000-367.001	63.00	
330753	07/18/2022	NNSWC LANDFILLNNSWC LANDFILL G	100362775	604-000-367.001	19.00	
330754	07/18/2022	NNSWC LANDFILLNNSWC LANDFILL G	100362775	604-000-367.001	58.00	
330755	07/18/2022	NNSWC LANDFILLNNSWC LANDFILL G	100362775	604-000-367.001	17.00	
330788	07/18/2022	PILGER, VILLAGE OF22-0100028	100362820	604-000-121.003	652.81	
331098	07/20/2022	NORFOLK, CITY OF22-0100024	100363044	604-000-121.003	76,637.03	
331148	07/20/2022	NUCOR22-0100035	100363106	604-000-121.003	118.80	
331155	07/20/2022	WASTE CONNECTIONS - FREMONT22-	100363115	604-000-121.003	1,102.13	
331252	07/21/2022	OAKLAND, CITY OF22-0100026	100363236	604-000-121.003	1,389.60	
331253	07/21/2022	COLUMBUS, CITY OF22-0100027	100363237	604-000-121.003	67,993.80	
331312	07/22/2022	ALBRACHT DISPOSAL SERVICE22-01	100363456	604-000-121.003	6,191.13	
331352	07/25/2022	U&I SANITATION22-0100038	100363811	604-000-121.003	470.88	
331364	07/25/2022	NNSWC LANDFILLNNSWC LANDFILL G	100363831	604-000-367.001	243.00	
331365	07/25/2022	NNSWC LANDFILLNNSWC LANDFILL G	100363831	604-000-367.001	72.00	
331366	07/25/2022	NNSWC LANDFILLNNSWC LANDFILL G	100363831	604-000-367.001	19.00	
331367	07/25/2022	NNSWC LANDFILLNNSWC LANDFILL G	100363831	604-000-367.001	13.00	
331368	07/25/2022	NNSWC LANDFILLNNSWC LANDFILL G	100363831	604-000-367.001	67.00	
331369	07/25/2022	NNSWC LANDFILLNNSWC LANDFILL G	100363831	604-000-367.001	43.00	
331370	07/25/2022	NNSWC LANDFILLNNSWC LANDFILL G	100363831	604-000-367.001	27.00	
331371	07/25/2022	NNSWC LANDFILLNNSWC LANDFILL G	100363831	604-000-367.001	79.00	
331372	07/25/2022	NNSWC LANDFILLNNSWC LANDFILL G	100363831	604-000-367.001	17.00	
331373	07/25/2022	NNSWC LANDFILLNNSWC LANDFILL G	100363831	604-000-367.001	92.00	
331374	07/25/2022	NNSWC LANDFILLNNSWC LANDFILL G	100363831	604-000-367.001	157.00	
331377	07/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100363901	604-000-367.001	0.90	
331491	07/27/2022	DOERNEMANN CONSTRUCTION22-0100	100364080	604-000-121.003	1,450.58	
331612	07/29/2022	BUDS SANITARY SERVICE LLC22-01	100364470	604-000-121.003	16,865.12	
331718	08/01/2022	COLFAX COUNTY HWY DEPT22-01000	100364918	604-000-121.003	164.89	
332756	08/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100365030	604-000-367.001	693.00	
332757	08/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100365030	604-000-367.001	13.00	
332758	08/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100365030	604-000-367.001	12.00	
332759	08/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100365030	604-000-367.001	135.00	
332760	08/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100365030	604-000-367.001	168.00	
332761	08/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100365030	604-000-367.001	58.00	
332762	08/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100365030	604-000-367.001	101.00	

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TRANSACTIONS FROM 03/01/2022 TO 09/30/2022

JE #	Date	Description	Reference #	OFFSETTING GL	DEBIT	CREDIT
604-000-113.021 NNSWC PRIMARY ACT-MIDWEST 6709						
Journal CR: Cash Receipts						
332763	08/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100365030	604-000-367.001	167.00	
332918	08/04/2022	NUCOR22-0100191	100365480	604-000-121.003	2,253.68	
332919	08/04/2022	NUCOR22-0100191	100365481	604-000-121.003	145.20	
333071	08/05/2022	NUCOR22-0100191	100365848	604-000-121.003	56.40	
333106	08/08/2022	ALBRACHT DISPOSAL SERVICE22-01	100366300	604-000-121.003	6,191.13	
333109	08/08/2022	ASSOCIATED WHOLESALE GROCERS22	100366305	604-000-121.003	1,864.33	
333184	08/09/2022	NNSWC LANDFILLNNSWC LANDFILL G	100366477	604-000-367.001	233.00	
333185	08/09/2022	NNSWC LANDFILLNNSWC LANDFILL G	100366477	604-000-367.001	13.00	
333186	08/09/2022	NNSWC LANDFILLNNSWC LANDFILL G	100366477	604-000-367.001	88.00	
333187	08/09/2022	NNSWC LANDFILLNNSWC LANDFILL G	100366477	604-000-367.001	21.00	
333188	08/09/2022	NNSWC LANDFILLNNSWC LANDFILL G	100366477	604-000-367.001	12.00	
333189	08/09/2022	NNSWC LANDFILLNNSWC LANDFILL G	100366477	604-000-367.001	113.00	
333405	08/12/2022	DAVE HOLLATZ CONSTRUCTION22-01	100367298	604-000-121.003	224.01	
333457	08/15/2022	ASSOCIATED WHOLESALE GROCERS22	100367696	604-000-121.003	626.16	
333458	08/15/2022	PILGER, VILLAGE OF22-0100185	100367697	604-000-121.003	485.04	
333459	08/15/2022	ENVIRONMENTAL SERVICES INC22-0	100367698	604-000-121.003	102.67	
333460	08/15/2022	JOHNS DISPOSAL INC22-0100030	100367699	604-000-121.003	2,971.29	
333646	08/16/2022	NNSWC LANDFILLNNSWC LANDFILL G	100367914	604-000-367.001	288.00	
333647	08/16/2022	NNSWC LANDFILLNNSWC LANDFILL G	100367914	604-000-367.001	59.00	
333648	08/16/2022	NNSWC LANDFILLNNSWC LANDFILL G	100367914	604-000-367.001	31.00	
333649	08/16/2022	NNSWC LANDFILLNNSWC LANDFILL G	100367914	604-000-367.001	230.00	
333650	08/16/2022	NNSWC LANDFILLNNSWC LANDFILL G	100367914	604-000-367.001	13.00	
333651	08/16/2022	NNSWC LANDFILLNNSWC LANDFILL G	100367914	604-000-367.001	251.00	
333652	08/16/2022	NNSWC LANDFILLNNSWC LANDFILL G	100367914	604-000-367.001	98.00	
333653	08/16/2022	NNSWC LANDFILLNNSWC LANDFILL G	100367914	604-000-367.001	23.00	
333654	08/16/2022	NNSWC LANDFILLNNSWC LANDFILL G	100367914	604-000-367.001	128.00	
333655	08/16/2022	NNSWC LANDFILLNNSWC LANDFILL G	100367914	604-000-367.001	265.00	
333656	08/16/2022	NNSWC LANDFILLNNSWC LANDFILL G	100367914	604-000-367.001	185.00	
333657	08/16/2022	NNSWC LANDFILLNNSWC LANDFILL G	100367914	604-000-367.001	62.00	
333781	08/17/2022	WASTE CONNECTIONS - NORFOLK22-	100368142	604-000-121.003	1,637.85	
333810	08/18/2022	NORFOLK, CITY OF22-0100181	100368367	604-000-121.003	69,713.70	
333814	08/18/2022	COLUMBUS, CITY OF22-0100184	100368377	604-000-121.003	63,612.32	
333815	08/18/2022	DEG ENTERPRISES22-0100198	100368378	Multiple	33.60	
333853	08/19/2022	ALBRACHT DISPOSAL SERVICE22-01	100368597	604-000-121.003	5,645.19	
333857	08/19/2022	U&I SANITATION22-0100193	100368601	604-000-121.003	454.58	
333924	08/22/2022	BUDS SANITARY SERVICE LLC22-01	100369006	604-000-121.003	15,885.19	
333925	08/22/2022	NNSWC LANDFILLNNSWC LANDFILL G	100369011	604-000-367.001	152.00	
333926	08/22/2022	NNSWC LANDFILLNNSWC LANDFILL G	100369011	604-000-367.001	59.00	
333927	08/22/2022	NNSWC LANDFILLNNSWC LANDFILL G	100369011	604-000-367.001	78.00	
333928	08/22/2022	NNSWC LANDFILLNNSWC LANDFILL G	100369011	604-000-367.001	83.00	
333929	08/22/2022	NNSWC LANDFILLNNSWC LANDFILL G	100369011	604-000-367.001	13.00	
334016	08/23/2022	WASTE CONNECTIONS - FREMONT22-	100369226	604-000-121.003	1,400.28	
334277	08/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100369796	604-000-367.001	213.00	
334278	08/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100369796	604-000-367.001	94.00	
334279	08/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100369796	604-000-367.001	164.00	
334280	08/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100369796	604-000-367.001	13.00	
334281	08/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100369796	604-000-367.001	67.00	
334282	08/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100369796	604-000-367.001	72.00	
334395	08/29/2022	ALBRACHT DISPOSAL SERVICE22-01	100370130	604-000-121.003	5,645.18	
334518	08/31/2022	NNSWC LANDFILLNNSWC LANDFILL G	100370422	604-000-367.001	137.00	
334519	08/31/2022	NNSWC LANDFILLNNSWC LANDFILL G	100370422	604-000-367.001	75.00	
334520	08/31/2022	NNSWC LANDFILLNNSWC LANDFILL G	100370422	604-000-367.001	33.00	
334521	08/31/2022	NNSWC LANDFILLNNSWC LANDFILL G	100370422	604-000-367.001	125.00	
334628	09/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100370672	604-000-367.001	347.00	
334629	09/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100370672	604-000-367.001	135.00	
334630	09/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100370672	604-000-367.001	12.00	
334631	09/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100370672	604-000-367.001	77.00	
334632	09/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100370672	604-000-367.001	72.00	
334633	09/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100370672	604-000-367.001	118.00	
334639	09/02/2022	FREMONT, CITY OF22-0100182	100370681	604-000-121.003	74,092.76	
334640	09/02/2022	COLFAX COUNTY HWY DEPT22-01001	100370682	604-000-121.003	191.04	
334695	09/06/2022	NNSWC LANDFILLNNSWC LANDFILL G	100371001	604-000-367.001	318.00	
335989	09/09/2022	NNSWC LANDFILLNNSWC LANDFILL G	100371384	604-000-367.001	268.00	
335990	09/09/2022	NNSWC LANDFILLNNSWC LANDFILL G	100371384	604-000-367.001	13.00	
336027	09/12/2022	ASSOCIATED WHOLESALE GROCERS22	100371537	604-000-121.003	1,003.92	
336028	09/12/2022	NUCOR22-0100456	100371538	604-000-121.003	271.44	
336065	09/12/2022	ASSOCIATED WHOLESALE GROCERS22	100371585	604-000-121.003	1,876.61	
336128	09/13/2022	NNSWC LANDFILLNNSWC LANDFILL G	100371677	604-000-367.001	113.00	
336164	09/13/2022	WASTE CONNECTIONS - NORFOLK22-	100371724	604-000-121.003	917.78	
336202	09/14/2022	JOHNS DISPOSAL INC22-0100187	100371839	604-000-121.003	2,937.56	
336281	09/15/2022	ASSOCIATED WHOLESALE GROCERS22	100372034	604-000-121.003	291.12	
336329	09/15/2022	WASTE CONNECTIONS - FREMONT22-	100372088	604-000-121.003	1,401.10	
336377	09/16/2022	PILGER, VILLAGE OF22-0100449	100372214	604-000-121.003	436.08	
336378	09/16/2022	DAVE HOLLATZ CONSTRUCTION22-01	100372215	604-000-121.003	187.80	
336716	09/19/2022	OAKLAND, CITY OF22-0100183	100372515	604-000-121.003	1,284.74	
336717	09/19/2022	OAKLAND, CITY OF22-0100447	100372516	604-000-121.003	1,705.22	
336718	09/19/2022	BUDS SANITARY SERVICE LLC22-01	100372517	604-000-121.003	16,982.96	
336762	09/20/2022	NNSWC LANDFILLNNSWC LANDFILL G	100372654	604-000-367.001	346.00	
336763	09/20/2022	NNSWC LANDFILLNNSWC LANDFILL G	100372654	604-000-367.001	317.00	

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FROM 604-000-113.002 TO 604-229-598.000
TRANSACTIONS FROM 03/01/2022 TO 09/30/2022

JE #	Date	Description	Reference #	OFFSETTING GL	DEBIT	CREDIT
604-000-113.021 NNSWC PRIMARY ACT-MIDWEST 6709						
Journal CR: Cash Receipts						
336764	09/20/2022	NNSWC LANDFILLNNSWC LANDFILL G	100372654	604-000-367.001	13.00	
336765	09/20/2022	NNSWC LANDFILLNNSWC LANDFILL G	100372654	604-000-367.001	91.00	
336766	09/20/2022	NNSWC LANDFILLNNSWC LANDFILL G	100372654	604-000-367.001	150.00	
336825	09/21/2022	NORFOLK, CITY OF22-0100445	100372852	604-000-121.003	75,906.95	
336905	09/22/2022	U&I SANITATION22-0100459	100373080	604-000-121.003	612.72	
336908	09/22/2022	COLUMBUS, CITY OF22-0100448	100373083	604-000-121.003	73,161.49	
336952	09/23/2022	NNSWC LANDFILLNNSWC LANDFILL G	100373278	604-000-367.001	222.00	
336953	09/23/2022	NNSWC LANDFILLNNSWC LANDFILL G	100373278	604-000-367.001	26.00	
336954	09/23/2022	NNSWC LANDFILLNNSWC LANDFILL G	100373278	604-000-367.001	21.00	
336955	09/23/2022	NNSWC LANDFILLNNSWC LANDFILL G	100373278	604-000-367.001	48.00	
336956	09/23/2022	NNSWC LANDFILLNNSWC LANDFILL G	100373278	604-000-367.001	48.00	
337050	09/26/2022	DEG ENTERPRISES22-0100463	100373632	604-000-121.003	24.72	
337052	09/26/2022	MIDWEST WIRE SOLUTIONS22-01004	100373634	604-000-121.003	71.52	
337072	09/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100373656	604-000-367.001	118.00	
337073	09/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100373656	604-000-367.001	12.00	
337074	09/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100373656	604-000-367.001	47.00	
337075	09/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100373656	604-000-367.001	25.00	
337076	09/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100373656	604-000-367.001	77.00	
337077	09/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100373656	604-000-367.001	23.00	
337078	09/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100373656	604-000-367.001	12.00	
337079	09/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100373656	604-000-367.001	15.00	
337080	09/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100373656	604-000-367.001	81.00	
338238	09/30/2022	FREMONT, CITY OF22-0100446	100374375	604-000-121.003	73,157.14	
338252	09/30/2022	CONTITECH USA INC22-0100458	100374392	604-000-121.003	0.96	
338253	09/30/2022	CONTITECH USA INC22-0100192	100374393	604-000-121.003	0.96	
338254	09/30/2022	CONTITECH USA INC22-0100037	100374394	604-000-121.003	0.95	
338255	09/30/2022	CONTITECH USA INC22-0099818	100374395	604-000-121.003	0.95	
338256	09/30/2022	CONTITECH USA INC22-0099557	100374396	604-000-121.003	94.57	
Journal Totals					1,725,501.72	0.00
Journal GJ: GENERAL JOURNAL						
319962	03/14/2022	TRANSFER FR NNSWC TO CITY	28203	Multiple		3,924.92
320931	03/23/2022	TRANSFER FR NNSWC TO CLOSURE A	28236	Multiple		393,013.00
321941	03/25/2022	US TREASURY NNSWC 3-31-23	28250	Multiple		1,479,133.73
320865	03/31/2022	ENTER INTEREST AMOUNTS	28232	Multiple	1,385.30	
321943	03/31/2022	DIVIDEND US TREASURY NNSWC	28251	604-000-388.001	937.50	
323118	04/06/2022	APPLY NUCOR OVERPYMT FR MARCH	28291	Multiple	14,949.17	
323062	04/18/2022	TRANSFER FR NNSWC TO CITY OF N	28267	Multiple		5,670.56
323066	04/22/2022	NNSWC WELLS FARGO SAFEKEEPING	28278	604-000-388.001		108.00
323068	04/30/2022	ENTER INTEREST AMOUNTS	28286	Multiple	1,022.25	
325554	05/12/2022	TRANSFER FR NNSWC TO CITY'S PR	28305	Multiple		4,602.86
325579	05/31/2022	ENTER INTEREST AMOUNTS	28346	Multiple	2,170.73	
329005	06/14/2022	NNSWC TRANSFER	28377	Multiple		4,506.62
330260	06/23/2022	TRADE DDA WELLS	28405	604-000-388.001		112.00
329013	06/30/2022	ENTER INTEREST AMOUNTS	28398	Multiple	2,162.18	
331688	07/12/2022	TRANSFER FR NNSWC TO CITY OF N	28419	Multiple		5,080.01
331693	07/18/2022	SAFEKEEPING FEES WELLS FARGO	28429	Multiple		56.00
331701	07/31/2022	ENTER INTEREST AMOUNTS	28442	Multiple	2,327.91	
334608	08/15/2022	TRANSFER FR NNSWC TO CITY	28460	Multiple		4,021.50
334610	08/17/2022	SAFEKEEPING FEES	28470	Multiple		56.00
334618	08/31/2022	ENTER INTEREST AMOUNTS	28484	Multiple	5,874.46	
338301	09/12/2022	TRNASFER TO CITY FR NNSWC	28496	Multiple		4,390.98
338758	09/12/2022	APPLY DEG OVER PYMT	28538	Multiple	18.00	
338305	09/19/2022	WF SAFEKEEPING FEES	28506	Multiple		56.00
338310	09/30/2022	US TREASURY 3-31-23 INTEREST @	28516	604-000-388.001	937.50	
338313	09/30/2022	ENTER INTEREST AMOUNTS	28519	Multiple	7,592.81	
338815	09/30/2022	NNSWC 3-31-22 CASH INTEREST TR	28544	604-000-388.001	937.50	
340154	09/30/2022	TO REVERSE MANUAL JOURNAL ENTR	28583	604-000-388.001		937.50
Journal Totals					40,315.31	1,905,669.68
Journal PR: Payroll						
319700	03/15/2022	SUMMARY PR 03/15/2022		Multiple		2,633.48
320449	03/30/2022	SUMMARY PR 03/30/2022		Multiple		2,740.73
322093	04/15/2022	SUMMARY PR 04/15/2022		Multiple		2,937.35
322929	04/29/2022	SUMMARY PR 04/29/2022		Multiple		2,656.29
323743	05/13/2022	SUMMARY PR 05/13/2022		Multiple		2,756.90
325231	05/27/2022	SUMMARY PR 05/27/2022		Multiple		2,926.78
327171	06/15/2022	SUMMARY PR 06/15/2022		Multiple		3,059.36
328540	06/30/2022	SUMMARY PR 06/30/2022		Multiple		2,673.14
330542	07/15/2022	SUMMARY PR 07/15/2022		Multiple		2,797.06
331468	07/29/2022	SUMMARY PR 07/29/2022		Multiple		2,676.52
333305	08/15/2022	SUMMARY PR 08/15/2022		Multiple		2,648.37
334180	08/30/2022	SUMMARY PR 08/30/2022		Multiple		2,832.24
336024	09/15/2022	SUMMARY PR 09/15/2022		Multiple		3,187.59
337237	09/30/2022	SUMMARY PR 09/30/2022		Multiple		2,652.34
Journal Totals					0.00	39,178.15
Journal PRR: Payroll Remittance Checks						
320524	03/28/2022	SUMMARY PRR 03/28/2022	8605	604-000-223.002		379.13
320525	03/28/2022	SUMMARY PRR 03/28/2022	EFT800	Multiple		1,390.68

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DB: Cityofnorfolk

FROM 604-000-113.002 TO 604-229-598.000
TRANSACTIONS FROM 03/01/2022 TO 09/30/2022

JE #	Date	Description	Reference #	OFFSETTING GL	DEBIT	CREDIT
604-000-113.021 NNSWC PRIMARY ACT-MIDWEST 6709						
Journal PRR: Payroll Remittance Checks						
320526	03/28/2022	SUMMARY PRR 03/28/2022		EFT799 604-000-222.006		626.28
322941	04/27/2022	SUMMARY PRR 04/27/2022		8612 604-000-223.002		400.49
322942	04/27/2022	SUMMARY PRR 04/27/2022		EFT808 Multiple		1,473.06
325319	05/25/2022	SUMMARY PRR 05/25/2022		8619 604-000-223.002		363.12
325320	05/25/2022	SUMMARY PRR 05/25/2022		EFT816 Multiple		1,408.67
328555	06/28/2022	SUMMARY PRR 06/28/2022		8624 604-000-223.002		360.84
328556	06/28/2022	SUMMARY PRR 06/28/2022		EFT825 Multiple		1,412.53
328557	06/28/2022	SUMMARY PRR 06/28/2022		EFT824 604-000-222.006		629.66
331482	07/27/2022	SUMMARY PRR 07/27/2022		8634 604-000-223.002		371.51
331483	07/27/2022	SUMMARY PRR 07/27/2022		EFT833 Multiple		1,391.01
334193	08/26/2022	SUMMARY PRR 08/26/2022		8638 604-000-223.002		366.17
334194	08/26/2022	SUMMARY PRR 08/26/2022		EFT841 Multiple		1,380.88
337258	09/28/2022	SUMMARY PRR 09/28/2022		8647 604-000-223.002		370.74
337259	09/28/2022	SUMMARY PRR 09/28/2022		EFT850 Multiple		1,459.57
337260	09/28/2022	SUMMARY PRR 09/28/2022		EFT849 604-000-222.006		614.63

Journal Totals	0.00	14,398.97
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Totals for 604-000-113.021	1,765,817.03	2,742,689.58
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Balance 03/01/22:	6,366,304.41
Net Change:	(976,872.55)
Balance 09/30/22:	5,389,431.86

604-000-116.001 U.S. TREASURIES						
Journal GJ: GENERAL JOURNAL						
321941	03/25/2022	US TREASURY NNSWC 3-31-23	28250	Multiple	1,478,227.14	
338814	09/30/2022	RCRC TREASURY NOTES @ 9-30-22	28543	Multiple	9,334.65	
338814	09/30/2022	RCRC TREASURY NOTES @ 9-30-22	28543	Multiple	10,669.38	
338817	09/30/2022	RCRD CARRYING VALUE @ 9-30-22	28546	604-000-388.001	20,359.92	
339032	09/30/2022	SEPTEMBER RVW	28552	Multiple	355.89	
339032	09/30/2022	SEPTEMBER RVW	28552	Multiple		20,359.92

Journal Totals	1,518,946.98	20,359.92
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Totals for 604-000-116.001	1,518,946.98	20,359.92
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Balance 03/01/22:	1,484,175.00
Net Change:	1,498,587.06
Balance 09/30/22:	2,982,762.06

604-000-121.003 ACCOUNTS RECEIVABLE						
Journal CR: Cash Receipts						
318325	03/02/2022	COLFAX COUNTY HWY DEPT22-00991	100341653	604-000-113.021		39.85
318477	03/04/2022	ASSOCIATED WHOLESALE GROCERS22	100341867	604-000-113.021		354.49
318478	03/04/2022	NUCOR22-0099352	100341868	604-000-113.021		181.68
319632	03/10/2022	DEG ENTERPRISES22-0099357	100342814	604-000-113.021		12.65
319633	03/10/2022	DAVE HOLLATZ CONSTRUCTION22-00	100342815	604-000-113.021		12.33
319663	03/10/2022	NUCOR22-0099352	100342848	604-000-113.021		98.16
319775	03/11/2022	NUCOR22-0099352	100343099	604-000-113.021		194.64
319840	03/14/2022	MIDWEST WIRE SOLUTIONS22-00993	100343490	604-000-113.021		18.00
319841	03/14/2022	JOHNS DISPOSAL INC22-0099191	100343491	604-000-113.021		2,684.61
320002	03/17/2022	PILGER, VILLAGE OF22-0099346	100344080	604-000-113.021		319.21
320040	03/18/2022	U&I SANITATION22-0099353	100344284	604-000-113.021		420.01
320044	03/18/2022	WASTE CONNECTIONS - NORFOLK22-	100344293	604-000-113.021		795.61
320045	03/18/2022	WASTE CONNECTIONS - FREMONT22-	100344294	604-000-113.021		1,374.82
320083	03/21/2022	BUDS SANITARY SERVICE LLC22-00	100344732	604-000-113.021		12,519.50
320367	03/23/2022	ASSOCIATED WHOLESALE GROCERS22	100345040	604-000-113.021		300.72
320392	03/23/2022	NORFOLK, CITY OF22-0099342	100345091	604-000-113.021		55,932.75
320456	03/25/2022	COLUMBUS, CITY OF22-0099345	100345489	604-000-113.021		45,025.53
320457	03/25/2022	OAKLAND, CITY OF22-0099344	100345490	604-000-113.021		1,040.64
320673	03/30/2022	ALBRACHT DISPOSAL SERVICE22-00	100346342	604-000-113.021		8,642.02
320691	03/30/2022	NUCOR22-0099352	100346367	Multiple		19,425.42
320788	04/01/2022	FREMONT, CITY OF22-0099343	100346896	604-000-113.021		54,737.79
321809	04/06/2022	ASSOCIATED WHOLESALE GROCERS22	100347712	604-000-113.021		353.05
321810	04/06/2022	NUCOR22-0099555	100347713	604-000-113.021		136.08
321811	04/06/2022	VULCRAFT22-0099549	100347714	604-000-113.021		142.83
321952	04/08/2022	ASSOCIATED WHOLESALE GROCERS22	100348050	604-000-113.021		200.40
321953	04/08/2022	HILAND ROBERTS22-0099556	100348051	604-000-113.021		1,157.04
322165	04/14/2022	JOHNS DISPOSAL INC22-0099348	100348693	604-000-113.021		3,371.98
322199	04/15/2022	FREMONT, CITY OF22-0099545	100348834	604-000-113.021		69,357.54
322401	04/19/2022	MIDWEST WIRE SOLUTIONS22-00995	100349213	604-000-113.021		46.81
322410	04/19/2022	PILGER, VILLAGE OF22-0099548	100349222	604-000-113.021		546.26
322411	04/19/2022	BUDS SANITARY SERVICE LLC22-00	100349223	604-000-113.021		15,867.66
322438	04/19/2022	NUCOR22-0099555	100349280	604-000-113.021		70.80
322576	04/20/2022	WASTE CONNECTIONS - FREMONT22-	100349455	604-000-113.021		1,444.62
322577	04/20/2022	WASTE CONNECTIONS - NORFOLK22-	100349456	604-000-113.021		955.44
322634	04/21/2022	NORFOLK, CITY OF22-0099544	100349676	604-000-113.021		67,654.29

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FROM 604-000-113.002 TO 604-229-598.000
TRANSACTIONS FROM 03/01/2022 TO 09/30/2022

JE #	Date	Description	Reference #	OFFSETTING GL	DEBIT	CREDIT
604-000-121.003 ACCOUNTS RECEIVABLE						
Journal CR: Cash Receipts						
333460	08/15/2022	JOHNS DISPOSAL INC22-0100030	100367699	604-000-113.021		2,971.29
333781	08/17/2022	WASTE CONNECTIONS - NORFOLK22-	100368142	604-000-113.021		1,637.85
333810	08/18/2022	NORFOLK, CITY OF22-0100181	100368367	604-000-113.021		69,713.70
333814	08/18/2022	COLUMBUS, CITY OF22-0100184	100368377	604-000-113.021		63,612.32
333815	08/18/2022	DEG ENTERPRISES22-0100198	100368378	Multiple		33.60
333853	08/19/2022	ALBRACHT DISPOSAL SERVICE22-01	100368597	604-000-113.021		5,645.19
333857	08/19/2022	U&I SANITATION22-0100193	100368601	604-000-113.021		454.58
333924	08/22/2022	BUDS SANITARY SERVICE LLC22-01	100369006	604-000-113.021		15,885.19
334016	08/23/2022	WASTE CONNECTIONS - FREMONT22-	100369226	604-000-113.021		1,400.28
334395	08/29/2022	ALBRACHT DISPOSAL SERVICE22-01	100370130	604-000-113.021		5,645.18
334639	09/02/2022	FREMONT, CITY OF22-0100182	100370681	604-000-113.021		74,092.76
334640	09/02/2022	COLFAX COUNTY HWY DEPT22-01001	100370682	604-000-113.021		191.04
336027	09/12/2022	ASSOCIATED WHOLESALE GROCERS22	100371537	604-000-113.021		1,003.92
336028	09/12/2022	NUCOR22-0100456	100371538	604-000-113.021		271.44
336065	09/12/2022	ASSOCIATED WHOLESALE GROCERS22	100371585	604-000-113.021		1,876.61
336164	09/13/2022	WASTE CONNECTIONS - NORFOLK22-	100371724	604-000-113.021		917.78
336202	09/14/2022	JOHNS DISPOSAL INC22-0100187	100371839	604-000-113.021		2,937.56
336281	09/15/2022	ASSOCIATED WHOLESALE GROCERS22	100372034	604-000-113.021		291.12
336329	09/15/2022	WASTE CONNECTIONS - FREMONT22-	100372088	604-000-113.021		1,401.10
336377	09/16/2022	PILGER, VILLAGE OF22-0100449	100372214	604-000-113.021		436.08
336378	09/16/2022	DAVE HOLLATZ CONSTRUCTION22-01	100372215	604-000-113.021		187.80
336716	09/19/2022	OAKLAND, CITY OF22-0100183	100372515	604-000-113.021		1,284.74
336717	09/19/2022	OAKLAND, CITY OF22-0100447	100372516	604-000-113.021		1,705.22
336718	09/19/2022	BUDS SANITARY SERVICE LLC22-01	100372517	604-000-113.021		16,982.96
336825	09/21/2022	NORFOLK, CITY OF22-0100445	100372852	604-000-113.021		75,906.95
336905	09/22/2022	U&I SANITATION22-0100459	100373080	604-000-113.021		612.72
336908	09/22/2022	COLUMBUS, CITY OF22-0100448	100373083	604-000-113.021		73,161.49
337050	09/26/2022	DEG ENTERPRISES22-0100463	100373632	604-000-113.021		24.72
337052	09/26/2022	MIDWEST WIRE SOLUTIONS22-01004	100373634	604-000-113.021		71.52
338238	09/30/2022	FREMONT, CITY OF22-0100446	100374375	604-000-113.021		73,157.14
338252	09/30/2022	CONTITECH USA INC22-0100458	100374392	604-000-113.021		0.96
338253	09/30/2022	CONTITECH USA INC22-0100192	100374393	604-000-113.021		0.96
338254	09/30/2022	CONTITECH USA INC22-0100037	100374394	604-000-113.021		0.95
338255	09/30/2022	CONTITECH USA INC22-0099818	100374395	604-000-113.021		0.95
338256	09/30/2022	CONTITECH USA INC22-0099557	100374396	604-000-113.021		94.57
Journal Totals					0.00	1,689,549.94
Journal MRB: Misc Receivables Billing						
318397	03/04/2022	SUMMARY MRB 03/04/2022		604-000-367.001	204,777.95	
320934	04/05/2022	SUMMARY MRB 04/05/2022		604-000-367.001	246,995.96	
323127	05/03/2022	SUMMARY MRB 05/03/2022		604-000-367.001	225,398.92	
326751	06/08/2022	SUMMARY MRB 06/08/2022		Multiple	266,808.54	
328804	07/01/2022	SUMMARY MRB 07/01/2022		Multiple	261,590.45	
332854	08/04/2022	SUMMARY MRB 08/04/2022		Multiple	248,292.44	
335927	09/08/2022	SUMMARY MRB 09/08/2022		Multiple	265,352.62	
Journal Totals					1,719,216.88	0.00
Journal MRR: Misc Receivables Receipting						
321800	04/06/2022	MR Payments: 04/06/2022		Multiple		14,949.17
336011	09/12/2022	MR Payments: 09/12/2022		Multiple		18.00
Journal Totals					0.00	14,967.17
Totals for 604-000-121.003					1,719,216.88	1,704,517.11
Balance 03/01/22:				2,724.46		
Net Change:				14,699.77		
Balance 09/30/22:				17,424.23		

604-000-138.009 DUE FROM DISB. FUND						
Journal CD: Cash Disbursements						
319515	03/07/2022	U S BANK	12784 (E)	Multiple		1,971.83
321690	04/04/2022	U S BANK	12920 (E)	Multiple		837.38
324948	05/16/2022	U S BANK	13114 (E)	Multiple		808.29
326867	06/06/2022	U S BANK	13204 (E)	Multiple		1,024.61
330203	07/05/2022	U S BANK	13377 (E)	Multiple		357.84
332698	08/01/2022	U S BANK	13541 (E)	Multiple		647.30
335796	09/06/2022	U S BANK	13697 (E)	Multiple		349.50
338182	09/30/2022	U S BANK	13879 (E)	Multiple		705.27
Journal Totals					0.00	6,702.02
Journal GJ: GENERAL JOURNAL						
319962	03/14/2022	TRANSFER FR NNSWC TO CITY	28203	Multiple	295.26	
323118	04/06/2022	APPLY NUCOR OVERPYMT FR MARCH	28291	Multiple		14,949.17
323062	04/18/2022	TRANSFER FR NNSWC TO CITY OF N	28267	Multiple	2,040.90	
323827	04/30/2022	RCRD MONTHLY FUEL EXPENSE	28301	Multiple		134.82
325554	05/12/2022	TRANSFER FR NNSWC TO CITY'S PR	28305	Multiple	838.38	
325554	05/12/2022	TRANSFER FR NNSWC TO CITY'S PR	28305	Multiple	134.82	
327153	05/31/2022	RCRD MONTHLY FUEL EXPENSE	28354	Multiple		69.67
329005	06/14/2022	NNSWC TRANSFER	28377	Multiple	69.67	

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FROM 604-000-113.002 TO 604-229-598.000

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TRANSACTIONS FROM 03/01/2022 TO 09/30/2022

JE #	Date	Description	Reference #	OFFSETTING GL	DEBIT	CREDIT
604-000-138.009 DUE FROM DISB. FUND						
Journal GJ: GENERAL JOURNAL						
329005	06/14/2022	NNSWC TRANSFER	28377	Multiple	807.29	
329011	06/27/2022	CRCT STANTON PUBLIC POWER	28391	Multiple		300.98
330617	06/30/2022	RCRD MONTHLY FUEL EXPENSE	28413	Multiple		124.76
331688	07/12/2022	TRANSFER FR NNSWC TO CITY OF N	28419	Multiple	124.76	
331688	07/12/2022	TRANSFER FR NNSWC TO CITY OF N	28419	Multiple	1,325.59	
333375	07/31/2022	RCRD MONTHLY FUEL EXPENSE	28448	Multiple		34.00
334608	08/15/2022	TRANSFER FR NNSWC TO CITY	28460	Multiple	357.84	
334608	08/15/2022	TRANSFER FR NNSWC TO CITY	28460	Multiple	34.00	
336013	08/31/2022	RCRD MONTHLY FUEL EXPENSE	28487	Multiple		114.02
338301	09/12/2022	TRNASFER TO CITY FR NNSWC	28496	Multiple	114.02	
338301	09/12/2022	TRNASFER TO CITY FR NNSWC	28496	Multiple	647.30	
338758	09/12/2022	APPLY DEG OVER PYMT	28538	Multiple		18.00
338669	09/30/2022	RCRD MONTHLY FUEL EXPENSE	28527	Multiple		85.41
339040	09/30/2022	CULLIGAN OF COLUMBUS CHARGE	28562	Multiple		74.60
Journal Totals					6,789.83	15,905.43
Journal MRR: Misc Receivables Receipting						
321800	04/06/2022	MR Payments: 04/06/2022		Multiple	14,949.17	
336011	09/12/2022	MR Payments: 09/12/2022		Multiple	18.00	
Journal Totals					14,967.17	0.00
Totals for 604-000-138.009					21,757.00	22,607.45
Balance 03/01/22:				364.33 CR		
Net Change:				(850.45)		
Balance 09/30/22:				1,214.78 CR		

604-000-221.001 ACCOUNTS PAYABLE

Journal AP: Accounts Payable

319482	03/01/2022	CASEY'S MAIL SERVICE LLCPOSTAG	1770	604-229-563.000		9.28
319483	03/01/2022	CASEY'S MAIL SERVICE LLCPOSTAG	1775	604-229-563.000		14.66
319484	03/01/2022	ROB MERCERMILEAGE	20220204	604-229-553.000		14.04
318914	03/07/2022	CULLIGAN OF COLUMBUS2201171303	22013301544	604-229-546.000		73.85
319123	03/07/2022	LUEDEKE OIL CO INC123	22020010019	Multiple		95.00
319372	03/07/2022	QED ENVIRONMENTAL INC22RA-4963	22018753238	604-229-546.000		942.00
319404	03/07/2022	SPACE EXPLORATION TECHNOLINV-U	22012968728	604-229-562.000		480.20
319410	03/07/2022	STANTON CO PUBLIC POWER0000000	22010867682	604-229-541.000		289.72
319445	03/07/2022	UPS2940EBJ7E5I	22011339042	604-229-546.000		7.00
319446	03/07/2022	UPSADJ00157139060421	22017922278	604-229-546.000		84.06
320251	03/15/2022	CASEY'S MAIL SERVICE LLCPOSTAG	1841	604-229-563.000		7.54
320252	03/15/2022	FAIRBANKS SCALES INCSALE REPA	1583993	604-229-546.000		603.25
320254	03/15/2022	ROB MERCERMILEAGE	20220304	604-229-553.000		45.05
320256	03/15/2022	WASTE CONNECTIONS OF NELANDFIL	2282022	604-229-532.000		77,906.17
320253	03/16/2022	FAIRBANKS SCALES INCSALE REPA	1585770	604-229-546.000		964.63
320255	03/16/2022	SCS ENGINEERSMONITORING	0429267	604-229-568.000		3,367.00
320932	03/29/2022	BURNS & MCDONNELL INCLANDFILL	124922-12	604-229-568.000		1,464.96
321132	03/31/2022	CULLIGAN OF COLUMBUS2202151555	22028242538	604-229-546.000		73.85
321146	03/31/2022	EAKES OFFICE PRODUCT843773600	22022200389	Multiple		15.46
321510	03/31/2022	NWEAd5a81d9a-fe04-4f54-8c19-9	22039762435	604-229-553.000		180.00
321580	03/31/2022	SPACE EXPLORATION TECHNOLINTER	22021768724	604-229-562.000		99.00
321581	03/31/2022	SPACE EXPLORATION TECHNOLPARTS	22039254940	604-229-562.000		58.85
321583	03/31/2022	STANTON CO PUBLIC POWER0000000	22020873203	604-229-541.000		410.22
322343	04/12/2022	NE DEPT OF ENVIRONTL QLTY AND	35489	604-229-532.000		37,169.39
322367	04/12/2022	SCS ENGINEERSGROUNDWATER	0432653	604-229-568.000		2,128.47
322369	04/12/2022	STANTON CO TREASURERHOST FEE	APRIL 2022	604-229-568.000		24,407.47
322376	04/12/2022	WASTE CONNECTIONS OF NEDISPOSA	3312022	604-229-532.000		88,299.42
322291	04/14/2022	CAROLINA SOFTWARESUPPORT	82809 NNSWC	604-229-568.000		166.67
324176	04/18/2022	CULLIGAN OF COLUMBUS2203151453	22032888444	604-229-546.000		65.86
324246	04/18/2022	FARMERS UNION COOP SUPPLY COSU	22040010220	604-229-524.000		106.35
324351	04/18/2022	KELLY SUPPLY COMPANY INCVnd: 3	22044292389	604-229-546.000		212.78
324390	04/18/2022	LUEDEKE OIL CO INCFLAT TIRE	22040010110	604-229-547.000		17.50
324651	04/18/2022	SPACE EXPLORATION TECHNOLSTMT-	22033028723	604-229-562.000		99.00
324662	04/18/2022	STANTON CO PUBLIC POWER0000000	22030878307	604-229-541.000		306.80
323234	04/22/2022	CASEY'S MAIL SERVICE LLCPOSTAG	1915	604-229-563.000		3.48
323235	04/22/2022	ROB MERCERMILEAGE	20220418	604-229-553.000		39.78
323975	05/11/2022	BKD, LLPFINANCIAL STMT AUDIT	BK01577203	604-229-568.000		7,850.00
323976	05/11/2022	CASEY'S MAIL SERVICE LLCPOSTAG	1999	604-229-563.000		18.52
323977	05/11/2022	FAIRBANKS SCALES INCTEST/INSPE	1592783	604-229-546.000		720.00
323978	05/11/2022	WASTE CONNECTIONS OF NEDISPOSA	4302022	604-229-532.000		78,159.38
325864	05/17/2022	AMAZONTONER	22058081208	604-229-564.000		194.95
326016	05/17/2022	CULLIGAN OF COLUMBUS2204151304	22045994254	604-229-546.000		72.36
326073	05/17/2022	FARMERS UNION COOP SUPPLY COFU	22050010980	604-229-524.000		36.00
326386	05/17/2022	NORTH STAR FORMSVnd: 14515 Inv	22057528337	Multiple		291.69
326416	05/17/2022	PEPLINK PEPWAVE LTDPEPLINK ROU	22051219370	604-229-564.000		49.00
326465	05/17/2022	SPACE EXPLORATION TECHNOLSTMT-	22043248729	604-229-562.000		99.00
326469	05/17/2022	STANTON CO PUBLIC POWER0000000	22040883443	604-229-541.000		249.71
326525	05/17/2022	W W GRAINGER INC6548511520	22041463252	604-229-546.000		31.90
326747	06/01/2022	BURNS & MCDONNELL INCMASER PL	124922-13	604-229-568.000		3,295.28

JE #	Date	Description	Reference #	OFFSETTING GL	DEBIT	CREDIT
604-000-221.001 ACCOUNTS PAYABLE						
Journal CD: Cash Disbursements						
322558	04/18/2022	WASTE CONNECTIONS OF NE	8611	604-000-113.021	88,299.42	
323303	05/02/2022	CASEY'S MAIL SERVICE LLC	8613	604-000-113.021	3.48	
323304	05/02/2022	ROB MERCER	8614	604-000-113.021	39.78	
324948	05/16/2022	U S BANK	13114 (E)	Multiple	808.29	
324978	05/16/2022	BKD, LLP	8615	604-000-113.021	7,850.00	
324979	05/16/2022	CASEY'S MAIL SERVICE LLC	8616	604-000-113.021	18.52	
324980	05/16/2022	FAIRBANKS SCALES INC	8617	604-000-113.021	720.00	
324981	05/16/2022	WASTE CONNECTIONS OF NE	8618	604-000-113.021	78,159.38	
326867	06/06/2022	U S BANK	13204 (E)	Multiple	1,024.61	
326934	06/06/2022	BURNS & MCDONNELL INC	8620	604-000-113.021	3,295.28	
326935	06/06/2022	NE DEPT OF ENVIRONMENT & ENER	8621	604-000-113.021	612.00	
326936	06/06/2022	SCS ENGINEERS	8622	604-000-113.021	11,403.36	
327901	06/21/2022	WASTE CONNECTIONS OF NE	8623	604-000-113.021	84,945.76	
330203	07/05/2022	U S BANK	13377 (E)	Multiple	357.84	
330255	07/05/2022	CASEY'S MAIL SERVICE LLC	8625	604-000-113.021	6.96	
330256	07/05/2022	JC RAMSDELL ENVIRO SERVICES IN	8626	604-000-113.021	5,237.50	
330257	07/05/2022	SANITAS TECHNOLOGIES	8627	604-000-113.021	395.00	
331054	07/18/2022	BURNS & MCDONNELL INC	8628	604-000-113.021	1,857.40	
331055	07/18/2022	CAROLINA SOFTWARE	8629	604-000-113.021	166.67	
331056	07/18/2022	CASEY'S MAIL SERVICE LLC	8630	604-000-113.021	6.96	
331057	07/18/2022	NE DEPT OF ENVIRONMENT & ENER	8631	604-000-113.021	40,032.66	
331058	07/18/2022	STANTON CO TREASURER	8632	604-000-113.021	26,287.66	
331059	07/18/2022	WASTE CONNECTIONS OF NE	8633	604-000-113.021	85,546.22	
332644	08/01/2022	SCS ENGINEERS	8635	604-000-113.021	2,807.20	
332698	08/01/2022	U S BANK	13541 (E)	Multiple	647.30	
333681	08/15/2022	BURNS & MCDONNELL INC	8636	604-000-113.021	4,323.58	
333682	08/15/2022	WASTE CONNECTIONS OF NE	8637	604-000-113.021	82,549.27	
335796	09/06/2022	U S BANK	13697 (E)	Multiple	349.50	
335866	09/06/2022	BURNS & MCDONNELL INC	8639	604-000-113.021	3,085.85	
335867	09/06/2022	CASEY'S MAIL SERVICE LLC	8640	604-000-113.021	36.14	
335868	09/06/2022	NE DEPT OF ENVIRONMENT & ENER	8641	604-000-113.021	7,500.00	
335869	09/06/2022	SCS ENGINEERS	8642	604-000-113.021	4,385.91	
336597	09/19/2022	BAIRD HOLM	8643	604-000-113.021	1,375.00	
336598	09/19/2022	CASEY'S MAIL SERVICE LLC	8644	604-000-113.021	9.00	
336599	09/19/2022	SCS ENGINEERS	8645	604-000-113.021	614.55	
336600	09/19/2022	WASTE CONNECTIONS OF NE	8646	604-000-113.021	93,603.69	
338182	09/30/2022	U S BANK	13879 (E)	Multiple	705.27	
Journal Totals					790,144.80	0.00
Journal GJ: GENERAL JOURNAL						
319962	03/14/2022	TRANSFER FR NNSWC TO CITY	28203	Multiple	3,629.66	
322236	03/31/2022	NNSWC ADMIN FEE	28266	Multiple		3,629.66
323062	04/18/2022	TRANSFER FR NNSWC TO CITY OF N	28267	Multiple	3,629.66	
325554	05/12/2022	TRANSFER FR NNSWC TO CITY'S PR	28305	Multiple	3,629.66	
329005	06/14/2022	NNSWC TRANSFER	28377	Multiple	3,629.66	
330499	06/30/2022	JUNE ADMIN FEES	28418	Multiple		3,629.66
331688	07/12/2022	TRANSFER FR NNSWC TO CITY OF N	28419	Multiple	3,629.66	
333383	07/31/2022	JULY ADMIN FEE NNSWC	28459	Multiple		3,629.66
334608	08/15/2022	TRANSFER FR NNSWC TO CITY	28460	Multiple	3,629.66	
338301	09/12/2022	TRNASFER TO CITY FR NNSWC	28496	Multiple	3,629.66	
Journal Totals					25,407.62	10,888.98
Journal JE: JOURNAL ENTRY WITH DTFD						
323829	04/30/2022	RCRD TRANS FR NNSWC TO CITY FO	28304	Multiple		3,629.66
327273	05/31/2022	RCRD TRANS FR NNSWC TO CITY FO	28376	Multiple		3,629.66
336019	08/31/2022	RCRD TRANS FR NNSWC TO CITY FO	28495	Multiple		3,629.66
338787	09/30/2022	RCRD TRANS FR NNSWC TO CITY FO	28539	Multiple		3,629.66
Journal Totals					0.00	14,518.64
Totals for 604-000-221.001					815,552.42	1,026,390.23
Balance 03/01/22:				3,629.66		
Net Change:				210,837.81		
Balance 09/30/22:				214,467.47		

604-000-222.005 FED. WITHHOLDING PAYABLE						
Journal PR: Payroll						
319700	03/15/2022	SUMMARY PR 03/15/2022		Multiple		192.66
320449	03/30/2022	SUMMARY PR 03/30/2022		Multiple		207.04
322093	04/15/2022	SUMMARY PR 04/15/2022		Multiple		242.33
322929	04/29/2022	SUMMARY PR 04/29/2022		Multiple		193.97
323743	05/13/2022	SUMMARY PR 05/13/2022		Multiple		184.82
325231	05/27/2022	SUMMARY PR 05/27/2022		Multiple		187.43
327171	06/15/2022	SUMMARY PR 06/15/2022		Multiple		183.51
328540	06/30/2022	SUMMARY PR 06/30/2022		Multiple		184.82
330542	07/15/2022	SUMMARY PR 07/15/2022		Multiple		191.35
331468	07/29/2022	SUMMARY PR 07/29/2022		Multiple		195.28
333305	08/15/2022	SUMMARY PR 08/15/2022		Multiple		191.35

JE #	Date	Description	Reference #	OFFSETTING GL	DEBIT	CREDIT
604-000-222.005 FED. WITHHOLDING PAYABLE						
Journal PR: Payroll						
334180	08/30/2022	SUMMARY PR 08/30/2022		Multiple		186.13
336024	09/15/2022	SUMMARY PR 09/15/2022		Multiple		199.01
337237	09/30/2022	SUMMARY PR 09/30/2022		Multiple		192.66
Journal Totals					0.00	2,732.36
Journal PRR: Payroll Remittance Checks						
320525	03/28/2022	SUMMARY PRR 03/28/2022	EFT800	Multiple	399.70	
322942	04/27/2022	SUMMARY PRR 04/27/2022	EFT808	Multiple	436.30	
325320	05/25/2022	SUMMARY PRR 05/25/2022	EFT816	Multiple	372.25	
328556	06/28/2022	SUMMARY PRR 06/28/2022	EFT825	Multiple	368.33	
331483	07/27/2022	SUMMARY PRR 07/27/2022	EFT833	Multiple	386.63	
334194	08/26/2022	SUMMARY PRR 08/26/2022	EFT841	Multiple	377.48	
337259	09/28/2022	SUMMARY PRR 09/28/2022	EFT850	Multiple	391.67	
Journal Totals					2,732.36	0.00
Totals for 604-000-222.005					2,732.36	2,732.36
Balance 03/01/22:					0.00	
Net Change:					0.00	
Balance 09/30/22:					0.00	

604-000-222.006 NEBR. WITHHOLDING PAYABLE						
Journal PR: Payroll						
319700	03/15/2022	SUMMARY PR 03/15/2022		Multiple		99.86
320449	03/30/2022	SUMMARY PR 03/30/2022		Multiple		107.75
322093	04/15/2022	SUMMARY PR 04/15/2022		Multiple		127.13
322929	04/29/2022	SUMMARY PR 04/29/2022		Multiple		100.58
323743	05/13/2022	SUMMARY PR 05/13/2022		Multiple		97.02
325231	05/27/2022	SUMMARY PR 05/27/2022		Multiple		102.94
327171	06/15/2022	SUMMARY PR 06/15/2022		Multiple		106.44
328540	06/30/2022	SUMMARY PR 06/30/2022		Multiple		95.55
330542	07/15/2022	SUMMARY PR 07/15/2022		Multiple		100.61
331468	07/29/2022	SUMMARY PR 07/29/2022		Multiple		101.29
333305	08/15/2022	SUMMARY PR 08/15/2022		Multiple		99.14
334180	08/30/2022	SUMMARY PR 08/30/2022		Multiple		99.43
336024	09/15/2022	SUMMARY PR 09/15/2022		Multiple		114.30
337237	09/30/2022	SUMMARY PR 09/30/2022		Multiple		99.86
Journal Totals					0.00	1,451.90
Journal PRR: Payroll Remittance Checks						
320526	03/28/2022	SUMMARY PRR 03/28/2022	EFT799	604-000-113.021	626.28	
328557	06/28/2022	SUMMARY PRR 06/28/2022	EFT824	604-000-113.021	629.66	
337260	09/28/2022	SUMMARY PRR 09/28/2022	EFT849	604-000-113.021	614.63	
Journal Totals					1,870.57	0.00
Totals for 604-000-222.006					1,870.57	1,451.90
Balance 03/01/22:					418.67	
Net Change:					(418.67)	
Balance 09/30/22:					0.00	

604-000-222.007 FICA TAX PAYABLE						
Journal PR: Payroll						
319700	03/15/2022	SUMMARY PR 03/15/2022		Multiple		484.78
320449	03/30/2022	SUMMARY PR 03/30/2022		Multiple		506.20
322093	04/15/2022	SUMMARY PR 04/15/2022		Multiple		547.86
322929	04/29/2022	SUMMARY PR 04/29/2022		Multiple		488.90
323743	05/13/2022	SUMMARY PR 05/13/2022		Multiple		503.44
325231	05/27/2022	SUMMARY PR 05/27/2022		Multiple		532.98
327171	06/15/2022	SUMMARY PR 06/15/2022		Multiple		554.90
328540	06/30/2022	SUMMARY PR 06/30/2022		Multiple		489.30
330542	07/15/2022	SUMMARY PR 07/15/2022		Multiple		511.80
331468	07/29/2022	SUMMARY PR 07/29/2022		Multiple		492.58
333305	08/15/2022	SUMMARY PR 08/15/2022		Multiple		486.88
334180	08/30/2022	SUMMARY PR 08/30/2022		Multiple		516.52
336024	09/15/2022	SUMMARY PR 09/15/2022		Multiple		580.02
337237	09/30/2022	SUMMARY PR 09/30/2022		Multiple		487.88
Journal Totals					0.00	7,184.04
Journal PRR: Payroll Remittance Checks						
320525	03/28/2022	SUMMARY PRR 03/28/2022	EFT800	Multiple	990.98	
322942	04/27/2022	SUMMARY PRR 04/27/2022	EFT808	Multiple	1,036.76	
325320	05/25/2022	SUMMARY PRR 05/25/2022	EFT816	Multiple	1,036.42	
328556	06/28/2022	SUMMARY PRR 06/28/2022	EFT825	Multiple	1,044.20	
331483	07/27/2022	SUMMARY PRR 07/27/2022	EFT833	Multiple	1,004.38	
334194	08/26/2022	SUMMARY PRR 08/26/2022	EFT841	Multiple	1,003.40	
337259	09/28/2022	SUMMARY PRR 09/28/2022	EFT850	Multiple	1,067.90	

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FROM 604-000-113.002 TO 604-229-598.000
TRANSACTIONS FROM 03/01/2022 TO 09/30/2022

JE #	Date	Description	Reference #	OFFSETTING GL	DEBIT	CREDIT
		604-000-222.007 FICA TAX PAYABLE				
		Journal PRR: Payroll Remittance Checks				
		Journal Totals			7,184.04	0.00
		Totals for 604-000-222.007			7,184.04	7,184.04
		Balance 03/01/22:			0.00	
		Net Change:			0.00	
		Balance 09/30/22:			0.00	

		604-000-223.002 PAY-TO RETIREMENT PLANS				
		Journal PR: Payroll				
319700	03/15/2022	SUMMARY PR 03/15/2022		Multiple		185.37
320449	03/30/2022	SUMMARY PR 03/30/2022		Multiple		193.76
322093	04/15/2022	SUMMARY PR 04/15/2022		Multiple		214.35
322929	04/29/2022	SUMMARY PR 04/29/2022		Multiple		186.14
323743	05/13/2022	SUMMARY PR 05/13/2022		Multiple		180.80
325231	05/27/2022	SUMMARY PR 05/27/2022		Multiple		182.32
327171	06/15/2022	SUMMARY PR 06/15/2022		Multiple		180.04
328540	06/30/2022	SUMMARY PR 06/30/2022		Multiple		180.80
330542	07/15/2022	SUMMARY PR 07/15/2022		Multiple		184.61
331468	07/29/2022	SUMMARY PR 07/29/2022		Multiple		186.90
333305	08/15/2022	SUMMARY PR 08/15/2022		Multiple		184.61
334180	08/30/2022	SUMMARY PR 08/30/2022		Multiple		181.56
336024	09/15/2022	SUMMARY PR 09/15/2022		Multiple		185.37
337237	09/30/2022	SUMMARY PR 09/30/2022		Multiple		185.37
		Journal Totals			0.00	2,612.00
		Journal PRR: Payroll Remittance Checks				
320524	03/28/2022	SUMMARY PRR 03/28/2022	8605	604-000-113.021	379.13	
322941	04/27/2022	SUMMARY PRR 04/27/2022	8612	604-000-113.021	400.49	
325319	05/25/2022	SUMMARY PRR 05/25/2022	8619	604-000-113.021	363.12	
328555	06/28/2022	SUMMARY PRR 06/28/2022	8624	604-000-113.021	360.84	
331482	07/27/2022	SUMMARY PRR 07/27/2022	8634	604-000-113.021	371.51	
334193	08/26/2022	SUMMARY PRR 08/26/2022	8638	604-000-113.021	366.17	
337258	09/28/2022	SUMMARY PRR 09/28/2022	8647	604-000-113.021	370.74	
		Journal Totals			2,612.00	0.00
		Totals for 604-000-223.002			2,612.00	2,612.00
		Balance 03/01/22:			0.00	
		Net Change:			0.00	
		Balance 09/30/22:			0.00	

		604-000-367.001 USE FEES				
		Journal CR: Cash Receipts				
318284	03/01/2022	NNSWC LANDFILLNNSWC LANDFILL G 100341591		604-000-113.021		105.00
318285	03/01/2022	NNSWC LANDFILLNNSWC LANDFILL G 100341591		604-000-113.021		12.00
318286	03/01/2022	NNSWC LANDFILLNNSWC LANDFILL G 100341591		604-000-113.021		13.00
318334	03/02/2022	NNSWC LANDFILLNNSWC LANDFILL G 100341659		604-000-113.021		2,035.00
318335	03/02/2022	NNSWC LANDFILLNNSWC LANDFILL G 100341659		604-000-113.021		25.00
318336	03/02/2022	NNSWC LANDFILLNNSWC LANDFILL G 100341659		604-000-113.021		1,682.00
318337	03/02/2022	NNSWC LANDFILLNNSWC LANDFILL G 100341659		604-000-113.021		24.00
318338	03/02/2022	NNSWC LANDFILLNNSWC LANDFILL G 100341659		604-000-113.021		132.00
318339	03/02/2022	NNSWC LANDFILLNNSWC LANDFILL G 100341659		604-000-113.021		36.00
318530	03/07/2022	NNSWC LANDFILLNNSWC LANDFILL G 100342130		604-000-113.021		2,411.00
318531	03/07/2022	NNSWC LANDFILLNNSWC LANDFILL G 100342131		604-000-113.021		12.00
318663	03/08/2022	NNSWC LANDFILLNNSWC LANDFILL G 100342304		604-000-113.021		80.88
319682	03/10/2022	NNSWC LANDFILLNNSWC LANDFILL G 100342875		604-000-113.021		74.00
319683	03/10/2022	NNSWC LANDFILLNNSWC LANDFILL G 100342875		604-000-113.021		71.00
319864	03/15/2022	NNSWC LANDFILLNNSWC LANDFILL G 100343610		604-000-113.021		1,024.00
320356	03/22/2022	NNSCW LANDFILLNNSWC LANDFILL G 100344885		604-000-113.021		636.00
320357	03/22/2022	NNSCW LANDFILLNNSWC LANDFILL G 100344886		604-000-113.021		42.00
320601	03/29/2022	NNSWC LANDFILLNNSWC LANDFILL G 100346103		604-000-113.021		956.00
320602	03/29/2022	NNSWC LANDFILLNNSWC LANDFILL G 100346103		604-000-113.021		35.00
320603	03/29/2022	NNSWC LANDFILLNNSWC LANDFILL G 100346103		604-000-113.021		13.00
320716	03/31/2022	NNSWC LANDFILLNNSWC LANDFILL G 100346597		604-000-113.021		107.00
320717	03/31/2022	NNSWC LANDFILLNNSWC LANDFILL G 100346597		604-000-113.021		75.00
320718	03/31/2022	NNSWC LANDFILLNNSWC LANDFILL G 100346597		604-000-113.021		12.00
320719	03/31/2022	NNSWC LANDFILLNNSWC LANDFILL G 100346597		604-000-113.021		21.00
320720	03/31/2022	NNSWC LANDFILLNNSWC LANDFILL G 100346597		604-000-113.021		98.00
320721	03/31/2022	NNSWC LANDFILLNNSWC LANDFILL G 100346597		604-000-113.021		28.00
320876	04/04/2022	NNSWC LANDFILLNNSWC LANDFILL G 100347365		604-000-113.021		263.00
322064	04/12/2022	NNSWC LANDFILLNNSWC LANDFILL G 100348427		604-000-113.021		57.00
322065	04/12/2022	NNSWC LANDFILLNNSWC LANDFILL G 100348427		604-000-113.021		13.00
322066	04/12/2022	NNSWC LANDFILLNNSWC LANDFILL G 100348427		604-000-113.021		29.00
322067	04/12/2022	NNSWC LANDFILLNNSWC LANDFILL G 100348427		604-000-113.021		15.00
322068	04/12/2022	NNSWC LANDFILLNNSWC LANDFILL G 100348427		604-000-113.021		17.00
322069	04/12/2022	NNSWC LANDFILLNNSWC LANDFILL G 100348427		604-000-113.021		33.00

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FROM 604-000-113.002 TO 604-229-598.000
TRANSACTIONS FROM 03/01/2022 TO 09/30/2022

JE #	Date	Description	Reference #	OFFSETTING GL	DEBIT	CREDIT
604-000-367.001 USE FEES						
Journal CR: Cash Receipts						
334278	08/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100369796	604-000-113.021		94.00
334279	08/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100369796	604-000-113.021		164.00
334280	08/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100369796	604-000-113.021		13.00
334281	08/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100369796	604-000-113.021		67.00
334282	08/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100369796	604-000-113.021		72.00
334518	08/31/2022	NNSWC LANDFILLNNSWC LANDFILL G	100370422	604-000-113.021		137.00
334519	08/31/2022	NNSWC LANDFILLNNSWC LANDFILL G	100370422	604-000-113.021		75.00
334520	08/31/2022	NNSWC LANDFILLNNSWC LANDFILL G	100370422	604-000-113.021		33.00
334521	08/31/2022	NNSWC LANDFILLNNSWC LANDFILL G	100370422	604-000-113.021		125.00
334628	09/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100370672	604-000-113.021		347.00
334629	09/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100370672	604-000-113.021		135.00
334630	09/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100370672	604-000-113.021		12.00
334631	09/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100370672	604-000-113.021		77.00
334632	09/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100370672	604-000-113.021		72.00
334633	09/02/2022	NNSWC LANDFILLNNSWC LANDFILL G	100370672	604-000-113.021		118.00
334695	09/06/2022	NNSWC LANDFILLNNSWC LANDFILL G	100371001	604-000-113.021		318.00
335989	09/09/2022	NNSWC LANDFILLNNSWC LANDFILL G	100371384	604-000-113.021		268.00
335990	09/09/2022	NNSWC LANDFILLNNSWC LANDFILL G	100371384	604-000-113.021		13.00
336128	09/13/2022	NNSWC LANDFILLNNSWC LANDFILL G	100371677	604-000-113.021		113.00
336762	09/20/2022	NNSWC LANDFILLNNSWC LANDFILL G	100372654	604-000-113.021		346.00
336763	09/20/2022	NNSWC LANDFILLNNSWC LANDFILL G	100372654	604-000-113.021		317.00
336764	09/20/2022	NNSWC LANDFILLNNSWC LANDFILL G	100372654	604-000-113.021		13.00
336765	09/20/2022	NNSWC LANDFILLNNSWC LANDFILL G	100372654	604-000-113.021		91.00
336766	09/20/2022	NNSWC LANDFILLNNSWC LANDFILL G	100372654	604-000-113.021		150.00
336952	09/23/2022	NNSWC LANDFILLNNSWC LANDFILL G	100373278	604-000-113.021		222.00
336953	09/23/2022	NNSWC LANDFILLNNSWC LANDFILL G	100373278	604-000-113.021		26.00
336954	09/23/2022	NNSWC LANDFILLNNSWC LANDFILL G	100373278	604-000-113.021		21.00
336955	09/23/2022	NNSWC LANDFILLNNSWC LANDFILL G	100373278	604-000-113.021		48.00
336956	09/23/2022	NNSWC LANDFILLNNSWC LANDFILL G	100373278	604-000-113.021		48.00
337072	09/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100373656	604-000-113.021		118.00
337073	09/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100373656	604-000-113.021		12.00
337074	09/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100373656	604-000-113.021		47.00
337075	09/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100373656	604-000-113.021		25.00
337076	09/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100373656	604-000-113.021		77.00
337077	09/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100373656	604-000-113.021		23.00
337078	09/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100373656	604-000-113.021		12.00
337079	09/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100373656	604-000-113.021		15.00
337080	09/26/2022	NNSWC LANDFILLNNSWC LANDFILL G	100373656	604-000-113.021		81.00
Journal Totals					0.00	35,951.78
Journal MRB: Misc Receivables Billing						
318397	03/04/2022	SUMMARY MRB 03/04/2022		604-000-121.003		204,777.95
320934	04/05/2022	SUMMARY MRB 04/05/2022		604-000-121.003		246,995.96
323127	05/03/2022	SUMMARY MRB 05/03/2022		604-000-121.003		225,398.92
326751	06/08/2022	SUMMARY MRB 06/08/2022		Multiple		266,807.59
328804	07/01/2022	SUMMARY MRB 07/01/2022		Multiple		261,589.50
332854	08/04/2022	SUMMARY MRB 08/04/2022		Multiple		248,291.48
335927	09/08/2022	SUMMARY MRB 09/08/2022		Multiple		265,350.67
Journal Totals					0.00	1,719,212.07
Totals for 604-000-367.001					0.00	1,755,163.85
Balance 03/01/22:					1,184,329.28	
Net Change:					1,755,163.85	
Balance 09/30/22:					2,939,493.13	

604-000-374.008 LATE CHARGES						
Journal MRB: Misc Receivables Billing						
326751	06/08/2022	SUMMARY MRB 06/08/2022		Multiple		0.95
328804	07/01/2022	SUMMARY MRB 07/01/2022		Multiple		0.95
332854	08/04/2022	SUMMARY MRB 08/04/2022		Multiple		0.96
335927	09/08/2022	SUMMARY MRB 09/08/2022		Multiple		1.95
Journal Totals					0.00	4.81
Totals for 604-000-374.008					0.00	4.81
Balance 03/01/22:					0.81	
Net Change:					4.81	
Balance 09/30/22:					5.62	

604-000-388.001 OTHER INTEREST INCOME						
Journal GJ: GENERAL JOURNAL						
321941	03/25/2022	US TREASURY NNSWC 3-31-23	28250	Multiple	906.59	
320865	03/31/2022	ENTER INTEREST AMOUNTS	28232	Multiple		1,385.30
321943	03/31/2022	DIVIDEND US TREASURY NNSWC	28251	604-000-113.021		937.50
323066	04/22/2022	NNSWC WELLS FARGO SAFEKEEPING	28278	604-000-113.021	108.00	
323068	04/30/2022	ENTER INTEREST AMOUNTS	28286	Multiple		1,022.25

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FROM 604-000-113.002 TO 604-229-598.000
TRANSACTIONS FROM 03/01/2022 TO 09/30/2022

JE #	Date	Description	Reference #	OFFSETTING GL	DEBIT	CREDIT
604-000-388.001 OTHER INTEREST INCOME						
Journal GJ: GENERAL JOURNAL						
325579	05/31/2022	ENTER INTEREST AMOUNTS	28346	Multiple		2,170.73
330260	06/23/2022	TRADE DDA WELLS	28405	604-000-113.021	112.00	
329013	06/30/2022	ENTER INTEREST AMOUNTS	28398	Multiple		2,162.18
331693	07/18/2022	SAFEKEEPING FEES WELLS FARGO	28429	Multiple	56.00	
331701	07/31/2022	ENTER INTEREST AMOUNTS	28442	Multiple		2,327.91
334610	08/17/2022	SAFEKEEPING FEES	28470	Multiple	56.00	
334618	08/31/2022	ENTER INTEREST AMOUNTS	28484	Multiple		5,874.46
338305	09/19/2022	WF SAFEKEEPING FEES	28506	Multiple	56.00	
338310	09/30/2022	US TREASURY 3-31-23 INTEREST @	28516	604-000-113.021		937.50
338313	09/30/2022	ENTER INTEREST AMOUNTS	28519	Multiple		7,592.81
338814	09/30/2022	RCRC TREASURY NOTES @ 9-30-22	28543	Multiple		9,334.65
338814	09/30/2022	RCRC TREASURY NOTES @ 9-30-22	28543	Multiple		10,669.38
338815	09/30/2022	NNSWC 3-31-22 CASH INTEREST TR	28544	604-000-113.021		937.50
338817	09/30/2022	RCRD CARRYING VALUE @ 9-30-22	28546	604-000-116.001		20,359.92
339032	09/30/2022	SEPTEMBER RVW	28552	Multiple		355.89
339032	09/30/2022	SEPTEMBER RVW	28552	Multiple	20,359.92	
340154	09/30/2022	TO REVERSE MANUAL JOURNAL ENTR	28583	604-000-113.021	937.50	
Journal Totals					22,592.01	66,067.98
Totals for 604-000-388.001					22,592.01	66,067.98
Balance 03/01/22:					10,902.16	
Net Change:					43,475.97	
Balance 09/30/22:					54,378.13	

604-229-511.000 SALARIES & WAGES						
Journal PR: Payroll						
319700	03/15/2022	SUMMARY PR 03/15/2022		Multiple	3,168.39	
320449	03/30/2022	SUMMARY PR 03/30/2022		Multiple	3,308.62	
322093	04/15/2022	SUMMARY PR 04/15/2022		Multiple	3,580.74	
322929	04/29/2022	SUMMARY PR 04/29/2022		Multiple	3,195.29	
323743	05/13/2022	SUMMARY PR 05/13/2022		Multiple	3,290.46	
325231	05/27/2022	SUMMARY PR 05/27/2022		Multiple	3,483.64	
327171	06/15/2022	SUMMARY PR 06/15/2022		Multiple	3,626.76	
328540	06/30/2022	SUMMARY PR 06/30/2022		Multiple	3,198.16	
330542	07/15/2022	SUMMARY PR 07/15/2022		Multiple	3,344.92	
331468	07/29/2022	SUMMARY PR 07/29/2022		Multiple	3,219.38	
333305	08/15/2022	SUMMARY PR 08/15/2022		Multiple	3,182.30	
334180	08/30/2022	SUMMARY PR 08/30/2022		Multiple	3,376.06	
336024	09/15/2022	SUMMARY PR 09/15/2022		Multiple	3,790.91	
337237	09/30/2022	SUMMARY PR 09/30/2022		Multiple	3,188.80	
Journal Totals					46,954.43	0.00
Totals for 604-229-511.000					46,954.43	0.00
Balance 03/01/22:					35,248.27	
Net Change:					46,954.43	
Balance 09/30/22:					82,202.70	

604-229-514.000 PENSION						
Journal PR: Payroll						
319700	03/15/2022	SUMMARY PR 03/15/2022		Multiple	185.37	
320449	03/30/2022	SUMMARY PR 03/30/2022		Multiple	193.76	
322093	04/15/2022	SUMMARY PR 04/15/2022		Multiple	214.35	
322929	04/29/2022	SUMMARY PR 04/29/2022		Multiple	186.14	
323743	05/13/2022	SUMMARY PR 05/13/2022		Multiple	180.80	
325231	05/27/2022	SUMMARY PR 05/27/2022		Multiple	182.32	
327171	06/15/2022	SUMMARY PR 06/15/2022		Multiple	180.04	
328540	06/30/2022	SUMMARY PR 06/30/2022		Multiple	180.80	
330542	07/15/2022	SUMMARY PR 07/15/2022		Multiple	184.61	
331468	07/29/2022	SUMMARY PR 07/29/2022		Multiple	186.90	
333305	08/15/2022	SUMMARY PR 08/15/2022		Multiple	184.61	
334180	08/30/2022	SUMMARY PR 08/30/2022		Multiple	181.56	
336024	09/15/2022	SUMMARY PR 09/15/2022		Multiple	185.37	
337237	09/30/2022	SUMMARY PR 09/30/2022		Multiple	185.37	
Journal Totals					2,612.00	0.00
Totals for 604-229-514.000					2,612.00	0.00
Balance 03/01/22:					1,918.92	
Net Change:					2,612.00	
Balance 09/30/22:					4,530.92	

604-229-515.000 FICA
Journal PR: Payroll

User: MDrevecky
DB: Cityofnorfolk

FROM 604-000-113.002 TO 604-229-598.000
TRANSACTIONS FROM 03/01/2022 TO 09/30/2022

JE #	Date	Description	Reference #	OFFSETTING GL	DEBIT	CREDIT
604-229-515.000 FICA						
Journal PR: Payroll						
319700	03/15/2022	SUMMARY PR 03/15/2022		Multiple	242.39	
320449	03/30/2022	SUMMARY PR 03/30/2022		Multiple	253.10	
322093	04/15/2022	SUMMARY PR 04/15/2022		Multiple	273.93	
322929	04/29/2022	SUMMARY PR 04/29/2022		Multiple	244.45	
323743	05/13/2022	SUMMARY PR 05/13/2022		Multiple	251.72	
325231	05/27/2022	SUMMARY PR 05/27/2022		Multiple	266.49	
327171	06/15/2022	SUMMARY PR 06/15/2022		Multiple	277.45	
328540	06/30/2022	SUMMARY PR 06/30/2022		Multiple	244.65	
330542	07/15/2022	SUMMARY PR 07/15/2022		Multiple	255.90	
331468	07/29/2022	SUMMARY PR 07/29/2022		Multiple	246.29	
333305	08/15/2022	SUMMARY PR 08/15/2022		Multiple	243.44	
334180	08/30/2022	SUMMARY PR 08/30/2022		Multiple	258.26	
336024	09/15/2022	SUMMARY PR 09/15/2022		Multiple	290.01	
337237	09/30/2022	SUMMARY PR 09/30/2022		Multiple	243.94	
Journal Totals					3,592.02	0.00
Totals for 604-229-515.000					3,592.02	0.00
Balance 03/01/22:				2,696.50		
Net Change:				3,592.02		
Balance 09/30/22:				6,288.52		

604-229-524.000 VEHICULAR FUEL & LUBE						
Journal AP: Accounts Payable						
319123	03/07/2022	LUEDEKE OIL CO INC123	22020010019	Multiple	55.00	
324246	04/18/2022	FARMERS UNION COOP SUPPLY COSU	22040010220	604-000-221.001	106.35	
326073	05/17/2022	FARMERS UNION COOP SUPPLY COFU	22050010980	604-000-221.001	36.00	
332127	07/18/2022	FARMERS UNION COOP SUPPLY COSU	22070010818	604-000-221.001	96.00	
337635	09/16/2022	FARMERS UNION COOP SUPPLY COSU	22080010315	604-000-221.001	63.30	
Journal Totals					356.65	0.00
Journal GJ: GENERAL JOURNAL						
323827	04/30/2022	RCRD MONTHLY FUEL EXPENSE	28301	Multiple	134.82	
327153	05/31/2022	RCRD MONTHLY FUEL EXPENSE	28354	Multiple	69.67	
330617	06/30/2022	RCRD MONTHLY FUEL EXPENSE	28413	Multiple	124.76	
333375	07/31/2022	RCRD MONTHLY FUEL EXPENSE	28448	Multiple	34.00	
336013	08/31/2022	RCRD MONTHLY FUEL EXPENSE	28487	Multiple	114.02	
338669	09/30/2022	RCRD MONTHLY FUEL EXPENSE	28527	Multiple	85.41	
Journal Totals					562.68	0.00
Totals for 604-229-524.000					919.33	0.00
Balance 03/01/22:				495.70		
Net Change:				919.33		
Balance 09/30/22:				1,415.03		

604-229-526.000 MINOR APPARATUS & TOOLS						
Journal AP: Accounts Payable						
332613	07/18/2022	W W GRAINGER INC6555804364	22074697152	604-000-221.001	136.07	
Journal Totals					136.07	0.00
Totals for 604-229-526.000					136.07	0.00
Balance 03/01/22:				0.00		
Net Change:				136.07		
Balance 09/30/22:				136.07		

604-229-532.000 GARBAGE FEES						
Journal AP: Accounts Payable						
320256	03/15/2022	WASTE CONNECTIONS OF NELANDFIL	2282022	604-000-221.001	77,906.17	
322343	04/12/2022	NE DEPT OF ENVIRONMENTL QLTY AND	35489	604-000-221.001	37,169.39	
322376	04/12/2022	WASTE CONNECTIONS OF NEDISPOSA	3312022	604-000-221.001	88,299.42	
323978	05/11/2022	WASTE CONNECTIONS OF NEDISPOSA	4302022	604-000-221.001	78,159.38	
327724	06/15/2022	WASTE CONNECTIONS OF NEDISPOSA	5312022	604-000-221.001	84,945.76	
330960	07/12/2022	NE DEPT OF ENVIRONMENT & ENER	35747	604-000-221.001	40,032.66	
330962	07/12/2022	WASTE CONNECTIONS OF NEDISPOSA	6302022	604-000-221.001	85,246.22	
333611	08/10/2022	WASTE CONNECTIONS OF NELANDFIL	7312022	604-000-221.001	82,549.27	
336593	09/14/2022	WASTE CONNECTIONS OF NEGARBAGE	8312022	604-000-221.001	93,603.69	
339243	09/30/2022	NE DEPT OF ENVIRONMENT & ENER	36003	604-000-221.001	40,948.33	
339245	09/30/2022	WASTE CONNECTIONS OF NEDISPOSA	9302022	604-000-221.001	92,736.81	
Journal Totals					801,597.10	0.00

JE #	Date	Description	Reference #	OFFSETTING GL	DEBIT	CREDIT
604-229-532.000 GARBAGE FEES						
Totals for 604-229-532.000					801,597.10	0.00
Balance 03/01/22:				353,690.19		
Net Change:				801,597.10		
Balance 09/30/22:				1,155,287.29		
604-229-541.000 ELECTRICITY						
Journal AP: Accounts Payable						
319410	03/07/2022	STANTON CO PUBLIC POWER0000000	22010867682	604-000-221.001	289.72	
321583	03/31/2022	STANTON CO PUBLIC POWER0000000	22020873203	604-000-221.001	410.22	
324662	04/18/2022	STANTON CO PUBLIC POWER0000000	22030878307	604-000-221.001	306.80	
326469	05/17/2022	STANTON CO PUBLIC POWER0000000	22040883443	604-000-221.001	249.71	
329820	06/16/2022	STANTON CO PUBLIC POWER0000000	22050888675	604-000-221.001	156.02	
332555	07/18/2022	STANTON CO PUBLIC POWER0000000	22060894196	604-000-221.001	111.68	
335649	08/16/2022	STANTON CO PUBLIC POWER0000000	22070899461	604-000-221.001	131.72	
338067	09/16/2022	STANTON CO PUBLIC POWER0000000	22080905239	604-000-221.001	134.44	
341115	09/30/2022	STANTON CO PUBLIC POWER0000000	22090911151	604-000-221.001	131.35	
Journal Totals					1,921.66	0.00
Journal GJ: GENERAL JOURNAL						
329011	06/27/2022	CRCT STANTON PUBLIC POWER	28391	Multiple	300.98	
Journal Totals					300.98	0.00
Totals for 604-229-541.000					2,222.64	0.00
Balance 03/01/22:				109.29		
Net Change:				2,222.64		
Balance 09/30/22:				2,331.93		

604-229-546.000 BLDG, GRND & PLANT MAINT						
Journal AP: Accounts Payable						
318914	03/07/2022	CULLIGAN OF COLUMBUS2201171303	22013301544	604-000-221.001	73.85	
319372	03/07/2022	QED ENVIRONMENTAL INC22RA-4963	22018753238	604-000-221.001	942.00	
319445	03/07/2022	UPS2940EBJ7E5I	22011339042	604-000-221.001	7.00	
319446	03/07/2022	UPSADJ00157139060421	22017922278	604-000-221.001	84.06	
320252	03/15/2022	FAIRBANKS SCALES INCSCALE REPA	1583993	604-000-221.001	603.25	
320253	03/16/2022	FAIRBANKS SCALES INCSCALE REPA	1585770	604-000-221.001	964.63	
321132	03/31/2022	CULLIGAN OF COLUMBUS2202151555	22028242538	604-000-221.001	73.85	
324176	04/18/2022	CULLIGAN OF COLUMBUS2203151453	22032888444	604-000-221.001	65.86	
324351	04/18/2022	KELLY SUPPLY COMPANY INCBLDG,	22044292389	604-000-221.001	212.78	
323977	05/11/2022	FAIRBANKS SCALES INCTEST/INSPE	1592783	604-000-221.001	720.00	
326016	05/17/2022	CULLIGAN OF COLUMBUS2204151304	22045994254	604-000-221.001	72.36	
326525	05/17/2022	W W GRAINGER INC6548511520	22041463252	604-000-221.001	31.90	
329156	06/16/2022	BOMGAARS00025193	22060251934	604-000-221.001	13.99	
329242	06/16/2022	CULLIGAN OF COLUMBUS2205161117	22055504903	604-000-221.001	65.86	
330963	07/12/2022	WASTE CONNECTIONS OF NEFRACK T	TANK22	604-000-221.001	300.00	
332068	07/18/2022	CULLIGAN OF COLUMBUS2206151518	22066209285	604-000-221.001	65.86	
334956	08/16/2022	AMAZON MKTPLACE PMTS3 POSITION	22085936184	604-000-221.001	19.68	
335126	08/16/2022	CULLIGAN OF COLUMBUS2207151541	22071425661	604-000-221.001	74.60	
335162	08/16/2022	ECHO GROUP INC (JESCO)LANDFILL	22082898263	604-000-221.001	13.50	
337488	09/16/2022	BOMGAARSCLOROX WIPES, LYSOL, S	22080239661	604-000-221.001	37.93	
337644	09/16/2022	FLOOR MAINTENANCEBLDG, GRND &	22087793091	604-000-221.001	52.14	
340636	09/30/2022	CULLIGAN OF COLUMBUSWATER COOL	22091565193	604-000-221.001	74.60	
Journal Totals					4,569.70	0.00
Journal GJ: GENERAL JOURNAL						
339040	09/30/2022	CULLIGAN OF COLUMBUS CHARGE	28562	Multiple	74.60	
Journal Totals					74.60	0.00
Totals for 604-229-546.000					4,644.30	0.00
Balance 03/01/22:				1,054.85		
Net Change:				4,644.30		
Balance 09/30/22:				5,699.15		

604-229-547.000 MACHINERY & VEH. MAINT						
Journal AP: Accounts Payable						
319123	03/07/2022	LUEDEKE OIL CO INC123	22020010019	Multiple	40.00	
324390	04/18/2022	LUEDEKE OIL CO INCFLAT TIRE	22040010110	604-000-221.001	17.50	
337489	09/16/2022	BOMGAARSOIL	22080241385	604-000-221.001	21.98	
337671	09/16/2022	GRAHAM TIRE CO OF NORFOLKMACHI	22095416827	Multiple	53.90	
337884	09/16/2022	NORFOLK AUTO SUPPLY0000000008	22087900093	Multiple	5.13	
337885	09/16/2022	NORFOLK AUTO SUPPLY00000000010	22087200102	604-000-221.001	13.18	
340838	09/30/2022	LUEDEKE OIL CO INCFLAT TIRE	22090010097	604-000-221.001	20.00	
Journal Totals					171.69	0.00

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FROM 604-000-113.002 TO 604-229-598.000
TRANSACTIONS FROM 03/01/2022 TO 09/30/2022

JE #	Date	Description	Reference #	OFFSETTING GL	DEBIT	CREDIT
604-229-547.000 MACHINERY & VEH. MAINT						
Totals for 604-229-547.000					171.69	0.00
Balance 03/01/22:				2,976.30		
Net Change:				171.69		
Balance 09/30/22:				3,147.99		

604-229-553.000 TRAVEL AND TRAINING						
Journal AP: Accounts Payable						
319484	03/01/2022	ROB MERCERMILEAGE	20220204	604-000-221.001	14.04	
320254	03/15/2022	ROB MERCERMILEAGE	20220304	604-000-221.001	45.05	
321510	03/31/2022	NWEAd5a81d9a-fe04-4f54-8c19-9	22039762435	604-000-221.001	180.00	
323235	04/22/2022	ROB MERCERMILEAGE	20220418	604-000-221.001	39.78	
Journal Totals					278.87	0.00
Totals for 604-229-553.000					278.87	0.00
Balance 03/01/22:				13.44		
Net Change:				278.87		
Balance 09/30/22:				292.31		

604-229-555.000 DUES AND PUBLICATIONS						
Journal AP: Accounts Payable						
332388	07/18/2022	NI NDA DEVICE51470125	22071473306	604-000-221.001	127.69	
Journal Totals					127.69	0.00
Totals for 604-229-555.000					127.69	0.00
Balance 03/01/22:				223.00		
Net Change:				127.69		
Balance 09/30/22:				350.69		

604-229-562.000 TELEPHONE & TELETYPE						
Journal AP: Accounts Payable						
319404	03/07/2022	SPACE EXPLORATION TECHNOLINV-U	22012968728	604-000-221.001	480.20	
321580	03/31/2022	SPACE EXPLORATION TECHNOLINTER	22021768724	604-000-221.001	99.00	
321581	03/31/2022	SPACE EXPLORATION TECHNOLPARTS	22039254940	604-000-221.001	58.85	
324651	04/18/2022	SPACE EXPLORATION TECHNOLSTMT-	22033028723	604-000-221.001	99.00	
326465	05/17/2022	SPACE EXPLORATION TECHNOLSTMT-	22043248729	604-000-221.001	99.00	
329124	06/16/2022	AT & T03155811147	22050935948	Multiple	1.17	
329816	06/16/2022	SPACE EXPLORATION TECHNOLSTMT-	22059848723	604-000-221.001	110.00	
332547	07/18/2022	SPACE EXPLORATION TECHNOLSTARL	22067448728	604-000-221.001	110.00	
335638	08/16/2022	SPACE EXPLORATION TECHNOLSTARL	22071128722	604-000-221.001	110.00	
338063	09/16/2022	SPACE EXPLORATION TECHNOLSTARL	22082608728	604-000-221.001	110.00	
Journal Totals					1,277.22	0.00
Totals for 604-229-562.000					1,277.22	0.00
Balance 03/01/22:				536.53		
Net Change:				1,277.22		
Balance 09/30/22:				1,813.75		

604-229-563.000 POSTAGE						
Journal AP: Accounts Payable						
319482	03/01/2022	CASEY'S MAIL SERVICE LLCPOSTAG	1770	604-000-221.001	9.28	
319483	03/01/2022	CASEY'S MAIL SERVICE LLCPOSTAG	1775	604-000-221.001	14.66	
320251	03/15/2022	CASEY'S MAIL SERVICE LLCPOSTAG	1841	604-000-221.001	7.54	
323234	04/22/2022	CASEY'S MAIL SERVICE LLCPOSTAG	1915	604-000-221.001	3.48	
323976	05/11/2022	CASEY'S MAIL SERVICE LLCPOSTAG	1999	604-000-221.001	18.52	
330059	06/29/2022	CASEY'S MAIL SERVICE LLCPOSTAG	2075	604-000-221.001	6.96	
330959	07/12/2022	CASEY'S MAIL SERVICE LLCPOSTAG	2138	604-000-221.001	6.96	
334691	08/30/2022	CASEY'S MAIL SERVICE LLCPOSTAG	2209	604-000-221.001	36.14	
336591	09/14/2022	CASEY'S MAIL SERVICE LLCPOSTAG	2242	604-000-221.001	9.00	
340422	09/30/2022	CASEY'S MAIL SERVICE LLCPOSTAG	2361	604-000-221.001	10.80	
Journal Totals					123.34	0.00
Totals for 604-229-563.000					123.34	0.00
Balance 03/01/22:				95.92		
Net Change:				123.34		
Balance 09/30/22:				219.26		

604-229-564.000 OFFICE SUPPLIES
Journal AP: Accounts Payable

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FROM 604-000-113.002 TO 604-229-598.000
TRANSACTIONS FROM 03/01/2022 TO 09/30/2022

JE #	Date	Description	Reference #	OFFSETTING GL	DEBIT	CREDIT	
604-229-564.000 OFFICE SUPPLIES							
Journal AP: Accounts Payable							
321146	03/31/2022	EAKES OFFICE PRODUCT	843773600	22022200389	Multiple	15.46	
325864	05/17/2022	AMAZONTONER		22058081208	604-000-221.001	194.95	
326386	05/17/2022	NORTH STAR FORMSOFFICE SUPPLIE		22057528337	Multiple	291.69	
326416	05/17/2022	PEPLINK PEPWAVE LTDPEPLINK ROU		22051219370	604-000-221.001	49.00	
337432	09/16/2022	AMAZON MKTPLACE PMTSREPORT COV		22087549541	604-000-221.001	58.84	
337574	09/16/2022	EAKES OFFICE PRODUCT	855495300	22088400507	Multiple	31.25	
337588	09/16/2022	EAKES OFFICE PRODUCTOFFICE SUP		22088200429	Multiple	123.18	
Journal Totals						764.37	0.00
Totals for 604-229-564.000						764.37	0.00
Balance 03/01/22:					81.14		
Net Change:					764.37		
Balance 09/30/22:					845.51		

604-229-565.000 LEGAL NOTICES&ADVERTISE							
Journal AP: Accounts Payable							
329616	06/16/2022	NORFOLK DAILY NEWS	000003	22057561797	Multiple	10.80	
Journal Totals						10.80	0.00
Totals for 604-229-565.000						10.80	0.00
Balance 03/01/22:					199.03		
Net Change:					10.80		
Balance 09/30/22:					209.83		

604-229-568.000 OTHER PROFESSIONAL FEES							
Journal AP: Accounts Payable							
320255	03/16/2022	SCS ENGINEERSMONITORING		0429267	604-000-221.001	3,367.00	
320932	03/29/2022	BURNS & MCDONNELL INCLANDFILL		124922-12	604-000-221.001	1,464.96	
322367	04/12/2022	SCS ENGINEERSGROUNDWATER		0432653	604-000-221.001	2,128.47	
322369	04/12/2022	STANTON CO TREASURERHOST FEE		APRIL 2022	604-000-221.001	24,407.47	
322291	04/14/2022	CAROLINA SOFTWARESUPPORT		82809 NNSWC	604-000-221.001	166.67	
323975	05/11/2022	BKD, LLPFINANCIAL STMT AUDIT		BK01577203	604-000-221.001	7,850.00	
326747	06/01/2022	BURNS & MCDONNELL INCMaster PL		124922-13	604-000-221.001	3,295.28	
326748	06/01/2022	NE DEPT OF ENVIRONMENT & ENER		35668	604-000-221.001	612.00	
326749	06/01/2022	SCS ENGINEERSGROUNDWATER MONIT		0435373	604-000-221.001	11,403.36	
330060	06/29/2022	JC RAMSDELL ENVIRO SERVICES IN		5185	604-000-221.001	5,237.50	
330061	06/29/2022	SANITAS TECHNOLOGIESSOFTWARE		07220602	604-000-221.001	395.00	
330957	07/12/2022	BURNS & MCDONNELL INCMaster PL		124922-14	604-000-221.001	1,857.40	
330958	07/12/2022	CAROLINA SOFTWARESUPPORT		83768	604-000-221.001	166.67	
330961	07/12/2022	STANTON CO TREASURERHOST FEE		JULY 2022	604-000-221.001	26,287.66	
331745	07/27/2022	SCS ENGINEERSLANDFILL MONITORI		0439828	604-000-221.001	2,807.20	
334692	08/30/2022	NE DEPT OF ENVIRONMENT & ENER		35903	604-000-221.001	7,500.00	
334693	08/30/2022	SCS ENGINEERSLANDFILL MONITORI		0438053	604-000-221.001	4,385.91	
334690	08/31/2022	BURNS & MCDONNELL INCPROF ENGI		147043-2	604-000-221.001	3,085.85	
336590	09/14/2022	BAIRD HOLMPROFESSIONAL SERVICE		285504	604-000-221.001	1,375.00	
336592	09/14/2022	SCS ENGINEERSLANDFILL MONITORI		0444889	604-000-221.001	614.55	
339244	09/30/2022	STANTON CO TREASURERHOST FEE		OCTOBER 2022	604-000-221.001	26,888.93	
340423	09/30/2022	SCS ENGINEERSMONITORING		0447668	604-000-221.001	3,072.75	
342199	09/30/2022	BURNS & MCDONNELL INCPOND REPA		147072-1	604-000-221.001	4,887.35	
Journal Totals						143,256.98	0.00
Journal GJ: GENERAL JOURNAL							
322236	03/31/2022	NNSWC ADMIN FEE		28266	Multiple	3,629.66	
330499	06/30/2022	JUNE ADMIN FEES		28418	Multiple	3,629.66	
333383	07/31/2022	JULY ADMIN FEE NSNWC		28459	Multiple	3,629.66	
341753	09/30/2022	DESIGN OF CELL 6 PHASE I		28593	604-229-587.000	3,085.85	
Journal Totals						10,888.98	3,085.85
Journal JE: JOURNAL ENTRY WITH DTFD							
323829	04/30/2022	RCRD TRANS FR NNSWC TO CITY FO		28304	Multiple	3,629.66	
327273	05/31/2022	RCRD TRANS FR NNSWC TO CITY FO		28376	Multiple	3,629.66	
336019	08/31/2022	RCRD TRANS FR NNSWC TO CITY FO		28495	Multiple	3,629.66	
338787	09/30/2022	RCRD TRANS FR NNSWC TO CITY FO		28539	Multiple	3,629.66	
Journal Totals						14,518.64	0.00
Totals for 604-229-568.000						168,664.60	3,085.85
Balance 03/01/22:					89,944.31		
Net Change:					165,578.75		
Balance 09/30/22:					255,523.06		

604-229-578.000 INTERFUND TRANS. OUT						
Journal GJ: GENERAL JOURNAL						
320931	03/23/2022	TRANSFER FR NNSWC TO CLOSURE A		28236	Multiple	393,013.00

JE #	Date	Description	Reference #	OFFSETTING GL	DEBIT	CREDIT
604-229-578.000 INTERFUND TRANS. OUT						
Journal GJ: GENERAL JOURNAL						
Journal Totals					393,013.00	0.00
Totals for 604-229-578.000					393,013.00	0.00
Balance 03/01/22:				0.00		
Net Change:				393,013.00		
Balance 09/30/22:				393,013.00		

604-229-587.000 INFRA-STRUCTURE						
Journal AP: Accounts Payable						
333610	08/10/2022	BURNS & MCDONNELL INCENGINEERI	147043-1	604-000-221.001	4,323.58	
340421	09/30/2022	BURNS & MCDONNELL INCENGINEERI	147043-3	604-000-221.001	42,066.89	
Journal Totals					46,390.47	0.00
Journal GJ: GENERAL JOURNAL						
341753	09/30/2022	DESIGN OF CELL 6 PHASE I	28593	604-229-568.000	3,085.85	
Journal Totals					3,085.85	0.00
Totals for 604-229-587.000					49,476.32	0.00
Balance 03/01/22:				0.00		
Net Change:				49,476.32		
Balance 09/30/22:				49,476.32		

Fund 804 NNSWC CLOSURE/POST CLOSU

GL Number	Description	Balance
*** Assets ***		
Cash		
804-000-115.009	NNSWC CLOSURE/POST MIDWEST6720	29,589.90
804-000-116.001	U.S. TREASURIES	12,552,704.98
Cash		<u>12,582,294.88</u>
Accounts Receivable		
Accounts Receivable		<u>0.00</u>
Due From Other Funds		
Due From Other Funds		<u>0.00</u>
Total Assets		<u>12,582,294.88</u>
*** Liabilities ***		
Other Liabilities		
804-000-225.002	ACCRUED CLOSURE/POST CLO	11,309,464.33
Other Liabilities		<u>11,309,464.33</u>
Total Liabilities		<u>11,309,464.33</u>
*** Fund Balance ***		
Unassigned		
804-000-295.001	RETAINED EARN.-UNRESERV	828,821.08
Unassigned		<u>828,821.08</u>
Total Fund Balance		<u>828,821.08</u>
Beginning Fund Balance		828,821.08
Net of Revenues VS Expenditures		444,009.47
Ending Fund Balance		1,272,830.55
Total Liabilities And Fund Balance		12,582,294.88

ACCOUNT DESCRIPTION	2021-22 AMENDED BUDGET	ACTIVITY FOR MONTH 09/30/20 INCREASE (DECR)	YTD BALANCE		AVAILABLE		% BDGT USED
			09/30/2022 NORMAL (ABNORM)	09/30/2022 NORMAL (ABNORM)	BALANCE NORMAL (ABNORM)	BALANCE NORMAL (ABNORM)	
Dept 000							
Fund 804 - NNSWC CLOSURE/POST CLOSU							
OTHER INTEREST INCOME							
388.001 OTHER INTEREST INCOME	314,000.00	7.65	50,996.47	263,003.53	16.24		
OTHER INTEREST INCOME	314,000.00	7.65	50,996.47	263,003.53	16.24		
INTERFUND TRANS. IN							
391.001 INTERFUND OPER.TRANS.IN	383,120.00	0.00	393,013.00	(9,893.00)	102.58		
INTERFUND TRANS. IN	383,120.00	0.00	393,013.00	(9,893.00)	102.58		
<hr/>							
FUND TOTALS							
TOTAL REVENUES	697,120.00	7.65	444,009.47	253,110.53	63.69		
TOTAL EXPENDITURES	0.00	0.00	0.00	0.00	0.00		
NET OF REVENUES & EXPENDITURES	697,120.00	7.65	444,009.47	253,110.53	63.69		
<hr/>							
Net - Dept 000	697,120.00	7.65	444,009.47	253,110.53			

User: MDrevecky
DB: Cityofnorfolk

FROM 804-000-115.002 TO 804-229-537.000
TRANSACTIONS FROM 03/01/2022 TO 09/30/2022

JE #	Date	Description	Reference #	OFFSETTING GL	DEBIT	CREDIT
804-000-115.009 NNSWC CLOSURE/POST MIDWEST6720						
Journal GJ: GENERAL JOURNAL						
321802	03/17/2022	CLOSURE POST CLOSURE SAFEKEEPI	28239	804-000-388.001		70.00
320931	03/23/2022	TRANSFER FR NNSWC TO CLOSURE A	28236	Multiple	393,013.00	
321940	03/25/2022	PURCHASE US TREASURY	28249	804-000-116.001		439,410.40
320865	03/31/2022	ENTER INTEREST AMOUNTS	28232	Multiple	37.66	
323119	04/19/2022	NNSWC INVESTMENT INCOME	28289	Multiple	7,878.47	
323119	04/19/2022	NNSWC INVESTMENT INCOME	28289	Multiple	12,118.29	
323120	04/22/2022	SAFEKEEPING FEES	28290	804-000-388.001		35.00
323068	04/30/2022	ENTER INTEREST AMOUNTS	28286	Multiple	18.85	
325579	05/31/2022	ENTER INTEREST AMOUNTS	28346	Multiple	10.87	
330166	06/23/2022	TRADE DDA FEE	28403	804-000-388.001		70.00
329013	06/30/2022	ENTER INTEREST AMOUNTS	28398	Multiple	10.51	
331693	07/18/2022	SAFEKEEPING FEES WELLS FARGO	28429	Multiple		35.00
331701	07/31/2022	ENTER INTEREST AMOUNTS	28442	Multiple	10.84	
334610	08/17/2022	SAFEKEEPING FEES	28470	Multiple		35.00
334618	08/31/2022	ENTER INTEREST AMOUNTS	28484	Multiple	30.59	
334683	08/31/2022	DIVIDEND WELLS FARGO BANK INT	28486	804-000-388.001	5,967.50	
338305	09/19/2022	WF SAFEKEEPING FEES	28506	Multiple		35.00
338313	09/30/2022	ENTER INTEREST AMOUNTS	28519	Multiple	42.65	
Journal Totals					419,139.23	439,690.40
Totals for 804-000-115.009					419,139.23	439,690.40
Balance 03/01/22:				50,141.07		
Net Change:				(20,551.17)		
Balance 09/30/22:				29,589.90		

804-000-116.001 U.S. TREASURIES						
Journal GJ: GENERAL JOURNAL						
321940	03/25/2022	PURCHASE US TREASURY	28249	804-000-115.009	439,410.40	
Journal Totals					439,410.40	0.00
Totals for 804-000-116.001					439,410.40	0.00
Balance 03/01/22:				12,113,294.58		
Net Change:				439,410.40		
Balance 09/30/22:				12,552,704.98		

804-000-388.001 OTHER INTEREST INCOME						
Journal GJ: GENERAL JOURNAL						
321802	03/17/2022	CLOSURE POST CLOSURE SAFEKEEPI	28239	804-000-115.009	70.00	
320865	03/31/2022	ENTER INTEREST AMOUNTS	28232	Multiple		37.66
323119	04/19/2022	NNSWC INVESTMENT INCOME	28289	Multiple		7,878.47
323119	04/19/2022	NNSWC INVESTMENT INCOME	28289	Multiple		12,118.29
323120	04/22/2022	SAFEKEEPING FEES	28290	804-000-115.009	35.00	
323068	04/30/2022	ENTER INTEREST AMOUNTS	28286	Multiple		18.85
325579	05/31/2022	ENTER INTEREST AMOUNTS	28346	Multiple		10.87
330166	06/23/2022	TRADE DDA FEE	28403	804-000-115.009	70.00	
329013	06/30/2022	ENTER INTEREST AMOUNTS	28398	Multiple		10.51
331693	07/18/2022	SAFEKEEPING FEES WELLS FARGO	28429	Multiple	35.00	
331701	07/31/2022	ENTER INTEREST AMOUNTS	28442	Multiple		10.84
334610	08/17/2022	SAFEKEEPING FEES	28470	Multiple	35.00	
334618	08/31/2022	ENTER INTEREST AMOUNTS	28484	Multiple		30.59
334683	08/31/2022	DIVIDEND WELLS FARGO BANK INT	28486	804-000-115.009		5,967.50
338305	09/19/2022	WF SAFEKEEPING FEES	28506	Multiple	35.00	
338313	09/30/2022	ENTER INTEREST AMOUNTS	28519	Multiple		42.65
Journal Totals					280.00	26,126.23
Totals for 804-000-388.001					280.00	26,126.23
Balance 03/01/22:				25,150.24		
Net Change:				25,846.23		
Balance 09/30/22:				50,996.47		

804-000-391.001 INTERFUND OPER.TRANS.IN						
Journal GJ: GENERAL JOURNAL						
320931	03/23/2022	TRANSFER FR NNSWC TO CLOSURE A	28236	Multiple		393,013.00
Journal Totals					0.00	393,013.00
Totals for 804-000-391.001					0.00	393,013.00
Balance 03/01/22:				0.00		
Net Change:				393,013.00		
Balance 09/30/22:				393,013.00		

Fund 604 NE NEBR SOLID WASTE COAL

GL Number	Description	Balance
*** Assets ***		
Cash		
604-000-111.009	RETURNED CHECKS	153.00
604-000-113.021	NNSWC PRIMARY ACT-MIDWEST 6709	5,601,538.56
604-000-116.001	U.S. TREASURIES	2,982,762.06
Cash		<u>8,584,453.62</u>
Accounts Receivable		
604-000-121.003	ACCOUNTS RECEIVABLE	182,547.38
Accounts Receivable		<u>182,547.38</u>
Fixed Assets		
604-000-151.001	LAND	1,218,051.00
604-000-151.002	BUILDINGS&IMPROVEMENTS	10,852,287.31
604-000-151.005	FURNITURE & EQUIPMENT	26,154.08
Fixed Assets		<u>12,096,492.39</u>
Accum. Depreciation		
604-000-155.001	ACCUMULATED DEPRECIATION	(7,648,033.69)
Accum. Depreciation		<u>(7,648,033.69)</u>
Other Assets		
Other Assets		<u>0.00</u>
Due From Other Funds		
604-000-138.009	DUE FROM DISB. FUND	(653.01)
Due From Other Funds		<u>(653.01)</u>
Deferred Outflows		
Deferred Outflows		<u>0.00</u>
Total Assets		<u>13,214,806.69</u>
*** Liabilities ***		
Accounts Payable		
604-000-221.001	ACCOUNTS PAYABLE	6,687.61
604-000-222.006	NEBR.WITHHOLDING PAYABLE	206.25
Accounts Payable		<u>6,893.86</u>
Liabilities-ST		
Liabilities-ST		<u>0.00</u>
Liabilities-LT (over 1 year)		
Liabilities-LT (over 1 year)		<u>0.00</u>
Deferred Inflows		
Deferred Inflows		<u>0.00</u>
Total Liabilities		<u>6,893.86</u>
*** Fund Balance ***		
Unassigned		

Fund 604 NE NEBR SOLID WASTE COAL

GL Number	Description	Balance
*** Fund Balance ***		
604-000-295.001	RETAINED EARN.-UNRESERV	11,606,015.43
	Unassigned	<u>11,606,015.43</u>
	Restricted	<u>0.00</u>
	Total Fund Balance	<u>11,606,015.43</u>
	Beginning Fund Balance - 21-22	<u>11,606,015.43</u>
	Net of Revenues VS Expenditures - 21-22	<u>1,016,532.17</u>
	*21-22 End FB/22-23 Beg FB	12,622,547.60
	Net of Revenues VS Expenditures - Current Year	585,365.23
	Ending Fund Balance	13,207,912.83
	Total Liabilities And Fund Balance	13,214,806.69

* Year Not Closed

PERIOD ENDING 01/31/2023

ACCOUNT DESCRIPTION	ACTIVITY FOR		YTD BALANCE	AVAILABLE		% BDGT USED
	2022-23 AMENDED BUDGET	MONTH 01/31/20 INCREASE (DECR)	01/31/2023 NORMAL (ABNORM)	BALANCE	NORMAL (ABNORM)	
Fund 604 - NE NEBR SOLID WASTE COAL						
Dept 000						
PROPRIETARY FUND USE CHARGES						
367.001 USE FEES	0.00	202,170.39	934,143.22	(934,143.22)		100.00
PROPRIETARY FUND USE CHARGES	0.00	202,170.39	934,143.22	(934,143.22)		100.00
OTHER REVENUE						
374.008 LATE CHARGES	0.00	0.10	48.26	(48.26)		100.00
OTHER REVENUE	0.00	0.10	48.26	(48.26)		100.00
OTHER INTEREST INCOME						
388.001 OTHER INTEREST INCOME	0.00	11,668.15	41,092.44	(41,092.44)		100.00
OTHER INTEREST INCOME	0.00	11,668.15	41,092.44	(41,092.44)		100.00
Net - Dept 000	0.00	213,838.64	975,283.92	(975,283.92)		
Dept 229 - NE NEBR SOLID WASTE COAL						
PERSONNEL COSTS						
511.000 SALARIES & WAGES	0.00	6,774.81	27,829.19	(27,829.19)		100.00
514.000 PENSION	0.00	382.17	1,533.92	(1,533.92)		100.00
515.000 FICA	0.00	518.28	2,128.94	(2,128.94)		100.00
PERSONNEL COSTS	0.00	7,675.26	31,492.05	(31,492.05)		100.00
OPER. SUP. AND MATERIALS						
524.000 VEHICULAR FUEL & LUBE	0.00	135.32	569.18	(569.18)		100.00
529.000 OTHER OPER. SUP. & MAT	0.00	0.00	35.73	(35.73)		100.00
OPER. SUP. AND MATERIALS	0.00	135.32	604.91	(604.91)		100.00
OTHER OPERATING COSTS						
532.000 GARBAGE FEES	0.00	116,003.19	290,586.91	(290,586.91)		100.00
OTHER OPERATING COSTS	0.00	116,003.19	290,586.91	(290,586.91)		100.00
UTILITIES & MAINTENANCE						
541.000 ELECTRICITY	0.00	244.41	502.71	(502.71)		100.00
546.000 BLDG, GRND & PLANT MAINT	0.00	932.81	2,866.63	(2,866.63)		100.00
547.000 MACHINERY & VEH. MAINT	0.00	20.00	20.00	(20.00)		100.00
UTILITIES & MAINTENANCE	0.00	1,197.22	3,389.34	(3,389.34)		100.00
LEGISLATIVE AFFAIRS						
553.000 TRAVEL AND TRAINING	0.00	0.00	540.05	(540.05)		100.00
555.000 DUES AND PUBLICATIONS	0.00	0.00	245.00	(245.00)		100.00
LEGISLATIVE AFFAIRS	0.00	0.00	785.05	(785.05)		100.00
OTHER ADMIN. & OVERHEAD						
562.000 TELEPHONE & TELETYPE	0.00	220.00	656.56	(656.56)		100.00
563.000 POSTAGE	0.00	12.60	38.38	(38.38)		100.00
564.000 OFFICE SUPPLIES	0.00	56.72	494.16	(494.16)		100.00
568.000 OTHER PROFESSIONAL FEES	0.00	28,200.52	61,871.33	(61,871.33)		100.00
OTHER ADMIN. & OVERHEAD	0.00	28,489.84	63,060.43	(63,060.43)		100.00
Net - Dept 229 - NE NEBR SOLID WASTE COAL	0.00	(153,500.83)	(389,918.69)	389,918.69		
Fund 604 - NE NEBR SOLID WASTE COAL:						
TOTAL REVENUES	0.00	213,838.64	975,283.92	(975,283.92)		100.00
TOTAL EXPENDITURES	0.00	153,500.83	389,918.69	(389,918.69)		100.00
NET OF REVENUES & EXPENDITURES	0.00	60,337.81	585,365.23	(585,365.23)		100.00

User: MDrevecky FROM 604-000-113.002 TO 604-229-598.000

DB: Cityofnorfolk TRANSACTIONS FROM 10/01/2022 TO 01/31/2023

Table with columns: JE #, Date, Description, Reference #, OFFSETTING GL, DEBIT, CREDIT. Contains detailed transaction records with multiple rows of financial data.

User: MDrevecky
DB: Cityofnorfolk

FROM 604-000-113.002 TO 604-229-598.000
TRANSACTIONS FROM 10/01/2022 TO 01/31/2023

Table with columns: JE #, Date, Description, Reference #, OFFSETTING GL, DEBIT, CREDIT. Contains multiple journal entries grouped by journal type (CR, GJ, JE, PR, PRR) and ending with Journal Totals.

User: MDrevecky FROM 604-000-113.002 TO 604-229-598.000
 DB: Cityofnorfolk TRANSACTIONS FROM 10/01/2022 TO 01/31/2023

JE #	Date	Description	Reference #	OFFSETTING GL	DEBIT	CREDIT
604-000-121.003 ACCOUNTS RECEIVABLE						
Journal CR: Cash Receipts						
346871	01/13/2023	JOHNS DISPOSAL INC22-0101000	100390691	604-000-113.021		2,803.11
346877	01/13/2023	ASSOCIATED WHOLESALE GROCERS23	100390699	604-000-113.021		1,017.38
347156	01/17/2023	MADISON, CITY OF23-0101163	100391123	604-000-113.021		21.83
347175	01/17/2023	NORFOLK, CITY OF23-0101151	100391153	604-000-113.021		60,933.07
347191	01/17/2023	WASTE CONNECTIONS - NORFOLK23-	100391168	604-000-113.021		668.66
347323	01/20/2023	OAKLAND, CITY OF23-0101153	100391586	604-000-113.021		1,340.41
347393	01/23/2023	U&I SANITATION23-0101164	100391863	604-000-113.021		244.33
347394	01/23/2023	MIDWEST WIRE SOLUTIONS23-01011	100391864	604-000-113.021		23.28
347395	01/23/2023	DEG ENTERPRISES23-0101167	100391865	604-000-113.021		28.56
347396	01/23/2023	DEG ENTERPRISES22-0101010	100391866	604-000-113.021		12.56
347414	01/23/2023	DOERNEMANN CONSTRUCTION22-0100	100391976	604-000-113.021		0.09
347415	01/23/2023	DOERNEMANN CONSTRUCTION22-0100	100391977	604-000-113.021		0.09
347416	01/23/2023	DOERNEMANN CONSTRUCTION22-0100	100391978	604-000-113.021		9.37
347417	01/23/2023	DOERNEMANN CONSTRUCTION22-0101	100391979	604-000-113.021		0.09
347418	01/23/2023	DOERNEMANN CONSTRUCTION23-0101	100391980	Multiple		50.16
347418	01/23/2023	DOERNEMANN CONSTRUCTION23-0101	100391980	Multiple		0.10
347725	01/31/2023	ALBRACHT DISPOSAL SERVICE23-01	100393296	604-000-113.021		117.16
Journal Totals					0.00	761,930.33
Journal MRA: Misc Receivables Adjustments						
345087	12/23/2022	SUMMARY MRA 12/23/2022		604-000-367.001	12.00	
Journal Totals					12.00	0.00
Journal MRB: Misc Receivables Billing						
338516	10/05/2022	SUMMARY MRB 10/05/2022		Multiple	261,804.54	
341509	11/08/2022	SUMMARY MRB 11/08/2022		Multiple	242,514.13	
343101	12/06/2022	SUMMARY MRB 12/06/2022		Multiple	221,067.32	
345728	01/05/2023	SUMMARY MRB 01/05/2023		Multiple	201,667.49	
Journal Totals					927,053.48	0.00
Journal MRR: Misc Receivables Receipting						
343183	12/07/2022	MR Payments: 12/07/2022		Multiple		12.00
Journal Totals					0.00	12.00
Totals for 604-000-121.003					927,065.48	761,942.33
Balance 10/01/22:				17,424.23		
Net Change:				165,123.15		
Balance 01/31/23:				182,547.38		

604-000-138.009 DUE FROM DISB. FUND						
Journal CD: Cash Disbursements						
341507	11/07/2022	U S BANK	14036 (E)	Multiple		724.08
344308	12/14/2022	U S BANK	14254 (E)	Multiple		2,173.63
346499	01/06/2023	U S BANK	14395 (E)	Multiple		562.54
Journal Totals					0.00	3,460.25
Journal GJ: GENERAL JOURNAL						
340136	10/11/2022	RCRD TRANSFER FR NNSWC TO CITY	28540	Multiple	85.41	
340136	10/11/2022	RCRD TRANSFER FR NNSWC TO CITY	28540	Multiple	1,054.77	
341751	10/31/2022	RCRD MONTHLY FUEL EXPENSE	28600	Multiple		110.69
342696	11/14/2022	RECORD TRANSF FR NNSWC TO CITY	28604	Multiple	185.29	
343614	11/30/2022	RCRD MONTHLY FUEL EXPENSE	28640	Multiple		126.20
344472	12/14/2022	TRANSFER FR NNSWC TO CITY	28645	Multiple	850.28	
346866	12/31/2022	RCRD MONTHLY FUEL EXPENSE	28677	Multiple		68.07
349522	01/31/2023	RCRD MONTHLY FUEL EXPENSE	28710	Multiple		90.47
349698	01/31/2023	CRRCT DEG OVERPYMT S/B TS NOT	28717	Multiple		12.00
Journal Totals					2,175.75	407.43
Journal JE: JOURNAL ENTRY WITH DTFD						
347088	01/17/2023	TRANSFER FR NNSWC TO CITY	28679	Multiple	2,241.70	
Journal Totals					2,241.70	0.00
Journal MRR: Misc Receivables Receipting						
343183	12/07/2022	MR Payments: 12/07/2022		Multiple	12.00	
Journal Totals					12.00	0.00
Totals for 604-000-138.009					4,429.45	3,867.68
Balance 10/01/22:				1,214.78 CR		
Net Change:				561.77		
Balance 01/31/23:				653.01 CR		

604-000-221.001 ACCOUNTS PAYABLE						
Journal AP: Accounts Payable						
339242	10/11/2022	CAROLINA SOFTWAREWASTEWORKS SO	84722	604-229-568.000		166.67
340683	10/18/2022	FARMERS UNION COOP SUPPLY COUN	22100010165	604-229-524.000		42.40
340849	10/18/2022	MENARDS-NORFOLKFIBERGLASS FILT	22108735933	604-229-529.000		35.73

User: MDrevecky
DB: Cityofnorfolk

FROM 604-000-113.002 TO 604-229-598.000
TRANSACTIONS FROM 10/01/2022 TO 01/31/2023

JE #	Date	Description	Reference #	OFFSETTING GL	DEBIT	CREDIT
604-000-221.001 ACCOUNTS PAYABLE						
Journal CD: Cash Disbursements						
344308	12/14/2022	U S BANK	14254 (E)	Multiple	2,173.63	
344801	12/19/2022	CASEY'S MAIL SERVICE LLC	8670	604-000-113.021	16.18	
344802	12/19/2022	WASTE CONNECTIONS OF NE	8671	604-000-113.021	85,072.87	
345575	01/03/2023	BURNS & MCDONNELL INC	8673	604-000-113.021	1,012.65	
345576	01/03/2023	CLARKSON FIRE DIST #1	8674	604-000-113.021	750.00	
345577	01/03/2023	SCS ENGINEERS	8675	604-000-113.021	10,820.98	
346499	01/06/2023	U S BANK	14395 (E)	Multiple	562.54	
347050	01/17/2023	CAROLINA SOFTWARE	8676	604-000-113.021	166.67	
347051	01/17/2023	CASEY'S MAIL SERVICE LLC	8677	604-000-113.021	12.60	
347052	01/17/2023	NE DEPT OF ENVIRONMENT & ENER	8678	604-000-113.021	34,820.45	
347053	01/17/2023	STANTON CO TREASURER	8679	604-000-113.021	22,865.03	
347054	01/17/2023	WASTE CONNECTIONS OF NE	8680	604-000-113.021	81,182.74	
Journal Totals					639,873.10	89,510.85
Journal GJ: GENERAL JOURNAL						
340136	10/11/2022	RCRD TRANSFER FR NNSWC TO CITY	28540	Multiple	3,629.66	
342696	11/14/2022	RECORD TRANSF FR NNSWC TO CITY	28604	Multiple	3,939.72	
344472	12/14/2022	TRANSFER FR NNSWC TO CITY	28645	Multiple	3,939.72	
Journal Totals					11,509.10	0.00
Journal JE: JOURNAL ENTRY WITH DTFD						
341752	10/31/2022	RCRD TRANS FR NNSWC TO CITY FO	28603	Multiple		3,939.72
344376	11/30/2022	RCRD TRANS FR NNSWC TO CITY FO	28644	Multiple		3,939.72
346867	12/31/2022	RCRD TRANS FR NNSWC TO CITY FO	28678	Multiple		3,939.72
347088	01/17/2023	TRANSFER FR NNSWC TO CITY	28679	Multiple	3,939.72	
349702	01/31/2023	RCRD TRANS FR NNSWC TO CITY FO	28719	Multiple		3,939.72
Journal Totals					3,939.72	15,758.88
Totals for 604-000-221.001					744,832.77	537,052.91
Balance 10/01/22:					214,467.47	
Net Change:					(207,779.86)	
Balance 01/31/23:					6,687.61	

604-000-222.005 FED. WITHHOLDING PAYABLE						
Journal PR: Payroll						
338813	10/14/2022	SUMMARY PR 10/14/2022		Multiple		200.65
339617	10/28/2022	SUMMARY PR 10/28/2022		Multiple		209.12
341651	11/15/2022	SUMMARY PR 11/15/2022		Multiple		203.83
342326	11/30/2022	SUMMARY PR 11/30/2022		Multiple		207.93
343492	12/15/2022	SUMMARY PR 12/15/2022		Multiple		201.08
345186	12/30/2022	SUMMARY PR 12/30/2022		Multiple		201.08
346749	01/13/2023	SUMMARY PR 01/13/2023		Multiple		185.40
347536	01/30/2023	SUMMARY PR 01/30/2023		Multiple		199.10
Journal Totals					0.00	1,608.19
Journal PRR: Payroll Remittance Checks						
339690	10/26/2022	SUMMARY PRR 10/26/2022	EFT858	Multiple	409.77	
342445	11/28/2022	SUMMARY PRR 11/28/2022	EFT866	Multiple	411.76	
345199	12/28/2022	SUMMARY PRR 12/28/2022	EFT875	Multiple	402.16	
347550	01/26/2023	SUMMARY PRR 01/26/2023	EFT883	Multiple	384.50	
Journal Totals					1,608.19	0.00
Totals for 604-000-222.005					1,608.19	1,608.19
Balance 10/01/22:					0.00	
Net Change:					0.00	
Balance 01/31/23:					0.00	

604-000-222.006 NEBR.WITHHOLDING PAYABLE						
Journal PR: Payroll						
338813	10/14/2022	SUMMARY PR 10/14/2022		Multiple		105.71
339617	10/28/2022	SUMMARY PR 10/28/2022		Multiple		110.75
341651	11/15/2022	SUMMARY PR 11/15/2022		Multiple		110.42
342326	11/30/2022	SUMMARY PR 11/30/2022		Multiple		114.72
343492	12/15/2022	SUMMARY PR 12/15/2022		Multiple		105.30
345186	12/30/2022	SUMMARY PR 12/30/2022		Multiple		107.19
346749	01/13/2023	SUMMARY PR 01/13/2023		Multiple		100.25
347536	01/30/2023	SUMMARY PR 01/30/2023		Multiple		106.00
Journal Totals					0.00	860.34
Journal PRR: Payroll Remittance Checks						
345200	12/28/2022	SUMMARY PRR 12/28/2022	EFT874	604-000-113.021	654.09	
Journal Totals					654.09	0.00

User: MDrevecky
DB: Cityofnorfolk

FROM 604-000-113.002 TO 604-229-598.000
TRANSACTIONS FROM 10/01/2022 TO 01/31/2023

JE #	Date	Description	Reference #	OFFSETTING GL	DEBIT	CREDIT
604-000-222.006 NEBR.WITHHOLDING PAYABLE						
Totals for 604-000-222.006					654.09	860.34
Balance 10/01/22:				0.00		
Net Change:				206.25		
Balance 01/31/23:				206.25		

604-000-222.007 FICA TAX PAYABLE						
Journal PR: Payroll						
338813	10/14/2022	SUMMARY PR 10/14/2022		Multiple		523.60
339617	10/28/2022	SUMMARY PR 10/28/2022		Multiple		537.08
341651	11/15/2022	SUMMARY PR 11/15/2022		Multiple		546.66
342326	11/30/2022	SUMMARY PR 11/30/2022		Multiple		561.62
343492	12/15/2022	SUMMARY PR 12/15/2022		Multiple		519.82
345186	12/30/2022	SUMMARY PR 12/30/2022		Multiple		532.54
346749	01/13/2023	SUMMARY PR 01/13/2023		Multiple		521.92
347536	01/30/2023	SUMMARY PR 01/30/2023		Multiple		514.64
Journal Totals					0.00	4,257.88
Journal PRR: Payroll Remittance Checks						
339690	10/26/2022	SUMMARY PRR 10/26/2022	EFT858	Multiple	1,060.68	
342445	11/28/2022	SUMMARY PRR 11/28/2022	EFT866	Multiple	1,108.28	
345199	12/28/2022	SUMMARY PRR 12/28/2022	EFT875	Multiple	1,052.36	
347550	01/26/2023	SUMMARY PRR 01/26/2023	EFT883	Multiple	1,036.56	
Journal Totals					4,257.88	0.00
Totals for 604-000-222.007					4,257.88	4,257.88
Balance 10/01/22:				0.00		
Net Change:				0.00		
Balance 01/31/23:				0.00		

604-000-223.002 PAY-TO RETIREMENT PLANS						
Journal PR: Payroll						
338813	10/14/2022	SUMMARY PR 10/14/2022		Multiple		190.03
339617	10/28/2022	SUMMARY PR 10/28/2022		Multiple		194.97
341651	11/15/2022	SUMMARY PR 11/15/2022		Multiple		191.89
342326	11/30/2022	SUMMARY PR 11/30/2022		Multiple		194.28
343492	12/15/2022	SUMMARY PR 12/15/2022		Multiple		190.29
345186	12/30/2022	SUMMARY PR 12/30/2022		Multiple		190.29
346749	01/13/2023	SUMMARY PR 01/13/2023		Multiple		187.09
347536	01/30/2023	SUMMARY PR 01/30/2023		Multiple		195.08
Journal Totals					0.00	1,533.92
Journal PRR: Payroll Remittance Checks						
339689	10/26/2022	SUMMARY PRR 10/26/2022	8652	604-000-113.021	385.00	
342444	11/28/2022	SUMMARY PRR 11/28/2022	8662	604-000-113.021	386.17	
345198	12/28/2022	SUMMARY PRR 12/28/2022	8672	604-000-113.021	380.58	
347549	01/26/2023	SUMMARY PRR 01/26/2023	8681	604-000-113.021	382.17	
Journal Totals					1,533.92	0.00
Totals for 604-000-223.002					1,533.92	1,533.92
Balance 10/01/22:				0.00		
Net Change:				0.00		
Balance 01/31/23:				0.00		

604-000-367.001 USE FEES						
Journal CR: Cash Receipts						
338569	10/05/2022	NNSWC LANDFILLNNSWC LANDFILL G 100375231		604-000-113.021		390.00
338570	10/05/2022	NNSWC LANDFILLNNSWC LANDFILL G 100375231		604-000-113.021		18.00
338571	10/05/2022	NNSWC LANDFILLNNSWC LANDFILL G 100375231		604-000-113.021		79.00
338572	10/05/2022	NNSWC LANDFILLNNSWC LANDFILL G 100375231		604-000-113.021		12.00
338573	10/05/2022	NNSWC LANDFILLNNSWC LANDFILL G 100375231		604-000-113.021		71.00
338574	10/05/2022	NNSWC LANDFILLNNSWC LANDFILL G 100375231		604-000-113.021		36.00
338575	10/05/2022	NNSWC LANDFILLNNSWC LANDFILL G 100375231		604-000-113.021		95.00
338576	10/05/2022	NNSWC LANDFILLNNSWC LANDFILL G 100375231		604-000-113.021		101.00
338577	10/05/2022	NNSWC LANDFILLNNSWC LANDFILL G 100375231		604-000-113.021		81.00
338578	10/05/2022	NNSWC LANDFILLNNSWC LANDFILL G 100375231		604-000-113.021		63.00
338579	10/05/2022	NNSWC LANDFILLNNSWC LANDFILL G 100375231		604-000-113.021		72.00
338580	10/05/2022	NNSWC LANDFILLNNSWC LANDFILL G 100375231		604-000-113.021		12.00
338839	10/11/2022	NNSWC LANDFILLNNSWC LANDFILL G 100376340		604-000-113.021		483.00
338840	10/11/2022	NNSWC LANDFILLNNSWC LANDFILL G 100376340		604-000-113.021		93.00
338841	10/11/2022	NNSWC LANDFILLNNSWC LANDFILL G 100376340		604-000-113.021		97.00
338842	10/11/2022	NNSWC LANDFILLNNSWC LANDFILL G 100376340		604-000-113.021		12.00
338843	10/11/2022	NNSWC LANDFILLNNSWC LANDFILL G 100376340		604-000-113.021		92.00
338844	10/11/2022	NNSWC LANDFILLNNSWC LANDFILL G 100376340		604-000-113.021		12.00

JE #	Date	Description	Reference #	OFFSETTING GL	DEBIT	CREDIT
604-000-374.008 LATE CHARGES						
Journal MRB: Misc Receivables Billing						
338516	10/05/2022	SUMMARY MRB 10/05/2022		Multiple		0.99
341509	11/08/2022	SUMMARY MRB 11/08/2022		Multiple		23.58
343101	12/06/2022	SUMMARY MRB 12/06/2022		Multiple		23.59
345728	01/05/2023	SUMMARY MRB 01/05/2023		Multiple		0.10
Journal Totals					0.00	48.26
Totals for 604-000-374.008					0.00	48.26
Balance 10/01/22:					0.00	
Net Change:					48.26	
Balance 01/31/23:					48.26	

604-000-388.001 OTHER INTEREST INCOME						
Journal GJ: GENERAL JOURNAL						
340142	10/19/2022	WF SAFEKEEPING FEES	28567	Multiple	56.00	
340147	10/31/2022	ENTER INTEREST AMOUNTS	28582	Multiple		8,126.21
342700	11/17/2022	SAFEKEEPING FEES WELLS FARGO	28608	Multiple	56.00	
342706	11/30/2022	ENTER INTEREST AMOUNTS	28625	Multiple		9,762.86
345113	12/16/2022	SAFEKEEPING FEES WELLS FARGO	28651	Multiple	56.00	
345741	12/31/2022	ENTER INTEREST AMOUNTS	28667	Multiple		11,703.22
347386	01/23/2023	SAFEKEEPING FEES WELLS FARGO	28689	Multiple	56.00	
347967	01/31/2023	ENTER INTEREST AMOUNTS	28702	Multiple		11,724.15
Journal Totals					224.00	41,316.44
Totals for 604-000-388.001					224.00	41,316.44
Balance 10/01/22:					0.00	
Net Change:					41,092.44	
Balance 01/31/23:					41,092.44	

604-229-511.000 SALARIES & WAGES						
Journal PR: Payroll						
338813	10/14/2022	SUMMARY PR 10/14/2022		Multiple	3,422.35	
339617	10/28/2022	SUMMARY PR 10/28/2022		Multiple	3,510.09	
341651	11/15/2022	SUMMARY PR 11/15/2022		Multiple	3,572.99	
342326	11/30/2022	SUMMARY PR 11/30/2022		Multiple	3,670.86	
343492	12/15/2022	SUMMARY PR 12/15/2022		Multiple	3,397.28	
345186	12/30/2022	SUMMARY PR 12/30/2022		Multiple	3,480.81	
346749	01/13/2023	SUMMARY PR 01/13/2023		Multiple	3,411.33	
347536	01/30/2023	SUMMARY PR 01/30/2023		Multiple	3,363.48	
Journal Totals					27,829.19	0.00
Totals for 604-229-511.000					27,829.19	0.00
Balance 10/01/22:					0.00	
Net Change:					27,829.19	
Balance 01/31/23:					27,829.19	

604-229-514.000 PENSION						
Journal PR: Payroll						
338813	10/14/2022	SUMMARY PR 10/14/2022		Multiple	190.03	
339617	10/28/2022	SUMMARY PR 10/28/2022		Multiple	194.97	
341651	11/15/2022	SUMMARY PR 11/15/2022		Multiple	191.89	
342326	11/30/2022	SUMMARY PR 11/30/2022		Multiple	194.28	
343492	12/15/2022	SUMMARY PR 12/15/2022		Multiple	190.29	
345186	12/30/2022	SUMMARY PR 12/30/2022		Multiple	190.29	
346749	01/13/2023	SUMMARY PR 01/13/2023		Multiple	187.09	
347536	01/30/2023	SUMMARY PR 01/30/2023		Multiple	195.08	
Journal Totals					1,533.92	0.00
Totals for 604-229-514.000					1,533.92	0.00
Balance 10/01/22:					0.00	
Net Change:					1,533.92	
Balance 01/31/23:					1,533.92	

604-229-515.000 FICA						
Journal PR: Payroll						
338813	10/14/2022	SUMMARY PR 10/14/2022		Multiple	261.80	
339617	10/28/2022	SUMMARY PR 10/28/2022		Multiple	268.54	
341651	11/15/2022	SUMMARY PR 11/15/2022		Multiple	273.33	
342326	11/30/2022	SUMMARY PR 11/30/2022		Multiple	280.81	
343492	12/15/2022	SUMMARY PR 12/15/2022		Multiple	259.91	
345186	12/30/2022	SUMMARY PR 12/30/2022		Multiple	266.27	

JE #	Date	Description	Reference #	OFFSETTING GL	DEBIT	CREDIT
604-229-515.000 FICA						
Journal PR: Payroll						
346749	01/13/2023	SUMMARY PR 01/13/2023		Multiple	260.96	
347536	01/30/2023	SUMMARY PR 01/30/2023		Multiple	257.32	
Journal Totals					2,128.94	0.00
Totals for 604-229-515.000					2,128.94	0.00
Balance 10/01/22:					0.00	
Net Change:					2,128.94	
Balance 01/31/23:					2,128.94	

604-229-524.000 VEHICULAR FUEL & LUBE						
Journal AP: Accounts Payable						
340683	10/18/2022	FARMERS UNION COOP SUPPLY COUN	22100010165	604-000-221.001	42.40	
343863	11/16/2022	FARMERS UNION COOP SUPPLY CO1	22110010238	604-000-221.001	41.50	
344253	11/16/2022	U S BANK/MISC TRAVEL EXPFUEL M	22113323843	604-000-221.001	45.00	
348528	01/17/2023	FARMERS UNION COOP SUPPLY CO1	22120010272	604-000-221.001	44.85	
Journal Totals					173.75	0.00
Journal GJ: GENERAL JOURNAL						
341751	10/31/2022	RCRD MONTHLY FUEL EXPENSE	28600	Multiple	110.69	
343614	11/30/2022	RCRD MONTHLY FUEL EXPENSE	28640	Multiple	126.20	
346866	12/31/2022	RCRD MONTHLY FUEL EXPENSE	28677	Multiple	68.07	
349522	01/31/2023	RCRD MONTHLY FUEL EXPENSE	28710	Multiple	90.47	
Journal Totals					395.43	0.00
Totals for 604-229-524.000					569.18	0.00
Balance 10/01/22:					0.00	
Net Change:					569.18	
Balance 01/31/23:					569.18	

604-229-529.000 OTHER OPER. SUP. & MAT						
Journal AP: Accounts Payable						
340849	10/18/2022	MENARDS-NORFOLKFIBERGLASS FILT	22108735933	604-000-221.001	35.73	
Journal Totals					35.73	0.00
Totals for 604-229-529.000					35.73	0.00
Balance 10/01/22:					0.00	
Net Change:					35.73	
Balance 01/31/23:					35.73	

604-229-532.000 GARBAGE FEES						
Journal AP: Accounts Payable						
342204	11/16/2022	WASTE CONNECTIONS OF NEDISPOSA	10312022	604-000-221.001	89,510.85	
342986	11/29/2022	WASTE CONNECTIONS OF NEDISPOSA	10312022	604-000-221.001	89,510.85	
342826	12/05/2022	WASTE CONNECTIONS OF NEVoid In	10312022	604-000-221.001		89,510.85
344731	12/13/2022	WASTE CONNECTIONS OF NEDISPOSA	NOV-22	604-000-221.001	85,072.87	
347047	01/10/2023	NE DEPT OF ENVIRONMENT & ENER	37174	604-000-221.001	34,820.45	
347049	01/10/2023	WASTE CONNECTIONS OF NEDISPOSA	DEC-22	604-000-221.001	81,182.74	
Journal Totals					380,097.76	89,510.85
Totals for 604-229-532.000					380,097.76	89,510.85
Balance 10/01/22:					0.00	
Net Change:					290,586.91	
Balance 01/31/23:					290,586.91	

604-229-541.000 ELECTRICITY						
Journal AP: Accounts Payable						
344231	11/16/2022	STANTON CO PUBLIC POWERPOWER	22100916222	604-000-221.001	117.37	
346417	12/16/2022	STANTON CO PUBLIC POWERNORTHEA	22110921738	604-000-221.001	140.93	
348906	01/17/2023	STANTON CO PUBLIC POWERNORTHEA	22120927546	604-000-221.001	244.41	
Journal Totals					502.71	0.00
Totals for 604-229-541.000					502.71	0.00
Balance 10/01/22:					0.00	
Net Change:					502.71	
Balance 01/31/23:					502.71	

604-229-546.000 BLDG, GRND & PLANT MAINT

JE #	Date	Description	Reference #	OFFSETTING GL	DEBIT	CREDIT
604-229-546.000 BLDG, GRND & PLANT MAINT						
Journal AP: Accounts Payable						
342201	11/16/2022	FAIRBANKS SCALES INCMMAINTENANC	1614885	604-000-221.001	754.00	
343808	11/16/2022	CULLIGAN OF COLUMBUS2210171553	22105473226	604-000-221.001	86.59	
344068	11/16/2022	NAHROLZR31A910391842004	22101061892	604-000-221.001	84.62	
344199	11/16/2022	QED ENVIRONMENTAL INCINSPECTIO	22108593903	604-000-221.001	942.00	
345999	12/16/2022	CULLIGAN OF COLUMBUSOFT WATER	22119898288	604-000-221.001	66.61	
348362	01/17/2023	BOMGAARS00123857	22121238579	Multiple	22.65	
348364	01/17/2023	BOMGAARS00124445	22121244454	604-000-221.001	44.47	
348467	01/17/2023	CULLIGAN OF COLUMBUS2212151517	22125908870	604-000-221.001	74.60	
348679	01/17/2023	MENARDS-NORFOLKBLDG, GRND & PL	23017084459	604-000-221.001	40.48	
348880	01/17/2023	QED ENVIRONMENTAL INCLANDFILL	22129691551	604-000-221.001	270.61	
348085	01/31/2023	NORFOLK AIR INCBLOWER MOTOR	30240	604-000-221.001	480.00	
Journal Totals					2,866.63	0.00
Totals for 604-229-546.000					2,866.63	0.00
Balance 10/01/22:				0.00		
Net Change:				2,866.63		
Balance 01/31/23:				2,866.63		

604-229-547.000 MACHINERY & VEH. MAINT						
Journal AP: Accounts Payable						
348660	01/17/2023	LUEDEKE OIL CO INC12	22120010101	604-000-221.001	20.00	
Journal Totals					20.00	0.00
Totals for 604-229-547.000					20.00	0.00
Balance 10/01/22:				0.00		
Net Change:				20.00		
Balance 01/31/23:				20.00		

604-229-553.000 TRAVEL AND TRAINING						
Journal AP: Accounts Payable						
341033	10/18/2022	NWEACONFERENCE ROB MERCER	22091565276	604-000-221.001	200.00	
342202	11/16/2022	ROB MERCERMILEAGE	20221024	604-000-221.001	27.50	
343985	11/16/2022	LA QUINTA INNS & SUITETRAVEL A	22117621685	604-000-221.001	265.20	
344254	11/16/2022	U S BANK/MISC TRAVEL EXPRED LO	22112007807	604-000-221.001	31.55	
344255	11/16/2022	U S BANK/MISC TRAVEL EXPSUBWAY	22114034944	604-000-221.001	15.80	
Journal Totals					540.05	0.00
Totals for 604-229-553.000					540.05	0.00
Balance 10/01/22:				0.00		
Net Change:				540.05		
Balance 01/31/23:				540.05		

604-229-555.000 DUES AND PUBLICATIONS						
Journal AP: Accounts Payable						
346407	12/16/2022	SOLID WASTE ASSOC OF NADUES	22117059959	604-000-221.001	245.00	
Journal Totals					245.00	0.00
Totals for 604-229-555.000					245.00	0.00
Balance 10/01/22:				0.00		
Net Change:				245.00		
Balance 01/31/23:				245.00		

604-229-562.000 TELEPHONE & TELETYPE						
Journal AP: Accounts Payable						
341112	10/18/2022	SPACE EXPLORATION TECHNOLSTMT-	22097988729	604-000-221.001	110.00	
341113	10/18/2022	SPACE EXPLORATION TECHNOLSTMT-	22103638726	604-000-221.001	110.00	
343649	11/16/2022	AMAZONBATTERY BACKUP	22106268383	604-000-221.001	106.56	
346411	12/16/2022	SPACE EXPLORATION TECHNOLSTARL	22110758726	604-000-221.001	110.00	
348904	01/17/2023	SPACE EXPLORATION TECHNOLSTMT-	23013268726	604-000-221.001	110.00	
348905	01/17/2023	SPACE EXPLORATION TECHNOLSTMT-	22121628721	604-000-221.001	110.00	
Journal Totals					656.56	0.00
Totals for 604-229-562.000					656.56	0.00
Balance 10/01/22:				0.00		
Net Change:				656.56		
Balance 01/31/23:				656.56		

JE #	Date	Description	Reference #	OFFSETTING GL	DEBIT	CREDIT
604-229-563.000 POSTAGE						
Journal AP: Accounts Payable						
342200	11/16/2022	CASEY'S MAIL SERVICE LLCPOSTAG	2430	604-000-221.001	9.60	
344730	12/13/2022	CASEY'S MAIL SERVICE LLCPOSTAG	2497	604-000-221.001	16.18	
347046	01/10/2023	CASEY'S MAIL SERVICE LLCPOSTAG	2571	604-000-221.001	12.60	
Journal Totals					38.38	0.00
Totals for 604-229-563.000					38.38	0.00
Balance 10/01/22:				0.00		
Net Change:				38.38		
Balance 01/31/23:				38.38		

604-229-564.000 OFFICE SUPPLIES						
Journal AP: Accounts Payable						
344159	11/16/2022	NORTH STAR FORMSSCALE TICKETS	22110824717	Multiple	437.44	
348481	01/17/2023	EAKES OFFICE PRODUCT864128600	23018400217	604-000-221.001	22.96	
348482	01/17/2023	EAKES OFFICE PRODUCT863451500	22126700086	Multiple	33.76	
Journal Totals					494.16	0.00
Totals for 604-229-564.000					494.16	0.00
Balance 10/01/22:				0.00		
Net Change:				494.16		
Balance 01/31/23:				494.16		

604-229-568.000 OTHER PROFESSIONAL FEES						
Journal AP: Accounts Payable						
339242	10/11/2022	CAROLINA SOFTWAREWASTEWORKS SO	84722	604-000-221.001	166.67	
342203	11/16/2022	SCS ENGINEERS SAMPLING & REPORT	0450145	604-000-221.001	5,530.95	
342980	11/29/2022	CLARKSON FIRE DIST #1CASH-IN-L	2022 TAXES	604-000-221.001	76.20	
342981	11/29/2022	EDUCATIONAL UNIT #7CASH-IN-LIE	2022 TAXES	604-000-221.001	57.14	
342982	11/29/2022	LOWER ELKHORN NATURAL RESOURCE	2022 TAXES	604-000-221.001	87.50	
342983	11/29/2022	NORTHEAST COMMUNITY COLLEGE CAS	2022 TAXES	604-000-221.001	352.38	
342984	11/29/2022	SCHOOL - COLFAX 58CASH-IN-LIEU	2022 TAXES	604-000-221.001	2,977.84	
342985	11/29/2022	STANTON CO AGRITL SOCIETY CASH-	2022 TAXES	604-000-221.001	19.34	
345545	12/28/2022	BURNS & MCDONNELL INC PROFESSIO	147072-2	604-000-221.001	1,012.65	
345546	12/28/2022	CLARKSON FIRE DIST #1DONATION	2023	604-000-221.001	750.00	
345547	12/28/2022	SCS ENGINEERS MONITORING	0453920	604-000-221.001	10,820.98	
347045	01/10/2023	CAROLINA SOFTWARE SUPPORT	85654	604-000-221.001	166.67	
347048	01/10/2023	STANTON CO TREASURER HOST FEE	JANUARY 2023	604-000-221.001	22,865.03	
348086	01/31/2023	SCS ENGINEERS MONITORING	0455642	604-000-221.001	1,229.10	
Journal Totals					46,112.45	0.00
Journal JE: JOURNAL ENTRY WITH DTFD						
341752	10/31/2022	RCRD TRANS FR NNSWC TO CITY FO	28603	Multiple	3,939.72	
344376	11/30/2022	RCRD TRANS FR NNSWC TO CITY FO	28644	Multiple	3,939.72	
346867	12/31/2022	RCRD TRANS FR NNSWC TO CITY FO	28678	Multiple	3,939.72	
349702	01/31/2023	RCRD TRANS FR NNSWC TO CITY FO	28719	Multiple	3,939.72	
Journal Totals					15,758.88	0.00
Totals for 604-229-568.000					61,871.33	0.00
Balance 10/01/22:				0.00		
Net Change:				61,871.33		
Balance 01/31/23:				61,871.33		

Fund 804 NNSWC CLOSURE/POST CLOSU

GL Number	Description	Balance
*** Assets ***		
Cash		
804-000-115.009	NNSWC CLOSURE/POST MIDWEST6720	50,786.99
804-000-116.001	U.S. TREASURIES	12,552,704.98
	Cash	<u>12,603,491.97</u>
Accounts Receivable		
	Accounts Receivable	<u>0.00</u>
Due From Other Funds		
	Due From Other Funds	<u>0.00</u>
	Total Assets	<u>12,603,491.97</u>
*** Liabilities ***		
Other Liabilities		
804-000-225.002	ACCRUED CLOSURE/POST CLO	11,309,464.33
	Other Liabilities	<u>11,309,464.33</u>
	Total Liabilities	<u>11,309,464.33</u>
*** Fund Balance ***		
Unassigned		
804-000-295.001	RETAINED EARN.-UNRESERV	828,821.08
	Unassigned	<u>828,821.08</u>
	Total Fund Balance	<u>828,821.08</u>
	Beginning Fund Balance - 21-22	828,821.08
	Net of Revenues VS Expenditures - 21-22	<u>444,009.47</u>
	*21-22 End FB/22-23 Beg FB	1,272,830.55
	Net of Revenues VS Expenditures - Current Year	21,197.09
	Ending Fund Balance	1,294,027.64
	Total Liabilities And Fund Balance	12,603,491.97

* Year Not Closed

ACCOUNT DESCRIPTION	ACTIVITY FOR		YTD BALANCE		AVAILABLE	
	2022-23 AMENDED BUDGET	MONTH 01/31/20 INCREASE (DECR)	01/31/2023 NORMAL	01/31/2023 (ABNORM)	BALANCE NORMAL (ABNORM)	% BDGT USED
Dept 000						
Fund 804 - NNSWC CLOSURE/POST CLOSU						
OTHER INTEREST INCOME						
388.001 OTHER INTEREST INCOME	0.00	69.65	21,197.09		(21,197.09)	100.00
OTHER INTEREST INCOME	0.00	69.65	21,197.09		(21,197.09)	100.00
<hr/>						
FUND TOTALS						
TOTAL REVENUES	0.00	69.65	21,197.09		(21,197.09)	100.00
TOTAL EXPENDITURES	0.00	0.00	0.00		0.00	0.00
NET OF REVENUES & EXPENDITURES	0.00	69.65	21,197.09		(21,197.09)	100.00
<hr/>						
Net - Dept 000	0.00	69.65	21,197.09		(21,197.09)	

User: MDrevecky
DB: Cityofnorfolk

FROM 804-000-115.002 TO 804-229-537.000
TRANSACTIONS FROM 10/01/2022 TO 01/31/2023

JE #	Date	Description	Reference #	OFFSETTING GL	DEBIT	CREDIT
804-000-115.009 NNSWC CLOSURE/POST MIDWEST6720						
Journal GJ: GENERAL JOURNAL						
340142	10/19/2022	WF SAFEKEEPING FEES	28567	Multiple		35.00
340145	10/31/2022	NNSWC INVESTMENT INCOME	28580	Multiple	12,714.11	
340145	10/31/2022	NNSWC INVESTMENT INCOME	28580	Multiple	8,265.83	
340147	10/31/2022	ENTER INTEREST AMOUNTS	28582	Multiple	58.21	
342700	11/17/2022	SAFEKEEPING FEES WELLS FARGO	28608	Multiple		35.00
342706	11/30/2022	ENTER INTEREST AMOUNTS	28625	Multiple	89.79	
345113	12/16/2022	SAFEKEEPING FEES WELLS FARGO	28651	Multiple		35.00
345741	12/31/2022	ENTER INTEREST AMOUNTS	28667	Multiple	104.50	
347386	01/23/2023	SAFEKEEPING FEES WELLS FARGO	28689	Multiple		35.00
347967	01/31/2023	ENTER INTEREST AMOUNTS	28702	Multiple	104.65	
Journal Totals					21,337.09	140.00
Totals for 804-000-115.009					21,337.09	140.00
Balance 10/01/22:				29,589.90		
Net Change:				21,197.09		
Balance 01/31/23:				50,786.99		

804-000-388.001 OTHER INTEREST INCOME						
Journal GJ: GENERAL JOURNAL						
340142	10/19/2022	WF SAFEKEEPING FEES	28567	Multiple	35.00	
340145	10/31/2022	NNSWC INVESTMENT INCOME	28580	Multiple		8,265.83
340145	10/31/2022	NNSWC INVESTMENT INCOME	28580	Multiple		12,714.11
340147	10/31/2022	ENTER INTEREST AMOUNTS	28582	Multiple		58.21
342700	11/17/2022	SAFEKEEPING FEES WELLS FARGO	28608	Multiple	35.00	
342706	11/30/2022	ENTER INTEREST AMOUNTS	28625	Multiple		89.79
345113	12/16/2022	SAFEKEEPING FEES WELLS FARGO	28651	Multiple	35.00	
345741	12/31/2022	ENTER INTEREST AMOUNTS	28667	Multiple		104.50
347386	01/23/2023	SAFEKEEPING FEES WELLS FARGO	28689	Multiple	35.00	
347967	01/31/2023	ENTER INTEREST AMOUNTS	28702	Multiple		104.65
Journal Totals					140.00	21,337.09
Totals for 804-000-388.001					140.00	21,337.09
Balance 10/01/22:				0.00		
Net Change:				21,197.09		
Balance 01/31/23:				21,197.09		

Contract Amendment FY2023-001**EXHIBIT B****SCS Engineers' Scope-of-Services Proposal - Standard Form with CLIENT**

Client: Northeast Nebraska Solid Waste Coalition
610 East Monroe Avenue
Norfolk, NE 68701

Consultant: SCS Engineers
14755 Grover Street
Omaha, NE 68144

Project Description:

Environmental and Solid Waste Support Services for environmental monitoring at the Northeast Nebraska Solid Waste Coalition (NNSWC) Municipal Solid Waste Landfill to comply with Nebraska Administrative Code Title 132 – Integrated Solid Waste Management Regulations.

Scope of Services:

SCS Engineers will provide engineering, scientific, and regulatory groundwater compliance support services to the NNSWC related to the compulsory groundwater monitoring and reporting associated with the currently operating landfill and annual emissions inventory and greenhouse gas reporting consistent with current Nebraska Department of Environment and Energy (NDEE) and EPA requirements.

Task 1 –Groundwater and Leachate Sampling

SCS Engineers will continue semiannual groundwater monitoring utilizing the five-year schedule established in the Sampling and Analysis Plan (SAP) dated October 2019, prepared by others. Due to the date of SAP preparation, calendar year 2023 will correspond with monitoring year 5, described in the updated SAP. As part of each event, SCS Engineers will:

- Coordinate with the subcontracted analytical laboratory to schedule the shipment of sample coolers and bottles.
- Collect groundwater elevation data from the locations presented in **Table 1** that are reasonably accessible prior to sampling any of the wells at the site. This information will be utilized to assess the temporal groundwater flow direction in the area.
- Collect groundwater samples in a manner consistent with the staggered sampling schedule presented in the October 2019 SAP. The planned sampling schedule for each location is also presented in **Table 1**.



- Prepare and ship the collected samples under standard chain of custody procedures to the selected laboratory. Duplicate samples and trip blanks will be submitted with each event in a manner consistent with accepted practices as described in the SAP.

Table 1. Sampling Locations and Schedule

Well ID	Designation	2023 (SAP YR 5)	2024 (SAP YR 1)	2025 (SAP YR 2)	2026 (SAP YR 3)	2027 (SAP YR 4)
MW-1S	Monitoring Well	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q
PZ-1D	Piezometer	No Sample	No Sample	No Sample	No Sample	No Sample
MW-2S	Monitoring Well	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q
PZ-2D	Piezometer	No Sample	No Sample	No Sample	No Sample	No Sample
MW-3SR	Monitoring Well	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q
MW-3D	Deep Well	2Q Only	2Q Only	No Sample	2Q Only	No Sample
MW-4SR	Monitoring Well	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q
MW-4D	Deep Well	2Q Only	2Q Only	No Sample	2Q Only	No Sample
MW-5S	Monitoring Well	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q
MW-6S	Piezometer	No Sample	No Sample	No Sample	No Sample	No Sample
MW-6SR	Monitoring Well	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q
MW-6D	Deep Well	2Q Only	2Q Only	No Sample	2Q Only	No Sample
MW-7S	Monitoring Well	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q
PZ-7S	Piezometer	No Sample	No Sample	No Sample	No Sample	No Sample
MW-8S	Monitoring Well	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q
MW-8D	Deep Well	2Q Only	2Q Only	No Sample	2Q Only	No Sample
MW-9S	Monitoring Well	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q
MW-10SR	Monitoring Well	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q
PZ-17S	Piezometer	No Sample	No Sample	No Sample	No Sample	No Sample
PZ-18S	Piezometer	No Sample	No Sample	No Sample	No Sample	No Sample
PZ-19S	Piezometer	No Sample	No Sample	No Sample	No Sample	No Sample
PZ-20S	Piezometer	No Sample	No Sample	No Sample	No Sample	No Sample
Facility Underdrain	Underdrain	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q
Leachate Basin Underdrain	Underdrain	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q
Leachate Basin	Leachate	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q

Table 2 and **Table 3** below summarize the scheduled laboratory analysis to be performed during each sampling event. For simplicity the following abbreviations are used:

- App I VOCs = Appendix I Volatile Organic Compounds (NDEE Title 132)
- App II VOCs = Appendix II Volatile Organic Compounds (NDEE Title 132)
- App I Metals = Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium (III), Copper, Lead, Nickel, Selenium, Silver, Thallium, Vanadium & Zinc
- App II Metals = Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium (III), Copper, Lead, Mercury, Nickel, Selenium, Silver, Thallium, Vanadium & Zinc
- Short Metals = Arsenic, Barium & Selenium
- Indicators = Ammonia, COD, Chloride, Total Iron, Total Sodium, TDS, TOC & TOX
- Short Indicators = COD, Chloride, Total Iron, Total Sodium, TDS & TOC

Table 2. Laboratory Analysis (Second Quarter Event)

Well ID	2023 (SAP YR 5)	2024 (SAP YR 1)	2025 (SAP YR 2)	2026 (SAP YR 3)	2027 (SAP YR 4)
MW-1S	App I VOCs App I Metals Indicators	App I VOCs Short Metals Short Indicators	App I VOCs Short Metals Short Indicators	App I VOCs Short Metals Short Indicators	App I VOCs Short Metals Short Indicators
MW-2S	App II VOCs* App II Metals* Indicators SVOCs* Pesticides* PCBs* Herbicides* Cyanide* Sulfide*	App I VOCs Short Metals Short Indicators *App II Detects	App I VOCs Short Metals Short Indicators *App II Detects	App I VOCs Short Metals Short Indicators *App II Detects	App I VOCs Short Metals Short Indicators *App II Detects
MW-3SR	App I VOCs App I Metals Indicators	App I VOCs Short Metals Short Indicators	App I VOCs Short Metals Short Indicators	App I VOCs Short Metals Short Indicators	App I VOCs Short Metals Short Indicators
MW-3D	App I VOCs App I Metals Indicators	App I VOCs Short Metals Short Indicators	No Sample	App I VOCs Short Metals Short Indicators	No Sample
MW-4SR	App I VOCs App I Metals Indicators	App I VOCs Short Metals Short Indicators	App I VOCs Short Metals Short Indicators	App I VOCs Short Metals Short Indicators	App I VOCs Short Metals Short Indicators
MW-4D	App I VOCs App I Metals Indicators	App I VOCs Short Metals Short Indicators	No Sample	App I VOCs Short Metals Short Indicators	No Sample
MW-5S	App I VOCs App I Metals Indicators	App I VOCs Short Metals Short Indicators	App I VOCs Short Metals Short Indicators	App I VOCs Short Metals Short Indicators	App I VOCs Short Metals Short Indicators
MW-6SR	I App I VOCs App I Metals Indicators	App I VOCs Short Metals Short Indicators	App I VOCs Short Metals Short Indicators	App I VOCs Short Metals Short Indicators	App I VOCs Short Metals Short Indicators
MW-6D	App I VOCs App I Metals	App I VOCs Short Metals	No Sample	App I VOCs Short Metals	No Sample

Well ID	2023	2024	2025	2026	2027
	(SAP YR 5)	(SAP YR 1)	(SAP YR 2)	(SAP YR 3)	(SAP YR 4)
	Indicators	Short Indicators		Short Indicators	
MW-7S	App I VOCs App I Metals Indicators	App I VOCs Short Metals Short Indicators	App I VOCs Short Metals Short Indicators	App I VOCs Short Metals Short Indicators	App I VOCs Short Metals Short Indicators
MW-8S	App I VOCs App I Metals Indicators	App I VOCs Short Metals Short Indicators	App I VOCs Short Metals Short Indicators	App I VOCs Short Metals Short Indicators	App I VOCs Short Metals Short Indicators
MW-8D	App I VOCs App I Metals Indicators	App I VOCs Short Metals Short Indicators	No Sample	App I VOCs Short Metals Short Indicators	No Sample
MW-9S	App I VOCs App I Metals Indicators	App I VOCs Short Metals Short Indicators	App I VOCs Short Metals Short Indicators	App I VOCs Short Metals Short Indicators	App I VOCs Short Metals Short Indicators
MW-10SR	App I VOCs App I Metals Indicators	App I VOCs Short Metals Short Indicators	App I VOCs Short Metals Short Indicators	App I VOCs Short Metals Short Indicators	App I VOCs Short Metals Short Indicators
Facility Underdrain	App I VOCs	App I VOCs	App I VOCs	App I VOCs	App I VOCs
Leachate Basin Underdrain	App I VOCs	App I VOCs	App I VOCs	App I VOCs	App I VOCs
Leachate Basin	App I VOCs App I Metals Indicators	App I VOCs App I Metals Indicators	App I VOCs App I Metals Indicators	App I VOCs App I Metals Indicators	App I VOCs App I Metals Indicators

Note: Monitoring well MW-2S is currently under a unit specific assessment monitoring period. A full suite of prescriptive Appendix II parameters MUST be analyzed every fifth year. If any exotic detections are reported, those parameters will be included in subsequent second quarter sampling events.

Table 3. Laboratory Analysis (Fourth Quarter Event)

Well ID	2023	2024	2025	2026	2027
	(SAP YR 5)	(SAP YR 1)	(SAP YR 2)	(SAP YR 3)	(SAP YR 4)
MW-1S	Short Indicators	Short Indicators	Short Indicators	Short Indicators	Short Indicators
MW-2S	Short Indicators	Short Indicators	Short Indicators	Short Indicators	Short Indicators
MW-3SR	Short Indicators	Short Indicators	Short Indicators	Short Indicators	Short Indicators
MW-4SR	Short Indicators	Short Indicators	Short Indicators	Short Indicators	Short Indicators
MW-5S	Short Indicators	Short Indicators	Short Indicators	Short Indicators	Short Indicators
MW-6SR	Short Indicators	Short Indicators	Short Indicators	Short Indicators	Short Indicators
MW-7S	Short Indicators	Short Indicators	Short Indicators	Short Indicators	Short Indicators

Well ID	2023 (SAP YR 5)	2024 (SAP YR 1)	2025 (SAP YR 2)	2026 (SAP YR 3)	2027 (SAP YR 4)
MW-8S	Short Indicators	Short Indicators	Short Indicators	Short Indicators	Short Indicators
MW-9S	Short Indicators	Short Indicators	Short Indicators	Short Indicators	Short Indicators
MW-10SR	Short Indicators	Short Indicators	Short Indicators	Short Indicators	Short Indicators
Leachate Basin	Indicators	Indicators	Indicators	Indicators	Indicators

The NNSWC will be responsible for compensating SCS Engineers for the cost of laboratory analysis and cooler shipping consistent with previous sampling events. Laboratory invoices will be presented on the SCS invoice as separate line items on a per invoice basis consistent with our standard terms and conditions.

Currently, the Deep Wells (MW-3D, MW-4D, MW-6D, and MW-8D) are sampled utilizing a non-dedicated pump and controller. During the 2022 deep well sampling event, the current vendor indicated that the sampling pump system is being discontinued due to equipment failure and unreliability. Presently, the vendor’s rental fleet is composed of a single unit and once that unit is retired an alternative sampling method will be required.

SCS is in the process of obtaining a quotation from QED to install permanent bladder pumps at each of the four locations. Due to the well depths, non-dedicated bladder pumps are not a reasonable alternative. Similarly, passive sampling techniques such as hydra sleeves and snap samplers cannot be utilized due to the sample volume required. SCS will provide a separate cost estimate for approval under a separate cover prior to the second quarter 2023 groundwater sampling event.

SCS Engineers will supply routine field equipment and disposable sampling supplies (gloves, Alconox, distilled water, ice etc.) at no additional charge.

Task 2 – Semi-annual Groundwater Reporting

Following each sampling event, SCS will prepare a semiannual groundwater monitoring report that summarizes the analytical results. Each report will include a summary of field activities, field notes, laboratory analytical report and laboratory QA/QC report. SCS will statistically analyze the groundwater monitoring data during second and fourth quarter sampling events to determine the presence of statistically significant increases (SSI’s). A statistical analysis report will be prepared which summarizes the results of the statistical analysis and will include graphical output of the analysis. The statistical analysis will be completed on historically detected constituents. The statistical methods used will be in accordance with the facility’s most current SAP. The analysis will be performed using the current platform of Sanitas™ for Groundwater.

Once the semi-annual groundwater monitoring report has been prepared, SCS will provide a draft final copy of the report to the NNSWC for review prior to submittal to the NDEE. Once finalized, the groundwater monitoring reports an electronic copy of the entire report will be transmitted to the NNSWC and the NDEE within 30 days after the end of the quarter in which sampling was performed. In addition, one bound paper copy of the report will be provided to the NNSWC.

SCS Engineers' proposed fee includes up to two hours per event of professional time to correspond with NNSWC and NDEE following their review of the submitted reports.

Task 3 – Annual Emissions Inventory and Greenhouse Gas Reporting

SCS will complete the annual emissions inventory report and the annual greenhouse gas report on behalf of NNSWC. SCS will submit a request for information (RFI) to NNSWC following the end of each calendar year. Consistent with previous years we will work with NNSWC to procure the information necessary for completion of the annual emissions inventory report and the annual greenhouse gas report. SCS will provide a draft final copy to the NNSWC at least three weeks prior to the submittal deadline (currently March 31st each year). Following receipt and incorporation of any comments SCS will submit the final emissions and greenhouse gas reports to the NDEE via the electronic State and Local Emissions Inventory System (SLEIS) and EPA via the electronic Greenhouse Gas Reporting Tool (e-GGRT), as required acting as NNSWC's Agent.

Task 4 – On-Call Miscellaneous Environmental Services

Over the course of this five-year contract amendment, it is quite likely that the NNSWC may require miscellaneous environmental services due to unforeseen items that may occur related to landfill operations. These items may include, but are not limited to, routine maintenance activities, well modifications, minor engineering support, or well rehabilitation due to age or accidental damage.

Fee Basis:

Compensation shall be in accordance with the subsection checked below. Any work added to the Scope of Services to be performed shall be compensated at SCS Engineers standard fee schedule in effect at the time of performance, unless otherwise agreed, subject to the terms and conditions of the Master Services Agreement between the parties.

SCS Engineers will be compensated for time and expenses in accordance with SCS Engineers' standard rates in effect at the time of performance. Our 2022 Fee Schedule is included as an attachment.

Task 4: On-Call Miscellaneous Environmental Services

SCS Engineers will be compensated in the lump sum amount of

Tasks 1 and 2: Groundwater and Leachate Sampling and Reporting

Second Quarter 2023 - \$16,850 + analytical (est. \$10,577)

Fourth Quarter 2023 - \$16,850 + analytical (est. \$1,264)

Second Quarter 2024 - \$16,850 + analytical (est. \$3,935)

Fourth Quarter 2024 - \$16,850 + analytical (est. \$1,327)

Second Quarter 2025 - \$16,850 + analytical (est. \$2,915)

Fourth Quarter 2025 - \$16,850 + analytical (est. \$1,393)

Second Quarter 2026 - \$17,693 + analytical (est. \$4,172)

Fourth Quarter 2026 - \$17,693 + analytical (est. \$1,463)

Second Quarter 2027 - \$17,693 + analytical (est. \$3,214)

Fourth Quarter 2027 - \$17,693 + analytical (est. \$1,536)

Each event will be billed monthly on a percentage complete basis. A \$3,500 per sampling event that includes deep wells (Second Quarter 2023, 2024 and 2026) will be applicable as a contingency to cover rental equipment, if required. The NNSWC is planning to install dedicated pumps prior to the first scheduled sampling event.

Task 3: Annual Emissions Inventory and Greenhouse Gas Reporting

2023 Annual Report (2022 Calendar Year) - \$4,000

2024 Annual Report (2023 Calendar Year) - \$4,000

2025 Annual Report (2024 Calendar Year) - \$4,000

2026 Annual Report (2025 Calendar Year) - \$4,200

2027 Annual Report (2026 Calendar Year) - \$4,200

Each event will be billed monthly on a percentage complete basis.

A one-time 5% cost of living adjustment has been incorporated into activities planned during the final two years of the contract period (2026 and 2027).

Other: SCS Engineers will be compensated as follows: _____

Services by CLIENT:

Provide readily available information as it pertains to this assignment. SCS Engineers will rely on information provided by the NNSWC and others as accurate without independent verification unless specifically requested to review / verify by the NNSWC. The NNSWC will be responsible for maintaining a license for the statistical software Sanitas™ for groundwater analysis and the cost of laboratory analysis and cooler shipping consistent with previous sampling events.

Services by Others:

Laboratory analytical services will be provided by SCS Engineers' subcontracted laboratory and will be direct billed to SCS Engineers. These services are not included in the lump sum fee quoted above.

Laboratory analytical services will be billed on a Time and materials basis subject to MSA terms. No other services are known or proposed at this time.

Governing Agreement:

The above referenced services shall be performed in accordance with the terms and conditions set forth in the SCS ENGINEERS, PROFESSIONAL CONSULTING SERVICES CONTRACT dated 18 January 2018, between SCS Engineers and CLIENT.

Acceptance of Individual Scope of Services Proposal as indicated above:

SCS ENGINEERS

NORTHEAST NEBRASKA SOLID WASTE COALITION



Signature

Signature

Charles Joyce, P.G.
Typed/Printed Name

Typed/Printed Name

Senior Project Manager
Title

Title

11/16/2022
Date of Signature

Date of Signature



**NORTHEAST NEBRASKA SOLID WASTE COALITION
AUTHORIZATION NO. 59
For
PROFESSIONAL SERVICES
To
BURNS & McDONNELL ENGINEERING COMPANY, INC.**

Area 6 Phase 1 Construction Administration Services

In accordance with the AGREEMENT for PROFESSIONAL ENGINEERING SERVICES dated March 8, 1993, (hereinafter called AGREEMENT) between the Northeast Nebraska Solid Waste Coalition (hereinafter called CLIENT) and Burns & McDonnell Engineering Company, Inc. (hereinafter called ENGINEER), CLIENT hereby authorizes ENGINEER to proceed with the following services:

1. Project Summary

CLIENT intends to construct a landfill expansion construction of cell Area 6 Phase 1 (Project) in 2023. This Authorization includes Construction Administrations Services for construction of the Project.

2. Scope of Services:

The Scope of Services to be provided by ENGINEER in connection with this Authorization, is as follows:

Task 1.0 – Issued for Construction Documents and Construction SWPPP

ENGINEER will update the Issued for Bid Plans and Specifications to incorporate any addenda and the signed contract documents to create an Issued for Construction set of plans and specifications for distribution, which will be distributed to the CLIENT and selected Contractor.

ENGINEER will prepare a construction stormwater pollution prevention plan (SWPPP) and notice of intent (NOI) for CLIENT to obtain a construction stormwater permit through the Nebraska Department of Environment and Energy (NDEE) for coverage under the General Permit for Stormwater Discharges Associated with Construction Activities. It is assumed the CLIENT will submit the NOI and any associated permit fees directly to the NDEE.

ENGINEER has assumed a total of 48 labor hours for this task.

Task 2.0 – Construction Administration

ENGINEER will review and process Contractor’s submittals. Submittal review assumes one original submittal review and one re-submittal review for no more than ten percent of all of the Contractor’s submittals. ENGINEER will maintain communication with the Contractor through the submittal process to document that materials and equipment meet project specifications. This task also includes review of contractor pay applications and general construction contract administration.

ENGINEER will coordinate and conduct one pre-construction meeting with the CLIENT, Contractor, Contractor’s Subcontractors to review construction procedures, establish the



construction schedule, define points of contact, discuss testing protocol, define the responsibilities of each party, and conduct a site inspection.

In addition, the ENGINEER will schedule and attend up to 15 construction progress meetings during the duration of the project, including an on-site inspection in conjunction with the construction meetings. In addition to the progress meetings, ENGINEER will schedule and attend a liner pre-installation meeting, and substantial completion and final completion walk-through meetings. The ENGINEER will prepare a meeting agenda and minutes for all meetings attended. The ENGINEER will have regular communications with the contractor and will be available to answer questions, resolve issues or field concerns that may arise during construction.

ENGINEER will provide a resident project representative (RPR) to observe and document construction progress during all significant phases of the construction of the project. It is anticipated that RPR will be onsite for an estimated 700 hours over the estimated 20-week schedule of the construction project. The RPR will complete daily documentation reports on construction progress, observe and document third-party materials testing as required per the specifications, provide and coordinate geosynthetic quality assurance documentation during liner installation, and assist in coordination with the Contractor, CLIENT, and landfill operations. In the event that the construction scope of work is altered, or the schedule is extended, additional RPR field hours will be considered outside of the scope of services and ENGINEER will submit an amendment request for additional time and materials for CLIENT approval prior to performing additional RPR field documentation.

ENGINEER has assumed a total of 950 labor hours for this task.

Task 3.0 – Construction Quality Assurance Report

Upon completion of the construction project, ENGINEER will prepare a construction quality assurance (CQA) report that describes the construction methods; outlines any variances in the work from the construction documents; provides conforming to construction record drawings; and presents all quality assurance and testing results. A draft of the CQA report will be provided to the CLIENT for review and comment. A final CQA report will be prepared with applicable comments addressed. Three hard copies of the final report will be submitted to the NDEE for review and approval, and two hard copies prepared for CLIENT records. ENGINEER has assumed a total of 8 hours for responding to NDEE review comments.

ENGINEER has assumed a total of 68 labor hours for this task.

3. Time of Service:

ENGINEER will proceed with providing the services set forth herein after a signed authorization has been received from the CLIENT. Completion dates of individual tasks shall be as described above and/or as mutually agreed upon by ENGINEER and CLIENT. It is anticipated that the construction completion of the Project will be in October 2023.



4. Compensation:

CLIENT shall compensate ENGINEER for providing the Scope of Services as set forth herein in accordance with the terms of the existing Agreement on a time and materials basis based on the ENGINEER's current rate sheet (BMR23-5). The cost initially authorized for the Scope of Services is Two Hundred and Twenty Thousand dollars (\$220,000) but is not a guaranteed maximum; provided, however, ENGINEER shall not exceed such amount without written approval of CLIENT. A summary of the estimated cost for each task is provided in the below table:

Task 1: IFC Documents and Construction SWPPP	\$ 9,300.00
Task 2: Construction Administration	\$197,100.00
Task 3: CQA Report	\$ 13,600.00
Total:	\$220,000.00

IN WITNESS WHEREOF, the parties have made and executed this Authorization as of the date written below.

CLIENT: Northeast Nebraska Solid Waste Coalition

ENGINEER: Burns & McDonnell Engineering Company, Inc.

By: _____

By: _____

Name: _____

Name: _____

Title: _____

Title: _____

Date: _____



**NORTHEAST NEBRASKA SOLID WASTE COALITION
AUTHORIZATION NO. 60
For
PROFESSIONAL SERVICES
To
BURNS & McDONNELL ENGINEERING COMPANY, INC.**

SWPPP Update

In accordance with the AGREEMENT for PROFESSIONAL ENGINEERING SERVICES dated March 8, 1993, (hereinafter called AGREEMENT) between the Northeast Nebraska Solid Waste Coalition (hereinafter called CLIENT) and Burns & McDonnell Engineering Company, Inc. (hereinafter called ENGINEER), CLIENT hereby authorizes ENGINEER to proceed with the following services:

1. Scope of Services:

The Scope of Services to be provided by ENGINEER in connection with this Authorization, is as follows:

Task 1.0 – SWPPP Update

ENGINEER will prepare an updated site SWPPP for the NNSWC Landfill to comply with the requirements of the General Permit for Stormwater Discharges Associated with Industrial Activities. It is assumed the CLIENT will submit the NOI and any associated permit fees directly to the NDEE. One (1) hard copy will be provided to the CLIENT for their records. It is anticipated that the SWPPP will be completed within 60 days of contract execution. ENGINEER has assumed a total of 40 labor hours for this task.

2. Compensation:

CLIENT shall compensate ENGINEER for providing the Scope of Services as set forth herein in accordance with the terms of the existing Agreement on a time and materials basis based on the ENGINEER’s current rate sheet (BMR23-5) for an initially authorized amount of Seven Thousand dollars (\$7,000) but is not a guaranteed maximum; provided, however, ENGINEER shall not exceed such amount without written approval of CLIENT.

IN WITNESS WHEREOF, the parties have made and executed this Authorization as of the date written below.

CLIENT: Northeast Nebraska Solid Waste Coalition

ENGINEER: Burns & McDonnell Engineering Company, Inc.

By: _____

By: _____

Name: _____

Name: _____

Title: _____

Title: _____

Date: _____

FUND REVENUE DETAIL

FUND CODE: 604

Code	Description	2019-2020 Actual Revenues	2020-2021 Actual Revenues	2021-2022 Estimated Revenues	2021-2022 Budget	2022-2023 Budget	Dollar Increase (Decrease)	Percent Increase (Decrease)
	Balance Brought Forward	<u>5,376,814</u>	<u>6,386,566</u>	<u>7,293,467</u>	<u>7,172,468</u>	<u>8,372,346</u>	<u>1,199,878</u>	<u>16.73%</u>
	Charges for Services							
36701	Use Fees	<u>2,873,100</u>	<u>2,916,026</u>	<u>2,939,169</u>	<u>3,070,843</u>	<u>2,955,331</u>	<u>(115,512)</u>	<u>(3.76%)</u>
	Total Charges for Services	<u>2,873,100</u>	<u>2,916,026</u>	<u>2,939,169</u>	<u>3,070,843</u>	<u>2,955,331</u>	<u>(115,512)</u>	<u>(3.76%)</u>
	Rent & Other Revenue							
37408	Late Charges	<u>98</u>	<u>90</u>	<u>6</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
	Total Rent & Other Revenue	<u>98</u>	<u>90</u>	<u>6</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
	Interest Income							
38801	Other Interest Income	<u>44,167</u>	<u>50,746</u>	<u>54,378</u>	<u>17,000</u>	<u>67,000</u>	<u>50,000</u>	<u>294.12%</u>
	Total Interest Income	<u>44,167</u>	<u>50,746</u>	<u>54,378</u>	<u>17,000</u>	<u>67,000</u>	<u>50,000</u>	<u>294.12%</u>
	Total Revenue	<u>2,917,365</u>	<u>2,966,862</u>	<u>2,993,553</u>	<u>3,087,843</u>	<u>3,022,331</u>	<u>(65,512)</u>	<u>(2.12%)</u>
	Total Funds Available	<u>8,294,179</u>	<u>9,353,428</u>	<u>10,287,020</u>	<u>10,260,311</u>	<u>11,394,677</u>	<u>1,134,366</u>	<u>11.06%</u>

NE NEBR SOLID WASTE COALITION

GENERAL FUND

FUND BUDGET CALCULATION

FUND CODE: 604

Code	Description					Amount
	BALANCE BROUGHT FORWARD					8,372,346
	Estimated balance as of October 1, 2022.					
	Total Restricted					-
	Unrestricted Balance					8,372,346
	CHARGES FOR SERVICES					
36701	Use Fees	123,044	Ton	@	\$24.00	2,953,056
	Special Wastes	175	Ton	@	\$13.00	2,275
	TOTAL CHARGES FOR SERVICES					<u>2,955,331</u>
	INTEREST INCOME					
38001	Other Interest Income					67,000
	Estimate of interest to be earned.					<u>67,000</u>
	TOTAL INTEREST INCOME					67,000
	TOTAL FUNDS AVAILABLE					11,394,677

DEPARTMENT EXPENDITURE DETAIL

DEPARTMENT CODE: 229

Code	Description	2019-2020 Actual Expenditures	2020-2021 Actual Expenditures	2021-2022 Estimated Expenditures	2021-2022 Budget	2022-2023 Budget	Dollar Increase (Decrease)	Percent Increase (Decrease)
Personnel Costs								
11	Salaries & Wages	79,065	80,878	82,203	86,575	87,370	795	0.92%
14	Pension	4,178	4,464	4,531	6,060	6,116	56	0.92%
15	FICA	6,048	6,187	6,289	6,623	6,684	61	0.92%
16	Worker's Compensation	791	842	808	831	877	46	5.54%
	Total Personnel Costs	90,082	92,371	93,830	100,089	101,047	958	0.96%
Operating Supplies and Materials								
24	Vehicular Fuel & Lube	732	892	1,446	1,750	2,562	812	46.40%
26	Minor Apparatus & Tools	-	-	136	500	500	-	-
	Total Operating Supplies & Mat.	732	892	1,583	2,250	3,062	812	36.09%
Other Operating Costs								
31	Rent	766	739	-	-	-	-	-
32	Disposal Fees	1,118,232	1,097,095	1,143,567	1,163,087	1,235,036	71,949	6.19%
	Total Other Operating Costs	1,118,998	1,097,834	1,143,567	1,163,087	1,235,036	71,949	6.19%
Utilities & Maintenance								
41	Electricity	2,390	2,558	2,235	4,000	4,000	-	-
46	Bldg., Ground, & Plant Maintenance	8,193	6,790	5,617	17,540	17,540	-	-
47	Machinery & Vehicle Maintenance	166	522	3,074	750	750	-	-
48	Office Equipment Maintenance	3,071	4,476	-	2,500	2,500	-	-
	Total Utilities & Maintenance	13,821	14,345	10,926	24,790	24,790	-	-
Legislative Affairs								
53	Travel & Training	764	178	344	1,724	1,734	10	0.58%
55	Dues & Publications	223	760	351	650	650	-	-
	Total Legislative Affairs	987	939	695	2,374	2,384	10	0.42%

NE NEBR SOLID WASTE COALITION

GENERAL FUND

DEPARTMENT EXPENDITURE DETAIL

DEPARTMENT CODE: 229

Code	Description	2019-2020 Actual Expenditures	2020-2021 Actual Expenditures	2021-2022 Estimated Expenditures	2021-2022 Budget	2022-2023 Budget	Dollar Increase (Decrease)	Percent Increase (Decrease)
	Other Admin. & Overhead							
61	Insurance	12,158	11,887	13,753	13,313	14,003	690	5.18%
62	Telephone & Teletype	420	440	1,594	2,650	2,650	-	-
63	Postage	123	128	219	1,000	1,000	-	-
64	Office Supplies	1,410	3,222	646	3,105	6,755	3,650	117.55%
65	Legal Notices & Advertising	29	690	905	500	500	-	-
68	Other Professional Fees	256,386	436,067	246,534	262,698	234,379	(28,319)	(10.78%)
	Total Other Admin. & Overhead	<u>270,526</u>	<u>452,433</u>	<u>263,651</u>	<u>283,266</u>	<u>259,287</u>	<u>(23,979)</u>	<u>(8.47%)</u>
	Gov't Subsidies & Transfers							
78	Intrafund Oper. Transfer Out	358,291	362,528	393,013	383,120	478,000	94,880	24.77%
	Total Gov't Subsidies & Trans.	<u>358,291</u>	<u>362,528</u>	<u>393,013</u>	<u>383,120</u>	<u>478,000</u>	<u>94,880</u>	<u>24.77%</u>
	Capital Outlay							
87	Infrastructure	54,176	38,620	7,409	520,000	4,207,200	3,687,200	709.08%
	Total Capital Outlay	<u>54,176</u>	<u>38,620</u>	<u>7,409</u>	<u>520,000</u>	<u>4,207,200</u>	<u>3,687,200</u>	<u>709.08%</u>
	Total Expenditures	1,907,614	2,059,961	1,914,674	2,478,976	6,310,806	3,831,830	154.57%
	Ending Balance	<u>6,386,566</u>	<u>7,293,467</u>	<u>8,372,346</u>	<u>7,781,335</u>	<u>5,083,871</u>	<u>(2,697,464)</u>	<u>(34.67%)</u>
	Total Funds Accounted For	<u>8,294,179</u>	<u>9,353,428</u>	<u>10,287,020</u>	<u>10,260,311</u>	<u>11,394,677</u>	<u>1,134,366</u>	<u>11.06%</u>

NE NEBR SOLID WASTE COALITION

GENERAL FUND

DEPARTMENT EXPENDITURE DETAIL

DEPARTMENT CODE: 229

Code	Description	Amount	Code	Description	Amount	Code	Description	Amount
10	PERSONNEL COSTS		30	OTHER OPERATING COSTS			Portable gas monitor	2,000
11	SALARIES & WAGES		32	DISPOSAL FEES			Vactor rental	650
	Average Monthly Salary			FY 21/22 Actual			Well Pumps	5,000
	\$ 5,885 x 12	70,620		Norfolk	34442		Janitorial Supplies	500
	Health Insurance Stipend			Fremont	34934		HVAC Repairs	1,000
	\$1,000 per Mo. x 12	12,000		Columbus	29781		Water Level Meter	850
	Overtime Avg. Hr.			Oakland	648		Plumbing Repairs	200
	\$ 45.67 x 104	4,750		Pilger	206		Scale Service	6,000
	TOTAL SALARIES	87,370		Newman Grove	7,799		TOTAL BLDG,GRND MAINT	17,540
				Other est.	8,269			
14	PENSION			Total	116,079	47	MACHINERY & VEHICLE MAINT.	
	\$ 87,370 x 7.00%	6,116		% Projected Incr 6%	123,044		Miscellaneous	750
	TOTAL PENSION	6,116		Operating contract			TOTAL MACH. & VEHICLE MAINT.	750
15	FICA			4.4 Variable Base		48	OFFICE EQUIP.MAINT.	
	\$87,370 x 7.65%	6,684		\$528,000 Fixed Base			Security System	2000
	TOTAL FICA	6,684		Adjustment 10%			Computer & Telephone	500
16	WORKER'S COMPENSATION			Variable Fee \$4.40	541,394		TOT.OFF.EQUIP.MAINT.	2,500
	Avg. Mo. \$73.06 x 12	877		Fixed Fee	528,000		TOTAL UTIL.& MAINT.	24,790
	TOTAL WORKER'S COMP.	877		\$/ton State Fee @ \$1.25	153,805			
	TOT. PERS. COSTS	101,047		Special Waste Handling		50	LEGISLATIVE AFFAIRS	
				175 ton x \$10.50	1,838	53	TRAVEL & TRAINING	
20	OPER. SUP. AND MATERIALS			Hazardous Wastes			NESWANA Conferenc 2	
24	VEHICULAR FUEL & LUBE			Test, Ship, Dispose	10,000		Mileage 400 @ \$0.59	234
	Unleaded 700 x \$3.66	2,562		TOTAL DISPOSAL FEES	1,235,036		Hotel 5 @ \$125.00	625
	TOTAL VEHIC. FUEL&LUBE	2,562		TOT. OTH OPER COSTS	1,235,036		Meals 5 @ 35	175
26	MINOR APPARATUS & TOOLS		40	UTILITIES AND MAINTENANCE			Registration	700
	Miscellaneous Supplies	500	41	ELECTRICITY			TOTAL TRAVEL & TRAINING	1,734
	TOTAL MINOR APP & TOOLS	500		TOTAL ELECTRICITY	4,000	55	DUES & PUBLICATIONS	
	TOTAL OPER. SUP. & MAT.	3,062			4,000		SWANA dues for 2 employees	400
				46	BLDG,GRND&PLANT MAINT		Dept of Ag. Scale Register	175
					Building	500	Water & Recycling News	75
					Water Filtration		TOTAL DUES & PUBLICATIONS	650
					12 x \$70.00	840	TOTAL LEG. AFFAIRS	2,384

NE NEBR SOLID WASTE COALITION

GENERAL FUND

DEPARTMENT EXPENDITURE DETAIL

DEPARTMENT CODE: 229

Code Description	Amount	Code Description	Amount	Code Description	Amount
60 OTHER ADMIN. & OVERHEAD		Norfolk Administrative Services (CPI Adjusted)			
61 INSURANCE			46,967	TOTAL RESTRICTED	-
Property and General Liability	14,003	Groundwater Monitoring (CPI Adjusted)		UNRESTRICTED BALANCE	5,083,871
TOTAL INSURANCE	14,003	and GGR Extension with SCS	17,350	TOTAL FUND ACCT. FOR	11,394,677
62 TELEPHONE & TELETYPE		Groundwater pass thru analytical	10,577		
Telephone	600	Audit Fees	7,250		
Internet Equipment for Update	550	Attorney	5,000		
Internet 12 @	125 1,500	Drug Screen 1 x \$ 35	35		
TOTAL TELE.&TELETYPE	2,650	Emission Inventory & GHG Report	4,000		
63 POSTAGE	1,000	Emission Inventory fee	1,350		
TOTAL POSTAGE	1,000	Update SWPPP	7,000		
64 OFFICE SUPPLIES		Legislative Activities	20,000		
Printing & copying	200	TOTAL OTHER PROF.FEES	234,379		
Software	500	TOTAL OTH.ADMIN&OV.	259,287		
Scale Printer and spare	500	70 GOV'T SUBSIDIES & TRANSFERS			
Computer and 1/2 of a spare	3,150	78 INTERFUND OPER. TRANSFER OUT			
Sanitas Software	400	Financial Assurance Fund	478,000		
Computer Supplies	600	TOTAL INTERFUND OP. TRAN.	478,000		
Miscellaneous Materials	550	TOTAL GOV'T SUBSIDIES & TRANSFERS	478,000		
Weight tickets		80 CAPITAL OUTLAY			
9 Case x \$	95 855	87 INFRASTRUCTURE			
TOT. OFFICE SUPPLIES	6,755	Design and Bid Service, Area 6 Ph. 1	161,200		
65 LEGAL NOTICES&ADVERTISE		Engineering CQA	220,000		
TOTAL LEG. NOT.& ADVER.	500	Construction of Cell 6-A	3,450,000		
68 OTHER PROFESSIONAL FEES		Installation of deep well pumps	11,000		
Stanton Co. Host Fee	102,600	Vertical/Lateral Permit Modifications	365,000		
Clarkson VFD Donation	750	TOTAL INFRASTRUCTURE	4,207,200		
School District In-Lieu-of-tax fee	4,000	TOT. CAPITAL OUTLAY	4,207,200		
NDEE Annual Operating Fee	7,500	TOT. EXP.	6,310,806		
		ENDING BALANCE	5,083,871		

NE NEBR SOLID WASTE COALITION

GENERAL FUND

DIVISION PERSONNEL ROSTER

DIVISION CODE: 229

Name	Position	Date of Hire	Grade & Step 10/1 /22	Monthly Wage	Merit Increase D a t e	Merit Grade /Step	Monthly New Wage	Monthly Ave. Wage
Kingsley, Deborah	Scale Clerk	10/26/95	10 H	4,277	5 -1	10 H	4,277	4,277
Renner, Galen	Scale Clerk	09/15/21	10 B	1,576	3 -1	10 C	1,652	<u>1,608</u>
Total							5,885	5,885

NE NEBR SOLID WASTE COALITION

GENERAL FUND

FUND REVENUE DETAIL

FUND CODE: 804

Code	Description	2019-2020 Actual Revenues	2020-2021 Actual Revenues	20221-2022 Estimated Revenues	2021-2022 Budget	2022-2023 Budget	Dollar Increase (Decrease)	Percent Increase (Decrease)
	Balance Brought Forward	8,461,285	9,157,348	9,858,776	9,828,876	10,675,716	846,840	8.62%
	Other Interest Income							
38801	Other Interest Income	337,772	338,900	423,927	314,000	400,000	86,000	27.39%
	Total Other Interest Income	337,772	338,900	423,927	314,000	400,000	86,000	27.39%
	Non-Revenue Receipts							
39101	Interfund Operating Transfers In	358,291	362,528	393,013	383,120	478,000	94,880	24.77%
	Total Non-Revenue Receipts	358,291	362,528	393,013	383,120	478,000	94,880	24.77%
	Total Revenue	696,063	701,428	816,940	697,120	878,000	180,880	25.95%
	Total Funds Available	9,157,348	9,858,776	10,675,716	10,525,996	11,553,716	1,027,720	9.76%

NE NEBR SOLID WASTE COALITION

CLOSURE/POST CLOSURE CARE FUND

FUND REVENUE BUDGET CALCULATION

FUND CODE: 804

Code	Description	
	BALANCE BROUGHT FORWARD	10,675,716
	Estimate of fund balance on October 1, 2022.	
38801	OTHER INTEREST INCOME	400,000
39101	INTERFUND OPERATING TRANSFERS IN	478,000

NE NEBR SOLID WASTE COALITION

CLOSURE/POST CLOSURE CARE FUND

DIVISION EXPENDITURE DETAIL

DIVISION CODE: 804

<u>Code</u>	<u>Description</u>	<u>2019-2020 Actual Expenditures</u>	<u>2020-2021 Actual Expenditures</u>	<u>20221-2022 Estimated Expenditures</u>	<u>2021-2022 Budget</u>	<u>2022-2023 Budget</u>	<u>Dollar Increase (Decrease)</u>	<u>Percent Increase (Decrease)</u>
	Total Expenditures	-	-	-	-	-	-	-
	Ending Balance	9,157,348	9,858,776	10,675,716	10,525,996	11,553,716	1,027,720	9.76%
	Total Funds Accounted For	9,157,348	9,858,776	10,675,716	10,525,996	11,553,716	1,027,720	9.76%

NE NEBR SOLID WASTE COALITION

CLOSURE/POST CLOSURE CARE FUND

DIVISION EXPENDITURE BUDGET CALCULATION

DIVISION CODE: 804

Code Description	Amount
ENDING BALANCE	11,553,716

NE NEBR SOLID WASTE COALITION

CLOSURE/POST CLOSURE CARE FUND

DOCUMENT 00 51 00 – NOTICE OF AWARD

To: J.J. Westhoff Construction Co. (Bidder)

700 Calvert St.

Lincoln, Nebraska 68502

Project Name: Northeast Nebraska Solid Waste Coalition Regional Sanitary Landfill

Area 6 Phase 1 Construction

Contract No.: 2023-1

Owner: Northeast Nebraska Solid Waste Coalition

You are notified that your Bid, dated February 16, 2023 for the above Contract has been considered. You are the apparent successful Bidder and are being awarded the Contract for the above stated Project and which is described as follows:

The Contract provides for the construction of new landfill Cell 3.3. Work for this Contract shall consist, but not be limited to, furnishing all supervision, labor, tools, equipment, transportation, storage facilities, services, and supplies required to complete the following:

Mobilization, clearing and grubbing, mass soil excavation and stockpiling, subgrade preparation, placement of soil liner material, placement of granular drainage material and geotextiles, placement of protective cover soil, placement of leachate collection system, construction of stormwater channels, construction of access roads, and any other work as indicated in the Contract Documents.

The Contract Price of your Contract is Three Million Four Hundred Fifty Thousand dollars (\$ 3,450,000.00).

The Contract Unit Prices of your Contract will be as stated in your Bid Form.

You must comply with the following conditions precedent within 15 days of the date of this Notice of Award, that is by March 16, 2023.

1. Deliver to the Owner three fully executed counterparts of the Contract Documents.

DOCUMENT 00 51 00 – NOTICE OF AWARD: continued

2. Deliver with the executed Agreement the Contract security (Bonds) and Certificate of Insurance as specified in the Instructions to Bidders, General Conditions, and Supplementary Conditions as applicable.

Failure to comply with these conditions within the time specified will entitle Owner to consider your Bid in default, to annul this Notice of Award, and to declare your Bid security forfeited.

Within 10 days after you comply with the above conditions, Owner will return to you one fully signed counterparts of the Agreement with the Contract Documents attached.

You are required to return an acknowledgement copy of this Notice of Award to the Owner.

Dated this 1st day of March, 2023.

OWNER

Northeast Nebraska Solid Waste Coalition

By _____

Title _____

Date March 1, 2023

ACCEPTANCE OF AWARD

CONTRACTOR

By _____

Title _____

Date _____ 20__

Copy to Engineer

END OF SECTION 00 51 00

DOCUMENT 00 50 00 – AGREEMENT BETWEEN OWNER AND CONTRACTOR

Project Name: Northeast Nebraska Solid Waste coalition Regional Sanitary Landfill
Contract Name: Area 6 Phase 1 Construction
Contract No: 2023-1

THIS AGREEMENT is dated as of the 2nd day of March in the year 2023 by and between the Northeast Nebraska Solid Waste Coalition (hereinafter called Owner) and J.J. Westhoff Construction Co. (hereinafter called Contractor).

Owner and Contractor, in consideration of the mutual covenants hereinafter set forth, agree as follows:

ARTICLE 1 - WORK

1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work under this Contract is generally described as follows: Construction of portions of a groundwater drainage system and a new landfill area, Area 6 Phase 1, adjacent to currently existing and operating areas of the Northeast Nebraska Solid Waste Coalition Regional Sanitary Landfill. Work for this contract consist of construction of a groundwater drainage system, geocomposite drain, soil liner, HDPE flexible membrane liner, geocomposite drainage layer, leachate drainage trench, HDPE leachate sump, and protective soil cover. Other work includes excavation and removal of soil not appropriate for liner construction, final grading of terraced area west of Area 6 and seeding disturbed areas

ARTICLE 2 - ENGINEER

2.01 The Project has been designed by Burns & McDonnell Engineering Co. Inc., who is hereinafter called Engineer and who is to act as Owner's representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

ARTICLE 3 - CONTRACT TIME

3.01 TIME OF THE ESSENCE:

A. All time limits for milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

3.02 DATES FOR SUBSTANTIAL COMPLETION AND FINAL PAYMENT:

The Work will be Substantially Completed in accordance with the GENERAL CONDITIONS by October 13, 2023 and fully completed and ready for final payment in accordance with the GENERAL CONDITIONS by October 27, 2023.

3.03 LIQUIDATED DAMAGES:

A. Owner and Contractor recognize that time is of the essence of this Agreement and that Owner will suffer financial loss if the Work is not completed within the time specified above, plus any extensions thereof allowed in accordance with the GENERAL CONDITIONS. The parties also recognize the delays, expense, and difficulties involved in proving the actual loss suffered by Owner if the Work is not Substantially Completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but

DOCUMENT 00 50 00 – AGREEMENT BETWEEN OWNER AND CONTRACTOR : continued

not as a penalty) Contractor shall pay Owner one thousand dollars \$1,000 for each day that expires after the time specified above in Paragraph 3.02 for Substantial Completion until the Work is Substantially Complete.

ARTICLE 4 - CONTRACT PRICE

4.01 4.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents an amount in current funds equal to the sum of the amounts determined pursuant to paragraphs below:

A. LUMP SUM CONTRACT PRICE: For all Work, a Lump Sum of:
Three Million Four Hundred Fifty Thousand dollars (\$ 3,450,000.00).

1. Schedule of Adjustment Unit Prices: In the event the Work indicated or specified in the Contract Documents is increased or decreased, the price set forth above shall be increased or decreased in accordance with the following schedule of Adjustment Unit Prices.

<u>No.</u>	<u>Item</u>	<u>Unit</u>	<u>Unit Price</u>
1	Excavation and Removal of Unacceptable Soil and Replacement with Acceptable Soil	CY	<u>\$6.50</u>

ARTICLE 5 - PAYMENT PROCEDURES

5.01 SUBMITTAL AND PROCESSING OF PAYMENTS:

A. Contractor shall submit Applications for Payment in accordance with the GENERAL CONDITIONS. Applications for Payment will be processed by Engineer as provided in the GENERAL CONDITIONS.

5.02 PROGRESS PAYMENTS, RETAINAGE:

A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment as recommended by Engineer, on or about the 15th day of each month during construction. All such payments will be measured by the schedule of values established in the GENERAL CONDITIONS or, in the event there is no schedule of values, as provided in the General Requirements.

1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below, but, in each case, less the aggregate of payments previously made and less such amounts as Engineer shall determine, or Owner may withhold, in accordance with the GENERAL CONDITIONS.

a. 90% of Work completed (with the balance being retainage). If Work has been 50% completed as determined by Engineer, and if the character and progress of the Work have been satisfactory to Owner and Engineer, Owner on recommendation of Engineer, may determine that as long as the character and progress of the Work subsequently remain satisfactory to them, there will be no additional retainage on account of Work subsequently completed, in which case the remaining progress

- payments prior to Substantial Completion will be an amount equal to 100% of the Work completed less the aggregate of payments previously made; and
- b. 90 % (with the balance being retainage) of Equipment and Materials not incorporated in the Work (but delivered, suitably stored, and accompanied by documentation satisfactory to Owner as provided in the GENERAL CONDITIONS).
2. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to 95% of the Contract Price (with the balance being retainage), less such amounts as Engineer shall determine, or Owner may withhold, in accordance with the GENERAL CONDITIONS.
- 5.03 FINAL PAYMENT:
- A. Upon final completion and acceptance of the Work in accordance with the GENERAL CONDITIONS, Owner shall pay the remainder of the Contract Price as recommended by Engineer and as provided in the GENERAL CONDITIONS.

ARTICLE 6 - INTEREST

- 6.01 All moneys not paid when due hereunder shall bear interest at the rate of 0 % per annum in accordance with the GENERAL CONDITIONS.

ARTICLE 7 - CONTRACTOR'S REPRESENTATIONS

- 7.01 In order to induce Owner to enter into this Agreement, Contractor makes the following representations:
- A. Contractor has examined and carefully studied the Contract Documents (including the Addenda) and other related data identified in the Bid Documents.
 - B. Contractor has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, performance, and furnishing of the Work.
 - C. Contractor is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, performance, and furnishing of the Work.
 - D. Contractor has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site; and (2) reports and drawings of a Hazardous Environmental Condition, if any, at the Site. Contractor acknowledges that Owner and Engineer do not assume responsibility for the accuracy or completeness of information and data shown or indicated in the Contract Documents with respect to Underground Facilities at or contiguous to the Site.
 - E. Contractor has obtained and carefully studied (or assumes responsibility of having done so) all such additional supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site or otherwise which may affect cost, progress, performance, and furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto.
 - F. Contractor does not consider that any additional examinations, investigations, explorations, tests, studies, or data are necessary for the performing and furnishing of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents.

DOCUMENT 00 50 00 – AGREEMENT BETWEEN OWNER AND CONTRACTOR : continued

- G. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- H. Contractor has correlated the information known to Contractor, information and observations obtained from visits to the Site, reports and drawings identified in the Contract Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.
- I. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents and the written resolution thereof by Engineer is acceptable to Contractor.
- J. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

ARTICLE 8 - CONTRACT DOCUMENTS

8.01 CONTENTS:

- A. The Contract Documents which comprise the entire Agreement between Owner and Contractor concerning the Work consist of the following and may only be amended, modified, or supplemented as provided in the GENERAL CONDITIONS:
 - 1. This Agreement.
 - 2. Exhibits to this Agreement (enumerated as follows):
 - a. Notice to Proceed.
 - b. Contractor's Bid.
 - c. Documentation submitted by Contractor prior to Notice of Award.
 - 3. Performance, Payment, and other Bonds.
 - 4. General Conditions.
 - 5. Specifications consisting of divisions and sections as listed in table of contents of Project Manual.
 - 6. Drawings consisting of a cover sheet and sheets as listed in the table of contents thereof, with each sheet bearing the following general title: Area 6 Construction
 - 7. Addenda numbers [1] to [1], inclusive.
 - 8. The following which may be delivered or issued after the Effective Date of the Agreement and are not attached hereto: All Written Amendments and other documents amending, modifying, or supplementing the Contract Documents pursuant to the GENERAL CONDITIONS.

ARTICLE 9 - MISCELLANEOUS

9.01 TERMS:

- A. Terms used in this Agreement which are defined in the GENERAL CONDITIONS shall have the meanings stated in the GENERAL CONDITIONS.

9.02 ASSIGNMENT OF CONTRACT:

- A. No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent [except to the extent that the effect of this restriction may be limited by Law], and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

DOCUMENT 00 50 00 – AGREEMENT BETWEEN OWNER AND CONTRACTOR : continued

9.03 SUCCESSORS AND ASSIGNS:

- A. Owner and Contractor each binds himself, his partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

9.04 SEVERABILITY:

- A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

9.05 OTHER PROVISIONS: NOT APPLICABLE

DOCUMENT 00 50 00 – AGREEMENT BETWEEN OWNER AND CONTRACTOR : continued

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement in triplicate. One counter-part each has been delivered to Owner, Contractor, and Engineer. All portions of the Contract Documents have been signed, initialed, or identified by Owner and Contractor or identified by Engineer on their behalf.

This Agreement will be effective on March 2, 2023, which is the Effective Date of the Agreement.

CONTRACTOR J.J. Westhoff Construction Co. OWNER Northeast Nebraska Solid Waste Coalition

By: _____ By: _____

Title: _____ Title: _____

(SEAL)

(SEAL)

Attest _____

Attest _____

Address for giving notices

Address for giving notices

License No. _____
(if required by Law)

(If Owner is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of Agreement)

Agent for Service of process

(if required by law)

(If Contractor is a corporation, attach evidence of authority to sign.)

Approved As to Form:

By: _____

Attorney For: _____

END OF SECTION 00 50 00

NNSWC Landfill Master Plan



Northeast Nebraska Solid Waste Coalition

**Landfill Master Plan
Project No. 124922**

**Revision 0
4/15/2022**

NNSWC Landfill Master Plan

prepared for

**Northeast Nebraska Solid Waste Coalition
Landfill Master Plan
Stanton County, Nebraska**

Project No. 124922

**Revision 0
4/15/2022**

prepared by

**Burns & McDonnell Engineering Company, Inc.
Sioux Falls, South Dakota**

EXECUTIVE SUMMARY

Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) developed the Northeast Nebraska Solid Waste Coalition (NNSWC, Coalition) Landfill Master Plan (Plan) for the NNSWC Regional Sanitary Landfill (Landfill) to provide the Coalition with short-term and long-term plans for optimum development and optimization of the Landfill. The Plan includes details regarding Landfill infrastructure planning and expansion strategy that will maximize the use of the property in a financially and operationally sound manner.

ES. 1 Alternatives and Efficiencies for Landfill Operations

Members of Burns & McDonnell visited the Landfill to conduct an on-site operational review of the Landfill. The purpose of the operation review was to identify key issues and potential opportunities to improve Landfill operations.

Additionally, a desktop evaluation was conducted to explore the potential for the Coalition to implement waste shredding or waste bailing operations. Based on the results of the desktop evaluation, it is recommended that the Coalition proceed with current Landfill operations.

The benefits and impacts of changes to waste acceptance amounts were also explored. A planning level financial model was created to evaluate the impacts of changes in waste receipts. The financial model was developed by evaluating the following scenarios:

- **Baseline Scenario:** Waste received by the Landfill will remain unchanged, “no waste change”
- **Scenario #1:** Assumes a 20-percent waste increase to the overall waste stream
- **Scenario #2:** Assumes a 20-percent waste decrease to the overall waste stream

From the analysis, the Baseline Scenario generally has a positive ending balance throughout the Landfill’s life but experiences a cash deficit near the end of the Landfill’s life. Scenario #1 experiences a positive ending cash balance throughout the Landfill’s life. The results of Scenario # 2 indicated that Coalition would have a negative cash ending balance much sooner in the Landfill’s life.

ES. 2 Landfill Expansion Development

Several Landfill expansion options were identified and evaluated to increase the disposal capacity of the Landfill within the current property boundary. Multiple conceptual expansion alternatives were then presented to the Project Task Force (PTF). The Preferred Expansion Alternative by the PTF was further refined to develop the following conceptual plans and documents:

- A conceptual base grading plan for the planned Landfill lateral expansion
- A conceptual final grading plan for the entire Landfill at closure, including the vertical expansion
- Conceptual stormwater, leachate, and landfill gas conveyance plans
- Preliminary Landfill stability calculations for the lateral and vertical expansion
- Volume calculations to determine airspace allocated for waste and soil balance requirements

Further, for optimum development of the Preferred Expansion Alternative for the Landfill, the following support facilities were evaluated:

- Dedicated space for scales, scale house, equipment building facilities, and customer convenience drop-off area
- Meeting space for employees and educational facilities
- Need for a landfill gas collection system and flare station
- Future off-site soil borrow and stockpile location.

Construction costs for the Preferred Expansion Alternative and support facilities were determined and incorporated into financial models developed for this Plan.

ES. 3 Cell Closure and End of Use Plans

Landfill area closure sequencing options were reviewed and evaluated based on the Preferred Expansion Alternative previously developed. A closure phasing plan was also developed, and the closure costs were incorporated into financial models developed for this Plan. Furthermore, alternative final cover systems were evaluated with the construction costs compared against the current permitted final cover profile. It was determined that an alternative earthen cover system at the Landfill has the potential to reduce final cover construction costs. Finally, incentives for a solar power project were investigated, and the feasibility of processing landfill gas to renewable natural gas was evaluated. The results of these analyzes indicated that these projects have the potential to be financially beneficial for the NNSWC. It is recommended that the Landfill re-analyze these options in the future as the feasibility and cost will vary based on the demand for the product produced and the cost of implementation.

ES. 4 Preliminary Expansion Plans

As part of this Plan, a preliminary review of several off-site expansion options was conducted based on NDEE and Stanton County solid waste guidelines, restrictions, and general construction feasibility. Based on the available data and preliminary analysis conducted, the proposed off-site landfill expansion options

were ranked to determine the preferred expansion option. Based on the preliminary analysis, the preferred expansion option was the South Off-Site Expansion Options.

ES. 5 Bylaws and Agreement Review

The NNSWC bylaws and agreement continue to be evaluated by the NNSWC Project Task Force (PTF) and Baird Holm, the Coalition's legal council. The final updated agreement and bylaws documents will be presented to the NNSWC Board at a later date.

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LIST OF ABBREVIATIONS

<u>Abbreviation</u>	<u>Term/Phrase/Name</u>
2020 Permit Modification	NNSWC Landfill 2020 Permit Modification
2021\$	2021 Dollars
2021 Tier 2 Report	2021 Tier 2 Landfill Gas Sampling & Emissions Rate Report
ACAP	Alternative Cover Assessment Program
ADC	Alternative Daily Cover
AUF	Airspace Utilization Factor
Burns & McDonnell	Burns & McDonnell Engineering Company, Inc.
CL	Low Plasticity Clay
CH	High Plasticity Clay
COVID-19	Coronavirus Disease 2019
CRD	Community Refuse Disposal, Inc.
CY	Cubic Yards
EPA	Environmental Protection Agency
ET	Evapotranspiration
FTE	Full Time Equivalent
gpm	Gallons per Minute
H	Horizontal
Landfill	NNSWC Regional Sanitary Landfill
lbs	Pounds
lb/cy	Pounds per Cubic Yard
LFG	Landfill Gas

<u>Abbreviation</u>	<u>Term/Phrase/Name</u>
Mg/yr	Megagram per Year
MSW	Municipal Solid Waste
NDEE	Nebraska Department of Environment and Energy
NE	Nebraska
NMOC	Non-Methane Organic Compounds
NNSWC/Coalition	Northeast Nebraska Solid Waste Coalition
NSPS	New Source Performance Standards
O&M	Operation and Maintenance
Plan	NNSWC Landfill Master Plan
PTF	Project Task Force
RFI	Request for Information
RNG	Renewable Natural Gas
V	Vertical
WCI	Waste Connections, Inc.

1.0 INTRODUCTION AND PROJECT APPROACH

The Northeast Nebraska Solid Waste Coalition (NNSWC, Coalition) retained the services of Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) to develop and prepare a Landfill Master Plan (Plan) for the NNSWC Regional Sanitary Landfill (Landfill). This section outlines the approach to complete the analysis and includes a description of the Plan's report organization.

1.1 Project Purpose

The purpose of this Plan is to provide the Coalition with short-term and long-term plans for optimum development and optimization of the Landfill. The Plan includes details regarding Landfill infrastructure planning and expansion strategy that will maximize the use of the property in a financially and operationally sound manner.

It should be noted that this document is intended for planning purposes and should be reviewed on a periodic basis by the Coalition to determine if updates are needed. As with any planning document, implementation often requires modification to adapt to unforeseen changes in waste received, operation methods, etc.

1.2 Project Team

The project team was comprised of representatives from the NNSWC Project Task Force (PTF) representatives and Burns & McDonnell. Members of the NNSWC PTF included:

- Steven Rames
- Rob Mercer
- Randy Gates
- Chuck Sliva
- Brian Newton
- Tyler Ficken

Key Burns & McDonnell representatives included:

- Luke Rodig
- Robert Craggs
- Scott Martin
- Pedro Ruiz Fabian
- Fred Doran

1.3 Project Approach

A series of key tasks were developed that served as a starting point for the Plan. The following tasks were used to collect information about the Landfill's current solid waste system and recommend any necessary changes and future updates with the subsequent project tasks.

1.3.1 Issue Data Request

A detailed data request was submitted to the Coalition to collect historic and background information on operations and practices. The data request served to provide a basis of understanding for the operational and financial considerations to be addressed. The information requested included the following:

- Contact information for representatives of the PTF
- Equipment and fleet inventory
- Organizational charts and personnel rosters
- Operational and productivity data for the Landfill
 - Landfill tonnage and soils usage logs
 - General types of waste disposed at the Landfill
- Detailed financial reports and budgets
- Landfill policies and agreements

1.3.2 Kick-Off Meeting & Project Task Force

Burns & McDonnell met with Coalition representatives on July 29, 2020, to initiate the project. The purpose of the kick-off meeting was to discuss the project scope, key issues to be addressed, key findings from previous engagements, and confirm the timing associated with the various project tasks.

Additionally, the project kick-off meeting served to establish a Project Task Force (PTF). The responsibilities of the PTF included participation in the project meetings and workshops, facilitating data collection, providing feedback on preliminary findings, providing critical direction on key recommendations and potential program changes, and providing support to the project team throughout the project. The PTF was comprised of representatives from diverse roles and different communities within the NNSWC. A complete picture of the solid waste system was developed by involving a variety of individuals from different communities with a wide range of responsibilities. Due to safety concerns related to the coronavirus disease 2019 (COVID-19) pandemic, most subsequent project meetings were held virtually. As the Coalition proceeds with recommendations from the Plan, full participation from the PTF members is expected to increase buy-in from other stakeholders and facilitate implementation of the recommendations.

1.3.3 Conduct Field Observations

On-site observations of key operating practices were conducted on October 12 and 13, 2020. A Burns & McDonnell representative observed the Landfill in general, waste filling operations, and scale operations to obtain a proper understanding of the challenges faced, productivity levels achieved, successes, and areas in need of improvement. The representative also conducted interviews with key managers and staff for each operation. The field observations served to gain a critical understanding of the Landfill's solid waste system.

1.4 Report Organization

This Plan is organized into seven sections, plus an executive summary. The key findings and recommendations are provided in their respective sections as well as in the executive summary. A summary of the Plan's sections is listed below:

- Executive Summary
- Section 1.0 – Introduction and Project Approach
- Section 2.0 – Background: provides a consolidation of existing site information related to the site's physical conditions and Landfill operations
- Section 3.0 – Alternatives and Efficiencies for Landfill Operations: provides an operational review of the Landfill and evaluates the benefits and impact of accepting additional waste from outside the Coalition or restricting the amount of waste accepted
- Section 4.0 – Landfill Expansion Development: focuses on lateral and vertical expansion options to maximize the disposal capacity of the Landfill and evaluates the necessary support facilities for optimum development at the existing Landfill site
- Section 5.0 – Cell Closure and Post-Closure Plans: provides cell closure sequencing plans with alternative cover options considered and an evaluation of the end of use plans for the existing Landfill
- Section 6.0 – Preliminary Off-Site Expansion Plans: discusses preliminary options for Landfill expansion in 60+ years outside the current site property
- Section 7.0 – Bylaws and Agreement Review: provides a summary of the review of the current Landfill bylaws and agreements and recommendations to the Coalition and NNSWC's legal council for consideration

2.0 BACKGROUND

2.1 Existing Site Information

The NNSWC, an affiliation of Nebraska cities, counties, towns, and villages, manages Municipal Solid Waste (MSW) in the Northeast region of Nebraska. The current 160-acre Landfill is located in the Northwest 1/4 of Section 21, Township 21 North, Range 3 East in rural Stanton County, Nebraska. The site itself is mostly grassland and has been partly used for row crops on the northwest corner. No major utilities traversed the site. The primary land use of the surrounding area is agriculture. The site is in a rural setting with a population density of less than 0.1 people per acre. Three residences are within ¼ mile of the site. The nearest town is Clarkson, NE with a population of 631. Additionally, the nearest body of water is Maple Creek which runs ¼ mile to the east and 30 feet below the site; it is not reasonable to assume that the creek would ever flood the Landfill property.

A scale and scale house that weigh and record loads into the facility are located near the entrance to the site. A maintenance building and yard are located close to the Landfill operations area on the northern section of the site. An electric service line runs along the north side of the site and provides the site with electricity. Water is supplied by a single well located near the Landfill entrance that is designed to pump 20 to 50 gallons per minute (gpm). A 7,000-gallon underground holding tank stores sanitary wastewater and maintenance facility wastewater on-site. The tank is periodically unloaded, and its contents taken to a wastewater treatment facility for disposal. On the north side of the site an existing tree line provides screening to the entrance of the facility. A 10-foot screening berm also runs along portions of the western and northern sides of the site between the Landfill and the road. Around the entirety of the site there is a 8-foot woven wire and barbed wire fence.

The Landfill currently has five active disposal cell areas. Area 5 is the most recent area constructed, with construction completed on November 11th, 2016. Area 6, the southernmost area, has been permitted but has not yet been constructed. Pending approval of the NNSWC Landfill 2020 Permit Modification (2020 Permit Modification) consisting of expanding the Landfill capacity by increasing the exterior side slopes, the total gross volume of the Landfill is 10,863,820 cubic yards (CY) with a total waste capacity of 10,241,655 CY.

2.2 Site Physical Conditions

Groundwater at the Landfill is monitored by a system of monitoring wells to detect any potential leachate or landfill gas contamination. Additionally, the Landfill has a composite liner and leachate collection system to provide protection of groundwater resources. The Landfill bottom liner is constructed and

installed to control migration of waste or waste constituents out of the Landfill into the adjacent subsurface soil, groundwater, or surface water at any time during the active-life of the Landfill and during the post-closure care period. The bottom liner consists of two components; the upper component is a flexible membrane liner (FML) that is installed in direct and uniform contact with the lower component of the composite liner, and the lower component consists of at least two feet of compacted soil with a hydraulic conductivity of no more than 1×10^{-7} cm/sec. Maximum annual leachate generation is estimated to be approximately 792,900 gallons. The existing leachate pond is designed to be able to hold over 3,366,000 gallons of leachate, considerably greater than annual leachate generation.

A permitted surface water drainage system is active at the Landfill to control the surface water from areas around the Landfill and surface water run-off from the Landfill. The surface water drainage system consists of open channels, sedimentation basins, terrace channels, side slope terrace channels, and letdown structures. Site drainage from outside the waste boundary area is kept out of the Landfill by open channels outside the Landfill perimeter road. Temporary berms are placed around the working face of the Landfill to prevent surface water run-off from areas of the Landfill that do not have intermediate cover.

2.3 Site Landfill Operations Overview

Community Refuse Disposal, Inc. (CRD), a Nebraska corporation owned by Waste Connections, Inc. (WCI), is contracted by the NNSWC for specific portions of the operation of the Landfill facility. The facility is open from 7:00 a.m. to 4:00 p.m. Monday through Friday and 7:00 a.m. to 12:00 p.m. on Saturday, and is closed on Sundays and on all major U.S. holidays. The workforce at the site is composed of two experienced heavy equipment operators, one laborer, and a site manager contracted through WCI. NNSWC employees at the Landfill consist of one full-time and one part-time scale clerk. The facility has several pieces of heavy-duty equipment including a compactor, excavator, articulated dump truck, and a bulldozer. The site accepts mostly MSW, as well as special non-hazardous industrial waste approved by the Nebraska Department of Environment and Energy (NDEE).

The site gate remains locked when the operating personnel are not on site. Security cameras also monitor the site and record all incidences of unauthorized access. All trucks are required to be weighed and a record of the time, weight, and vehicle number are kept by the scale clerk personnel. After being weighed, the trucks can proceed to the active disposal areas.

Detailed discussion of the Landfill operations is included in Section 3.1 below.

3.0 ALTERNATIVES AND EFFICIENCIES FOR LANDFILL OPERATIONS

3.1 Landfill Operational Review

A site visit to the Landfill was conducted on October 12 and 13, 2020 to observe operational activities. Based on discussions with staff, the site operations observed reflect a normal weekday operating period for the Landfill. General tasks observed during the site visit included tipping area preparation, waste load inspection, waste placement and compaction, placement of alternative daily cover, and general observations of other support operations such as scale house operations. Through a request for information (RFI), the Coalition provided documents for review related to existing contracts, previous site development, financial and budgeting, personnel, equipment, and environmental operations. As a result of the site visit and informational review, the following key issues were identified as potential opportunities to improve Landfill operations:

- Section 3.1.1 – Facility Traffic Flow
- Section 3.1.2 – Staffing
- Section 3.1.3 – Equipment
- Section 3.1.4 – Scale House Operations
- Section 3.1.5 – Site Infrastructure
- Section 3.1.6 – Working Face Operations
- Section 3.1.7 – Leachate Management
- Section 3.1.8 – Stormwater Controls
- Section 3.1.9 – Litter

This section of the Plan will discuss these key issues with the focus on improving the efficiency and management of the Landfill operations as well as providing for an effective solid waste program while maintaining environmental protection.

3.1.1 Facility Traffic Flow

The Landfill accepts MSW primarily from Coalition member transfer station facilities, and also accepts a small portion of waste from residential and commercial sources. As shown on Figure 3-1, customers enter the site through the scale house entrance from 825th Road with the following options:

- Customers enter the scale house scale to weigh-in and begin their transaction. From the scale house, customers are directed to the following locations depending on the weather:
 - Landfill Area 4 non-wet weather active face; or
 - Landfill Area 5 wet weather active face

- Customers that need to weigh-out to complete their transaction enter the scale at the scale house. Other customers with completed transactions leave via the bypass lane.

Waste that arrives at the Landfill is primarily transfer trailers, however the Landfill also receives other types of waste traffic, including special waste that bypasses transfer stations. Typical waste types and quantities delivered to the Landfill include the following:

- Eight roll offs directly hauled per day on average
- Three to four rural packer trucks per day
- One to two loads of bulky waste per day
- Tire waste
- Construction waste
- Animal carcasses
- Loads by individuals from hog confinements
- Assorted loads including wind mill debris, rubber products, and medical center waste
- Goodyear hoses that the Landfill keeps in a separate area from other waste

Figure 3-1: Existing NNSWC Sanitary Landfill Entrance Waste Flow Diagram



3.1.2 Staffing

The Coalition currently contracts Landfill operations to WCI through a contract established between both parties on December 7, 1992. WCI currently has one fulltime employee to supervise overall Landfill operations, one fulltime laborer, and two fulltime operators. When necessary, WCI utilizes labor from the private operator’s other facilities as needed, which include the Butler County and G & P Landfills. The Landfill also has 1.375 full time equivalent (FTE) NNSWC employees attending the scale house and managing customers entering and exiting the site Table 3-1 provides the current staffing at the Landfill. It should be noted that this only includes the on-site staffing at the Landfill and does not include the other supervisory and administrative staffing that is provided by NNSWC.

Table 3-1: Current Staffing for NNSWC Sanitary Landfill Operations

Title/Job Function	Total FTE	Role	Employer
Site Manager	1	Supervisory role managing employees	Waste Connections, Inc.
Laborer	1	Pick up wind blown litter, perform miscellaneous housekeeping tasks	Waste Connections, Inc.
Operator	2	Operate dozer and compactor at active face of Landfill, set wind screens, excavate and haul soil	Waste Connections, Inc.
Landfill Scale Attendant	1.375	Scale house operations, manage customers entering and exiting the site	NNSWC
Total Landfill Staff	5.25	-	-

Based on the observations, the current staffing levels at the Landfill appear to be sufficient for operations, contingent upon WCI's ability to continue utilizing staffing from other facilities for back-up labor.

3.1.3 Equipment

Equipment operating in their normal daily functions was witnessed during the site visit. Landfill operations are heavily dependent on having the right piece of equipment available to create an efficient tipping area and optimize airspace utilization. The equipment must be maintained to be operable during all hours of business, and key pieces of equipment should have backups onsite to allow for routine maintenance and unplanned downtime. Minor equipment maintenance is conducted by WCI. Major equipment maintenance is conducted by a CAT dealer. The equipment at the Landfill does not have GPS, therefore, the active face areas in the Landfill are marked with a handheld GPS. Table 3-2 summarizes the current Landfill equipment inventory. All equipment at the Landfill is owned by WCI and is generally in good working condition. At the time of the site visit, the A1-Jon compactor and one of the CAT 826 compactors were down for maintenance. The teeth on the down compactors were in good condition and were greater than six inches. The teeth on the functional CAT 826 compactor were fairly worn down at the time of the site visit.

Table 3-2: NNSWC Sanitary Landfill Equipment List

Type	Make & Model	Current Purpose/Area of Use
Dozer	D6T	Cover soil grading and sloping on active face
	D6N	Finishing off areas and miscellaneous maintenance and borrow activities

Type	Make & Model	Current Purpose/Area of Use
	D6M	Spare piece of equipment that can be used at the active face
Compactor	A1-Jon	Spread and compact waste at working face
	CAT 826G	
	CAT 826G	
Excavator	Komatsu PC400LC	Long reach, Borrow operations, pond cleanouts, etc.
	CAT 322B	Short reach, Active face support (pulling waste out of trailers)
Loader	938G	Miscellaneous site activities
Dump Truck	CAT 730	Articulated miscellaneous site operations
Water Truck	--	4,000 gallon capacity
Payloader	Caterpillar	Miscellaneous site operations (road gravel)
Motor Grader	Caterpillar	Snow removal, haul road grading
Farm Tractor	--	Miscellaneous site operations
Mobile Diesel Wagon	--	Miscellaneous fueling near active face

It is recommended to maintain frontline (i.e., primary) compactor(s) with sufficient teeth length (i.e., greater than six inches) to adequately process and compact waste for optimum airspace utilization. Additionally, it is recommended to install and utilize GPS equipment on the frontline compactor. The GPS should be equipped with a landfill specific package to help track fill elevations as well as real-time compaction rates for efficient waste filling operations.

3.1.4 Scale House Operations

The Landfill is open from 7:00 am to 4:00 pm Monday through Friday, and 7:00 am to 12:00 pm Saturday. The Landfill is closed on Sundays and on all major U.S. Holidays. The scale house is staffed by 1.375 FTE (55 hours per week) scale house attendants. The truck queue is highest within the first hour of the Landfill opening and is intermittent after the first hour. A second rush usually occurs in the early afternoon. Cash accounts are infrequent, as customers are required to bring a check.

3.1.5 Site Infrastructure

During the site visit, existing buildings and roads onsite were observed for current functionality and condition. The following summarizes the major buildings and disposal areas on-site:

- **Scale House.** The scale house was installed in 1995 and is in fair condition but nearing the end of its life, and is not on a permanent foundation.

- **Scale.** A new deck was installed in 2015. Load cells and other components are replaced or upgraded as they fail. The limited access of the scale makes it difficult to clean out; as a result, accumulation of dirt and debris below the scale is an issue.
- **Equipment Building.** The current equipment building is just large enough to store the equipment at the Landfill in the winter; equipment is stored outside at the active areas the rest of the year. The building is 25 years old and does not have a septic system. A 7,000 gallon underground holding tank stores sanitary wastewater and maintenance facility wastewater on-site. The tank is periodically unloaded, and its contents taken to a wastewater treatment facility for disposal. In addition, the building is having some issues with stormwater leaking in due to gravel that is built up higher than the building floor. It is recommended that the future equipment building is larger, has a septic system, and built at a higher elevation to prevent stormwater intrusion.
- **Site Access Roads.** The site access roads are generally maintained as dictated by active filling operations.
- **Perimeter Roads.** The perimeter roads at the Landfill were in good condition at the time of the site visit.

Overall, the site infrastructure is adequate for continued short-term operations. Additional discussion regarding long-term site infrastructure needs and improvements is included in Section 4.4.

3.1.6 Working Face Operations

Working face activities begin around 6:40 am. The Landfill staff typically stockpiles dirt at the end of the day to prepare the active face for the next day. Additional intermediate cover soil is stripped away in the morning where the daily cell area is planned. At the time of the site visit, waste was being placed in 10-foot thick lifts in a daily cell that is typically 80 feet by 40 feet. Shutdowns do not occur regularly but may occur during periods of high winds and when road conditions are poor due to ice or blizzards. Burns & McDonnell staff observed the following operations at the Landfill during the site visit:

- **Equipment at working face.** The Landfill staff currently has one person operating both the dozer and compactor at the active face. Another operator excavates and hauls soil. During normal operations, three to four trucks are dumping at one time. Wet weather operations restrict dumping trucks to two at one time. Area 4 is currently being filled during regular operations, and Area 5 is currently used for wet weather conditions, with waste lifts progressing from the west side to the east side of the cells. Landfill operators compact waste on the slope of the daily cell working face to maintain a small landfill working face and minimize blowing litter. It is typically more efficient for compactors to compact on flat, horizontal lifts.

- **Use of alternative daily cover (ADC) and daily cover.** The Landfill staff uses spray-on ADC to limit soil borrow activities as much as possible. ADC is mixed with leachate in the summer and well water in the winter when leachate is not available (i.e., pond surface is frozen). One water truck load equates to approximately two to three days of ADC. The Landfill is also permitted to use petroleum contaminated soils (PCS) as ADC, but does not receive consistent amounts of this material. The use of ADC helps with achieving a good waste to soil ratio and increases the airspace utilization.
- **Litter Fencing.** Multiple wind screens are set up at the working face to control litter. Significant changes in wind direction were observed during the site visit but the wind screens were setup and relocated effectively to control the litter. A perimeter fence collects litter that blows out of the active face on windy days. The fence is generally in good shape but has some areas that are worn out.

3.1.7 Leachate Management

Leachate collected from the Landfill is conveyed to the existing leachate pond. Leachate is currently managed on-site. Landfill operations uses a sprinkler to apply leachate over areas of daily or intermediate cover and for dust suppression on the interior working areas. Previously, the Landfill also used seepage pits on the active Landfill face to manage leachate, however this practice has been discontinued due to the staffing required to continually monitor the leachate levels within the pit. The pump used for this operation was replaced in 2019 and is in good working condition. At the time of the site visit, there was no significant scaling in the leachate piping, and it appeared to be in good condition. The Landfill should continue to flush the leachate piping annually to not only conduct integrity testing on the pipes but to also clean the manholes and sewer piping from solids build-up. Furthermore, the sewer lines should also continue to be air tested on an annual basis. The pond underdrain leak detection float system infrequently causes maintenance issues. It is recommended that Landfill staff continue keeping a daily log of the elevation in the leachate pond.

3.1.8 Stormwater Controls

Perimeter stormwater ditches are constructed around the Landfill and generally direct stormwater to the stormwater pond located in the southeast corner of the Landfill property. The Landfill utilizes diversion berms on the south side of Area 4 and north side of Area 5 that feed to the letdown constructed as part of the Area 5 construction project. The letdown structure then drains into the stormwater pond south of Area 4. Landfill staff maintains the stormwater pond, and removes sediment approximately every two years, or

as needed. At the time of the site visit, the Landfill staff were working on excavating the stormwater pond and performing erosion related repairs next to the stormwater pond.

Stormwater near the scale area drains fairly well. However, as mentioned previously the equipment building has issues with stormwater leaking into the building. The gravel pad surrounding the building gets built up higher than the floor of the equipment building during operations, preventing water from draining away from the building. It is recommended that the Landfill operator continue to make improvements to divert stormwater away from the equipment building.

3.1.9 Litter

There was minimal litter observed at the Landfill during the site visit with the exception near the active filling areas in Area 4 and Area 5. Windblown litter is typically collected and bagged on the active area. For the most part, the perimeter litter fencing was in good shape at the time of the site visit, but there were some areas that were in need of repair. It was noticed during the site visit that several trucks were not adequately sweeping out their trailers after disposal, which resulted in windblown litter occurring as trucks were pulling away. It is recommended that all trucks sweep out trailers to minimize windblown litter when trucks leave the Landfill, and that Landfill staff repair the portions of the perimeter litter fencing that are in need of repair.

3.2 Waste Shredding and Waste Bailing Evaluations

A desktop evaluation was conducted to explore the potential for the Coalition to implement waste shredding or waste bailing. The evaluation was developed based on Burns & McDonnell's industry experience and information provided by manufacturers. The cost of material processing was compared with the potential improvements in waste density and associated additional benefits of the incremental airspace gained. The findings of the evaluation are summarized below.

Airspace is the Landfill's primary asset and the grinding or shredding of waste can increase the airspace utilization factor (AUF) of the Landfill. For the waste shredding evaluation, the Landfill life gained with increased AUF was compared to the cost of owning, operating, and maintaining a shredder at the Landfill. For reference, the full waste shredding evaluation analysis is provided in Appendix A.

The cost of owning, operating, and maintaining a shredder at the Landfill is estimated to be \$255,300 per year. This cost considers full depreciation of the shredding equipment over ten years and the cost of operating and maintaining the equipment for 4-hours a day for 160-days per year. Additionally, the cost of 1.0 full-time employee (FTE) is considered to operate the shredder per year prorated by assuming 1.5

FTE required for shredder operations for 160-days per year). Table 3-3 shows a summary of the costs for the waste shredding evaluation.

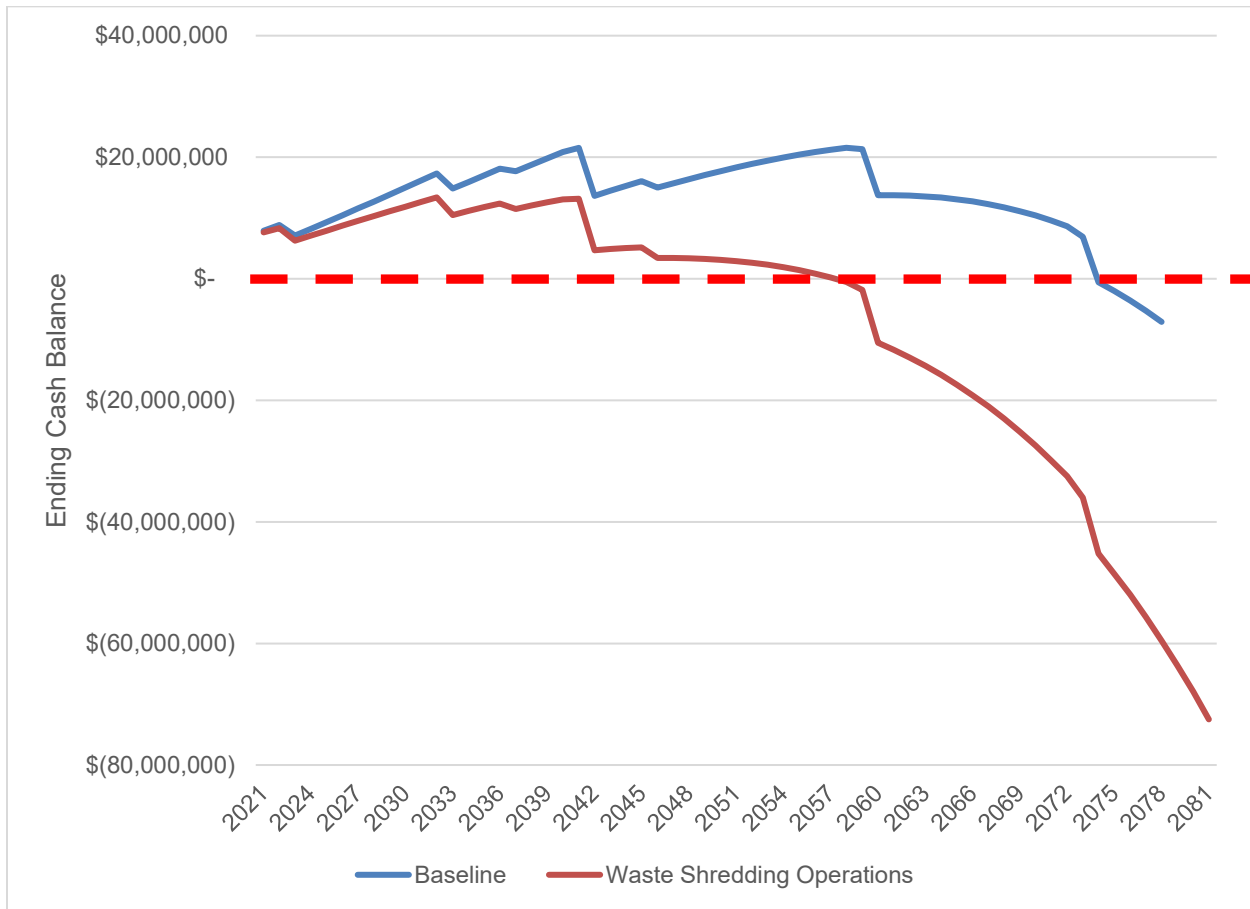
Table 3-3: Summary of Costs for NNSWC Waste Shredding

Annual Costs	2021\$
Shredder (owning and operating Costs)	\$172,800
Operator (1.0 FTE salary and benefits)	\$82,500
Total	\$255,300

To determine the Landfill life gained, an annual tonnage of 112,000 tons with a future generation growth rate of one percent and a current Landfill AUF of 1,296 pounds per cubic yard (lb/cy) per the 2019 Volume Calculations Report prepared by Burns & McDonnell in April 2020 were assumed. It was also assumed that the current Landfill AUF would increase approximately 300 lb/cy for the volume of waste being shredded. With these assumptions and a shredder capacity of 52,800 tons per year (based on 75-percent maximum throughput capacity of 110 tons per hour, operating 4 hours per day, for 160 days per year), the average effective total AUF for waste shredding operations was calculated to be 1,405 lb/cy. With the average effective total AUF, the Coalition would gain 3.67 years of additional life due to the increase in AUF provided by shredding waste, assuming the Landfill expansion detailed in Section 4.0 is completed.

The additional Landfill life gained, and the costs associated with shredding operations were used as inputs into a financial model (Appendix B) to determine the impacts that waste shredding will have on the Landfill net revenue (Section 3.3 details additional financial model inputs). Figure 3-2 compares the baseline operations versus the operations with waste shredding. From the figure, the Coalition will begin seeing a cash ending balance deficit around 2058 with waste shredding operations at the Landfill because of the additional operating costs of shredding waste. Before this date, the Coalition would need to increase tipping fees to avoid a cash deficit. It is recommended that the Coalition proceed with normal Landfill operations.

Figure 3-2: NNSWC Ending Cash Balance Comparison of Baseline versus Waste Shredding Operations



From Burns & McDonnell’s experience, waste bailing operations typically provide an AUF of approximately 1,200 lb/cy for landfills of similar size. As previously explained a landfill’s airspace is its most valuable asset. Current Landfill operations yield a calculated AUF value of 1,296 lb/cy, which exceed the expected AUF for waste bailing operations. Additionally, a waste bailing operation would require a bailer building to be constructed and additional FTEs to staff the operation. A bailing operation for the Landfill is not financially justifiable as the Coalition will spend considerable upfront capital costs and operation/maintenance costs for no gain in additional AUF.

3.3 Benefits and Impacts of Changes to Waste Acceptance Amounts

Changes to net revenues and overall costs with increases and decreases in waste receipts were evaluated as part of this task. Tipping fee requirements for NNSWC members were also reviewed. The analysis assumed the Landfill expansion concept and the supporting infrastructure discussed in Section 4.0 are developed. A planning level financial model was created to evaluate the impact of changes in waste receipts, and the detailed worksheets are provided in Appendix C.

The financial model was developed by evaluating the following scenarios:

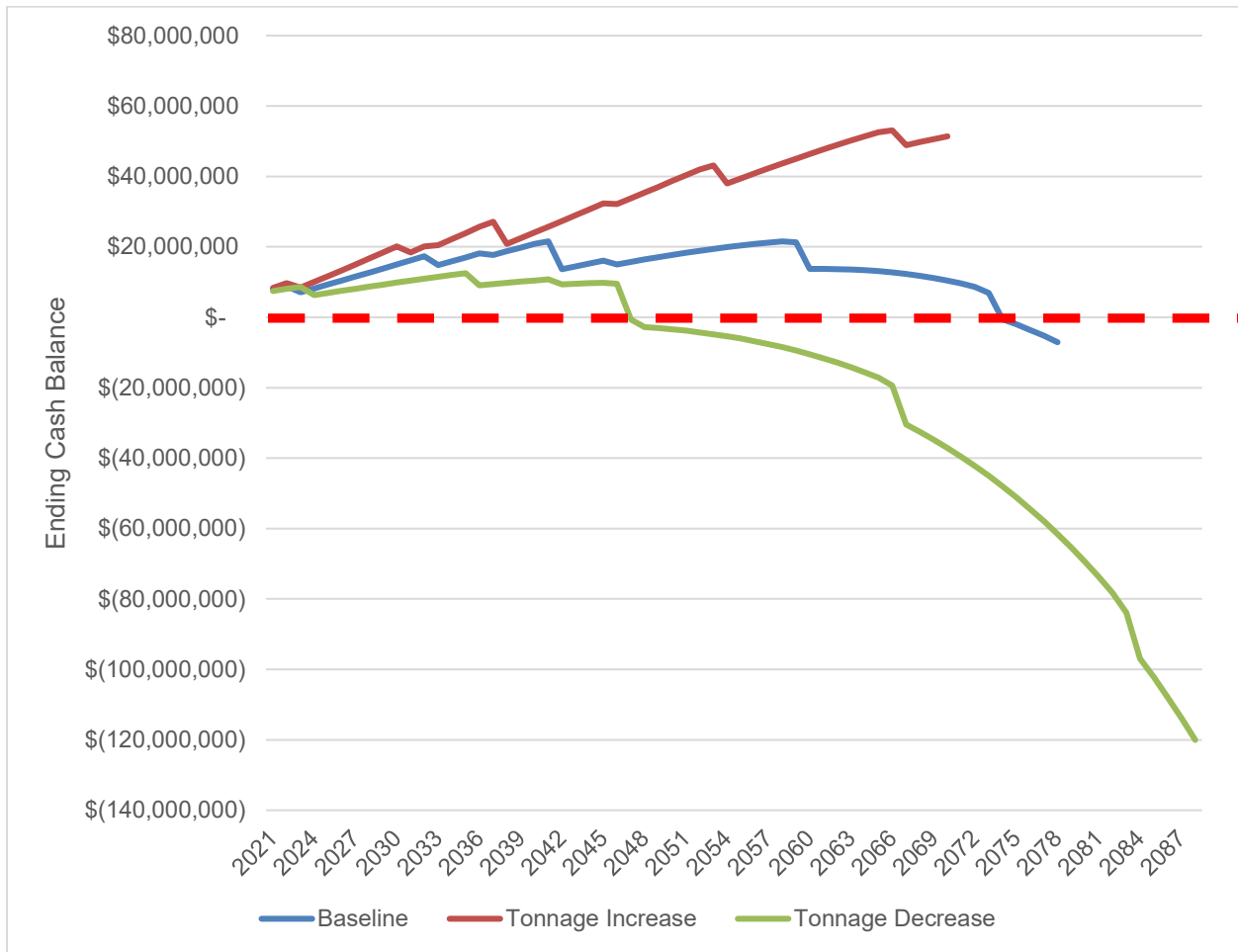
- **Baseline Scenario:** Waste received by the Landfill will remain unchanged, “no waste change.”
- **Scenario #1:** Assumes a 20-percent waste increase to the overall waste stream.
- **Scenario #2:** Assumes a 20-percent waste decrease to the overall waste stream.

For all scenarios, the financial model assumes a waste tonnage rate of 112,000 tons for 2021 with a one-percent tonnage increase per year. The following were additional key inputs into the financial model:

- **WCI Operation Costs:** The Coalition currently contracts Landfill operations to WCI through a contract established between both parties on December 7, 1992. The contract establishes a “fixed” fee for operating the facility (based at \$480,000) as well as a tonnage fee (based at \$4.00 per ton of incoming waste, not to exceed \$480,000). Additionally, there is a separate special waste fee (\$10.50 per ton) collected to manage special wastes.
- **Coalition Operating Costs:** A total cost of \$758,000 net present value was assumed for 2021 with input from the PTF. This value incorporates personnel costs, operating and maintenance costs, other administrative and overhead costs, financial assurance fund transfers, and professional services.
- Operating costs projected include inflationary increases based on the type of cost (2.5 to 3.0 percent)
- Capital costs for supporting infrastructure discussed in Section 4.0 and Section 5.0
- Current Tipping fee of \$24.00 to be unchanged
- Closure/Post-Closure costs funded via financial assurance funds

The financial evaluation results are depicted in Figure 3-3 based on the assumptions provided above. The financial evaluation was carried out until the Landfill life was depleted for each scenario. The timing of when cell construction/closure and additional capital improvements vary as determined by the findings described in Section 4.0 per each scenario. Additionally, the ending life of the Landfill varied due to the increase or decrease of waste placed in the Landfill. The objective of the financial model was to evaluate the impact on the NNSWC cash ending balance based on the three scenarios previously described.

Figure 3-3: NNSWC Financial Ending Cash Balance Analysis with Tonnage Adjustments



The Baseline Scenario generally has a positive ending balance throughout the Landfill’s life. Close to the end of the baseline scenario, the Coalition begins to experience a cash deficit around 2074. Increases to the tipping fee should be considered and evaluated approximately 10 years prior to the reserves being depleted.

Scenario #1 (tonnage increase scenario) experiences an increase in revenues from the additional tipping fees gained due to the increase in the waste stream. With this scenario, capital project construction dates are accelerated and provide the Coalition with an ending positive cash balance throughout the Landfill’s life. The Landfill life is depleted by 2070, with a positive cash balance of approximately \$50 million.

The results for Scenario #2 (tonnage reduction scenario) indicate that the Coalition will have a negative ending cash balance beginning in 2047. To avoid a negative cash ending balance, tipping fee increases would need to be considered and evaluated approximately 10 years prior to the reserves being depleted.

With this scenario, the Landfill life is depleted in 2088. Similar to other scenarios, the capital project construction dates are altered (i.e., delayed) with this scenario based on when construction is necessary.

4.0 LANDFILL EXPANSION DEVELOPMENT

Several options were identified and evaluated to increase the disposal capacity of the Landfill within the current property boundary. Multiple conceptual expansion alternatives detailed below were identified and presented to the PTF. Subsequently, the Preferred Expansion Alternative by the PTF was further refined by Burns & McDonnell, and the following conceptual plans and documents were developed:

- A conceptual base grading plan for the planned Landfill lateral expansion
- A conceptual final grading plan for the entire Landfill at closure, including the vertical expansion
- Conceptual stormwater, leachate, and landfill gas conveyance plans
- Preliminary Landfill stability calculations for the lateral and vertical expansion
- Volume calculations to determine airspace allocated for waste and soil balance requirements

An analysis of estimated construction times and net present value construction costs was completed for the lateral/vertical expansion and support facilities and infrastructure. The construction timing and costs developed for the improvements were used as inputs into the financial model developed in Section 3.3 to evaluate the impacts of waste increases or decreases into the Landfill.

4.1 Site Restrictions

A thorough review was conducted of the NDEE site location restrictions, Stanton County siting requirements, and associated historical siting evaluations in the Landfill's permit documents. This review served to establish potential lateral and vertical expansion options within the Landfill's existing property boundary. The following expansion alternatives and final expansion options all meet the restriction requirements set forth by the NDEE and Stanton County.

4.2 Conceptual Expansion Alternatives

Several conceptual expansion alternatives at the Landfill were reviewed. Four primary horizontal expansion alternatives and three vertical expansion alternatives were identified and presented to the Coalition PTF. The conceptual expansion alternatives can be referenced in Figures A through H in Appendix D and are described in further detail below. The figures presented in the appendix depict the horizontal expansion alternatives with a 30-foot vertical expansion graded at a 4 horizontal (H):1 vertical (V) slope. The amount of airspace gained for each conceptual expansion alternative was calculated and is provided in Table 4-1 below. The additional airspace capacity was calculated by subtracting the ultimate permitted airspace capacity from the ultimate airspace capacity determined for each alternative. To better understand how the additional airspace capacity compares to each alternative, the additional expansion

life was calculated based on an assume tonnage rate of 112,000 tons, tonnage growth rate of one percent, and a waste density of 1,296 lb/cy.

Table 4-1: Airspace and Expansion Life Summary for the NNSWC Landfill Expansion Alternatives

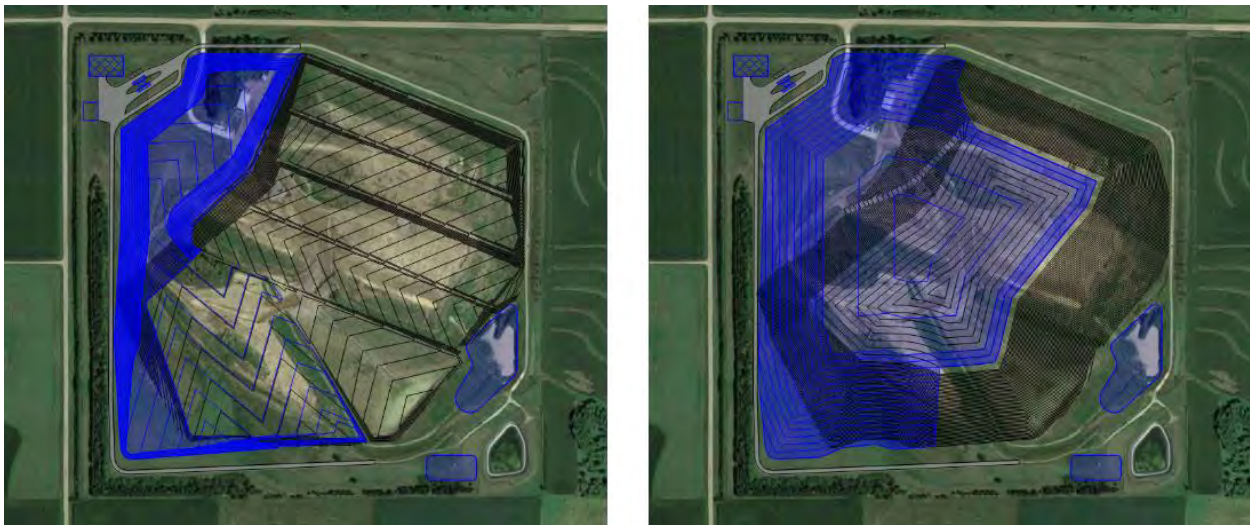
Expansion Alternative		Existing	1	2	3.A	3.B
Crest = 1780 (0ft vertical)	Available Airspace (CY)	9,598,984	12,765,172	11,814,593	13,570,528	12,524,278
	Additional Airspace (CY)	-	3,166,188	2,215,609	3,971,544	2,925,294
	Additional Expansion Life (yrs) ^a	-	13	9.2	16	12
Crest = 1810 (30ft vertical)	Available Airspace (CY)	9,598,984	14,249,672	12,900,177	15,103,410	13,716,381
	Additional Airspace (CY)	-	4,650,688	3,301,193	5,504,426	4,117,397
	Additional Expansion Life (yrs) ^a	-	18.5	13.5	21.6	16.6
Crest = 1840 (60ft vertical)	Available Airspace (CY)	9,598,984	15,207,495	13,462,874	16,145,343	14,339,019
	Additional Airspace (CY)	-	5,608,511	3,863,890	6,546,359	4,740,035
	Additional Expansion Life (yrs) ^a	-	21.9	15.6	25.2	18.8

^a Landfill life estimates assume a present annualized tonnage of 112,000 tons with a predicted future generation growth rate of one percent. At the time the existing permitted capacity is depleted in 2049, the annualized tonnage is estimated to be 149,000 tons; this value is the starting point for expansion life calculations of the expansion options.

4.2.1 Expansion Alternative 1

Expansion Alternative 1 covers an approximate non-permitted area of 20-acres to the West and Northwest of the existing permitted Landfill footprint. The expansion alternative base grades and final cover plan are presented conceptually in Figure A and Figure B in Appendix D. A snapshot of the base grades and the final cover plan is shown in Figure 4-1. This expansion alternative will provide the Landfill with approximately 13.0-22.0 years of additional life as indicated in Table 4-1. However, it will require existing Landfill infrastructure such as existing inbound/outbound scales, scale house, and equipment building to the property's northwest corner to be relocated.

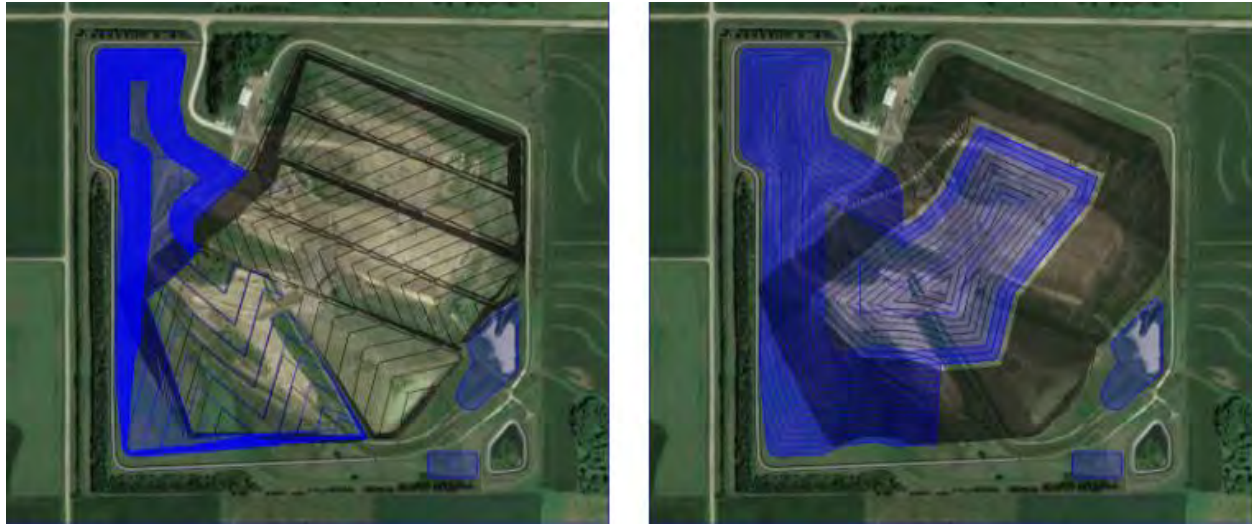
Figure 4-1: NNSWC Expansion Alternative 1 Base Grades (left) and Final Cover (right)



4.2.2 Expansion Alternative 2

Expansion Alternative 2 is located to the West and Northwest of the existing permitted Landfill footprint. This expansion alternative covers an approximate non-permitted area of 18-acres providing the Landfill with 9.3-15.6 years of additional life based on calculations summarized in Table 4-1. The decrease in additional life is primarily due to the expansion not fully piggybacking onto existing Landfill slopes. However, this alternative will not require the relocation of existing infrastructure. The base grades and final cover plan for Expansion Alternative 2 are presented conceptually in Figure C and Figure D, respectively, in Appendix D. Figure 4-2 provides a snapshot of the base grades and final cover plan.

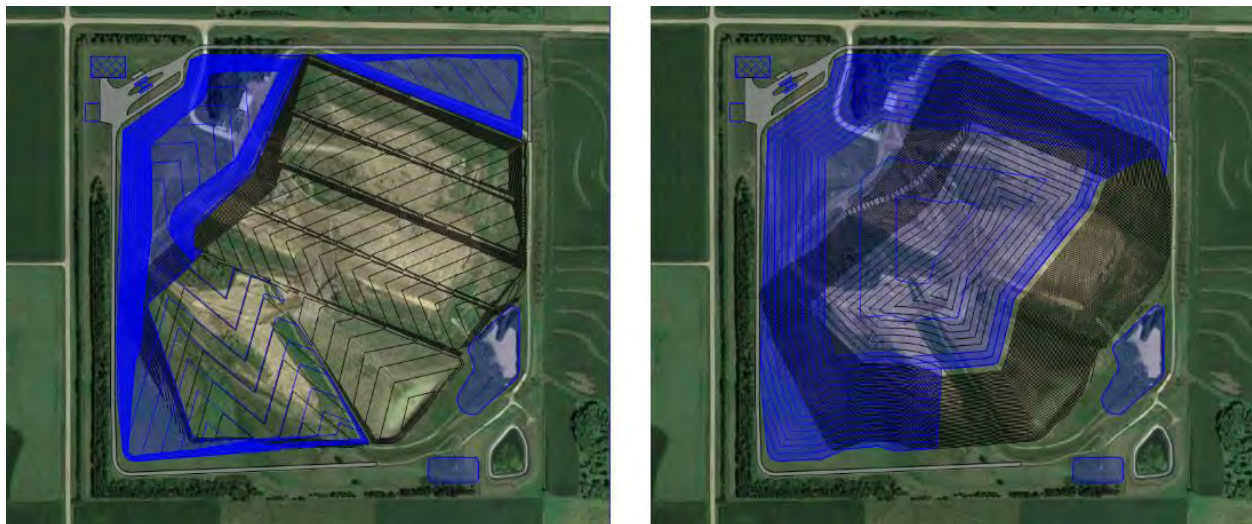
Figure 4-2: NNSWC Expansion Alternative 2 Base Grades (left) and Final Cover (right)



4.2.3 Expansion Alternative 3.A

Expansion Alternative 3.A is the same as Expansion Alternative 1 on the west side of the site, but additional landfill capacity is also added in the Northeast corner of the Landfill. This expansion alternative covers an approximate non-permitted area of 26-acres and will provide the Landfill with 16.1-25.2 years of additional life as indicated in Table 4-1. Similar to Expansion Alternative 1, the Landfill infrastructure will need to relocate to the property's northwest corner. Reference Figure E and Figure F in Appendix D for a conceptual representation of the base grades and final cover plan for this alternative. Figure 4-3 shows a snapshot of the base grade and final cover for this alternative.

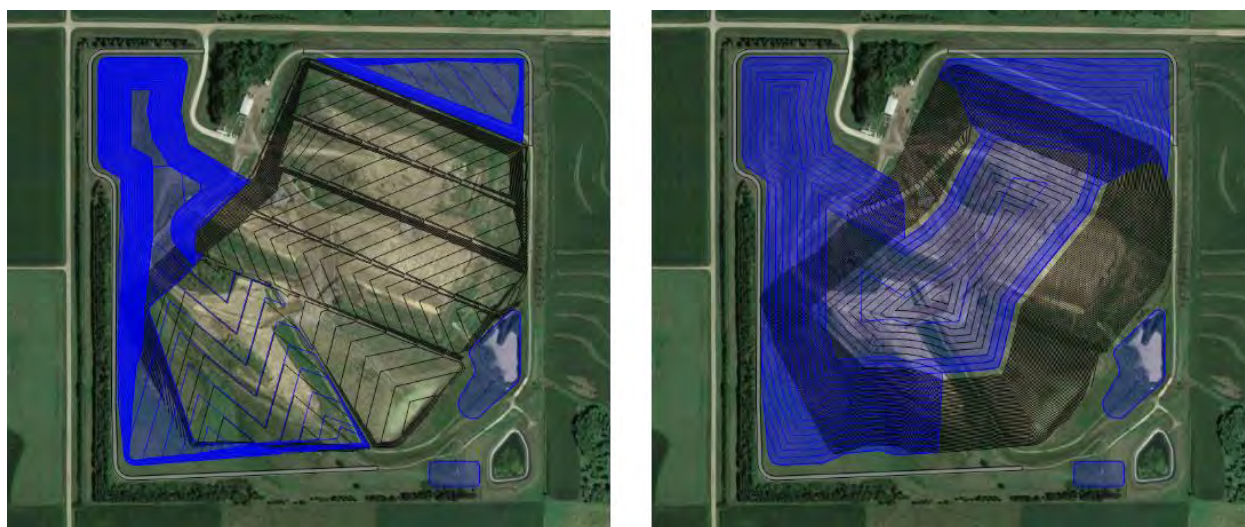
Figure 4-3: NNSWC Expansion Alternative 3.A Base Grades (left) and Final Cover (right)



4.2.4 Expansion Alternative 3.B

Expansion Alternative 3.B is the same as Expansion Alternative 2 but takes advantage of the additional waste capacity in the Northeast corner of the Landfill. The base grades and final cover plan are presented conceptually in Figure G and Figure H, respectively, in Appendix D. A snapshot of the base grades and final cover plan for this alternative is shown in Figure 4-4. This expansion alternative covers an approximate non permitted area of 24-acres and will provide the Landfill with 12.1-18.9 years of additional life as indicated in Table 4-1. Like Expansion Alternative 2, Landfill infrastructure will not need to relocate.

Figure 4-4: NNSWC Expansion Alternative 3.B Base Grades (left) and Final Cover (right)



4.3 Preferred Expansion Alternative

Based on a review of the proposed lateral and vertical expansion alternatives by the Coalition PTF, the preferred configuration for future development was Expansion Alternative 3.A with a vertical expansion of 60-feet. The Preferred Expansion Alternative 3.A was further revised with 3.3(H):1(V) slopes to match the slopes and capacities developed with the NNSWC Landfill 2020 Permit Modification (2020 Permit Modification) prepared by Burns & McDonnell in October 2020. Table 4-2 below provides the final airspace and additional expansion life gained with the revisions to this alternative calculated using the same approach explained in Section 4.2. The preferred configuration allows for the most expansion life and will also phase out existing infrastructure that will be nearing the end of its life at the time of development. With direction from the PTF, Burns & McDonnell further refined Preferred Expansion Alternative 3.A and developed a conceptual design for the alternative.

Table 4-2: Airspace and Expansion Life Summary for the NNSWC Preferred Expansion Alternative 3.A

Expansion Alternative	Crest = 1840 (60ft vertical)		
	Available Airspace (CY)	Additional Airspace (CY)	Additional Expansion Life (yrs) ^a
2020 Permit Modification	10,260,000	-	-
3.A ^b	17,530,000	7,270,000	27.7

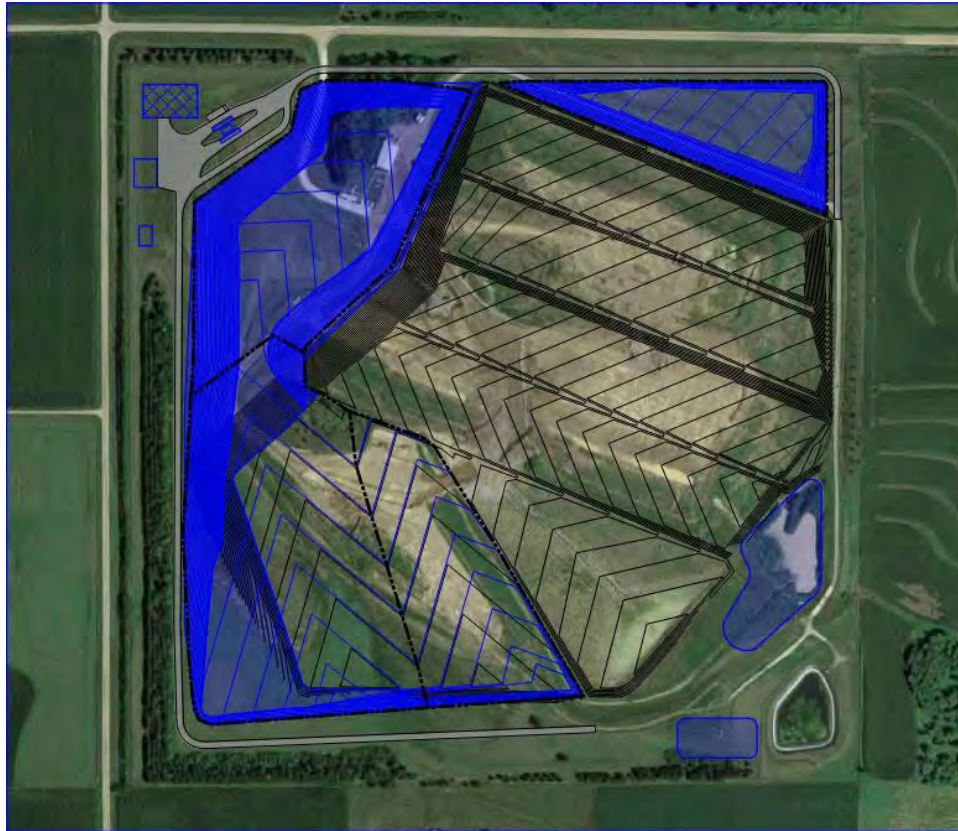
^a Landfill life estimates assume a present annualized tonnage of 112,000 tons with a predicted future generation growth of one-percent. At the time the existing permitted capacity is depleted in 2049, the annualized tonnage is estimated to be 149,000 tons; this value is the starting point for expansion life calculations.

^b Available airspace capacity adjusted per 2020 Permit Modification 3.3(H):1(V) slopes and adjusted remaining Landfill airspace.

4.3.1 Base Grade Plans

Figure 1 of Appendix E provides a conceptual base grade plan for the Preferred Expansion Alternative 3.A. A snapshot of the proposed base grade plans is shown in Figure 4-5. The new Landfill footprint will cover approximately 104 acres, increasing the Landfill footprint an additional 26-acres from the currently permitted 78-acre footprint. A summary of the proposed expansion areas are:

- **Area 6 Phase 1:** 9.3-acres
- **Area 6 Phase 2:** 19.1-acres
- **Area 7:** 14.0-acres
- **Area 8:** 6.3-acres

Figure 4-5: NNSWC Preferred Expansion Alternative 3.A Base Grade Plan

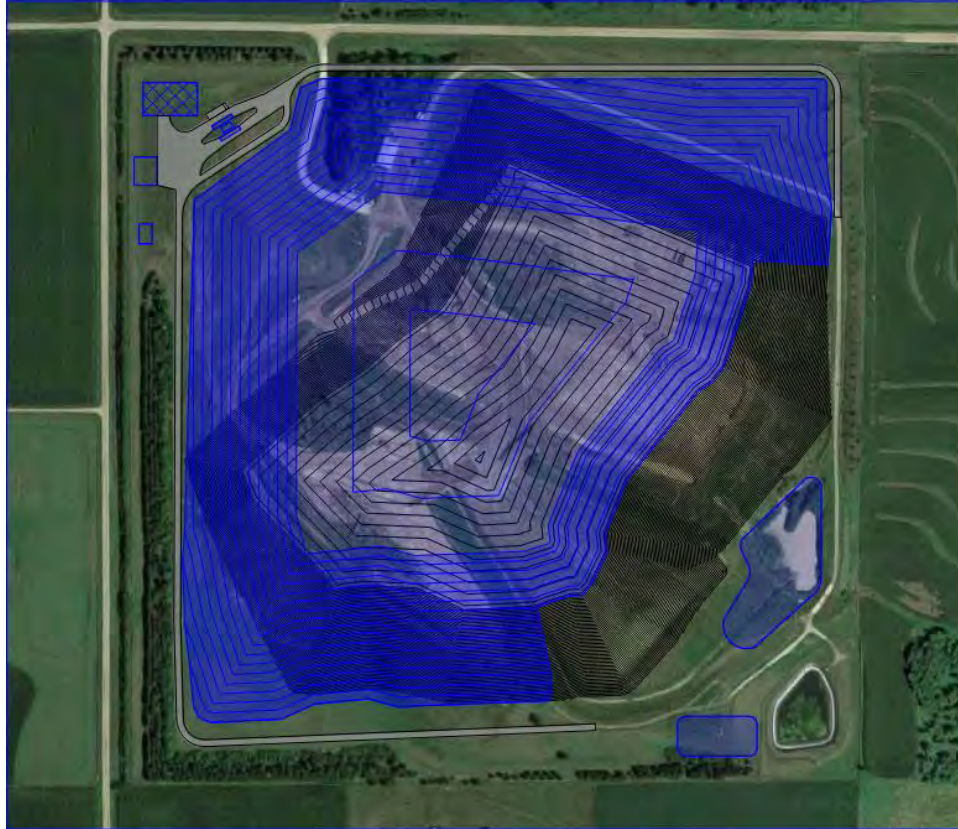
For Area 6 Phase 1-2 and Area 7, the base elevations are graded so that leachate will drain via gravity to the south and then east, connecting into the permitted leachate sewer infrastructure for Area 6. Similarly, the base elevations for Area 8 are graded so that leachate will drain via gravity to the southeast corner of the area, where it will then be pumped into the existing leachate sewer infrastructure near Area 1. Furthermore, the side slopes are graded at a 3(H):1(V) slope to match previous area construction base grades. To fully capture the horizontal expansion potential, permitting and design would need to be completed before developing Area 6 Phase 2 as significant modifications to the permitted Area 6 Phase 2 base grades are necessary. Minor modifications to the permitted Area 6 Phase 1 base grades will be submitted to the NDEE for permitting prior to Area 6 Phase 1 design and construction.

4.3.2 Final Grade Plans

The conceptual final grade plan for the Preferred Expansion Alternative 3.A is provided as Figure 2 of Appendix E. Figure 4-6 provides a snapshot of the final grades. The final grade plan incorporates a 60-foot vertical expansion from the current permitted final grades. It also considers the 3.3(H):1(V) final cover grade slope currently proposed in the 2020 Permit Modification. As provided in Figure 2, additional waste is placed over the proposed lateral landfill expansion and above the existing disposal areas to

maximize the Landfill capacity. With the proposed lateral and vertical expansions, the disposal capacity of the Landfill increases by approximately 6.5 million cubic yards. This additional Landfill capacity provides the Coalition with over 25 years of additional site life as indicated in Table 4-2.

Figure 4-6: NNSWC Preferred Expansion Alternative 3.A Final Grade Plan



Landfill stability calculations prepared for the 2020 Permit Modification are provided in Appendix F. The analysis considers the proposed lateral and vertical expansion. From the slope stability report, the proposed lateral and vertical expansion is deemed to be adequate.

4.3.3 Additional Landfill Infrastructure

4.3.3.1 Leachate Conveyance Plans

As previously described in Section 4.3.1 and provided in Figure 3 in Appendix E, a gravity leachate drainage system will be implemented to provide leachate drainage for Area 6 Phase 1-2 and Area 7. For Area 7, leachate will be directed from north to south by a leachate drainage trench up to the toe of the slope of Area 7. At the toe of the slope, a leachate drainage trench will be provided that will directly tie into the leachate drainage trench designed for Area 6 Phase 2. The leachate collected from Area 7 and Area 6 Phase 2 will then be directed from west to east to the Area 6 Phase 1 sump across the south slope

toe of both Area 6 Phase 1 and Phase 2 with a leachate drainage trench. Area 6 Phase 1 will have an individual leachate drainage trench running from north to south that will direct leachate into the Area 6 Phase 1 sump. The leachate collected in the Area 6 sump will connect into the existing leachate sewer infrastructure developed for Area 5 and will be transferred to the existing leachate pond.

Leachate in Area 8 will be collected along the toe of the slope adjacent to Area 1. The leachate will be directed via gravity to the Area 8 sump. Due to the topography at the northeast corner of the property, the leachate from the sump in Area 8 will be pumped into the existing leachate collection system adjacent to Area 1.

For the Preferred Expansion Alternative 3.A, it is anticipated that additional leachate holding capacity will be required. A new leachate pond is expected to be built next to the existing leachate pond at the southeast corner of the property, as shown in Figure 1 of Appendix E. Modifications to the existing leachate collection system will be provided as required to transfer leachate into either the existing or the proposed leachate ponds. Timing and estimated capital improvement costs for the proposed new leachate pond are found in Table 4-5 and Table 4-6, respectively, located in Section 4.4.

4.3.3.2 Stormwater Conveyance Plans

Stormwater will be collected and treated on-site through a series of terrace channels, letdown structures, open channels, and sedimentation basins. Precipitation that falls on the active working face and comes in contact with MSW will be managed as leachate. Precipitation that lands on intermediate and final cover soils and does not come in contact with waste will be managed as stormwater. The final cover system is designed to minimize infiltration of precipitation, control odors, provide a pleasing appearance, and provide a base for vegetation establishment. The proposed final cover contours and stormwater drainage of the Landfill expansion are provided on Figure 4 of Appendix E. The stormwater terraces will be constructed during final cover construction. Side slope terrace channels with a one-percent slope will be located at approximately 40-foot vertical increments and will drain to letdown channels that will then drain into stormwater ditches around the perimeter of the Landfill. These ditches will drain to the expanded sedimentation basin located in the southeast corner of the Landfill. Timing and estimated capital improvement costs for the proposed sedimentation basin expansion are provided in Table 4-5 and Table 4-6, respectively, located in Section 4.4.

4.3.3.3 Landfill Gas Conveyance Plans

Management of Landfill Gas (LFG) will continue in accordance with NDEE Title 129 – Nebraska Air Quality Regulations. Title 129 establishes the general air quality criteria that must be maintained and

directly incorporates the federal New Source Performance Standards (NSPS) for MSW landfills (40 CFR Part 60). NSPS requires reporting of Non-Methane Organic Compounds (NMOC) emission rate annually or at five-year intervals if the estimated NMOC emission rate is below the emission rate threshold. As currently permitted, the NNSWC facility is subject to 40 CFR Part 62 Subpart OOO regulations. Based on the proposed lateral and vertical expansion, the Landfill will be subject to 40 CFR Part 60 Subpart XXX, which requires an NMOC emission rate threshold of 34 megagram per year (Mg/yr). The increase in disposal capacity and the potential tonnage received are the main drivers that impact the emissions rate model. If, at any time during the landfill operating life, the calculated NMOC emission rate exceeds the threshold defined by NSPS, the Landfill will be required to install a landfill gas collection and control system.

Per the April 2021 Tier 2 Landfill Gas Sampling & Emissions Rate Report prepared by Burns & McDonnell (2021 Tier 2 Report), the Landfill will not exceed the 34 Mg/yr threshold for the foreseeable future. A landfill gas vent system is proposed for the lateral and vertical expansion of the Landfill, which should control decomposition gases generated within the Landfill and prevent the gases from posing a hazard to adjacent properties. Figure 5 of Appendix E provides the proposed Landfill gas venting layout. The proposed system consists of approximately 109 gas vents or one gas vent per acre as currently permitted. Figure 4-7 shows the currently permitted passive gas vents. The passive gas vents are interconnected with perforated gas collection pipes in the waste below the infiltration layer to effectively collect and vent LFG. Figure 4-8 depicts a passive vertical well gas venting system. A passive vertical well gas venting system should be considered at the time of permitting the preferred expansion. A passive vertical well gas venting system has the same functionality as the passive gas vents, but this system is easier to convert to an active gas collection system, if required in the future.

Figure 4-7: Typical Passive Gas Vent Section for NNSWC Landfill Expansion

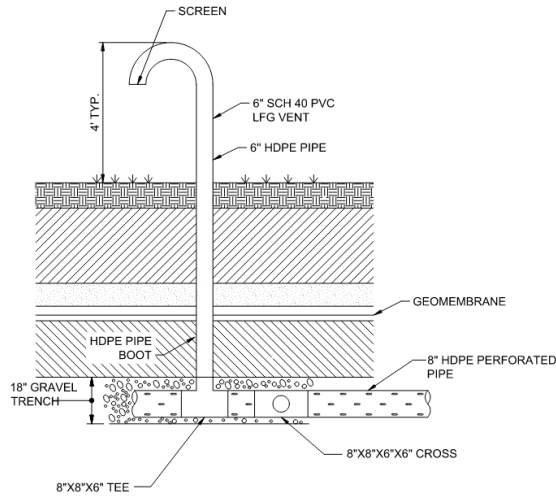
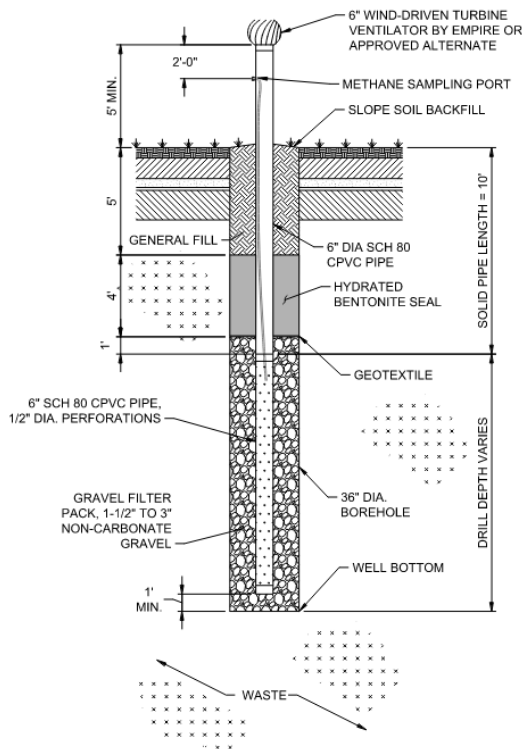


Figure 4-8: Typical Passive Vertical Well Gas Vent Section for NNSWC Landfill Expansion



A landfill gas collection and control system may alter the proposed gas venting system for the Landfill expansion and require installation of a flare station. In this occurrence, a landfill gas collection and control system will be designed and submitted for approval from NDEE. For this Plan, a preliminary flare

station location for the gas collection system has been identified at the property's northwest corner and is anticipated to be required 25-30 years out.

4.3.4 Expansion Volume Capacity

The total ultimate Landfill capacity for the Preferred Expansion Alternative 3.A is approximately 18,350,000 cubic yards. The available waste and daily and intermediate cover volume is 17,530,000 cubic yards after subtracting the final cover volume and the base liner protective cover soil volume from the total ultimate capacity. The ultimate capacity represents an increase of 7,270,000 cubic yards in airspace as compared to the 2020 Permit Modification. Based on an AUF of 1,296 lb/cy, a baseline year tonnage of 112,000 tons, and a one-percent waste growth rate through closure, it is anticipated that the additional capacity for the Preferred Expansion Alternative 3.A will add approximately 27.7 years of life to the Landfill as indicated in Table 4-2.

Appendix G provides a breakdown of the Landfill life and capacity by Landfill area and includes airspace projections for three assumed scenarios previously described in Section 3.3 (no waste change, 20-percent waste decrease, and 20-percent waste increase). Table 4-3 summarizes the expected time when the proposed lateral expansion areas will need to begin receiving waste for each assumed scenario. Areas 1-5 are currently active at the Landfill and will continue to be active through the construction of Area 6 Phase 1. From the 2020 Volume Calculation Report prepared by Burns & McDonnell in April 2021 for the Coalition, the construction of Area 6 Phase 1 is expected to occur during the 2023 construction season. As shown in Table 4-3, Area 6 Phase 1 will begin receiving waste at the same time for all three scenarios. Area 6 Phase 1 will need to be constructed prior to permitting the Preferred Expansion Alternative 3.A; however, minor modifications to the current permit are recommended for the base grades of the area to accommodate the future expansion permitting effort.

Table 4-3: NNSWC Preferred Expansion Alternative 3.A Area Construction and Waste Filling Schedule

Area	Baseline: No Waste Change		Scenario 1: 20% Waste Increase		Scenario 2: 20% Waste Decrease	
	Const. Year	Active Year	Const. Year	Active Year	Const. Year	Active Year
Area 1-5	-	Active	-	Active	-	Active
Area 6 PH 1	2023	2024	2023	2024	2023	2024
Area 6 PH 2	2042	2043	2038	2039	2047	2048
Area 7	2060	2061	2054	2055	2067	2068
Area 8	2074	2075	2066	2067	2084	2085

Area construction generally occurs the year prior to commencing waste filling operations in the area. Table 4-3 also summarizes the expected construction date for the proposed Areas. The required construction time for the proposed areas should be reassessed closer to when the areas will need to be constructed. Furthermore, as can be observed in Table 4-3, if waste into the Landfill decreases, each area's expected life is extended and vice versa if waste increases. Finally, from airspace projections, the Landfill life will be depleted in 2078 for the no waste change scenario, 2070 for the 20-percent waste increase scenario, and 2088 for the 20-percent waste decrease scenario.

4.3.5 Expansion Soil Balance

The on-site soil materials available are classified as high plasticity (CH) and low plasticity (CL) clay soils per the Unified Soil Classification System. These soils are deemed adequate by the NDEE Title 132 regulations to be used for daily, intermediate, and final cover.

Appendix G provides the soil volume calculations and a breakdown of the Landfill soil projections for the proposed expansion. The primary sources of on-site soil available for use are the remaining area excavations and the stockpile area located in the northwest corner of the property. Approximately 1,839,000 cubic yards would be removed from the Landfill expansion's proposed footprint. An approximate 309,500 cubic yards of additional soil is available in the northwest stockpile area. The total on-site available soil is approximately 2,148,500 cubic yards.

Soil required for the remaining Landfill life includes daily and intermediate cover soil, final cover soil, and protective cover soil for the proposed Area 6 through Area 8 expansion. Using a 4:1 waste to soil ratio for the remaining Landfill airspace, approximately 2,648,100 cubic yards of soil are required for daily and intermediate cover. The final cover soil required, excluding the sand layer material, is approximately 493,800 cubic yards. An additional 117,900 cubic yards of soil is needed for the 12-inch protective cover soil for Area 6 through Area 8. The total soil that is required for the proposed life of the landfill is approximately 3,259,900 cubic yards. The soil balance calculations show a soil deficit of roughly 1,111,300 cubic yards. The Landfill can improve upon the soil deficit by having efficient soil usage for daily and intermediate cover operations. Ultimately, it is anticipated that the Coalition will be required to purchase new land for soil borrow or purchase and import soil to account for the soil deficit. Similarly to the airspace projection breakdown, the required soil volume calculations assume three distinct scenarios: no waste change, 20-percent waste increase, and 20-percent waste decrease. In summary, the Landfill soil will approximately be depleted in 2063 for the no waste change scenario, 2057 for the 20-percent waste increase scenario, and 2071 for the 20-percent waste decrease scenario. It is

recommended that the Coalition purchase adjacent land for soil borrow operations. The timing of land acquisition needs is discussed in further detail in the Section 6.0 below.

4.3.6 Expansion Cost Assessment

The net present value cost was calculated for each area of Preferred Expansion Alternative 3.A for the Landfill. As previously mentioned, the proposed lateral expansion adds approximately 26-acres to the permitted landfill footprint, and the expected area construction dates are summarized in Table 4-3. Table 4-4 shows the cost of each of the expansion areas in 2021 dollars (2021\$). The estimated costs generally consist of mobilization, area mass excavation, expansion of the groundwater collection system that lies underneath the Landfill subgrade, construction of composite Landfill liner and leachate collection systems, installation of the protective cover, and extending the leachate and groundwater conveyance piping to its respective retention basin. A budgetary cost per acre for construction is approximately \$210,000 (2021\$). The estimated construction costs are based on industry experience combined with information from past projects, vendors, and published sources. It is recommended that the construction costs for the proposed areas is reassessed closer to when the areas will need to be constructed.

Table 4-4: NNSWC Preferred Expansion Alternative 3.A Construction Costs

Expansion Area	Total Cost (2021\$)
Area 6 PH 1	\$ 2,500,000
Area 6 PH 2	\$ 3,700,000
Area 7	\$ 2,700,000
Area 8	\$ 1,500,000

4.4 Support Facilities for Optimum Development

To maximize the disposal capacity at the Landfill, the existing scale, scale house, and equipment maintenance building facilities will require relocation to allow for the implementation of the proposed lateral expansion. The infrastructure is planned to be relocated to the northwest corner of the property, as shown in Figure 1 of Appendix E. The proposed location for the infrastructure allows for the existing property access to remain the same and will not require additional permitting from the County.

Additionally, dedicated inbound and outbound scales are included with a by-pass lane located adjacent to the scales to account for increased traffic if additional Coalition members are added and waste to the Landfill increases. Meeting spaces are also incorporated into the new equipment maintenance building.

These spaces will not only serve as employee breakrooms and rest areas but will also be able to be configured into educational and training facilities.

A new customer convenience drop-off area is shown in Figure 1 located in the northwest corner of the Landfill property. The drop-off area should be considered if the Coalition allows additional residential self-haulers at the Landfill as a way of separating the residential haulers from the larger commercial haulers for safety and convenience. The Landfill would oversee the hauling and dumping of the roll-offs into the Landfill's active areas once the containers are full.

The area around the scales, scale house, drop-off area, and a portion of the equipment maintenance building is planned to be paved as shown in Figure 1 in Appendix E. The remaining proposed roads outside this area shown in Figure 1 will consist of an aggregate or gravel surfacing.

Before the northwest corner of the property can be developed, the northwest soil stockpile will need to be removed from the location. Based on the soil balance calculations previously presented in Section 4.3.5 and Appendix G, the northwest corner stockpile will be depleted within approximately 10 to 15 years. This timeframe aligns with the end of the remaining life of the existing scale, scale house, and equipment maintenance building. The Landfill should begin removing and using the northwest soil stockpile as a soil borrow source following the excavation and construction of Area 6 Phase 1 to maintain the proposed development timeline of this infrastructure.

As detailed previously in Section 4.3.3.3, the 2021 Tier 2 Report was reviewed and the need for a gas collection system and flare station is not anticipated to be required in the near future. However, the emissions modeling will be impacted by the increase in disposal capacity of the Landfill and the potential increase in tonnage received. For planning purposes, Burns & McDonnell has included a flare station and a gas collection system 25 to 30 years out depending on the amount of waste the Landfill receives and potential changes in NMOC emission concentrations. The flare station is proposed to be located adjacent to the relocated equipment maintenance building, as seen in Figure 1 of Appendix E. The proximity of the flare to the new equipment maintenance building will allow for easy access by Landfill personnel. Further, gas collected from the Landfill could be beneficially used as a heating source for the equipment maintenance building and scale house. The need for a gas collection system and flare station should be reevaluated following subsequent Tier 2 and Air Permit renewals.

With the proposed Landfill expansion, an off-site location for future soil borrow and soil stockpile will be required for Landfill operations as described in Section 4.3.5. From the soil balance calculations results, the Landfill is expected to require soil to be stockpiled off-site following the construction of Area 6 Phase 2 and have a soil deficit closer to the Landfill's end of life. The need for an off-site soil stockpile location earlier in the Landfill life arises from the need to use the soil stockpiled in the northwest corner of the

property to allow for the required infrastructure to be relocated. The timing of when the acquisition of land is needed is highly dependent on the waste received by the Landfill. The need for expansion into adjacent lands is discussed in detail in Section 6.0 of this report. The Coalition should consider purchasing this land ahead of time to stockpile excavated soils and utilize as a soil borrow area closer to the end of the Landfill's life.

Table 4-5 summarizes when the Landfill is expected to construct the site improvements to support the Landfill operations. As previously described, the timing of when facilities are required is dependent on the quantity of waste that is received by the Landfill. The planning level present value construction costs for the Landfill support facilities are provided in Table 4-6.

Table 4-5: NNSWC Landfill Expansion Expected Construction Timing for Support Facilities

Facility	Baseline: No Waste Change	Scenario 1: 20% Waste Increase	Scenario 2: 20% Waste Decrease
Scales (x2)	2033	2031	2036
Scale House			
Equipment Building			
Drop-Off Area			
Asphalt Pavement			
Land Acquisition ¹	2037	2033	2042
Sedimentation Basin Expansion	2042	2038	2047
Leachate Pond Addition			
Landfill Gas Flare	2046	2048	2048

¹ Dates provided require the Landfill will acquire land five years prior to needing the land.

Table 4-6: NNSWC Landfill Expansion Support Facilities Net Present Value Construction Costs

Facility	Quantity	Unit	Unit Price ¹	Subtotal
Scales (x2)	2	LS	\$150,000	\$300,000
Scale House	1	LS	\$400,000	\$400,000
Equipment Building	6,000	SF	\$200	\$1,200,000
Drop-Off Area	1	LS	\$200,000	\$200,000
Asphalt Pavement	86,200	SF	\$7.00	\$600,000
Land Acquisition	160	AC	\$6,000	\$1,000,000
Sedimentation Basin Expansion	1	LS	\$250,000	\$250,000
Leachate Pond Addition	1	LS	\$1,000,000	\$1,000,000
Landfill Gas Flare	1	LS	\$1,000,000	\$1,000,000

¹ Costs are provided based on Burns & McDonnell's experience with similar facilities at other landfill sites.

5.0 CELL CLOSURE AND END OF USE PLANS

Landfill area closure sequencing options were reviewed and evaluated based on the Preferred Expansion Alternative previously developed. A closure phasing plan was developed, and the closure sequencing was included in the financial models developed for this Plan.

5.1 Closure Phasing Plan

The Landfill is currently permitted to be closed in one phase. For the proposed expansion option, the Landfill could delay closure until final elevations are reached for all areas. Benefits of this option include deferral of capital construction costs, the economy of scale for closure construction, and the ability to recapture airspace in areas where waste has settled below final elevations. However, the financial assurance liability for closure costs will be more significant as this option includes the largest area of opened Landfill to close. Additionally, the probability of double handling excavated soils will increase as excavated soils will need to be stockpiled off-site and hauled back at the time of closure. Further, delaying closure will result in an overall increase in leachate generation and cost management thereof.

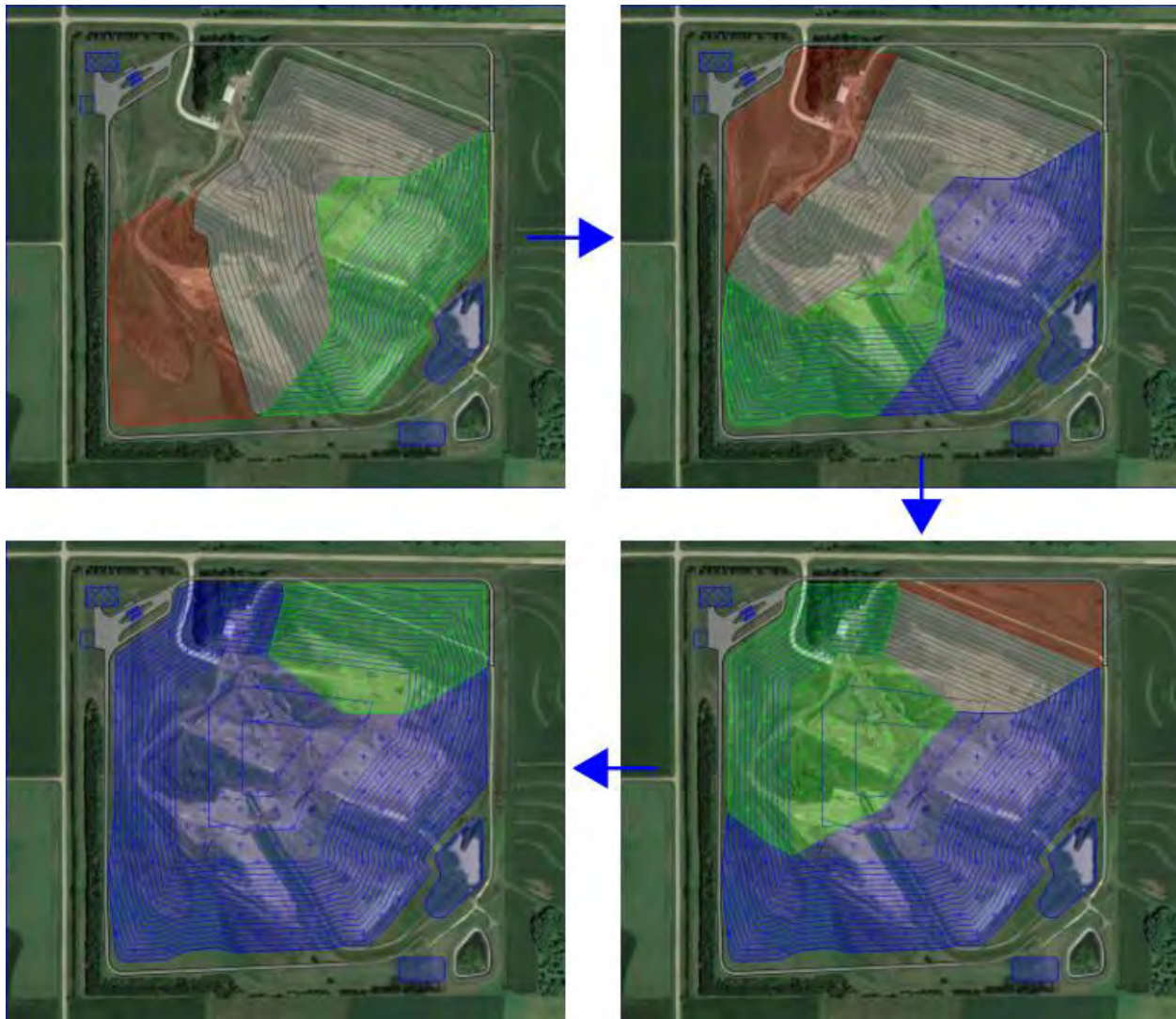
Sequencing the Landfill closure in phases where partial closures are completed as areas reach final waste elevations is recommended. Benefits of this option include reduction of final assurance closure liability as the open area of the Landfill will be reduced, closure construction projects will be manageable and more easily budgeted, and the reduction of leachate generation by capping off areas of the Landfill, thereby reducing stormwater infiltration into the waste. The main drawback with this option is differential settlement may occur as waste breaks down and if areas that have received final cover settle, the airspace cannot be recaptured. In order to mitigate this, area closures will be sequenced such that preliminary settlement should have occurred in the waste before closing the area.

Figures 1 through 4 of Appendix H show the proposed sequencing plan for the Landfill expansion. Table 5-1 provides a summary of expected area closure sequencing timing. The timing of when areas are expected to be closed is highly dependent on the amount of waste the Landfill receives. The area closures are sequenced to be constructed in-phase with new area construction, optimizing the soil usage from excavation areas and avoiding double handling of the soils. The proposed extent of area closure provided is for planning and cost purposes only and the Coalition shall revisit the full extent of the closure area closer to the time of construction. For reference, Figure 5-1 below is a summary of the proposed closure sequencing plan for the Landfill expansion.

Table 5-1: NNSWC Preferred Expansion Alternative 3.A Expected Timing of Area Closure

Closure Area	Area (Acres)	Baseline: No Waste Change	Scenario 1: 20% Waste Increase	Scenario 2: 20% Waste Decrease
Areas 1-6 PH1	26.1	2042	2038	2047
Area 6 PH 2	22.8	2060	2054	2067
Area 7	34.1	2074	2067	2084
Area 8	19.2	2078	2070	2088

Figure 5-1: NNSWC Preferred Expansion Alternative 3.A Proposed Closure Sequencing Plans



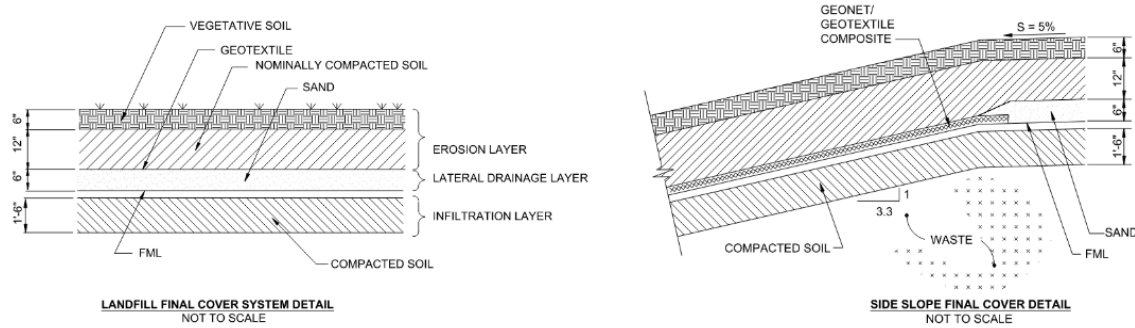
^a Closure sequencing plans in the figure are presented in a clockwise pattern. The first closure sequence is located on the top left corner of the figure.

^b Green shading represents proposed final cover closure, blue shading represents existing final cover, red shading represents proposed active area, and gray shading represents intermediate cover.

5.2 Alternative Final Cover System

The current permitted final cover profile consists of a compacted soil liner and geosynthetic flexible membrane liners as indicated in Figure 5-2. Geosynthetic liners add high material costs to closure when compared to soil-only caps. It is in the best interest of the Coalition to consider the implementation of an alternative earth cover system at the Landfill that has the potential to reduce final cover construction costs.

Figure 5-2: NNSWC Permitted Final Cover Profile



The following alternative final cover options were evaluated as part of this Plan:

- Infiltration Cover
- Evapotranspiration (ET) Cover

The sections that follow provide greater detail of the cover systems evaluated and a cost comparison per acre of the various construction types.

5.2.1 Infiltration Covers

The NDEE permits infiltration covers through the Research, Development, & Demonstration (RD&D) Rule (Title 132, Chapter 2, Section 14). Infiltration covers are similar to their ET cover counterparts with respect to the design approach; however, infiltration covers utilize less soil to promote controlled percolation into the waste mass. The design provides additional moisture to the waste after closure, which will generate additional usable landfill gas, promote controlled waste degradation, and afford a reduction in long-term environmental risks.

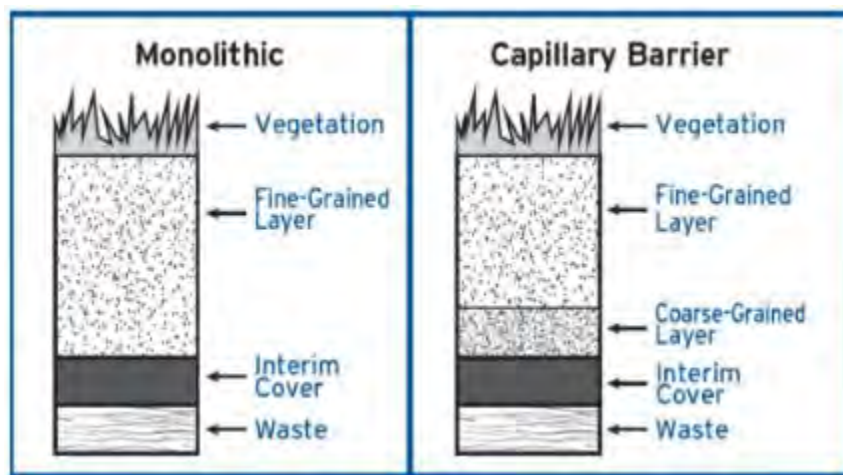
Several drawbacks are associated with permitting an infiltration cover system under the NDEE RD&D rule:

- Under the RD&D rule, the permit would be required to be renewed every three years for a period of up to 12-years. If the project goals are satisfied within the 12 years, the Coalition could then incorporate the infiltration cover as an approved final site-specific design.
- The Landfill should expect an increase in post-closure leachate quantities and associated disposal costs for an infiltration cover.

5.2.2 Evapotranspiration (ET) Covers

NDEE permits ET covers under Title 132, Chapter 3, Section 5. There are two primary types of ET alternative earthen cover systems employed in landfill caps: monolithic barrier and capillary barrier. Both types of cover systems are designed to retain water within the cover, supporting the overlying vegetation, as seen in Figure 5-3. The monolithic barrier cover system option consists of a continuous soil layer that interfaces with the pre-existing landfill intermediate cover. The capillary barrier cover system includes a granular material (sand or fine gravel) at the base of the cover system overlying the pre-existing intermediate cover. In the capillary barrier system, the difference in grain size between the soil layer and the granular material produces a capillary action whereby the soil layer holds the water until the soil's saturation point is reached. Capillary barrier systems have been shown to retain more moisture than monolithic covers of the same soil thickness and can be more economical in certain applications.

Figure 5-3: NNSWC Proposed ET Cover Designs



For comparison, a successful ET final cover system has been installed at the Sioux Falls Regional Sanitary Landfill in Sioux Falls, South Dakota. Sioux Falls also has a comparable environment with similar annual precipitation and slightly longer dormant season than that of Stanton County, Nebraska. Furthermore, the Sioux Fall Landfill has a landfill gas collection system that the ET cover system has not impaired. Therefore, this alternative cover system should be a feasible option for the NNSWC Landfill.

5.2.3 Final Cover Cost Comparison

Table 5-2 illustrates a budgetary construction cost estimate per acre of construction for various landfill cover designs. The table was composed using current regional construction costs. Final cover constructions costs can be reduced significantly for an alternative earthen landfill cover system.

Table 5-2: Cost Comparison per Acre of Construction for Various Landfill Cover Designs

Cover Design	Unit per Acre		Unit Price (\$/Unit)	Price per Acre (2021\$)
Infiltration Cover (RD&D Cover)				
Vegetative Cover (6" thick)	807	CY	\$4.50	\$3,632
Soil Cover (24" thick)	3,227	CY	\$4.50	\$14,522
Total:				\$18,153
Monolithic ET Cover				
Vegetative Cover (6" thick)	807	CY	\$4.50	\$3,632
Soil Cap (48" thick)	6,453	CY	\$4.50	\$29,039
Total:				\$32,670
Capillary Barrier ET Cover				
Vegetative Cover (6" thick)	807	CY	\$4.50	\$3,632
Soil Cap (30" thick)	4,033	CY	\$4.50	\$18,149
ASTM C33 Sand (6" thick)	1,089	Ton	\$20.00	\$21,780
Total:				\$43,560
Permitted Cover				
Vegetative Cover (6" thick)	807	CY	\$4.50	\$3,632
Erosion Layer (12" thick)	1,613	CY	\$4.50	\$7,259
Drainage Layer	4,840	SY	\$8.00	\$38,720
Geomembrane	4,840	SY	\$9.00	\$43,560
Compacted Soil Cap (18" thick)	2,420	CY	\$4.50	\$10,890
Total:				\$104,060

5.2.4 Closure Costs and Recommendations

A capillary barrier ET cover system is recommended for closure of the Landfill once areas reach final grades. The proposed layer thicknesses are highly dependent on the required storage capacity of the site. As shown in Table 5-2, the proposed capillary barrier ET cover will consist of 6-inches of vegetative cover, 30-inches of soil, and 6-inches of sand. The soil layers need to accommodate the design climate conditions, such as snowmelts and summer thunderstorms, or periods during which ET rates are low, or plants are dormant. A study conducted on capillary barrier ET covers at the Douglas County, Nebraska

Recycling and Disposal Facility by the Alternative Cover Assessment Program (ACAP) for the United States Environmental Protection Agency (EPA) has proven that capillary barrier ET covers work with similar environments to the NNSWC Landfill. The ACAP study, provided in Appendix I for reference, concluded that the permeability of the capillary barrier ET cover was better than that required by the NDEE with the soil layers and thicknesses that are being proposed. Furthermore, the thickness of the proposed final cover is the same as the permitted final cover and will not impact the airspace capacity and soil balance results presented in the previous sections. Additionally, the soil layer will need to be compacted to 80-percent to 90-percent density to promote the storage capacity of the soil and allow the growth of the vegetative roots. A permit modification will be required if the Coalition desires to proceed with a capillary barrier ET cover system. Prior to submitting a permit modification, the Coalition might be required to provide a test closure area and a pilot study of the proposed closure alternative to the NDEE.

In addition to the benefits detailed in the previous sections, Table 5-3 compares the proposed final cover closure costs to the permitted final cover design for the Preferred Expansion Alternative. This table considers the Capillary Barrier ET final cover construction costs from Table 5-2 and costs associated with the final grading, installation of landfill gas collection system, and stormwater drainage. Table 5-3 shows that installing a capillary barrier ET cover system will benefit the Landfill financially with a cost savings of over \$6,000,000 throughout the Landfill's lifetime.

Table 5-3: NNSWC Area Cover Closure Cost Comparison

Closure Area	Permitted Cover	Capillary Barrier ET Cover	Cost Savings
Area 1-6 PH1	\$4,624,817	\$3,045,767	\$1,579,050
Area 6 PH 2	\$4,040,070	\$2,660,670	\$1,379,400
Area 7	\$6,042,385	\$3,979,335	\$2,063,050
Area 8	\$3,402,164	\$2,240,564	\$1,161,600
Total	\$18,109,436	\$11,926,336	\$6,183,100

5.3 End of Use Plans

Upon the capacity of the Landfill being reached and when the final cover has been applied, short-rooted plants and/or grass are currently permitted to be planted on the remaining unvegetated areas of the facility to control erosion and create an open green space. For this Plan, incentives for a solar power project were investigated and the feasibility of processing LFG to Renewable Natural Gas (RNG) was evaluated.

5.3.1 Solar Power Incentives

A limited review of the financial incentives for developing a solar project on the final cover of the Landfill was conducted. Typically, solar farm projects in the United States cost an average of \$500,000 per acre, while general revenues range between \$21,250 and \$42,500 per acre annually based on web data compiled in 2021. If an investment is made in solar power energy at the Landfill, the Coalition will start to see a return on investment between 12-24 years after installation. In addition to site development costs, upfront costs are necessary to tie the solar power generated into the electric grid. These additional costs can range from several hundred thousand dollars to several million dollars depending on the distance and interconnection requirements. These costs make the project cost prohibited until future infrastructure is developed or solar costs are decreased.

5.3.2 Renewable Natural Gas Feasibility Evaluation

As part of this Plan's development, the NNSWC requested that a high-level feasibility evaluation be performed to determine if using LFG to produce Renewable Natural Gas (RNG) could be an economically viable option in the future. The RNG would potentially be used for commercial purposes (sale to a gas utility for subsequent sale to their customer base as renewable natural gas) or as a transportation fuel as part of the EPA's Renewable Fuel Standards Program. Injection into a local utility pipeline was assumed to be required for both potential end markets.

The estimated total capital and operating costs for an RNG plant range from approximately \$32,500,000 to \$41,500,000 in 2021 dollars. The projected annual revenue in year one of operation (assumed to be 2049) is estimated at \$5.5M and remains somewhat constant, assuming no change in current market prices. In the "Low" capital cost scenario, payback is possible in 7.4 years and is under 10 years for the "High" scenario, assuming 1,000 scfm of LFG is available. Based on the current estimated LFG flow rate, the estimated project payback period is greater than 10 years. The full RNG feasibility evaluation is provided in Appendix L.

The preliminary results indicate that this project has the potential to be financially beneficial for the NNSWC. Upgrading LFG to RNG has the potential to generate considerable revenue from multiple streams but will require investment in new infrastructure and ongoing operating costs. Given the volatility of the RNG market, it is in the best interest of the NNSWC to re-evaluate the development of an RNG project in three to five years.

5.3.3 Recommendation

It is recommended that the Landfill re-analyze these options closer to the end of the Landfill's life or during interim closure phases. The feasibility and cost of the proposed alternatives will vary based on the demand for the product produced and the cost of implementation.

6.0 PRELIMINARY OFF-SITE EXPANSION PLANS

A preliminary review of several 60+ year off-site expansion options using various sets of existing land data was conducted as part of this Plan. Properties off-site the existing Landfill footprint were evaluated based on NDEE and Stanton County solid waste guidelines, restrictions, and general construction feasibility. The following data sources were considered in site analysis:

- US Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Soil Survey Geographic (SSURGO) digital data
- US Fish & Wildlife Service (USFWS) National Wetland Inventory (NWI) maps
- US Geological Survey (USGS) 7.5-minute topographic maps
- USGS National Hydrography Dataset digital stream and river data
- Nebraska Game and Parks Commission (NGPC) Estimated Current Ranges of Threatened and Endangered Species: List of Species by County
- USFWS Information for Planning and Consultation (IPaC) tool
- State Archeology Office of History Nebraska
- Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs)

A ranking of the proposed off-site Landfill expansion options was determined based on available data along with site restrictions, regulatory requirements, feasibility, and adaptability.

6.1 Adjacent Land Review and Restrictions

Location and construction of solid waste areas in the state of Nebraska are subject to the rules and regulations of NDEE Title 132 – Integrated Solid Waste Management Regulations. A summary of the NDEE regulations can be found in Table 6-1. Additionally, the proposed off-site expansion options must meet all Stanton county zoning regulations. All parcels considered for expansion are zoned as A-1 primary agricultural district by Stanton County and therefore fall under those specific zoning guidelines. A summary of Stanton County zoning restrictions pertaining to landfills can be found in Table 6-2. Per Stanton County records, all proposed properties have a single owner, which will allow for greater ease in property acquisition. See Appendix J for a summary of the adjacent property owners.

Table 6-1: Summary of NDEE Title 132, Chapter 3 Regulations for NNSWC Off-Site Expansion

Section 2.01	Site must have no detrimental effect on groundwater or surface water
Section 2.02	Application must describe soils, geology, nearby ground and surface water, and potential for pollution and leachate generation

Section 2.01	Site must have no detrimental effect on groundwater or surface water
Section 2.03	Must be 1000 feet from nearest state, interstate, and federal highway unless active area is screened
Section 2.04	Must be adequately distanced from nearby airports
Section 2.05	Cannot be placed in 100-year floodplain unless owner can demonstrate it will not restrict flows, reduce storage capacity, or result in solid waste washout.
Section 2.06	Site cannot be located in a wetland
Section 2.07	Must demonstrate site is not located in an unstable area
Section 2.08	Cannot be located less than 200 feet from a fault that has been displaced since Holocene times
Section 2.09	Cannot be located in seismic impact zone unless owner can demonstrate landfill and other structures can resist horizontal accelerations

Table 6-2: Summary of Stanton County Zoning Regulations for NNSWC Off-Site Expansion

Article 4	Site must be $\frac{3}{4}$ mile from the nearest dwelling
Article 4	Site must be 1000 feet from the nearest wellhead
Article 4	Site must be 100 feet from the nearest road centerline
Article 5	Sites can apply for conditional use permits if they do not fully meet zoning criteria

All proposed off-site expansion option sites meet the state and local criteria except for the East Expansion Option (described in greater detailed below). The East Expansion Option fails to meet NDEE Title 132, Chapter 3 Sections 2.05 and 2.06 as the proposed location is situated in an existing wetland and stretch of a 100-year floodplain. Therefore, the East Expansion Option will require additional site investigations and permitting if selected as the final option for a 60+ year expansion.

6.2 Off-Site Expansion Options

Four off-site locations adjacent to the existing Landfill have been evaluated for 60+ year expansion alternatives. All proposed off-site expansion option sites are located adjacent to the existing Landfill to provide greater airspace efficiency and utilization of existing site infrastructure, thus reducing development costs. All locations can be characterized by Non-Hydric soils of the Nora-Moody-Crofton complex, consisting of a variety of silty clay loams typical for the region (Appendix K). Clay soils are ideal for constructing landfills as they typically provide the levels of permeability required by the NDEE. For any of these sites, the permeability levels of the soils are expected to be adequate since they resemble the soils encountered at the existing Landfill. Additionally, these soils are ideal for soil borrow and stockpiling operations for current and future existing Landfill operations. Vegetation is primarily

grassland with some areas of tree cover for all sites, requiring minimal site clearing before future construction. The following subsections describe the various expansion options that the project team developed for this Plan.

6.2.1 North Off-Site Expansion Option

The North Off-Site Expansion Option has a footprint of approximately 71-acres and an estimated maximum capacity of 8.55 million cubic yards of waste. The estimated lifespan of this option is shown in Table 6-3. The property is located directly north of the existing Landfill and across a county road, which will require new landfill infrastructure to be developed. Figure 6-1 shows a preliminary landfill infrastructure layout and a final grading plan. The final cover is graded at a 4(H):1(V) slope, and the proposed final crest elevation is at 1790 feet above mean sea level with a five-percent slope crown to allow for adequate runoff and drainage. The topography of the site slopes towards the northeast portion of the parcel, making it the ideal location for a leachate pond and a sedimentation basin. However, a small section of a riverine habitat also runs through the northeast portion of the parcel. This environmental constraint can be mitigated by placing the sedimentation basin and leachate pond an adequate distance away from the riverine habitat or by rerouting the habitat around the sedimentation basin and leachate ponds.

Figure 6-1: Proposed NNSWC North Off-Site Expansion Option Infrastructure Layout and Grading Plan



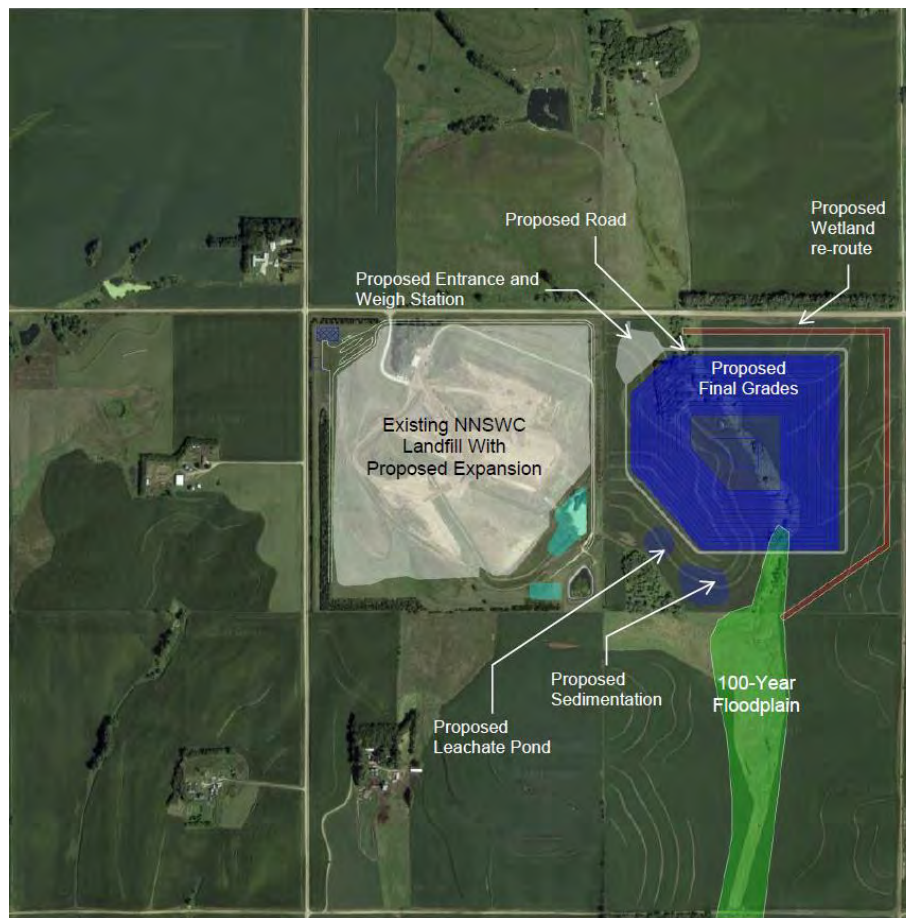
6.2.2 East Off-Site Expansion Option

The East Off-Site Expansion Option has a footprint of 65-acres and an estimated maximum capacity of 8.70 million cubic yards of waste. The estimated lifespan of this option is presented in Table 6-3. It is located on an adjacent parcel of land directly east of the existing Landfill, providing the Coalition the opportunity to utilize some existing infrastructure. If the Coalition desires, a new weigh station can be placed on the northwest corner of the property. The site's topography features the lowest elevations running north to south through the center of the property, sloping upwards to the east and west on each respective side. This low elevation area includes an emergent wetland habitat running north to south through the property and a portion of a 100-year floodplain in the southern region. Mitigation options for the wetland and floodplain include rerouting the wetland around the proposed expansion site and modifying the floodplain to maintain the storage capacity. As explained for the South Off-Site Expansion Option below, piggybacking from the existing Landfill could be considered for this option but is not

recommended since it will interfere with the existing leachate management infrastructure already developed on the east side of the existing Landfill.

Additionally, a sedimentation basin and leachate pond will need to be situated outside of the wetland and floodplain, which would make the southwest portion of the parcel the most suitable location. Due to these environmental restrictions, additional investigation and permitting will be required for this expansion option. Figure 6-2 presents a preliminary landfill infrastructure layout and a final grading plan, with the final cover graded with 4(H):1(V) slopes. The proposed final crest elevation is 1770 feet above mean sea level with a five-percent slope crown to allow for runoff and drainage.

Figure 6-2: Proposed NNSWC East Off-Site Expansion Option Infrastructure Layout and Final Grading Plan



6.2.3 East Alternative Off-Site Expansion Option

Considering the restrictions posed by the wetland and 100-year floodplain for the East Off-Site Expansion Option, an alternative design could be considered that avoids interference with both the wetland and the floodplain. The East Alternative Off-Site Expansion Option has a footprint of 34-acres and an estimated

maximum capacity of 1.18 million cubic yards of waste. With a smaller footprint, this option will need to use the existing Landfill infrastructure to optimize the site use. A preliminary landfill infrastructure layout and a final cover plan are shown in Figure 6-3, and the estimated lifespan is presented in Table 6-3. The proposed final crest elevation is 1690 feet above mean sea level with a five-percent slope crown to allow for adequate runoff and drainage. The volume and expected lifespan of the East Alternative Off-Site Expansion Option are significantly less than the other expansion options. Lastly, as explained for the East Off-Site Expansion Option, piggybacking from the existing Landfill could be considered for this option but is not recommended since it will interfere with the existing leachate management infrastructure on the east side of the Landfill.

Figure 6-3: Proposed NNSWC East Alternative Off-Site Expansion Option Infrastructure Layout and Grading Plan



6.2.4 South Off-Site Expansion Option

The South Off-Site Expansion Option has a footprint of approximately 118-acres and an estimated maximum capacity of 17.52 million cubic yards of waste. The estimated lifespan of this option is shown in Table 6-3. This proposed expansion option is adjacent to the existing Landfill and can utilize the

current Landfill entrance and weigh station to maximize the Landfill capacity. Additionally, the South Off-Site Expansion Option's proposed design will tie into and piggyback from the existing Landfill, maximizing the lifespan and airspace capacity of the option. The topography features low elevations in the northeast and southwest portions of the property. This makes the northeast corner of the property ideal for siting of the sedimentation basin and leachate pond as they will also be adjacent to the existing ponds. A drawback to this option includes a small section of a riverine habitat located in the northeast portion of the property. Proper placement of the sedimentation basin and leachate pond can mitigate the riverine habitat. Additionally, dwellings on and around the property can pose a challenge. A dwelling directly on the property can cause the land to be more expensive at the time of purchase, and a dwelling directly to the west of the property might impact permitting of the site. This can be mitigated by adding additional trees on the west side of the new landfill property to block the landfill view from the adjacent dwelling. Figure 6-4 shows a preliminary landfill infrastructure layout and a final grading plan. The final cover plan is graded with 3.3(H):1(V) slopes to match the 2020 Permit Modification slopes. The proposed final crest elevation is 1840 feet above mean sea level with a five-percent slope crown to allow for runoff and draining.

Figure 6-4: Proposed NNSWC South Off-Site Expansion Option Infrastructure Layout and Grading Plan

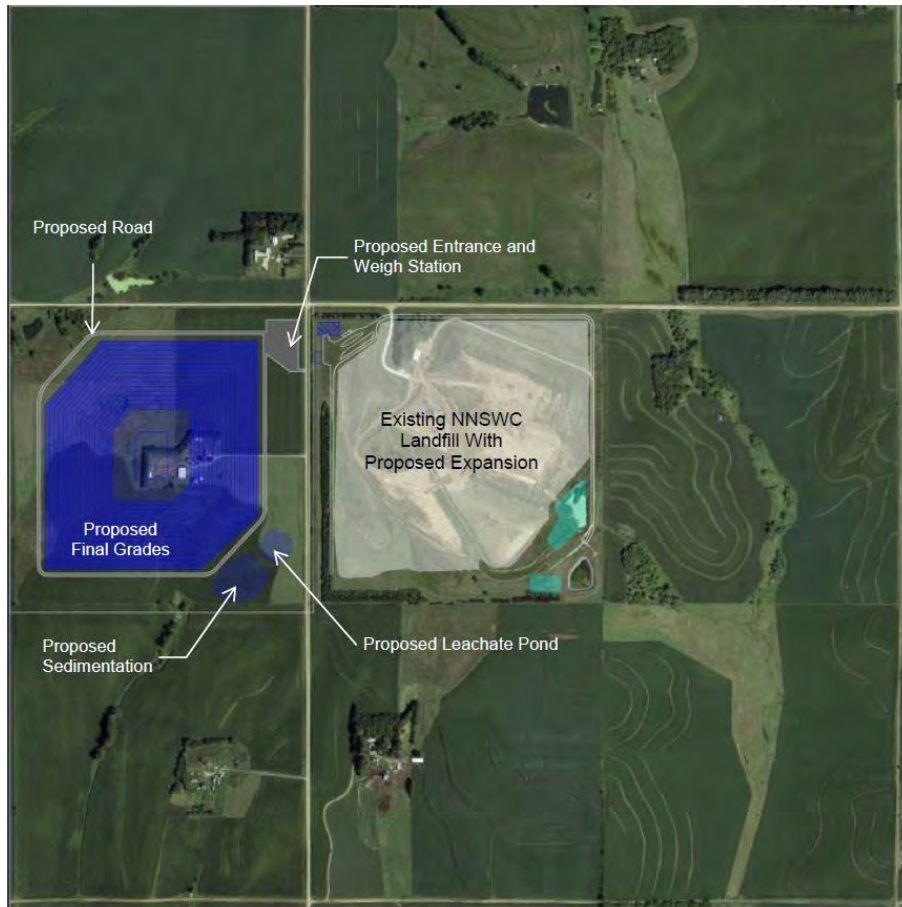


6.2.5 West Off-Site Expansion Option

The West Off-Site Expansion Option has a footprint of approximately 81-acres and an estimated maximum capacity of 11.99 million cubic yards of waste. The estimated lifespan of the expansion is in Table 6-3. A preliminary landfill infrastructure layout and a final cover plan are presented in Figure 6-5, with the final cover graded with a 4(H):1(V) slope. The proposed final crest elevation is at 1840 feet above mean sea level with a five-percent slope crown to allow for adequate runoff and drainage. The new landfill site is located across the road from the existing landfill, requiring new infrastructure to be developed. From the figure, the new infrastructure is proposed to be located on the northeast corner of the property with a sedimentation basin and leachate pond placed at a low elevation area in the southeast corner of the property. A small portion of a pond and riverine habitat is located along the northern border of the property. The placement of the landfill should be adequately distanced away from the existing pond and riverine habitat. Similar to the South Off-Site Expansion Option, a dwelling is situated on the property potentially causing the land to be more expensive at the time of purchase, and nearby dwellings

are directly north and south of this option posing a challenge at the time of permitting the landfill. This can be mitigated by planting trees along the property boundary to block the view of the Landfill.

Figure 6-5: Proposed NNSWC West Off-Site Expansion Option Infrastructure Layout and Grading Plan



6.3 Landfill Capacity Calculations

Five options for potential off-site expansion outside the current Landfill footprint were reviewed. A summary of each option's available airspace capacity and expansion life is presented in Table 6-3. The Landfill airspace capacity was calculated using the proposed off-site expansion options estimated volumes from the approximate base and final grades generated within AutoCAD Civil3D. The expansion life was then calculated based on current disposal rates and Landfill densities. Table 6-3 shows that the North, East, and West Off-Site Expansion Options have comparable available airspace while the South Off-Site Expansion Option provides the Coalition with the most airspace capacity. The East Alternative Off-Site Expansion Option has the least amount of airspace available.

Table 6-3: Proposed NNSWC Off-Site Expansion Lifespan Estimates

Options	Estimated Available Airspace (CY)	Additional Expansion Life (yrs) ^a
North	8,549,000	26.0
East	8,696,000	26.4
East Alternative	1,180,000	4.8
South	17,521,000	46.9
West	11,994,000	34.6

^a Off-Site Landfill Expansion life estimates assume a present annualized tonnage of 112,000 tons with a predicted future generation growth of one-percent. At the time the Baseline Landfill expansion capacity is depleted in 2078, the annualized tonnage is estimated to be 196,000 tons; this value is the starting point for expansion life calculations.

6.4 Recommended Expansion Option

A ranked summary of all the proposed off-site expansion options in order of most to least preferred is provided in Table 6-4 below. Development costs are not associated with these rankings. The only cost considered for this analysis was the average land acquisition cost detailed in Section 4.4.

Table 6-4: Summary of Advantages and Disadvantages for the Proposed Off-Site Expansion Options for the NNSWC Landfill

Rank	Option	Advantages	Disadvantages
1	South	<ul style="list-style-type: none"> • Highest estimated lifespan • Adjacent to existing Landfill • Ability to piggyback on existing Landfill • Ability to utilize existing Landfill infrastructure 	<ul style="list-style-type: none"> • Nearby dwelling directly to the west • Potentially more expensive land because of a dwelling on the property • Small riverine habitat on the northeast corner of the property
2	West	<ul style="list-style-type: none"> • Second highest estimated lifespan 	<ul style="list-style-type: none"> • Across the road from existing Landfill requiring new Landfill infrastructure • Nearby dwelling directly north and south • Potentially more expensive land because of a dwelling on the property • Pond riverine habitat in the northwest corner of the site

Rank	Option	Advantages	Disadvantages
3	North	<ul style="list-style-type: none"> • Ideal topography for gravity leachate drainage • Similar capacity to the West and East Options 	<ul style="list-style-type: none"> • Across the road from existing Landfill requiring new Landfill infrastructure • Riverine habitat in the northeast corner of the site
4	East	<ul style="list-style-type: none"> • Adjacent to existing Landfill • Ability to utilizes existing Landfill infrastructure 	<ul style="list-style-type: none"> • Numerous environmental constraints • 100-yr floodplain and wetland running directly through the middle of the property • Extensive permitting and mitigation efforts will be required
5	East Alternative	<ul style="list-style-type: none"> • Adjacent to existing Landfill • Ability to utilize existing Landfill infrastructure • Avoids wetland and floodplain issues on the property • Good source of borrow soil 	<ul style="list-style-type: none"> • Considerably less airspace • Better suited as a soil borrow source

Based on the preliminary estimates, the preferred expansion option would be the South Off-Site Expansion Option. This option is optimal since it can maximize the airspace capacity by being incorporated into the existing landfill and by utilizing the existing landfill infrastructure that has already been developed. Additionally, this site had the greatest estimated volume and lifespan and demonstrated very few siting restrictions.

7.0 BYLAWS AND AGREEMENT REVIEW

At the time of this final report submittal, the NNSWC Bylaws and Agreement continue to be evaluated by the NNSWC PTF and Baird Holm, the Coalition's legal council. The final updated agreement and bylaws documents will be presented to the NNSWC Board at a later date.

APPENDIX A – WASTE SHREDDING EVALUATION CALCULATIONS



Shredder Costs: (from Attachment 1)

Estimated Owning Costs	\$	160.00	per Hour
Estimated O&M Costs	\$	110.00	per Hour
Annual Usage (@4 hrs/day, 160 days/yr)		640	Hours
Annual Cost	\$	(172,800)	per Year

Operator Costs:

1 FTE (\$55,000 base salary + 50% base salary for benefits)	\$	(82,500)	per Year
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Total Waste Shredding Cost (Shredder + Operator Costs)

\$	(255,300)	per Year
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Remaining Landfill Life:

Current AUF	1,296 lb/cy	Date Capacity is Reached	May 1, 2078 Attachment 3
Average Effective Total AUF w/ Shredder (from Attachment 2)	1,405 lb/cy		January 1, 2082 Attachment 4
Additional Life w/ Increased AUF			3.67 Years



**Estimated Owning and Operating Costs
Terminator 6000**

GENERAL STATEMENT:

The following owning and operating cost analysis is based on reported contractor information and test runs conducted by Komptech. There will be cost variations depending upon the conditions and type of material being processed. This analysis is based on 10 years or 6,400 hours (640 hours per year).

Please note: There will be considerable value of the unit after the 10 year period. However, to ensure maximum figures for budget purposes, we have fully depreciated the equipment.

OWNING COSTS

Purchase Price:

Based on a \$773,000 purchase price, amortized over 6,400 hours:

\$120.78/hr.

Interest:

Figuring 4.25% per year on a declining balance of \$773,000, total interest costs will be \$177,210.56, divided by 6,400 hours:

\$27.69/hr.

Insurance:

Based on a replacement value of \$773,000 and an average rate of 1.00% per year, yearly insurance costs will be \$7,730.00, divided by 640 hours:

\$12.08/hr.

TOTAL OWNING COSTS:

\$160.55/hr.

OPERATING COSTS

Maintenance:

Labor and materials for daily maintenance involving lubrication, inspection, and wear parts as listed on page 3, "Detailed Maintenance Costs":

\$23.48/hr.

**Estimated Owning and Operating Costs
Terminator 6000 (Continued)**

Fuel:

Fuel Consumption for the Cat C-18 (580-HP) engine is estimated at 17 gallons per hour, multiplied by the estimated cost of \$3.00 per gallon:

\$51.00/hr.

TOTAL OPERATING COSTS:

\$74.48/hr.

SUMMARY OF OWNING AND OPERATING COSTS

Owning Costs

- | | |
|------------------|--------------|
| 1. Depreciation: | \$120.78/hr. |
| 2. Interest: | \$27.69/hr. |
| 3. Insurance: | \$12.08/hr. |

TOTAL OWNING COSTS:

\$160.55/hr.

Operating Costs

- | | |
|-----------------|-------------|
| 1. Maintenance: | \$23.48/hr. |
| 2. Fuel: | \$51.00/hr. |

TOTAL OPERATING COSTS:

\$74.48/hr.

TOTAL OWNING AND OPERATING COSTS PER HOUR: \$235.03/hr.

Prepared For:

Name

Company

Prepared By:

Name

Company

DISCLAIMER: The previous owning and operating costs are estimates only based on reported contractor information and factory test runs. These costs do not imply any absolutes or guarantees by Komptech.

**Estimated Detailed Maintenance Costs
Terminator 6000**

Teeth and Bolts:

32 Teeth @ \$90.00 each, every 250 hours: \$11.52/hr.
32 Teeth Bolts @ \$13.00 each, every 250 hours: \$1.66/hr.

Counterteeth:

17 Counterteeth @ \$420.00 each, every 2,500 hours: \$2.86/hr.

Belly Belt:

Belly Belt @ \$4,500.00 every 3,500 hours: \$1.29/hr.

Discharge Belt:

Discharge Belt @ \$7,000.00 every 5,000 hours: \$1.40/hr.

Labor:

Labor involved in changing wear parts and general
maintenance @ \$30.00/hour, every 40 hours: \$0.75/hr.

Engine Maintenance:

Approximate maintenance costs for the Cat C-18 (580-HP) \$2.00/hr.

Miscellaneous Parts:

Includes an estimated cost for all non-standard maintenance
such as seal kits, bearings, etc.: \$2.00/hr.

TOTAL MAINTENANCE COSTS:

\$23.48/hr.



SHREDDING

LOW-SPEED, HIGH-TORQUE WASTE SHREDDERS

Waste processors and recycling facilities today demand shredding equipment that will handle just about any material. Komptech industrial shredders are built with aggressive feed capabilities and heavy duty reversing shafts to efficiently shred the toughest materials and deliver product at the right size.



Scan this code
to watch our
shredders in action!



TERMINATOR

LOW-SPEED SINGLE-SHAFT SHREDDER

The Terminator is a low-speed, high-torque, single-shaft shredder designed to process nearly all types of difficult waste, including heavy contaminated C&D debris, bulky waste, white goods, mattresses, tires and municipal solid waste (MSW).

- » Remote-controlled hopper with 11-foot feed opening.
- » The hydraulic drum drive can reverse at any time for self-cleaning.



Continuous cutting gap adjustment enables various output particle sizes.



Full access to all maintenance points and shredding chamber.

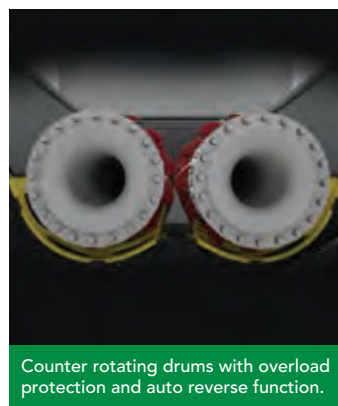
	3400 S	6000 S
Power		
Diesel Engine / Horsepower:	CAT® C9 Tier 4F / 330 HP	CAT® C18 Tier 4F / 600 HP
Proportion <i>(dependent on equipment)</i>		
Transport Dimensions (LxWxH):	25'8" x 9'4" x 11'10" (7.8 x 2.9 x 3.6 m)	
Maximum Weight:	57,000 lbs	60,000 lbs
Performance <i>(dependent on material)</i>		
Maximum Throughput:	up to 55 tons/hr	up to 110 tons/hr

CRAMBO

LOW-SPEED DUAL-SHAFT SHREDDER

The Crambo is a dual-shaft shredder engineered to deliver high-throughput shredding of the toughest wood and organic waste materials while mixing and blending to provide a homogeneous output.

- » Designed to withstand heavy contamination.
- » Low maintenance, fuel consumption and operating costs.



Counter rotating drums with overload protection and auto reverse function.



Easy sizing with quick screen basket changes. Output sizes from 2" to 24".

	3400	6000
Power		
Diesel Engine / Horsepower:	CAT® C9 Tier 4F / 330 HP	CAT® C18 Tier 4F / 600 HP
Proportion <i>(dependent on equipment)</i>		
Transport Dimensions (LxWxH):	25' x 9'4" x 11'2" (7.5 x 2.9 x 3.4 m)	
Maximum Weight:	54,000 lbs	58,000 lbs
Performance <i>(dependent on material)</i>		
Maximum Throughput:	up to 50 tons/hr	up to 110 tons/hr

**ATTACHMENT 2
Northeast Nebraska Solid Waste Coalition
Waste Shredding Evaluation**

5/28/2021
by:PRF
ck:LAR

MSW/Industrial Tonnage (**Assumed**) = 112,000 tons
 Predicted Future Generation Growth = 1.00%
 Current Airspace Utilization Factor (AUF) = 1,296 lb/cy
 Assumed AUF Increase w/ Waste Shredding = 300 lb/cy
 Estimated Waste Shredding AUF = 1,600 lb/cy
 Shredder Capacity = 52,800 tons/year
 assuming 75% of maximum throughput capacity of
 110 tons/hr (from Attachment 1) operating @ 4 hr
 per day, 160 days/year

Average Effective Total AUF = 1,405 lb/cy

Year	Total Tonnage	Effective AUF (lb/cy)
2021	112,000	1,439
2022	113,120	1,438
2023	114,251	1,436
2024	115,394	1,435
2025	116,548	1,434
2026	117,713	1,432
2027	118,890	1,431
2028	120,079	1,430
2029	121,280	1,428
2030	122,493	1,427
2031	123,718	1,426
2032	124,955	1,424
2033	126,204	1,423
2034	127,466	1,422
2035	128,741	1,421
2036	130,029	1,419
2037	131,329	1,418
2038	132,642	1,417
2039	133,969	1,416
2040	135,308	1,415
2041	136,661	1,413
2042	138,028	1,412
2043	139,408	1,411
2044	140,802	1,410
2045	142,210	1,409
2046	143,632	1,408
2047	145,069	1,407
2048	146,519	1,406
2049	147,985	1,404
2050	149,464	1,403
2051	150,959	1,402
2052	152,469	1,401
2053	153,993	1,400
2054	155,533	1,399
2055	157,089	1,398
2056	158,660	1,397
2057	160,246	1,396
2058	161,849	1,395
2059	163,467	1,394
2060	165,102	1,393
2061	166,753	1,392

2062	168,420	1,391
2063	170,104	1,390
2064	171,806	1,389
2065	173,524	1,389
2066	175,259	1,388
2067	177,011	1,387
2068	178,782	1,386
2069	180,569	1,385
2070	182,375	1,384
2071	184,199	1,383
2072	186,041	1,382
2073	187,901	1,381
2074	189,780	1,381
2075	191,678	1,380
2076	193,595	1,379
2077	195,531	1,378
2078	197,486	1,377

ATTACHMENT 3
Northeast Nebraska Solid Waste Coalition
Waste Shredding Evaluation
Remaining Airspace Projections w/ Expansion - Current AUF = 1,296 lb/cy

5/28/2021
 by:PRF
 ck:LAR

MSW/Industrial Tonnage (Assumed) =	112,000	tons	Remaining Area Capacity
Predicted Future Generation Growth =	1.00%		Area 1/2/3/4/5 2,210,000
Airspace Utilization Factor (AUF) =	1,296	lb/cy	Area 6 PH 1 2,060,000
Ultimate Capacity without final cover and protective soil layer (waste + soil) =	17,530,000	cy	Area 6 PH 2 4,180,000
			Area 7 3,900,000
			Area 8 970,000
			Total 13,320,000

Year	Total Tonnage	Waste Annual MSW/Industrial Airspace Consumed (cy)	Waste Remaining Expansion Ultimate Capacity (cy)	Year End Remaining Cell Capacity	Active Area
2021	112,000	172,840	13,147,160	2,037,160	Area 1/2/3/4/5
2022	113,120	174,568	12,972,593	1,862,593	
2023	114,251	176,314	12,796,279	1,686,279	
2024	115,394	178,077	12,618,202	3,568,202	Area 6 PH 1
2025	116,548	179,857	12,438,345	3,388,345	
2026	117,713	181,656	12,256,689	3,206,689	
2027	118,890	183,473	12,073,216	3,023,216	
2028	120,079	185,307	11,887,909	2,837,909	
2029	121,280	187,160	11,700,748	2,650,748	
2030	122,493	189,032	11,511,716	2,461,716	
2031	123,718	190,922	11,320,794	2,270,794	
2032	124,955	192,832	11,127,962	2,077,962	
2033	126,204	194,760	10,933,203	1,883,203	
2034	127,466	196,707	10,736,495	1,686,495	
2035	128,741	198,675	10,537,821	1,487,821	
2036	130,029	200,661	10,337,159	1,287,159	
2037	131,329	202,668	10,134,491	1,084,491	
2038	132,642	204,695	9,929,797	879,797	
2039	133,969	206,742	9,723,055	673,055	
2040	135,308	208,809	9,514,246	464,246	
2041	136,661	210,897	9,303,349	253,349	
2042	138,028	213,006	9,090,343	40,343	
2043	139,408	215,136	8,875,207	4,005,207	Area 6 PH 2
2044	140,802	217,287	8,657,920	3,787,920	
2045	142,210	219,460	8,438,459	3,568,459	
2046	143,632	221,655	8,216,804	3,346,804	
2047	145,069	223,871	7,992,933	3,122,933	
2048	146,519	226,110	7,766,823	2,896,823	
2049	147,985	228,371	7,538,452	2,668,452	
2050	149,464	230,655	7,307,797	2,437,797	
2051	150,959	232,962	7,074,835	2,204,835	
2052	152,469	235,291	6,839,544	1,969,544	
2053	153,993	237,644	6,601,900	1,731,900	
2054	155,533	240,021	6,361,879	1,491,879	
2055	157,089	242,421	6,119,459	1,249,459	
2056	158,660	244,845	5,874,614	1,004,614	
2057	160,246	247,293	5,627,320	757,320	
2058	161,849	249,766	5,377,554	507,554	
2059	163,467	252,264	5,125,290	255,290	
2060	165,102	254,787	4,870,503	503	
2061	166,753	257,334	4,613,169	3,643,169	Area 7
2062	168,420	259,908	4,353,261	3,383,261	
2063	170,104	262,507	4,090,754	3,120,754	
2064	171,806	265,132	3,825,622	2,855,622	

2065	173,524	267,783	3,557,839	2,587,839
2066	175,259	270,461	3,287,378	2,317,378
2067	177,011	273,166	3,014,212	2,044,212
2068	178,782	275,897	2,738,315	1,768,315
2069	180,569	278,656	2,459,658	1,489,658
2070	182,375	281,443	2,178,215	1,208,215
2071	184,199	284,257	1,893,958	923,958
2072	186,041	287,100	1,606,858	636,858
2073	187,901	289,971	1,316,887	346,887
2074	189,780	292,871	1,024,017	54,017
2075	191,678	295,799	728,217	728,217 Area 8
2076	193,595	298,757	429,460	429,460
2077	195,531	301,745	127,715	127,715
2078	197,486	304,762	-177,047	-177,047 Life Depleted May 2078
2079	199,461	307,810	-484,857	-484,857
2080	201,455	310,888	-795,745	-795,745

ATTACHMENT 4

**Northeast Nebraska Solid Waste Coalition
Waste Shredding Evaluation**

Remaining Airspace Projections w/ Expansion - Average Effective Total AUF = 1,405 lb/cy

5/28/2021

by:PRF

ck:LAR

MSW/Industrial Tonnage (Assumed) = 112,000 tons
 Predicted Future Generation Growth = 1.00%
 Average Effective Total AUF = 1,405 lb/cy
 Ultimate Capacity without final cover and protective soil layer (waste + soil) = 17,530,000 cy

Remaining Area Capacity	
Area 1/2/3/4/5	2,210,000
Area 6 PH 1	2,060,000
Area 6 PH 2	4,180,000
Area 7	3,900,000
Area 8	970,000
Total	13,320,000

Year	Total Tonnage	Waste Annual MSW/Industrial Airspace Consumed (cy)	Waste Remaining Expansion Ultimate Capacity (cy)	Year End Remaining Cell Capacity
2021	112,000	159,382	13,160,618	13,160,618
2022	113,120	160,976	12,999,643	12,999,643
2023	114,251	162,585	12,837,057	12,837,057
2024	115,394	164,211	12,672,846	12,672,846
2025	116,548	165,853	12,506,993	12,506,993
2026	117,713	167,512	12,339,481	12,339,481
2027	118,890	169,187	12,170,294	12,170,294
2028	120,079	170,879	11,999,415	11,999,415
2029	121,280	172,588	11,826,828	11,826,828
2030	122,493	174,313	11,652,514	11,652,514
2031	123,718	176,057	11,476,458	11,476,458
2032	124,955	177,817	11,298,640	11,298,640
2033	126,204	179,595	11,119,045	11,119,045
2034	127,466	181,391	10,937,654	10,937,654
2035	128,741	183,205	10,754,449	10,754,449
2036	130,029	185,037	10,569,411	10,569,411
2037	131,329	186,888	10,382,524	10,382,524
2038	132,642	188,757	10,193,767	10,193,767
2039	133,969	190,644	10,003,123	10,003,123
2040	135,308	192,551	9,810,573	9,810,573
2041	136,661	194,476	9,616,097	9,616,097
2042	138,028	196,421	9,419,676	9,419,676
2043	139,408	198,385	9,221,291	9,221,291
2044	140,802	200,369	9,020,922	9,020,922
2045	142,210	202,373	8,818,549	8,818,549
2046	143,632	204,396	8,614,153	8,614,153
2047	145,069	206,440	8,407,713	8,407,713
2048	146,519	208,505	8,199,208	8,199,208
2049	147,985	210,590	7,988,619	7,988,619
2050	149,464	212,696	7,775,923	7,775,923
2051	150,959	214,823	7,561,100	7,561,100
2052	152,469	216,971	7,344,130	7,344,130
2053	153,993	219,140	7,124,989	7,124,989
2054	155,533	221,332	6,903,657	6,903,657
2055	157,089	223,545	6,680,112	6,680,112
2056	158,660	225,781	6,454,332	6,454,332
2057	160,246	228,038	6,226,293	6,226,293
2058	161,849	230,319	5,995,974	5,995,974
2059	163,467	232,622	5,763,352	5,763,352
2060	165,102	234,948	5,528,404	5,528,404
2061	166,753	237,298	5,291,106	5,291,106
2062	168,420	239,671	5,051,436	5,051,436
2063	170,104	242,067	4,809,368	4,809,368
2064	171,806	244,488	4,564,880	4,564,880
2065	173,524	246,933	4,317,947	4,317,947

2066	175,259	249,402	4,068,545	4,068,545	
2067	177,011	251,896	3,816,649	3,816,649	
2068	178,782	254,415	3,562,233	3,562,233	
2069	180,569	256,959	3,305,274	3,305,274	
2070	182,375	259,529	3,045,745	3,045,745	
2071	184,199	262,124	2,783,621	2,783,621	
2072	186,041	264,746	2,518,875	2,518,875	
2073	187,901	267,393	2,251,482	2,251,482	
2074	189,780	270,067	1,981,415	1,981,415	
2075	191,678	272,768	1,708,648	1,708,648	
2076	193,595	275,495	1,433,152	1,433,152	
2077	195,531	278,250	1,154,902	1,154,902	
2078	197,486	281,033	873,869	873,869	Life Depleted May 2078 w/ AUF = 1,296 lb/cy
2079	199,461	283,843	590,026	590,026	
2080	201,455	286,681	303,345	303,345	
2081	203,470	289,548	13,796	13,796	
2082	205,505	292,444	-278,647	-278,647	Life Depleted January 2082 w/ AUF = 1,405 lb/cy
2083	207,560	295,368	-574,016	-574,016	
2084	209,635	298,322	-872,337	-872,337	
2085	211,732	301,305	-1,173,643	-1,173,643	

APPENDIX B – NNSWC WASTE SHREDDING FINANCIAL EVALUATION

NNSWC Financial Model - Waste Shredding Evaluation

Financial Model Inputs

Hours of Operation: M-F 7AM-4PM; Sat 7AM-12PM

Interest:	3.50%
Inflation:	2.50%
Current Year:	2021
Starting Year:	2021

WCI Operation Costs

WCI Fixed Fee:	\$ 480,000	annually
Annual Increase in Fixed Fee:	3%	
WCI Tonnage Fee:	\$4	per ton
Annual Increase in Tonnage Fee:	0%	
WCI Special Waste Fee:	\$10.50	per ton
Annual Increase in Special Waste Fee:	0%	
2020 Annual Tonnage (assumed):	112,000	tons
2020 Special Waste Tonnage (assumed):	50	tons
Annual Tonnage Increase:	1%	per year

Coalition Operation Costs

Personnel Costs	\$ 94,734	
Operating & Maintenance Costs	\$ 30,577	
Other Admin. and Overhead	\$ 22,455	
Other Misc.	\$ 10,000	
FA Fund Transfers	\$ 350,000	Covers Closure & Post-Closure Care Costs
Professional Services	\$ 250,000	Annual Average
Total Coalition Costs:	\$ (758,000)	2021\$

NNSWC Revenue Analysis - Baseline

Interest:	3.50%	[input from "operation inputs"]
Inflation:	2.50%	[input from "operation inputs"]
Current Year:	2021	[input from "operation inputs"]

WCI Operation Costs

WCI Fixed Fee:	\$ 480,000	annually	[input from "operation inputs"]
Annual Increase in Fixed Fee:	3.0%		[input from "operation inputs"]
WCI Tonnage Fee:	\$4	per ton	[input from "operation inputs"]
Annual Increase in Tonnage Fee:	0%		[input from "operation inputs"]
WCI Special Waste Fee:	\$10.50	per ton	[input from "operation inputs"]
Annual Increase in Special Waste Fee:	0%		[input from "operation inputs"]
2020 Annual Tonnage (assumed):	112,000	tons	[input from "operation inputs"]
2020 Special Waste Tonnage (assumed):	50	tons	[input from "operation inputs"]
Annual Tonnage Increase:	1%	per year	[input from "operation inputs"]
Starting Year:	2021		[input from "operation inputs"]

Coalition Operating Costs

Personnel Costs	\$ 94,734	[input from "operation inputs"]
Operating & Maintenance Costs	\$ 30,577	[input from "operation inputs"]
Other Admin. and Overhead	\$ 22,455	[input from "operation inputs"]
Other Misc.	\$ 10,000	[input from "operation inputs"]
FA Fund Transfers	\$ 350,000	[input from "operation inputs"]
Professional Services	\$ 250,000	[input from "operation inputs"]
Total Coalition Costs:	\$ (758,000)	

Capital Costs

	PV Cost	Execution Year	2021-2031													
			2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031			
Cell 6 Ph 1 Engineering	\$ 200,000	2022	\$ 250,000	\$ 205,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 1 Construction	\$ 2,500,000	2023	\$ -	\$ -	\$ 2,626,570	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 1 CA	\$ 250,000	2023	\$ -	\$ -	\$ 262,660	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Scales	\$ 300,000	2033	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Scale House	\$ 400,000	2033	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Equipment Building	\$ 1,200,000	2033	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Drop-Off Area	\$ 200,000	2033	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Asphalt Pavement	\$ 600,000	2033	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Land Acquisition	\$ 1,000,000	2037	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 2 Engineering	\$ 200,000	2041	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 2 Construction	\$ 3,700,000	2042	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 2 CA	\$ 370,000	2042	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 1-6 Ph 1 Closure*	\$ 3,100,000	2042	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Sedimentation Basin	\$ 250,000	2042	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Leachate Pond	\$ 1,000,000	2042	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Landfill Gas Flare	\$ 1,000,000	2046	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 7 Engineering	\$ 200,000	2059	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 7 Construction	\$ 2,700,000	2060	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 7 CA	\$ 270,000	2060	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 2 Closure*	\$ 2,700,000	2060	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 8 Engineering	\$ 200,000	2073	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 8 Construction	\$ 1,500,000	2074	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 8 CA	\$ 200,000	2074	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 7 Closure*	\$ 4,000,000	2074	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 8 Ph 2 Closure*	\$ 2,300,000	2078	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Insert Row Above Here</i>			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total CIP			\$ 250,000	\$ 205,000	\$ 2,889,230	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Revenues

	2020 Rates	% Increase/Decrease	2021-2031										
			2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Annual Tonnage	112,000	1%	112,000	113,120	114,251	115,394	116,548	117,713	118,890	120,079	121,280	122,493	123,718
Tipping Fee	\$ 24.00	0%	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00
Total Revenues			\$ 2,688,000	\$ 2,714,880	\$ 2,742,029	\$ 2,769,449	\$ 2,797,144	\$ 2,825,115	\$ 2,853,366	\$ 2,881,900	\$ 2,910,719	\$ 2,939,826	\$ 2,969,224

*Closure cost to be funded via FA funds

	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065
\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$	-	-	-	-	-	-	-	-	-	-	511,140	-	-	-	-	-	-
\$	-	-	-	-	-	-	-	-	-	-	-	7,072,860	-	-	-	-	-
\$	-	-	-	-	-	-	-	-	-	-	-	707,290	-	-	-	-	-
\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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\$	-	-	-	-	-	-	-	-	-	-	511,140	7,780,150	-	-	-	-	-

	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065
\$	147,985	149,464	150,959	152,469	153,993	155,533	157,089	158,660	160,246	161,849	163,467	165,102	166,753	168,420	170,104	171,806	173,524
\$	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
\$	3,551,630	3,587,146	3,623,018	3,659,248	3,695,841	3,732,799	3,770,127	3,807,828	3,845,906	3,884,366	3,923,209	3,962,441	4,002,066	4,042,086	4,082,507	4,123,332	4,164,566

NNSWC Revenue Analysis - Baseline

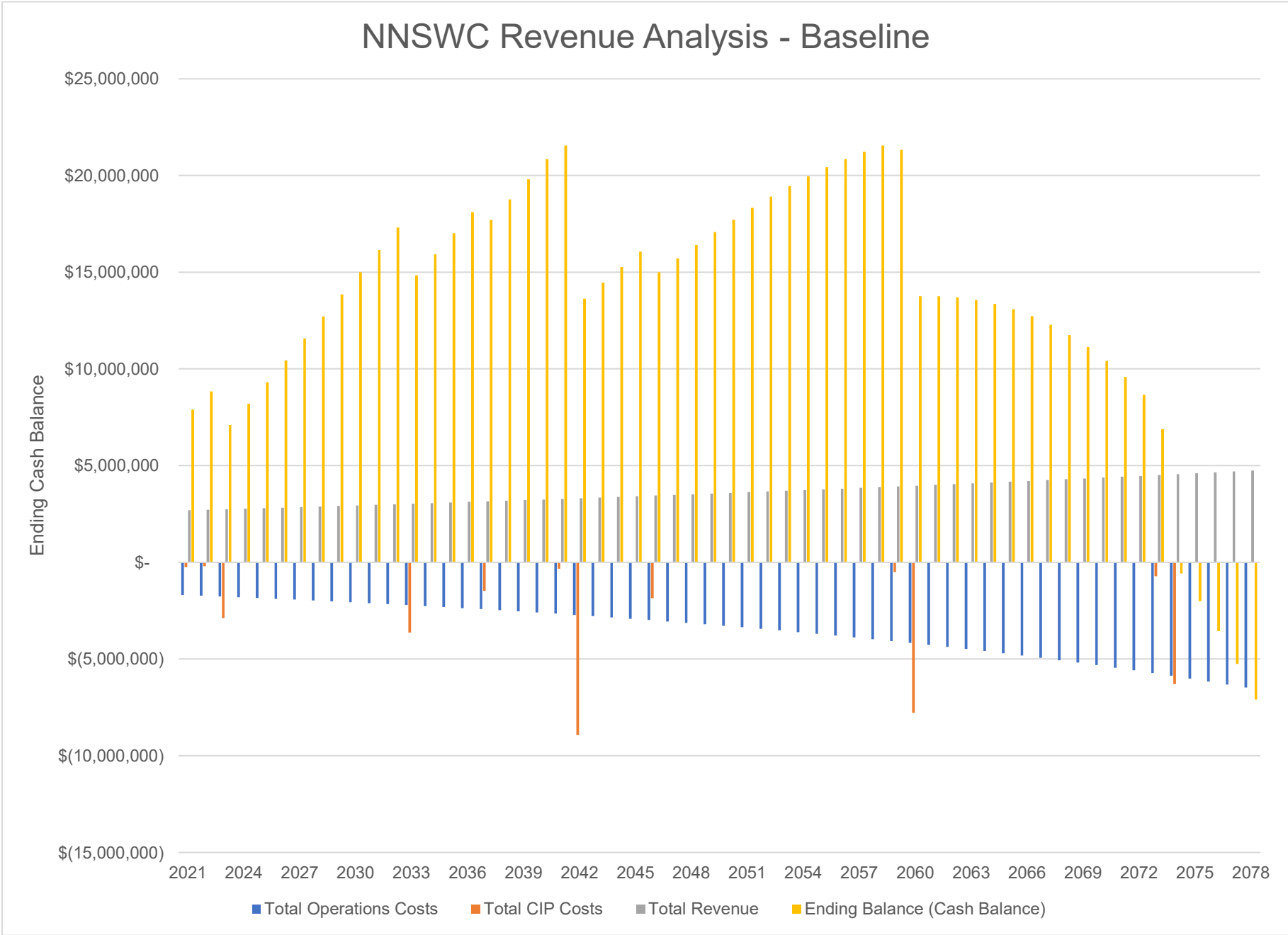
Beginning Balance:	\$ 7,000,000
Interest:	3.50%
Inflation:	2.50%
Investment APR:	2.00%
Starting Year:	2021

ProForma														
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Annual Tonnages	112,000	113,120	114,251	115,394	116,548	117,713	118,890	120,079	121,280	122,493	123,718	124,955	126,204	127,466
Fixed Fee \$	480,000	494,400	509,232	524,509	540,244	556,452	573,145	590,339	608,050	626,291	645,080	664,432	684,365	704,896
Tonnage Fee \$	448,000	452,480	457,005	461,575	466,191	470,853	475,561	480,317	485,120	489,971	494,871	499,819	504,818	509,866
Special Waste Fee \$	525	530	536	541	546	552	557	563	568	574	580	586	592	597
Total WCI Operations Costs \$	(928,525)	(947,410)	(966,772)	(986,625)	(1,006,981)	(1,027,856)	(1,049,263)	(1,071,219)	(1,093,738)	(1,116,836)	(1,140,531)	(1,164,837)	(1,189,774)	(1,215,359)
Total Coalition Operating Costs \$	(758,000)	(776,950)	(796,374)	(816,283)	(836,690)	(857,607)	(879,048)	(901,024)	(923,549)	(946,638)	(970,304)	(994,562)	(1,019,426)	(1,044,911)
Total Operations Costs \$	(1,686,525)	(1,724,360)	(1,763,146)	(1,802,908)	(1,843,671)	(1,885,463)	(1,928,311)	(1,972,243)	(2,017,287)	(2,063,474)	(2,110,835)	(2,159,399)	(2,209,200)	(2,260,271)
Total CIP Costs \$	(250,000)	(205,000)	(2,889,230)	-	-	-	-	-	-	-	-	-	(3,631,220)	-
Total Revenue \$	2,688,000	2,714,880	2,742,029	2,769,449	2,797,144	2,825,115	2,853,366	2,881,900	2,910,719	2,939,826	2,969,224	2,998,917	3,028,906	3,059,195
Beginning Balance \$	7,000,000	7,891,475	8,832,024	7,095,217	8,200,192	9,314,899	10,437,624	11,567,770	12,704,681	13,847,661	14,995,975	16,148,845	17,305,449	14,833,702
Annual Change \$	751,475	785,520	(1,910,347)	966,541	953,472	939,652	925,055	909,657	893,431	876,352	858,390	839,517	(2,811,514)	798,924
Change From Investments \$	140,000	155,030	173,540	138,434	161,235	183,073	205,091	227,254	249,549	271,962	294,480	317,087	339,767	289,879
Ending Balance (Cash Balance) \$	7,891,475	8,832,024	7,095,217	8,200,192	9,314,899	10,437,624	11,567,770	12,704,681	13,847,661	14,995,975	16,148,845	17,305,449	14,833,702	15,922,505

2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
128,741	130,029	131,329	132,642	133,969	135,308	136,661	138,028	139,408	140,802	142,210	143,632	145,069	146,519	147,985	149,464
\$ 726,043	\$ 747,824	\$ 770,259	\$ 793,367	\$ 817,168	\$ 841,683	\$ 866,933	\$ 892,941	\$ 919,730	\$ 947,322	\$ 975,741	\$ 1,005,013	\$ 1,035,164	\$ 1,066,219	\$ 1,098,205	\$ 1,131,151
\$ 514,964	\$ 520,114	\$ 525,315	\$ 530,568	\$ 535,874	\$ 541,233	\$ 546,645	\$ 552,112	\$ 557,633	\$ 563,209	\$ 568,841	\$ 574,530	\$ 580,275	\$ 586,078	\$ 591,938	\$ 597,858
\$ 603	\$ 610	\$ 616	\$ 622	\$ 628	\$ 634	\$ 641	\$ 647	\$ 653	\$ 660	\$ 667	\$ 673	\$ 680	\$ 687	\$ 694	\$ 701
\$ (1,241,611)	\$ (1,268,548)	\$ (1,296,190)	\$ (1,324,557)	\$ (1,353,670)	\$ (1,383,550)	\$ (1,414,219)	\$ (1,445,700)	\$ (1,478,016)	\$ (1,511,191)	\$ (1,545,249)	\$ (1,580,216)	\$ (1,616,119)	\$ (1,652,983)	\$ (1,690,837)	\$ (1,729,710)
\$ (1,071,034)	\$ (1,097,810)	\$ (1,125,255)	\$ (1,153,387)	\$ (1,182,221)	\$ (1,211,777)	\$ (1,242,071)	\$ (1,273,123)	\$ (1,304,951)	\$ (1,337,575)	\$ (1,371,014)	\$ (1,405,290)	\$ (1,440,422)	\$ (1,476,432)	\$ (1,513,343)	\$ (1,551,177)
\$ (2,312,645)	\$ (2,366,358)	\$ (2,421,445)	\$ (2,477,944)	\$ (2,535,891)	\$ (2,595,327)	\$ (2,656,290)	\$ (2,718,823)	\$ (2,782,967)	\$ (2,848,765)	\$ (2,916,263)	\$ (2,985,506)	\$ (3,056,541)	\$ (3,129,416)	\$ (3,204,181)	\$ (3,280,887)
\$ -	\$ -	\$ (1,484,510)	\$ -	\$ -	\$ -	\$ (327,730)	\$ (8,935,400)	\$ -	\$ -	\$ -	\$ (1,853,950)	\$ -	\$ -	\$ -	\$ -
\$ 3,089,787	\$ 3,120,685	\$ 3,151,891	\$ 3,183,410	\$ 3,215,244	\$ 3,247,397	\$ 3,279,871	\$ 3,312,670	\$ 3,345,796	\$ 3,379,254	\$ 3,413,047	\$ 3,447,177	\$ 3,481,649	\$ 3,516,465	\$ 3,551,630	\$ 3,587,146
\$ 15,922,505	\$ 17,012,299	\$ 18,100,618	\$ 17,701,887	\$ 18,754,285	\$ 19,801,785	\$ 20,842,528	\$ 21,547,455	\$ 13,628,669	\$ 14,455,617	\$ 15,269,936	\$ 16,066,441	\$ 14,989,497	\$ 15,708,089	\$ 16,403,431	\$ 17,072,783
\$ 777,142	\$ 754,327	\$ (754,064)	\$ 705,467	\$ 679,353	\$ 652,070	\$ 295,850	\$ (8,341,553)	\$ 562,829	\$ 530,489	\$ 496,784	\$ (1,392,279)	\$ 425,108	\$ 387,050	\$ 347,450	\$ 306,260
\$ 312,653	\$ 333,993	\$ 355,333	\$ 346,931	\$ 368,147	\$ 388,673	\$ 409,077	\$ 422,768	\$ 264,118	\$ 283,830	\$ 299,722	\$ 315,334	\$ 293,483	\$ 308,292	\$ 321,903	\$ 335,018
\$ 17,012,299	\$ 18,100,618	\$ 17,701,887	\$ 18,754,285	\$ 19,801,785	\$ 20,842,528	\$ 21,547,455	\$ 13,628,669	\$ 14,455,617	\$ 15,269,936	\$ 16,066,441	\$ 14,989,497	\$ 15,708,089	\$ 16,403,431	\$ 17,072,783	\$ 17,714,060

	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065
	150,959	152,469	153,993	155,533	157,089	158,660	160,246	161,849	163,467	165,102	166,753	168,420	170,104	171,806	173,524
\$	1,165,086	\$ 1,200,039	\$ 1,236,040	\$ 1,273,121	\$ 1,311,315	\$ 1,350,654	\$ 1,391,174	\$ 1,432,909	\$ 1,475,896	\$ 1,520,173	\$ 1,565,778	\$ 1,612,751	\$ 1,661,134	\$ 1,710,968	\$ 1,762,297
\$	603,836	\$ 609,875	\$ 615,973	\$ 622,133	\$ 628,354	\$ 634,638	\$ 640,984	\$ 647,394	\$ 653,868	\$ 660,407	\$ 667,011	\$ 673,681	\$ 680,418	\$ 687,222	\$ 694,094
\$	708	\$ 715	\$ 722	\$ 729	\$ 736	\$ 744	\$ 751	\$ 759	\$ 766	\$ 774	\$ 782	\$ 789	\$ 797	\$ 805	\$ 813
\$	(1,769,630)	\$ (1,810,628)	\$ (1,852,735)	\$ (1,895,983)	\$ (1,940,405)	\$ (1,986,036)	\$ (2,032,909)	\$ (2,081,062)	\$ (2,130,531)	\$ (2,181,354)	\$ (2,233,571)	\$ (2,287,222)	\$ (2,342,349)	\$ (2,398,995)	\$ (2,457,205)
\$	(1,589,956)	\$ (1,629,705)	\$ (1,670,448)	\$ (1,712,209)	\$ (1,755,014)	\$ (1,798,890)	\$ (1,843,862)	\$ (1,889,958)	\$ (1,937,207)	\$ (1,985,637)	\$ (2,035,278)	\$ (2,086,160)	\$ (2,138,314)	\$ (2,191,772)	\$ (2,246,567)
\$	(3,359,586)	\$ (3,440,333)	\$ (3,523,183)	\$ (3,608,192)	\$ (3,695,420)	\$ (3,784,925)	\$ (3,876,771)	\$ (3,971,020)	\$ (4,067,738)	\$ (4,166,991)	\$ (4,268,849)	\$ (4,373,382)	\$ (4,480,664)	\$ (4,590,768)	\$ (4,703,771)
\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (511,140)	\$ (7,780,150)	\$ -	\$ -	\$ -	\$ -	\$ -
\$	3,623,018	\$ 3,659,248	\$ 3,695,841	\$ 3,732,799	\$ 3,770,127	\$ 3,807,828	\$ 3,845,906	\$ 3,884,366	\$ 3,923,209	\$ 3,962,441	\$ 4,002,066	\$ 4,042,086	\$ 4,082,507	\$ 4,123,332	\$ 4,164,566
\$	17,714,060	\$ 18,325,073	\$ 18,903,538	\$ 19,447,075	\$ 19,953,206	\$ 20,419,347	\$ 20,842,808	\$ 21,220,789	\$ 21,550,373	\$ 21,317,388	\$ 13,750,582	\$ 13,750,452	\$ 13,688,832	\$ 13,559,059	\$ 13,357,437
\$	263,432	\$ 218,915	\$ 172,658	\$ 124,607	\$ 74,707	\$ 22,903	\$ (30,864)	\$ (86,654)	\$ (655,669)	\$ (7,984,700)	\$ (266,783)	\$ (331,296)	\$ (398,156)	\$ (467,435)	\$ (539,206)
\$	347,581	\$ 359,550	\$ 370,880	\$ 381,524	\$ 391,434	\$ 400,558	\$ 408,845	\$ 416,239	\$ 422,683	\$ 417,894	\$ 266,654	\$ 269,676	\$ 268,383	\$ 265,814	\$ 261,832
\$	18,325,073	\$ 18,903,538	\$ 19,447,075	\$ 19,953,206	\$ 20,419,347	\$ 20,842,808	\$ 21,220,789	\$ 21,550,373	\$ 21,317,388	\$ 13,750,582	\$ 13,750,452	\$ 13,688,832	\$ 13,559,059	\$ 13,357,437	\$ 13,080,064

	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078
	175,259	177,011	178,782	180,569	182,375	184,199	186,041	187,901	189,780	191,678	193,595	195,531	197,486
\$	1,815,166	\$ 1,869,621	\$ 1,925,710	\$ 1,983,481	\$ 2,042,985	\$ 2,104,275	\$ 2,167,403	\$ 2,232,425	\$ 2,299,398	\$ 2,368,380	\$ 2,439,431	\$ 2,512,614	\$ 2,587,993
\$	701,035	\$ 708,046	\$ 715,126	\$ 722,277	\$ 729,500	\$ 736,795	\$ 744,163	\$ 751,605	\$ 759,121	\$ 766,712	\$ 774,379	\$ 782,123	\$ 789,944
\$	822	\$ 830	\$ 838	\$ 846	\$ 855	\$ 863	\$ 872	\$ 881	\$ 890	\$ 898	\$ 907	\$ 917	\$ 926
\$	(2,517,023)	\$ (2,578,496)	\$ (2,641,674)	\$ (2,706,605)	\$ (2,773,340)	\$ (2,841,933)	\$ (2,912,438)	\$ (2,984,911)	\$ (3,059,408)	\$ (3,135,990)	\$ (3,214,718)	\$ (3,295,654)	\$ (3,378,862)
\$	(2,302,731)	\$ (2,360,299)	\$ (2,419,306)	\$ (2,479,789)	\$ (2,541,784)	\$ (2,605,328)	\$ (2,670,462)	\$ (2,737,223)	\$ (2,805,654)	\$ (2,875,795)	\$ (2,947,690)	\$ (3,021,382)	\$ (3,096,917)
\$	(4,819,753)	\$ (4,938,795)	\$ (5,060,980)	\$ (5,186,394)	\$ (5,315,124)	\$ (5,447,262)	\$ (5,582,900)	\$ (5,722,134)	\$ (5,865,062)	\$ (6,011,785)	\$ (6,162,408)	\$ (6,317,036)	\$ (6,475,779)
\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (722,230)	\$ (6,292,370)	\$ -	\$ -	\$ -	\$ -
\$	4,206,211	\$ 4,248,273	\$ 4,290,756	\$ 4,333,664	\$ 4,377,000	\$ 4,420,770	\$ 4,464,978	\$ 4,509,628	\$ 4,554,724	\$ 4,600,271	\$ 4,646,274	\$ 4,692,737	\$ 4,739,664
\$	13,080,064	\$ 12,722,886	\$ 12,281,695	\$ 11,752,118	\$ 11,129,618	\$ 10,409,482	\$ 9,586,820	\$ 8,656,558	\$ 6,891,200	\$ (577,071)	\$ (2,002,816)	\$ (3,558,721)	\$ (5,253,399)
\$	(613,542)	\$ (690,522)	\$ (770,224)	\$ (852,730)	\$ (938,124)	\$ (1,026,491)	\$ (1,117,922)	\$ (1,934,736)	\$ (7,602,708)	\$ (1,411,514)	\$ (1,516,134)	\$ (1,624,299)	\$ (1,736,115)
\$	256,365	\$ 249,330	\$ 240,647	\$ 230,229	\$ 217,988	\$ 203,830	\$ 187,660	\$ 169,378	\$ 134,436	\$ (14,230)	\$ (39,772)	\$ (70,379)	\$ (103,660)
\$	12,722,886	\$ 12,281,695	\$ 11,752,118	\$ 11,129,618	\$ 10,409,482	\$ 9,586,820	\$ 8,656,558	\$ 6,891,200	\$ (577,071)	\$ (2,002,816)	\$ (3,558,721)	\$ (5,253,399)	\$ (7,093,175)



NNSWC Revenue Analysis - Baseline w/ Waste Shredding

Interest:	3.50%	[input from "operation inputs"]
Inflation:	2.50%	[input from "operation inputs"]
Current Year:	2021	[input from "operation inputs"]

WCI Operation Costs

WCI Fixed Fee:	\$ 480,000	annually	[input from "operation inputs"]
Annual Increase in Fixed Fee:	3.0%		[input from "operation inputs"]
WCI Tonnage Fee:	\$4	per ton	[input from "operation inputs"]
Annual Increase in Tonnage Fee:	0%		[input from "operation inputs"]
WCI Special Waste Fee:	\$10.50	per ton	[input from "operation inputs"]
Annual Increase in Special Waste Fee:	0%		[input from "operation inputs"]
2020 Annual Tonnage (assumed):	112,000	tons	[input from "operation inputs"]
2020 Special Waste Tonnage (assumed):	50	tons	[input from "operation inputs"]
Annual Tonnage Increase:	1%	per year	[input from "operation inputs"]
Starting Year:	2021		[input from "operation inputs"]

Coalition Operating Costs

Personnel Costs	\$ 94,734	[input from "operation inputs"]
Operating & Maintenance Costs	\$ 30,577	[input from "operation inputs"]
Other Admin. and Overhead	\$ 22,455	[input from "operation inputs"]
Other Misc.	\$ 10,000	[input from "operation inputs"]
FA Fund Transfers	\$ 350,000	[input from "operation inputs"]
Professional Services	\$ 250,000	[input from "operation inputs"]
Waste Shredding Costs	\$ 255,300	
Total Coalition Costs:	\$ (1,014,000)	

Capital Costs

	PV Cost	Execution Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Cell 6 Ph 1 Engineering	\$ 200,000	2022	\$ 250,000	\$ 205,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 1 Construction	\$ 2,500,000	2023	\$ -	\$ -	\$ 2,626,570	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 1 CA	\$ 250,000	2023	\$ -	\$ -	\$ 262,660	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Scales	\$ 300,000	2033	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Scale House	\$ 400,000	2033	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Equipment Building	\$ 1,200,000	2033	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Drop-Off Area	\$ 200,000	2033	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Asphalt Pavement	\$ 600,000	2033	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Land Acquisition	\$ 1,000,000	2037	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 2 Engineering	\$ 200,000	2041	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 2 Construction	\$ 3,700,000	2042	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 2 CA	\$ 370,000	2042	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 1-6 Ph 1 Closure*	\$ 3,100,000	2042	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Sedimentation Basin	\$ 250,000	2042	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Leachate Pond	\$ 1,000,000	2042	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Landfill Gas Flare	\$ 1,000,000	2046	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 7 Engineering	\$ 200,000	2059	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 7 Construction	\$ 2,700,000	2060	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 7 CA	\$ 270,000	2060	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 2 Closure*	\$ 2,700,000	2060	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 8 Engineering	\$ 200,000	2073	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 8 Construction	\$ 1,500,000	2074	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 8 CA	\$ 200,000	2074	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 7 Closure*	\$ 4,000,000	2074	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 8 Ph 2 Closure*	\$ 2,300,000	2078	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Insert Row Above Here</i>			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total CIP			\$ 250,000	\$ 205,000	\$ 2,889,230	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Revenues

	2020 Rates	% Increase/Decrease	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Annual Tonnage	112,000	1%	112,000	113,120	114,251	115,394	116,548	117,713	118,890	120,079	121,280	122,493	123,718	124,955
Tipping Fee	\$ 24.00	0%	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00
Total Revenues			\$ 2,688,000	\$ 2,714,880	\$ 2,742,029	\$ 2,769,449	\$ 2,797,144	\$ 2,825,115	\$ 2,853,366	\$ 2,881,900	\$ 2,910,719	\$ 2,939,826	\$ 2,969,224	\$ 2,998,917

*Closure cost to be funded via FA funds

2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 403,470	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 537,960	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 1,613,870	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 268,980	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 806,940	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ 1,484,510	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 327,730	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,214,460	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 621,450	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 419,900	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,679,590	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,853,950	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 3,631,220	\$ -	\$ -	\$ -	\$ 1,484,510	\$ -	\$ -	\$ -	\$ 327,730	\$ 8,935,400	\$ -	\$ -	\$ -	\$ 1,853,950	\$ -	\$ -	\$ -

2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049
126,204	127,466	128,741	130,029	131,329	132,642	133,969	135,308	136,661	138,028	139,408	140,802	142,210	143,632	145,069	146,519	147,985
\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00
\$ 3,028,906	\$ 3,059,195	\$ 3,089,787	\$ 3,120,685	\$ 3,151,891	\$ 3,183,410	\$ 3,215,244	\$ 3,247,397	\$ 3,279,871	\$ 3,312,670	\$ 3,345,796	\$ 3,379,254	\$ 3,413,047	\$ 3,447,177	\$ 3,481,649	\$ 3,516,465	\$ 3,551,630

	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066
\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$	-	-	-	-	-	-	-	-	-	511,140	7,072,860	-	-	-	-	-	-
\$	-	-	-	-	-	-	-	-	-	-	707,290	-	-	-	-	-	-
\$	-	-	-	-	-	-	-	-	-	511,140	7,780,150	-	-	-	-	-	-

	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066
	149,464	150,959	152,469	153,993	155,533	157,089	158,660	160,246	161,849	163,467	165,102	166,753	168,420	170,104	171,806	173,524	175,259
\$	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
\$	3,587,146	3,623,018	3,659,248	3,695,841	3,732,799	3,770,127	3,807,828	3,845,906	3,884,366	3,923,209	3,962,441	4,002,066	4,042,086	4,082,507	4,123,332	4,164,566	4,206,211

NNSWC Revenue Analysis - Baseline w/ Waste Shredding

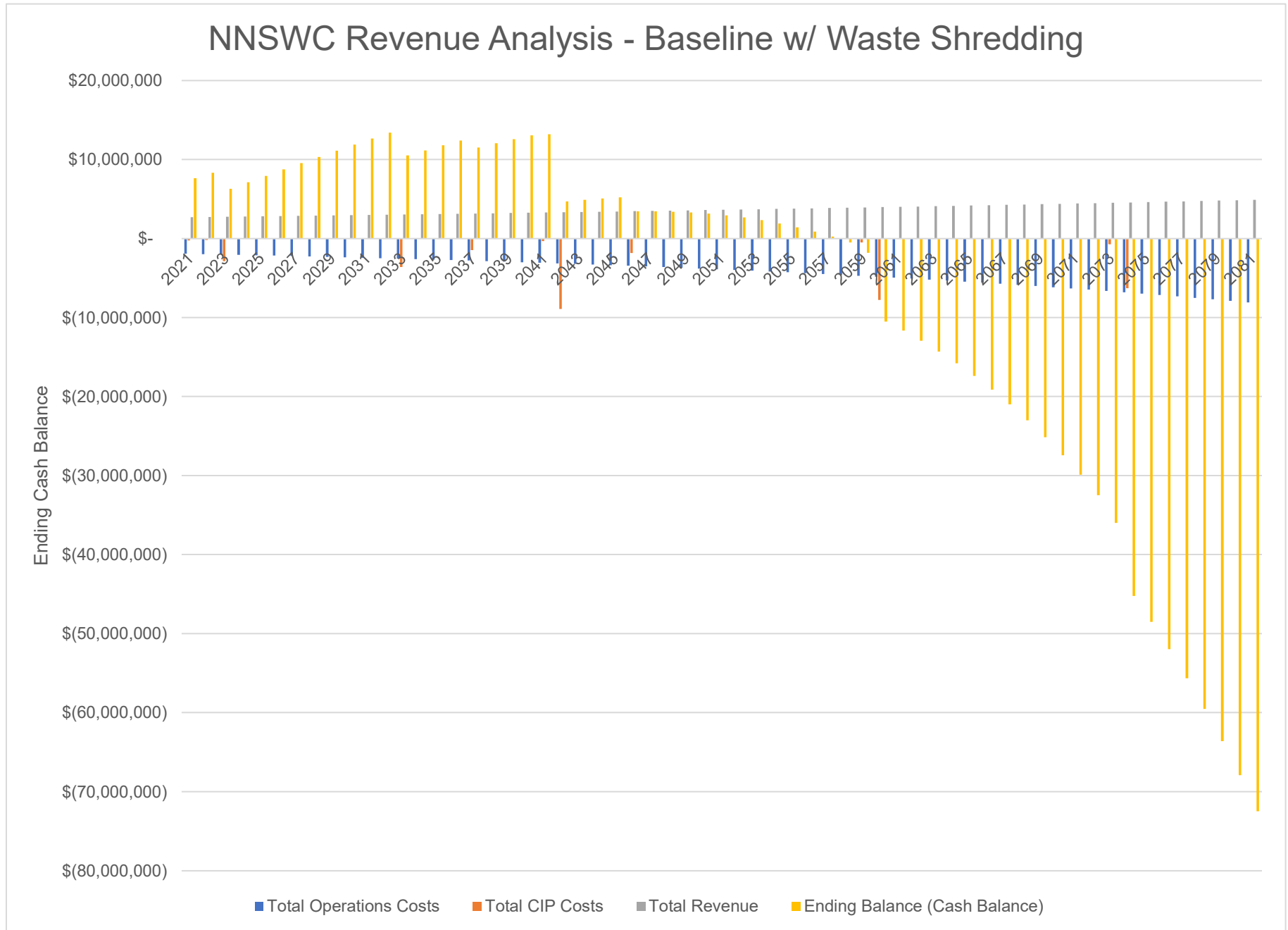
Beginning Balance:	\$ 7,000,000
Interest:	3.50%
Inflation:	2.50%
Investment APR:	2.00%
Starting Year:	2021

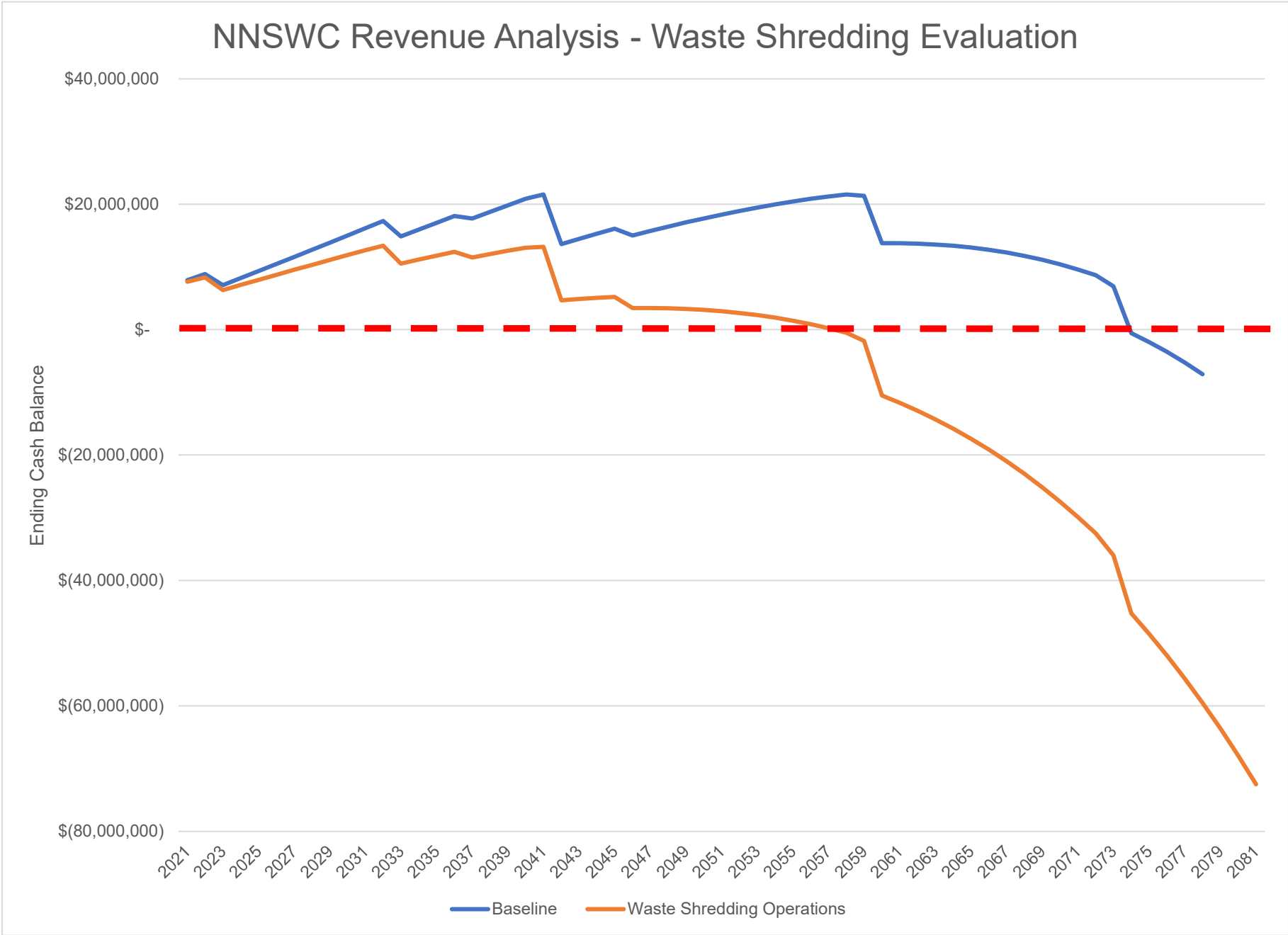
ProForma														
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Annual Tonnages	112,000	113,120	114,251	115,394	116,548	117,713	118,890	120,079	121,280	122,493	123,718	124,955	126,204	127,466
Fixed Fee \$	480,000	494,400	509,232	524,509	540,244	556,452	573,145	590,339	608,050	626,291	645,080	664,432	684,365	704,896
Tonnage Fee \$	448,000	452,480	457,005	461,575	466,191	470,853	475,561	480,317	485,120	489,971	494,871	499,819	504,818	509,866
Special Waste Fee \$	525	530	536	541	546	552	557	563	568	574	580	586	592	597
Total WCI Operations Costs	\$ (928,525)	\$ (947,410)	\$ (966,772)	\$ (986,625)	\$ (1,006,981)	\$ (1,027,856)	\$ (1,049,263)	\$ (1,071,219)	\$ (1,093,738)	\$ (1,116,836)	\$ (1,140,531)	\$ (1,164,837)	\$ (1,189,774)	\$ (1,215,359)
Total Coalition Operating Costs	\$ (1,014,000)	\$ (1,039,350)	\$ (1,065,334)	\$ (1,091,967)	\$ (1,119,266)	\$ (1,147,248)	\$ (1,175,929)	\$ (1,205,327)	\$ (1,235,461)	\$ (1,266,347)	\$ (1,298,006)	\$ (1,330,456)	\$ (1,363,717)	\$ (1,397,810)
Total Operations Costs	\$ (1,942,525)	\$ (1,986,760)	\$ (2,032,106)	\$ (2,078,592)	\$ (2,126,247)	\$ (2,175,104)	\$ (2,225,193)	\$ (2,276,546)	\$ (2,329,198)	\$ (2,383,183)	\$ (2,438,536)	\$ (2,495,293)	\$ (2,553,492)	\$ (2,613,170)
Total CIP Costs	\$ (250,000)	\$ (205,000)	\$ (2,889,230)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (3,631,220)	\$ -
Total Revenue	\$ 2,688,000	\$ 2,714,880	\$ 2,742,029	\$ 2,769,449	\$ 2,797,144	\$ 2,825,115	\$ 2,853,366	\$ 2,881,900	\$ 2,910,719	\$ 2,939,826	\$ 2,969,224	\$ 2,998,917	\$ 3,028,906	\$ 3,059,195
Beginning Balance	\$ 7,000,000	\$ 7,635,475	\$ 8,308,504	\$ 6,292,369	\$ 7,105,810	\$ 7,916,371	\$ 8,721,916	\$ 9,521,417	\$ 10,313,773	\$ 11,097,828	\$ 11,872,377	\$ 12,636,154	\$ 13,387,839	\$ 10,494,828
Annual Change	\$ 495,475	\$ 523,120	\$ (2,179,307)	\$ 690,857	\$ 670,896	\$ 650,011	\$ 628,174	\$ 605,354	\$ 581,520	\$ 556,643	\$ 530,688	\$ 503,623	\$ (3,155,806)	\$ 446,025
Change From Investments	\$ 140,000	\$ 149,910	\$ 163,172	\$ 122,584	\$ 139,665	\$ 155,534	\$ 171,328	\$ 187,002	\$ 202,535	\$ 217,906	\$ 233,089	\$ 248,061	\$ 262,796	\$ 204,641
Ending Balance (Cash Balance)	\$ 7,635,475	\$ 8,308,504	\$ 6,292,369	\$ 7,105,810	\$ 7,916,371	\$ 8,721,916	\$ 9,521,417	\$ 10,313,773	\$ 11,097,828	\$ 11,872,377	\$ 12,636,154	\$ 13,387,839	\$ 10,494,828	\$ 11,145,494

2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
128,741	130,029	131,329	132,642	133,969	135,308	136,661	138,028	139,408	140,802	142,210	143,632	145,069	146,519	147,985	149,464
\$ 726,043	\$ 747,824	\$ 770,259	\$ 793,367	\$ 817,168	\$ 841,683	\$ 866,933	\$ 892,941	\$ 919,730	\$ 947,322	\$ 975,741	\$ 1,005,013	\$ 1,035,164	\$ 1,066,219	\$ 1,098,205	\$ 1,131,151
\$ 514,964	\$ 520,114	\$ 525,315	\$ 530,568	\$ 535,874	\$ 541,233	\$ 546,645	\$ 552,112	\$ 557,633	\$ 563,209	\$ 568,841	\$ 574,530	\$ 580,275	\$ 586,078	\$ 591,938	\$ 597,858
\$ 603	\$ 610	\$ 616	\$ 622	\$ 628	\$ 634	\$ 641	\$ 647	\$ 653	\$ 660	\$ 667	\$ 673	\$ 680	\$ 687	\$ 694	\$ 701
\$ (1,241,611)	\$ (1,268,548)	\$ (1,296,190)	\$ (1,324,557)	\$ (1,353,670)	\$ (1,383,550)	\$ (1,414,219)	\$ (1,445,700)	\$ (1,478,016)	\$ (1,511,191)	\$ (1,545,249)	\$ (1,580,216)	\$ (1,616,119)	\$ (1,652,983)	\$ (1,690,837)	\$ (1,729,710)
\$ (1,432,755)	\$ (1,468,574)	\$ (1,505,289)	\$ (1,542,921)	\$ (1,581,494)	\$ (1,621,031)	\$ (1,661,557)	\$ (1,703,096)	\$ (1,745,673)	\$ (1,789,315)	\$ (1,834,048)	\$ (1,879,899)	\$ (1,926,897)	\$ (1,975,069)	\$ (2,024,446)	\$ (2,075,057)
\$ (2,674,366)	\$ (2,737,122)	\$ (2,801,479)	\$ (2,867,478)	\$ (2,935,164)	\$ (3,004,581)	\$ (3,075,776)	\$ (3,148,796)	\$ (3,223,689)	\$ (3,300,506)	\$ (3,379,297)	\$ (3,460,116)	\$ (3,543,015)	\$ (3,628,052)	\$ (3,715,283)	\$ (3,804,767)
\$ -	\$ -	\$ (1,484,510)	\$ -	\$ -	\$ -	\$ (327,730)	\$ (8,935,400)	\$ -	\$ -	\$ -	\$ (1,853,950)	\$ -	\$ -	\$ -	\$ -
\$ 3,089,787	\$ 3,120,685	\$ 3,151,891	\$ 3,183,410	\$ 3,215,244	\$ 3,247,397	\$ 3,279,871	\$ 3,312,670	\$ 3,345,796	\$ 3,379,254	\$ 3,413,047	\$ 3,447,177	\$ 3,481,649	\$ 3,516,465	\$ 3,551,630	\$ 3,587,146
\$ 11,145,494	\$ 11,779,732	\$ 12,394,512	\$ 11,503,681	\$ 12,044,821	\$ 12,561,294	\$ 13,050,608	\$ 13,183,055	\$ 4,670,068	\$ 4,880,405	\$ 5,054,997	\$ 5,187,930	\$ 3,422,817	\$ 3,427,871	\$ 3,383,513	\$ 3,286,186
\$ 415,420	\$ 383,562	\$ (1,134,097)	\$ 315,932	\$ 280,081	\$ 242,816	\$ (123,635)	\$ (8,771,526)	\$ 122,107	\$ 78,748	\$ 33,750	\$ (1,866,888)	\$ (61,366)	\$ (111,587)	\$ (163,653)	\$ (217,620)
\$ 218,817	\$ 231,218	\$ 243,266	\$ 225,208	\$ 236,392	\$ 246,498	\$ 256,082	\$ 258,539	\$ 88,231	\$ 95,843	\$ 99,183	\$ 101,775	\$ 66,421	\$ 67,229	\$ 66,326	\$ 64,397
\$ 11,779,732	\$ 12,394,512	\$ 11,503,681	\$ 12,044,821	\$ 12,561,294	\$ 13,050,608	\$ 13,183,055	\$ 4,670,068	\$ 4,880,405	\$ 5,054,997	\$ 5,187,930	\$ 3,422,817	\$ 3,427,871	\$ 3,383,513	\$ 3,286,186	\$ 3,132,962

	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065
	150,959	152,469	153,993	155,533	157,089	158,660	160,246	161,849	163,467	165,102	166,753	168,420	170,104	171,806	173,524
\$	1,165,086	1,200,039	1,236,040	1,273,121	1,311,315	1,350,654	1,391,174	1,432,909	1,475,896	1,520,173	1,565,778	1,612,751	1,661,134	1,710,968	1,762,297
\$	603,836	609,875	615,973	622,133	628,354	634,638	640,984	647,394	653,868	660,407	667,011	673,681	680,418	687,222	694,094
\$	708	715	722	729	736	744	751	759	766	774	782	789	797	805	813
\$	(1,769,630)	(1,810,628)	(1,852,735)	(1,895,983)	(1,940,405)	(1,986,036)	(2,032,909)	(2,081,062)	(2,130,531)	(2,181,354)	(2,233,571)	(2,287,222)	(2,342,349)	(2,398,995)	(2,457,205)
\$	(2,126,934)	(2,180,107)	(2,234,610)	(2,290,475)	(2,347,737)	(2,406,430)	(2,466,591)	(2,528,256)	(2,591,462)	(2,656,249)	(2,722,655)	(2,790,721)	(2,860,489)	(2,932,001)	(3,005,301)
\$	(3,896,563)	(3,990,735)	(4,087,345)	(4,186,458)	(4,288,142)	(4,392,466)	(4,499,500)	(4,609,317)	(4,721,992)	(4,837,602)	(4,956,225)	(5,077,943)	(5,202,838)	(5,330,997)	(5,462,506)
\$	-	-	-	-	-	-	-	-	(511,140)	(7,780,150)	-	-	-	-	-
\$	3,623,018	3,659,248	3,695,841	3,732,799	3,770,127	3,807,828	3,845,906	3,884,366	3,923,209	3,962,441	4,002,066	4,042,086	4,082,507	4,123,332	4,164,566
\$	3,132,962	2,920,788	2,646,490	2,306,772	1,898,212	1,417,260	860,226	223,285	(497,534)	(1,817,491)	(10,508,951)	(11,672,567)	(12,937,686)	(14,312,185)	(15,801,010)
\$	(273,546)	(331,487)	(391,504)	(453,659)	(518,015)	(584,638)	(653,593)	(724,952)	(1,309,923)	(8,655,311)	(954,160)	(1,035,857)	(1,120,331)	(1,207,664)	(1,297,941)
\$	61,371	57,188	51,786	45,100	37,062	27,604	16,652	4,133	(10,033)	(36,149)	(209,456)	(229,262)	(254,168)	(281,160)	(310,397)
\$	2,920,788	2,646,490	2,306,772	1,898,212	1,417,260	860,226	223,285	(497,534)	(1,817,491)	(10,508,951)	(11,672,567)	(12,937,686)	(14,312,185)	(15,801,010)	(17,409,348)

	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081
	175,259	177,011	178,782	180,569	182,375	184,199	186,041	187,901	189,780	191,678	193,595	195,531	197,486	199,461	201,455	203,470
\$	1,815,166	1,869,621	1,925,710	1,983,481	2,042,985	2,104,275	2,167,403	2,232,425	2,299,398	2,368,380	2,439,431	2,512,614	2,587,993	2,665,632	2,745,601	2,827,969
\$	701,035	708,046	715,126	722,277	729,500	736,795	744,163	751,605	759,121	766,712	774,379	782,123	789,944	797,843	805,822	813,880
\$	822	830	838	846	855	863	872	881	890	898	907	917	926	935	944	954
\$	(2,517,023)	(2,578,496)	(2,641,674)	(2,706,605)	(2,773,340)	(2,841,933)	(2,912,438)	(2,984,911)	(3,059,408)	(3,135,990)	(3,214,718)	(3,295,654)	(3,378,862)	(3,464,411)	(3,552,368)	(3,642,803)
\$	(3,080,434)	(3,157,445)	(3,236,381)	(3,317,290)	(3,400,223)	(3,485,228)	(3,572,359)	(3,661,668)	(3,753,210)	(3,847,040)	(3,943,216)	(4,041,796)	(4,142,841)	(4,246,412)	(4,352,572)	(4,461,387)
\$	(5,597,457)	(5,735,941)	(5,878,055)	(6,023,895)	(6,173,563)	(6,327,162)	(6,484,797)	(6,646,579)	(6,812,618)	(6,983,030)	(7,157,934)	(7,337,450)	(7,521,704)	(7,710,823)	(7,904,940)	(8,104,190)
\$	-	-	-	-	-	-	-	(722,230)	(6,292,370)	-	-	-	-	-	-	-
\$	4,206,211	4,248,273	4,290,756	4,333,664	4,377,000	4,420,770	4,464,978	4,509,628	4,554,724	4,600,271	4,646,274	4,692,737	4,739,664	4,787,061	4,834,931	4,883,281
\$	(17,409,348)	(19,142,572)	(21,006,252)	(23,006,155)	(25,148,257)	(27,438,747)	(29,884,035)	(32,490,757)	(35,988,015)	(40,245,277)	(44,518,802)	(48,983,022)	(53,648,344)	(58,522,939)	(63,615,308)	(68,934,251)
\$	(1,391,245)	(1,487,668)	(1,587,298)	(1,690,231)	(1,796,563)	(1,906,391)	(2,019,819)	(2,139,181)	(2,264,264)	(2,392,759)	(2,525,660)	(2,664,713)	(2,809,039)	(2,958,762)	(3,113,009)	(3,272,909)
\$	(341,979)	(376,012)	(412,605)	(451,871)	(493,928)	(538,896)	(586,903)	(638,077)	(696,999)	(760,766)	(829,561)	(902,609)	(981,555)	(1,066,608)	(1,158,934)	(1,258,706)
\$	(19,142,572)	(21,006,252)	(23,006,155)	(25,148,257)	(27,438,747)	(29,884,035)	(32,490,757)	(35,988,015)	(40,245,277)	(44,518,802)	(48,983,022)	(53,648,344)	(58,522,939)	(63,615,308)	(68,934,251)	(74,488,867)





APPENDIX C – NNSWC FINANCIAL EVALUATION

NNSWC Financial Model

Financial Model Inputs

Hours of Operation: M-F 7AM-4PM; Sat 7AM-12PM

Interest:	3.50%
Inflation:	2.50%
Current Year:	2021
Starting Year:	2021

WCI Operation Costs

WCI Fixed Fee:	\$ 480,000	annually
Annual Increase in Fixed Fee:	3%	
WCI Tonnage Fee:	\$4	per ton
Annual Increase in Tonnage Fee:	0%	
WCI Special Waste Fee:	\$10.50	per ton
Annual Increase in Special Waste Fee:	0%	
2020 Annual Tonnage (assumed):	112,000	tons
2020 Special Waste Tonnage (assumed):	50	tons
Annual Tonnage Increase:	1%	per year

Coalition Operation

Personnel Costs	\$ 94,734	
Operating & Maintenance Costs	\$ 30,577	
Other Admin. and Overhead	\$ 22,455	
Other Misc.	\$ 10,000	
FA Fund Transfers	\$ 350,000	Covers Closure and Post-Closure Care Costs
Professional Services	\$ 250,000	Annual Average
Total Coalition Costs:	\$ (758,000)	2021\$

NNSWC Revenue Analysis - Baseline

Interest:	3.50%	[input from "operation inputs"]
Inflation:	2.50%	[input from "operation inputs"]
Current Year:	2021	[input from "operation inputs"]

WCI Operation Costs

WCI Fixed Fee:	\$ 480,000	annually	[input from "operation inputs"]
Annual Increase in Fixed Fee:	3.0%		[input from "operation inputs"]
WCI Tonnage Fee:	\$4	per ton	[input from "operation inputs"]
Annual Increase in Tonnage Fee:	0%		[input from "operation inputs"]
WCI Special Waste Fee:	\$10.50	per ton	[input from "operation inputs"]
Annual Increase in Special Waste Fee:	0%		[input from "operation inputs"]
2020 Annual Tonnage (assumed):	112,000	tons	[input from "operation inputs"]
2020 Special Waste Tonnage (assumed):	50	tons	[input from "operation inputs"]
Annual Tonnage Increase:	1%	per year	[input from "operation inputs"]
Starting Year:	2021		[input from "operation inputs"]

Coalition Operating Costs

Personnel Costs	\$ 94,734	[input from "operation inputs"]
Operating & Maintenance Costs	\$ 30,577	[input from "operation inputs"]
Other Admin. and Overhead	\$ 22,455	[input from "operation inputs"]
Other Misc.	\$ 10,000	[input from "operation inputs"]
FA Fund Transfers	\$ 350,000	[input from "operation inputs"]
Professional Services	\$ 250,000	[input from "operation inputs"]
Total Coalition Costs:	\$ (758,000)	

Capital Costs

	PV Cost	Execution Year														
			2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031			
Cell 6 Ph 1 Engineering	\$ 200,000	2022	\$ 250,000	\$ 205,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 1 Construction	\$ 2,500,000	2023	\$ -	\$ -	\$ 2,626,570	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 1 CA	\$ 250,000	2023	\$ -	\$ -	\$ 262,660	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Scales	\$ 300,000	2033	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Scale House	\$ 400,000	2033	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Equipment Building	\$ 1,200,000	2033	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Drop-Off Area	\$ 200,000	2033	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Asphalt Pavement	\$ 600,000	2033	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Land Acquisition	\$ 1,000,000	2037	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 2 Engineering	\$ 200,000	2041	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 2 Construction	\$ 3,700,000	2042	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 2 CA	\$ 370,000	2042	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 1-6 Ph 1 Closure*	\$ 3,100,000	2042	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Sedimentation Basin	\$ 250,000	2042	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Leachate Pond	\$ 1,000,000	2042	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Landfill Gas Flare	\$ 1,000,000	2046	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 7 Engineering	\$ 200,000	2059	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 7 Construction	\$ 2,700,000	2060	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 7 CA	\$ 270,000	2060	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 2 Closure*	\$ 2,700,000	2060	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 8 Engineering	\$ 200,000	2073	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 8 Construction	\$ 1,500,000	2074	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 8 CA	\$ 200,000	2074	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 7 Closure*	\$ 4,000,000	2074	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 8 Ph 2 Closure*	\$ 2,300,000	2078	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Insert Row Above Here</i>			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total CIP			\$ 250,000	\$ 205,000	\$ 2,889,230	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Revenues

	2020 Rates	% Increase/ Decrease											
			2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Annual Tonnage	112,000	1%	112,000	113,120	114,251	115,394	116,548	117,713	118,890	120,079	121,280	122,493	123,718
Tipping Fee	\$ 24.00	0%	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00
Total Revenues			\$ 2,688,000	\$ 2,714,880	\$ 2,742,029	\$ 2,769,449	\$ 2,797,144	\$ 2,825,115	\$ 2,853,366	\$ 2,881,900	\$ 2,910,719	\$ 2,939,826	\$ 2,969,224

*Closure cost to be funded via FA funds

	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078
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\$	-	-	-	-	-	-	-	722,230	5,552,090	-	-	-	-
\$	-	-	-	-	-	-	-	-	740,280	-	-	-	-
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\$	-	-	-	-	-	-	-	722,230	6,292,370	-	-	-	-

	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078
	175,259	177,011	178,782	180,569	182,375	184,199	186,041	187,901	189,780	191,678	193,595	195,531	197,486
\$	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
\$	4,206,211	4,248,273	4,290,756	4,333,664	4,377,000	4,420,770	4,464,978	4,509,628	4,554,724	4,600,271	4,646,274	4,692,737	4,739,664

NNSWC Revenue Analysis - Baseline

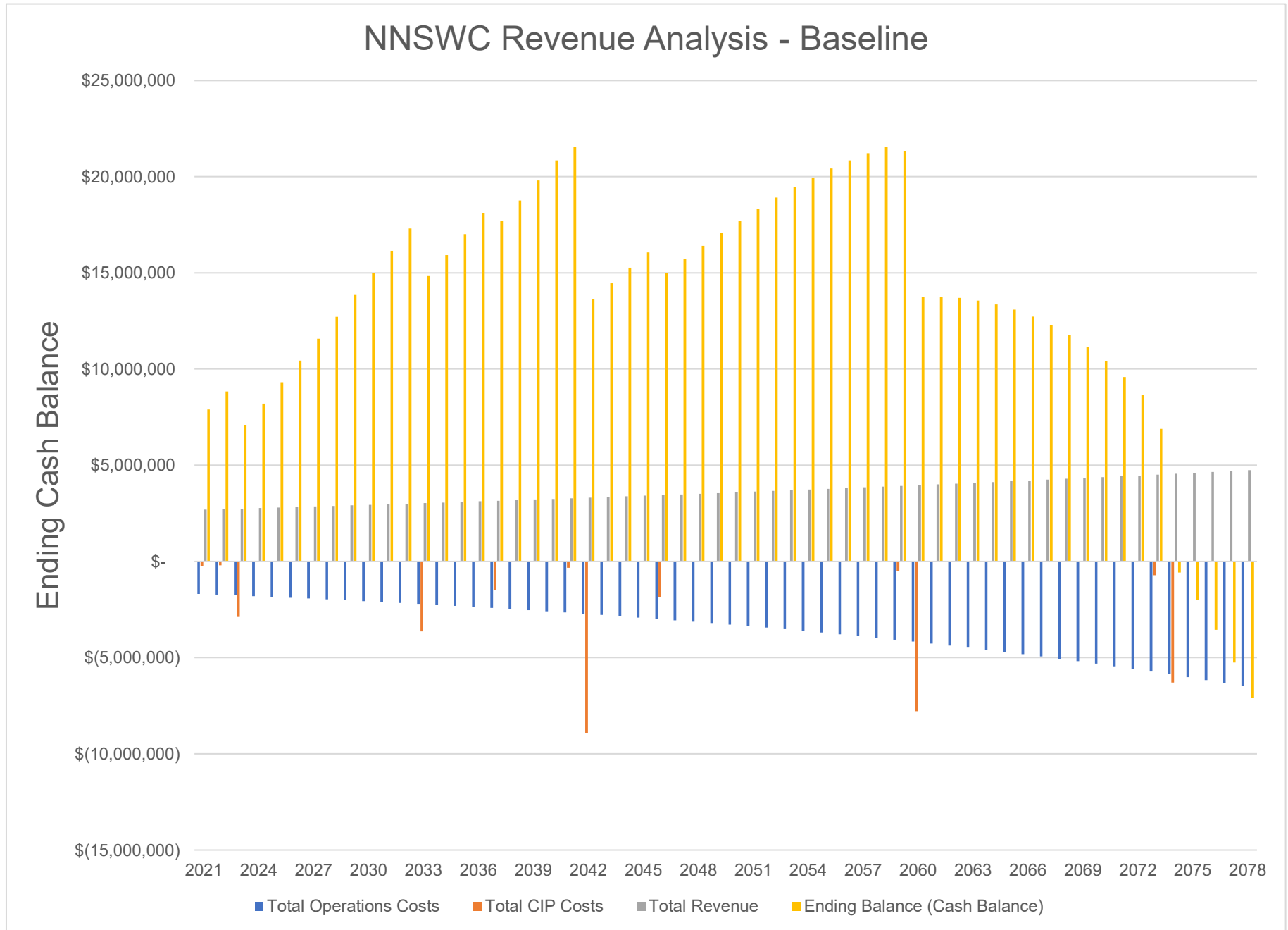
Beginning Balance:	\$ 7,000,000
Interest:	3.50%
Inflation:	2.50%
Investment APR:	2.00%
Starting Year:	2021

ProForma														
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Annual Tonnages	112,000	113,120	114,251	115,394	116,548	117,713	118,890	120,079	121,280	122,493	123,718	124,955	126,204	127,466
Fixed Fee \$	480,000	494,400	509,232	524,509	540,244	556,452	573,145	590,339	608,050	626,291	645,080	664,432	684,365	704,896
Tonnage Fee \$	448,000	452,480	457,005	461,575	466,191	470,853	475,561	480,317	485,120	489,971	494,871	499,819	504,818	509,866
Special Waste Fee \$	525	530	536	541	546	552	557	563	568	574	580	586	592	597
Total WCI Operations Costs \$	(928,525)	(947,410)	(966,772)	(986,625)	(1,006,981)	(1,027,856)	(1,049,263)	(1,071,219)	(1,093,738)	(1,116,836)	(1,140,531)	(1,164,837)	(1,189,774)	(1,215,359)
Total Coalition Operating Costs \$	(758,000)	(776,950)	(796,374)	(816,283)	(836,690)	(857,607)	(879,048)	(901,024)	(923,549)	(946,638)	(970,304)	(994,562)	(1,019,426)	(1,044,911)
Total Operations Costs \$	(1,686,525)	(1,724,360)	(1,763,146)	(1,802,908)	(1,843,671)	(1,885,463)	(1,928,311)	(1,972,243)	(2,017,287)	(2,063,474)	(2,110,835)	(2,159,399)	(2,209,200)	(2,260,271)
Total CIP Costs \$	(250,000)	(205,000)	(2,889,230)	-	-	-	-	-	-	-	-	-	(3,631,220)	-
Total Revenue \$	2,688,000	2,714,880	2,742,029	2,769,449	2,797,144	2,825,115	2,853,366	2,881,900	2,910,719	2,939,826	2,969,224	2,998,917	3,028,906	3,059,195
Beginning Balance \$	7,000,000	7,891,475	8,832,024	7,095,217	8,200,192	9,314,899	10,437,624	11,567,770	12,704,681	13,847,661	14,995,975	16,148,845	17,305,449	14,833,702
Annual Change \$	751,475	785,520	(1,910,347)	966,541	953,472	939,652	925,055	909,657	893,431	876,352	858,390	839,517	(2,811,514)	798,924
Change From Investments \$	140,000	155,030	173,540	138,434	161,235	183,073	205,091	227,254	249,549	271,962	294,480	317,087	339,767	289,879
Ending Balance (Cash Balance) \$	7,891,475	8,832,024	7,095,217	8,200,192	9,314,899	10,437,624	11,567,770	12,704,681	13,847,661	14,995,975	16,148,845	17,305,449	14,833,702	15,922,505

	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
	128,741	130,029	131,329	132,642	133,969	135,308	136,661	138,028	139,408	140,802	142,210	143,632	145,069	146,519	147,985	149,464
\$	726,043	\$ 747,824	\$ 770,259	\$ 793,367	\$ 817,168	\$ 841,683	\$ 866,933	\$ 892,941	\$ 919,730	\$ 947,322	\$ 975,741	\$ 1,005,013	\$ 1,035,164	\$ 1,066,219	\$ 1,098,205	\$ 1,131,151
\$	514,964	\$ 520,114	\$ 525,315	\$ 530,568	\$ 535,874	\$ 541,233	\$ 546,645	\$ 552,112	\$ 557,633	\$ 563,209	\$ 568,841	\$ 574,530	\$ 580,275	\$ 586,078	\$ 591,938	\$ 597,858
\$	603	\$ 610	\$ 616	\$ 622	\$ 628	\$ 634	\$ 641	\$ 647	\$ 653	\$ 660	\$ 667	\$ 673	\$ 680	\$ 687	\$ 694	\$ 701
\$	(1,241,611)	\$ (1,268,548)	\$ (1,296,190)	\$ (1,324,557)	\$ (1,353,670)	\$ (1,383,550)	\$ (1,414,219)	\$ (1,445,700)	\$ (1,478,016)	\$ (1,511,191)	\$ (1,545,249)	\$ (1,580,216)	\$ (1,616,119)	\$ (1,652,983)	\$ (1,690,837)	\$ (1,729,710)
\$	(1,071,034)	\$ (1,097,810)	\$ (1,125,255)	\$ (1,153,387)	\$ (1,182,221)	\$ (1,211,777)	\$ (1,242,071)	\$ (1,273,123)	\$ (1,304,951)	\$ (1,337,575)	\$ (1,371,014)	\$ (1,405,290)	\$ (1,440,422)	\$ (1,476,432)	\$ (1,513,343)	\$ (1,551,177)
\$	(2,312,645)	\$ (2,366,358)	\$ (2,421,445)	\$ (2,477,944)	\$ (2,535,891)	\$ (2,595,327)	\$ (2,656,290)	\$ (2,718,823)	\$ (2,782,967)	\$ (2,848,765)	\$ (2,916,263)	\$ (2,985,506)	\$ (3,056,541)	\$ (3,129,416)	\$ (3,204,181)	\$ (3,280,887)
\$	-	\$ -	\$ (1,484,510)	\$ -	\$ -	\$ -	\$ (327,730)	\$ (8,935,400)	\$ -	\$ -	\$ -	\$ (1,853,950)	\$ -	\$ -	\$ -	\$ -
\$	3,089,787	\$ 3,120,685	\$ 3,151,891	\$ 3,183,410	\$ 3,215,244	\$ 3,247,397	\$ 3,279,871	\$ 3,312,670	\$ 3,345,796	\$ 3,379,254	\$ 3,413,047	\$ 3,447,177	\$ 3,481,649	\$ 3,516,465	\$ 3,551,630	\$ 3,587,146
\$	15,922,505	\$ 17,012,299	\$ 18,100,618	\$ 17,701,887	\$ 18,754,285	\$ 19,801,785	\$ 20,842,528	\$ 21,547,455	\$ 13,628,669	\$ 14,455,617	\$ 15,269,936	\$ 16,066,441	\$ 14,989,497	\$ 15,708,089	\$ 16,403,431	\$ 17,072,783
\$	777,142	\$ 754,327	\$ (754,064)	\$ 705,467	\$ 679,353	\$ 652,070	\$ 295,850	\$ (8,341,553)	\$ 562,829	\$ 530,489	\$ 496,784	\$ (1,392,279)	\$ 425,108	\$ 387,050	\$ 347,450	\$ 306,260
\$	312,653	\$ 333,993	\$ 355,333	\$ 346,931	\$ 368,147	\$ 388,673	\$ 409,077	\$ 422,768	\$ 264,118	\$ 283,830	\$ 299,722	\$ 315,334	\$ 293,483	\$ 308,292	\$ 321,903	\$ 335,018
\$	17,012,299	\$ 18,100,618	\$ 17,701,887	\$ 18,754,285	\$ 19,801,785	\$ 20,842,528	\$ 21,547,455	\$ 13,628,669	\$ 14,455,617	\$ 15,269,936	\$ 16,066,441	\$ 14,989,497	\$ 15,708,089	\$ 16,403,431	\$ 17,072,783	\$ 17,714,060

	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065
	150,959	152,469	153,993	155,533	157,089	158,660	160,246	161,849	163,467	165,102	166,753	168,420	170,104	171,806	173,524
\$	1,165,086	\$ 1,200,039	\$ 1,236,040	\$ 1,273,121	\$ 1,311,315	\$ 1,350,654	\$ 1,391,174	\$ 1,432,909	\$ 1,475,896	\$ 1,520,173	\$ 1,565,778	\$ 1,612,751	\$ 1,661,134	\$ 1,710,968	\$ 1,762,297
\$	603,836	\$ 609,875	\$ 615,973	\$ 622,133	\$ 628,354	\$ 634,638	\$ 640,984	\$ 647,394	\$ 653,868	\$ 660,407	\$ 667,011	\$ 673,681	\$ 680,418	\$ 687,222	\$ 694,094
\$	708	\$ 715	\$ 722	\$ 729	\$ 736	\$ 744	\$ 751	\$ 759	\$ 766	\$ 774	\$ 782	\$ 789	\$ 797	\$ 805	\$ 813
\$	(1,769,630)	\$ (1,810,628)	\$ (1,852,735)	\$ (1,895,983)	\$ (1,940,405)	\$ (1,986,036)	\$ (2,032,909)	\$ (2,081,062)	\$ (2,130,531)	\$ (2,181,354)	\$ (2,233,571)	\$ (2,287,222)	\$ (2,342,349)	\$ (2,398,995)	\$ (2,457,205)
\$	(1,589,956)	\$ (1,629,705)	\$ (1,670,448)	\$ (1,712,209)	\$ (1,755,014)	\$ (1,798,890)	\$ (1,843,862)	\$ (1,889,958)	\$ (1,937,207)	\$ (1,985,637)	\$ (2,035,278)	\$ (2,086,160)	\$ (2,138,314)	\$ (2,191,772)	\$ (2,246,567)
\$	(3,359,586)	\$ (3,440,333)	\$ (3,523,183)	\$ (3,608,192)	\$ (3,695,420)	\$ (3,784,925)	\$ (3,876,771)	\$ (3,971,020)	\$ (4,067,738)	\$ (4,166,991)	\$ (4,268,849)	\$ (4,373,382)	\$ (4,480,664)	\$ (4,590,768)	\$ (4,703,771)
\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (511,140)	\$ (7,780,150)	\$ -	\$ -	\$ -	\$ -	\$ -
\$	3,623,018	\$ 3,659,248	\$ 3,695,841	\$ 3,732,799	\$ 3,770,127	\$ 3,807,828	\$ 3,845,906	\$ 3,884,366	\$ 3,923,209	\$ 3,962,441	\$ 4,002,066	\$ 4,042,086	\$ 4,082,507	\$ 4,123,332	\$ 4,164,566
\$	17,714,060	\$ 18,325,073	\$ 18,903,538	\$ 19,447,075	\$ 19,953,206	\$ 20,419,347	\$ 20,842,808	\$ 21,220,789	\$ 21,550,373	\$ 21,317,388	\$ 13,750,582	\$ 13,750,452	\$ 13,688,832	\$ 13,559,059	\$ 13,357,437
\$	263,432	\$ 218,915	\$ 172,658	\$ 124,607	\$ 74,707	\$ 22,903	\$ (30,864)	\$ (86,654)	\$ (655,669)	\$ (7,984,700)	\$ (266,783)	\$ (331,296)	\$ (398,156)	\$ (467,435)	\$ (539,206)
\$	347,581	\$ 359,550	\$ 370,880	\$ 381,524	\$ 391,434	\$ 400,558	\$ 408,845	\$ 416,239	\$ 422,683	\$ 417,894	\$ 266,654	\$ 269,676	\$ 268,383	\$ 265,814	\$ 261,832
\$	18,325,073	\$ 18,903,538	\$ 19,447,075	\$ 19,953,206	\$ 20,419,347	\$ 20,842,808	\$ 21,220,789	\$ 21,550,373	\$ 21,317,388	\$ 13,750,582	\$ 13,750,452	\$ 13,688,832	\$ 13,559,059	\$ 13,357,437	\$ 13,080,064

	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078
	175,259	177,011	178,782	180,569	182,375	184,199	186,041	187,901	189,780	191,678	193,595	195,531	197,486
\$	1,815,166	\$ 1,869,621	\$ 1,925,710	\$ 1,983,481	\$ 2,042,985	\$ 2,104,275	\$ 2,167,403	\$ 2,232,425	\$ 2,299,398	\$ 2,368,380	\$ 2,439,431	\$ 2,512,614	\$ 2,587,993
\$	701,035	\$ 708,046	\$ 715,126	\$ 722,277	\$ 729,500	\$ 736,795	\$ 744,163	\$ 751,605	\$ 759,121	\$ 766,712	\$ 774,379	\$ 782,123	\$ 789,944
\$	822	\$ 830	\$ 838	\$ 846	\$ 855	\$ 863	\$ 872	\$ 881	\$ 890	\$ 898	\$ 907	\$ 917	\$ 926
\$	(2,517,023)	\$ (2,578,496)	\$ (2,641,674)	\$ (2,706,605)	\$ (2,773,340)	\$ (2,841,933)	\$ (2,912,438)	\$ (2,984,911)	\$ (3,059,408)	\$ (3,135,990)	\$ (3,214,718)	\$ (3,295,654)	\$ (3,378,862)
\$	(2,302,731)	\$ (2,360,299)	\$ (2,419,306)	\$ (2,479,789)	\$ (2,541,784)	\$ (2,605,328)	\$ (2,670,462)	\$ (2,737,223)	\$ (2,805,654)	\$ (2,875,795)	\$ (2,947,690)	\$ (3,021,382)	\$ (3,096,917)
\$	(4,819,753)	\$ (4,938,795)	\$ (5,060,980)	\$ (5,186,394)	\$ (5,315,124)	\$ (5,447,262)	\$ (5,582,900)	\$ (5,722,134)	\$ (5,865,062)	\$ (6,011,785)	\$ (6,162,408)	\$ (6,317,036)	\$ (6,475,779)
\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (722,230)	\$ (6,292,370)	\$ -	\$ -	\$ -	\$ -
\$	4,206,211	\$ 4,248,273	\$ 4,290,756	\$ 4,333,664	\$ 4,377,000	\$ 4,420,770	\$ 4,464,978	\$ 4,509,628	\$ 4,554,724	\$ 4,600,271	\$ 4,646,274	\$ 4,692,737	\$ 4,739,664
\$	13,080,064	\$ 12,722,886	\$ 12,281,695	\$ 11,752,118	\$ 11,129,618	\$ 10,409,482	\$ 9,586,820	\$ 8,656,558	\$ 6,891,200	\$ (577,071)	\$ (2,002,816)	\$ (3,558,721)	\$ (5,253,399)
\$	(613,542)	\$ (690,522)	\$ (770,224)	\$ (852,730)	\$ (938,124)	\$ (1,026,491)	\$ (1,117,922)	\$ (1,934,736)	\$ (7,602,708)	\$ (1,411,514)	\$ (1,516,134)	\$ (1,624,299)	\$ (1,736,115)
\$	256,365	\$ 249,330	\$ 240,647	\$ 230,229	\$ 217,988	\$ 203,830	\$ 187,660	\$ 169,378	\$ 134,436	\$ (14,230)	\$ (39,772)	\$ (70,379)	\$ (103,660)
\$	12,722,886	\$ 12,281,695	\$ 11,752,118	\$ 11,129,618	\$ 10,409,482	\$ 9,586,820	\$ 8,656,558	\$ 6,891,200	\$ (577,071)	\$ (2,002,816)	\$ (3,558,721)	\$ (5,253,399)	\$ (7,093,175)



NNSWC Revenue Analysis - Tonnage Increase

Interest:	3.50%	[input from "operation inputs"]
Inflation:	2.50%	[input from "operation inputs"]
Current Year:	2021	[input from "operation inputs"]

WCI Operation Costs

WCI Fixed Fee:	\$ 480,000	annually	[input from "operation inputs"]
Annual Increase in Fixed Fee:	3.0%		[input from "operation inputs"]
WCI Tonnage Fee:	\$4	per ton	[input from "operation inputs"]
Annual Increase in Tonnage Fee:	0%		[input from "operation inputs"]
WCI Special Waste Fee:	\$10.50	per ton	[input from "operation inputs"]
Annual Increase in Special Waste Fee:	0%		[input from "operation inputs"]
2020 Annual Tonnage (assumed):	134,400	tons	[input from "operation inputs"]
2020 Special Waste Tonnage (assumed):	50	tons	[input from "operation inputs"]
Annual Tonnage Increase:	1%	per year	[input from "operation inputs"]
Starting Year:	2021		[input from "operation inputs"]

Coalition Operating Costs

Personnel Costs	\$ 94,734	[input from "operation inputs"]
Operating & Maintenance Costs	\$ 30,577	[input from "operation inputs"]
Other Admin. and Overhead	\$ 22,455	[input from "operation inputs"]
Other Misc.	\$ 10,000	[input from "operation inputs"]
FA Fund Transfers	\$ 350,000	[input from "operation inputs"]
Professional Services	\$ 250,000	[input from "operation inputs"]
Total Coalition Costs:	\$ (758,000)	

Capital Costs														
	PV Cost	Execution Year												
			2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	
Cell 6 Ph 1 Engineering	\$ 200,000	2022	\$ 250,000	\$ 205,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 1 Construction	\$ 2,500,000	2023	\$ -	\$ -	\$ 2,626,570	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 1 CA	\$ 250,000	2023	\$ -	\$ -	\$ 262,660	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Scales	\$ 300,000	2031	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 384,030
Facility Improvement - Scale House	\$ 400,000	2031	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 512,040
Facility Improvement - Equipment Building	\$ 1,200,000	2031	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,536,110
Facility Improvement - Drop-Off Area	\$ 200,000	2031	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 256,020
Facility Improvement - Asphalt Pavement	\$ 600,000	2031	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 768,060
Facility Improvement - Land Acquisition	\$ 1,000,000	2033	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 2 Engineering	\$ 200,000	2037	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 2 Construction	\$ 3,700,000	2038	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 2 CA	\$ 370,000	2038	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 1-6 Ph 1 Closure*	\$ 3,100,000	2038	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Sedimentation Basin	\$ 250,000	2038	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Leachate Pond	\$ 1,000,000	2038	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Landfill Gas Flare	\$ 1,000,000	2046	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 7 Engineering	\$ 200,000	2053	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 7 Construction	\$ 2,700,000	2054	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 7 CA	\$ 270,000	2054	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 2 Closure*	\$ 2,700,000	2054	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 8 Engineering	\$ 200,000	2066	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 8 Construction	\$ 1,500,000	2067	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 8 CA	\$ 200,000	2067	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 7 Closure*	\$ 4,000,000	2067	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 8 Ph 2 Closure*	\$ 2,300,000	2070	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Insert Row Above Here</i>			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total CIP			\$ 250,000	\$ 205,000	\$ 2,889,230	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,456,260

Revenues														
	2020 Rates	% Increase/ Decrease												
			2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	
Annual Tonnage	134,400	1%	134,400	135,744	137,101	138,472	139,857	141,256	142,668	144,095	145,536	146,991	148,461	
Tipping Fee	\$ 24.00	0%	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00
Total Revenues			\$ 3,225,600	\$ 3,257,856	\$ 3,290,435	\$ 3,323,339	\$ 3,356,572	\$ 3,390,138	\$ 3,424,039	\$ 3,458,280	\$ 3,492,863	\$ 3,527,791	\$ 3,563,069	

*Closure cost to be funded via FA funds

	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$	-	1,344,890	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$	-	-	-	-	-	296,910	-	-	-	-	-	-	-	-	-	-	-
\$	-	-	-	-	-	-	5,629,990	-	-	-	-	-	-	-	-	-	-
\$	-	-	-	-	-	-	563,000	-	-	-	-	-	-	-	-	-	-
\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$	-	-	-	-	-	-	380,410	-	-	-	-	-	-	-	-	-	-
\$	-	-	-	-	-	-	1,521,620	-	-	-	-	-	-	-	-	-	-
\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,853,950	-	-
\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$	-	1,344,890	-	-	-	296,910	8,095,020	-	-	-	-	-	-	-	1,853,950	-	-

	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
\$	149,946	151,445	152,960	154,489	156,034	157,595	159,171	160,762	162,370	163,994	165,633	167,290	168,963	170,652	172,359	174,082	175,823
\$	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
\$	3,598,700	3,634,687	3,671,034	3,707,744	3,744,821	3,782,270	3,820,092	3,858,293	3,896,876	3,935,845	3,975,203	4,014,955	4,055,105	4,095,656	4,136,613	4,177,979	4,219,759

NNSWC Revenue Analysis - Tonnage Increase

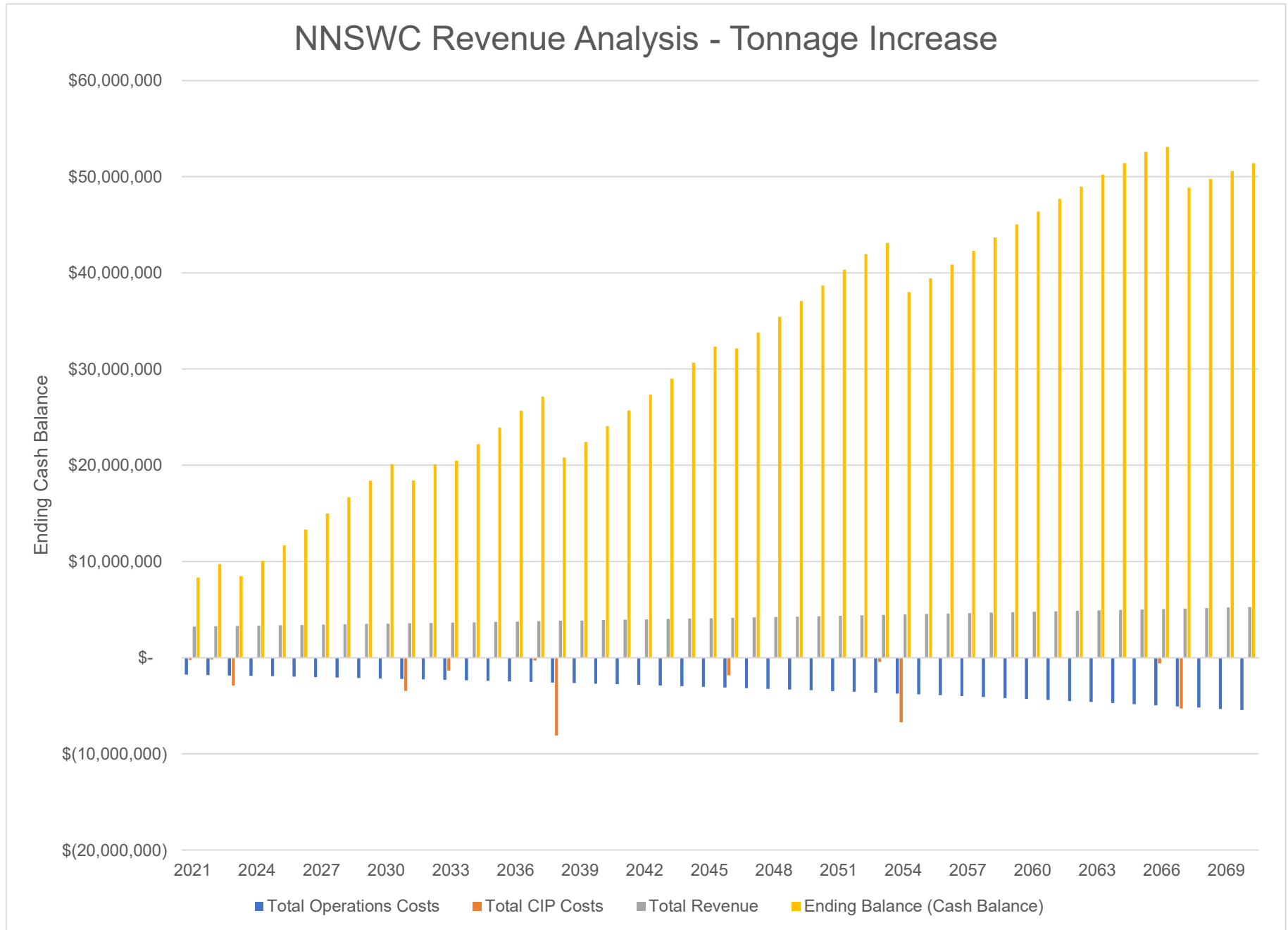
Beginning Balance:	\$ 7,000,000.00
Interest:	3.50%
Inflation:	2.50%
Investment APR:	2.00%
Starting Year:	2021

ProForma													
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Annual Tonnages	134,400	135,744	137,101	138,472	139,857	141,256	142,668	144,095	145,536	146,991	148,461	149,946	151,445
Fixed Fee \$	480,000	494,400	509,232	524,509	540,244	556,452	573,145	590,339	608,050	626,291	645,080	664,432	684,365
Tonnage Fee \$	537,600	542,976	548,406	553,890	559,429	565,023	570,673	576,380	582,144	587,965	593,845	599,783	605,781
Special Waste Fee \$	525	530	536	541	546	552	557	563	568	574	580	586	592
Total WCI Operations Costs	\$ (1,018,125)	\$ (1,037,906)	\$ (1,058,173)	\$ (1,078,940)	\$ (1,100,219)	\$ (1,122,026)	\$ (1,144,376)	\$ (1,167,282)	\$ (1,190,762)	\$ (1,214,831)	\$ (1,239,505)	\$ (1,264,801)	\$ (1,290,738)
Total Coalition Operating Costs	\$ (758,000)	\$ (776,950)	\$ (796,374)	\$ (816,283)	\$ (836,690)	\$ (857,607)	\$ (879,048)	\$ (901,024)	\$ (923,549)	\$ (946,638)	\$ (970,304)	\$ (994,562)	\$ (1,019,426)
Total Operations Costs	\$ (1,776,125)	\$ (1,814,856)	\$ (1,854,547)	\$ (1,895,223)	\$ (1,936,909)	\$ (1,979,634)	\$ (2,023,423)	\$ (2,068,306)	\$ (2,114,311)	\$ (2,161,469)	\$ (2,209,809)	\$ (2,259,363)	\$ (2,310,164)
Total CIP Costs	\$ (250,000)	\$ (205,000)	\$ (2,889,230)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (3,456,260)	\$ -	\$ (1,344,890)
Total Revenue	\$ 3,225,600	\$ 3,257,856	\$ 3,290,435	\$ 3,323,339	\$ 3,356,572	\$ 3,390,138	\$ 3,424,039	\$ 3,458,280	\$ 3,492,863	\$ 3,527,791	\$ 3,563,069	\$ 3,598,700	\$ 3,634,687
Beginning Balance	\$ 7,000,000	\$ 8,339,475	\$ 9,741,464	\$ 8,479,671	\$ 10,073,550	\$ 11,691,368	\$ 13,331,737	\$ 14,994,391	\$ 16,679,011	\$ 18,385,250	\$ 20,112,724	\$ 18,404,756	\$ 20,104,287
Annual Change	\$ 1,199,475	\$ 1,238,000	\$ (1,453,343)	\$ 1,428,116	\$ 1,419,663	\$ 1,410,504	\$ 1,400,616	\$ 1,389,974	\$ 1,378,551	\$ 1,366,323	\$ (2,103,000)	\$ 1,339,337	\$ (20,367)
Change from Investments	\$ 140,000	\$ 163,990	\$ 191,549	\$ 165,762	\$ 198,156	\$ 229,864	\$ 262,037	\$ 294,647	\$ 327,687	\$ 361,151	\$ 395,031	\$ 360,194	\$ 394,882
Ending Balance (Cash Balance)	\$ 8,339,475	\$ 9,741,464	\$ 8,479,671	\$ 10,073,550	\$ 11,691,368	\$ 13,331,737	\$ 14,994,391	\$ 16,679,011	\$ 18,385,250	\$ 20,112,724	\$ 18,404,756	\$ 20,104,287	\$ 20,478,802

2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
152,960	154,489	156,034	157,595	159,171	160,762	162,370	163,994	165,633	167,290	168,963	170,652	172,359	174,082	175,823
\$ 704,896	\$ 726,043	\$ 747,824	\$ 770,259	\$ 793,367	\$ 817,168	\$ 841,683	\$ 866,933	\$ 892,941	\$ 919,730	\$ 947,322	\$ 975,741	\$ 1,005,013	\$ 1,035,164	\$ 1,066,219
\$ 611,839	\$ 617,957	\$ 624,137	\$ 630,378	\$ 636,682	\$ 643,049	\$ 649,479	\$ 655,974	\$ 662,534	\$ 669,159	\$ 675,851	\$ 682,609	\$ 689,435	\$ 696,330	\$ 703,293
\$ 597	\$ 603	\$ 610	\$ 616	\$ 622	\$ 628	\$ 634	\$ 641	\$ 647	\$ 653	\$ 660	\$ 667	\$ 673	\$ 680	\$ 687
\$ (1,317,333)	\$ (1,344,604)	\$ (1,372,571)	\$ (1,401,253)	\$ (1,430,671)	\$ (1,460,845)	\$ (1,491,797)	\$ (1,523,548)	\$ (1,556,122)	\$ (1,589,542)	\$ (1,623,832)	\$ (1,659,017)	\$ (1,695,122)	\$ (1,732,174)	\$ (1,770,199)
\$ (1,044,911)	\$ (1,071,034)	\$ (1,097,810)	\$ (1,125,255)	\$ (1,153,387)	\$ (1,182,221)	\$ (1,211,777)	\$ (1,242,071)	\$ (1,273,123)	\$ (1,304,951)	\$ (1,337,575)	\$ (1,371,014)	\$ (1,405,290)	\$ (1,440,422)	\$ (1,476,432)
\$ (2,362,244)	\$ (2,415,638)	\$ (2,470,381)	\$ (2,526,508)	\$ (2,584,057)	\$ (2,643,066)	\$ (2,703,573)	\$ (2,765,619)	\$ (2,829,245)	\$ (2,894,493)	\$ (2,961,407)	\$ (3,030,031)	\$ (3,100,412)	\$ (3,172,595)	\$ (3,246,631)
\$ -	\$ -	\$ -	\$ (296,910)	\$ (8,095,020)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,853,950)	\$ -	\$ -
\$ 3,671,034	\$ 3,707,744	\$ 3,744,821	\$ 3,782,270	\$ 3,820,092	\$ 3,858,293	\$ 3,896,876	\$ 3,935,845	\$ 3,975,203	\$ 4,014,955	\$ 4,055,105	\$ 4,095,656	\$ 4,136,613	\$ 4,177,979	\$ 4,219,759
\$ 20,478,802	\$ 22,189,270	\$ 23,917,128	\$ 25,661,196	\$ 27,123,879	\$ 20,797,295	\$ 22,417,820	\$ 24,051,373	\$ 25,693,821	\$ 27,344,211	\$ 29,001,469	\$ 30,664,460	\$ 32,331,988	\$ 32,148,841	\$ 33,784,509
\$ 1,308,790	\$ 1,292,106	\$ 1,274,441	\$ 958,851	\$ (6,858,985)	\$ 1,215,227	\$ 1,193,303	\$ 1,170,226	\$ 1,145,958	\$ 1,120,462	\$ 1,093,698	\$ 1,065,625	\$ (817,749)	\$ 1,005,383	\$ 973,128
\$ 401,678	\$ 435,752	\$ 469,628	\$ 503,831	\$ 532,401	\$ 405,298	\$ 440,250	\$ 472,222	\$ 504,432	\$ 536,796	\$ 569,293	\$ 601,903	\$ 634,602	\$ 630,285	\$ 663,084
\$ 22,189,270	\$ 23,917,128	\$ 25,661,196	\$ 27,123,879	\$ 20,797,295	\$ 22,417,820	\$ 24,051,373	\$ 25,693,821	\$ 27,344,211	\$ 29,001,469	\$ 30,664,460	\$ 32,331,988	\$ 32,148,841	\$ 33,784,509	\$ 35,420,721

2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062
177,582	179,357	181,151	182,962	184,792	186,640	188,506	190,391	192,295	194,218	196,160	198,122	200,103	202,104
\$ 1,098,205	\$ 1,131,151	\$ 1,165,086	\$ 1,200,039	\$ 1,236,040	\$ 1,273,121	\$ 1,311,315	\$ 1,350,654	\$ 1,391,174	\$ 1,432,909	\$ 1,475,896	\$ 1,520,173	\$ 1,565,778	\$ 1,612,751
\$ 710,326	\$ 717,429	\$ 724,604	\$ 731,850	\$ 739,168	\$ 746,560	\$ 754,025	\$ 761,566	\$ 769,181	\$ 776,873	\$ 784,642	\$ 792,488	\$ 800,413	\$ 808,417
\$ 694	\$ 701	\$ 708	\$ 715	\$ 722	\$ 729	\$ 736	\$ 744	\$ 751	\$ 759	\$ 766	\$ 774	\$ 782	\$ 789
\$ (1,809,225)	\$ (1,849,281)	\$ (1,890,397)	\$ (1,932,603)	\$ (1,975,930)	\$ (2,020,410)	\$ (2,066,076)	\$ (2,112,963)	\$ (2,161,106)	\$ (2,210,541)	\$ (2,261,304)	\$ (2,313,435)	\$ (2,366,973)	\$ (2,421,958)
\$ (1,513,343)	\$ (1,551,177)	\$ (1,589,956)	\$ (1,629,705)	\$ (1,670,448)	\$ (1,712,209)	\$ (1,755,014)	\$ (1,798,890)	\$ (1,843,862)	\$ (1,889,958)	\$ (1,937,207)	\$ (1,985,637)	\$ (2,035,278)	\$ (2,086,160)
\$ (3,322,568)	\$ (3,400,458)	\$ (3,480,353)	\$ (3,562,308)	\$ (3,646,377)	\$ (3,732,619)	\$ (3,821,090)	\$ (3,911,853)	\$ (4,004,968)	\$ (4,100,499)	\$ (4,198,511)	\$ (4,299,073)	\$ (4,402,251)	\$ (4,508,119)
\$ -	\$ -	\$ -	\$ -	\$ (440,760)	\$ (6,708,790)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 4,261,956	\$ 4,304,576	\$ 4,347,621	\$ 4,391,098	\$ 4,435,009	\$ 4,479,359	\$ 4,524,152	\$ 4,569,394	\$ 4,615,088	\$ 4,661,239	\$ 4,707,851	\$ 4,754,930	\$ 4,802,479	\$ 4,850,504
\$ 35,420,721	\$ 37,055,261	\$ 38,686,581	\$ 40,313,037	\$ 41,932,903	\$ 43,103,611	\$ 37,987,177	\$ 39,433,070	\$ 40,864,416	\$ 42,276,348	\$ 43,666,578	\$ 45,032,660	\$ 46,372,035	\$ 47,682,033
\$ 939,388	\$ 904,118	\$ 867,268	\$ 828,790	\$ 347,871	\$ (5,962,050)	\$ 703,062	\$ 657,541	\$ 610,120	\$ 560,740	\$ 509,340	\$ 455,857	\$ 400,228	\$ 342,385
\$ 695,153	\$ 727,202	\$ 759,188	\$ 791,077	\$ 822,837	\$ 845,615	\$ 742,831	\$ 773,805	\$ 801,812	\$ 829,491	\$ 856,742	\$ 883,518	\$ 909,770	\$ 935,445
\$ 37,055,261	\$ 38,686,581	\$ 40,313,037	\$ 41,932,903	\$ 43,103,611	\$ 37,987,177	\$ 39,433,070	\$ 40,864,416	\$ 42,276,348	\$ 43,666,578	\$ 45,032,660	\$ 46,372,035	\$ 47,682,033	\$ 48,959,863

	2063	2064	2065	2066	2067	2068	2069	2070
	204,125	206,167	208,228	210,311	212,414	214,538	216,683	218,850
\$	1,661,134	\$ 1,710,968	\$ 1,762,297	\$ 1,815,166	\$ 1,869,621	\$ 1,925,710	\$ 1,983,481	\$ 2,042,985
\$	816,501	\$ 824,666	\$ 832,913	\$ 841,242	\$ 849,655	\$ 858,151	\$ 866,733	\$ 875,400
\$	797	\$ 805	\$ 813	\$ 822	\$ 830	\$ 838	\$ 846	\$ 855
\$	(2,478,433)	\$ (2,536,440)	\$ (2,596,024)	\$ (2,657,230)	\$ (2,720,105)	\$ (2,784,699)	\$ (2,851,060)	\$ (2,919,240)
\$	(2,138,314)	\$ (2,191,772)	\$ (2,246,567)	\$ (2,302,731)	\$ (2,360,299)	\$ (2,419,306)	\$ (2,479,789)	\$ (2,541,784)
\$	(4,616,747)	\$ (4,728,212)	\$ (4,842,590)	\$ (4,959,960)	\$ (5,080,404)	\$ (5,204,005)	\$ (5,330,849)	\$ (5,461,024)
\$	-	\$ -	\$ -	\$ (607,590)	\$ (5,293,560)	\$ -	\$ -	\$ -
\$	4,899,009	\$ 4,947,999	\$ 4,997,479	\$ 5,047,454	\$ 5,097,928	\$ 5,148,907	\$ 5,200,396	\$ 5,252,400
\$	48,959,863	\$ 50,202,613	\$ 51,407,242	\$ 52,570,579	\$ 53,081,724	\$ 48,846,698	\$ 49,747,714	\$ 50,593,093
\$	282,261	\$ 219,787	\$ 154,889	\$ (520,097)	\$ (5,276,036)	\$ (55,098)	\$ (130,453)	\$ (208,624)
\$	960,488	\$ 984,842	\$ 1,008,448	\$ 1,031,243	\$ 1,041,010	\$ 956,114	\$ 975,832	\$ 992,345
\$	50,202,613	\$ 51,407,242	\$ 52,570,579	\$ 53,081,724	\$ 48,846,698	\$ 49,747,714	\$ 50,593,093	\$ 51,376,814



NNSWC Revenue Analysis - Tonnage Decrease

Interest:	3.50%	[input from "operation inputs"]
Inflation:	2.50%	[input from "operation inputs"]
Current Year:	2021	[input from "operation inputs"]

WCI Operation Costs

WCI Fixed Fee:	\$ 480,000	annually	[input from "operation inputs"]
Annual Increase in Fixed Fee:	3.0%		[input from "operation inputs"]
WCI Tonnage Fee:	\$4	per ton	[input from "operation inputs"]
Annual Increase in Tonnage Fee:	0%		[input from "operation inputs"]
WCI Special Waste Fee:	\$10.50	per ton	[input from "operation inputs"]
Annual Increase in Special Waste Fee:	0%		[input from "operation inputs"]
2020 Annual Tonnage (assumed):	89,600	tons	[input from "operation inputs"]
2020 Special Waste Tonnage (assumed):	50	tons	[input from "operation inputs"]
Annual Tonnage Increase:	1%	per year	[input from "operation inputs"]
Starting Year:	2021		[input from "operation inputs"]

Coalition Operating Costs

Personnel Costs	\$ 94,734	[input from "operation inputs"]
Operating & Maintenance Costs	\$ 30,577	[input from "operation inputs"]
Other Admin. and Overhead	\$ 22,455	[input from "operation inputs"]
Other Misc.	\$ 10,000	[input from "operation inputs"]
FA Fund Transfers	\$ 350,000	[input from "operation inputs"]
Professional Services	\$ 250,000	[input from "operation inputs"]
Total Coalition Costs:	\$ (758,000)	

Capital Costs

	PV Cost	Execution Year	2021-2031													
			2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031			
Cell 6 Ph 1 Engineering	\$ 200,000	2023	\$ 250,000	\$ -	\$ 210,130	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 1 Construction	\$ 2,500,000	2024	\$ -	\$ -	\$ -	\$ 2,692,230	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 1 CA	\$ 250,000	2024	\$ -	\$ -	\$ -	\$ 269,230	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Scales	\$ 300,000	2036	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Scale House	\$ 400,000	2036	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Equipment Building	\$ 1,200,000	2036	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Drop-Off Area	\$ 200,000	2036	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Asphalt Pavement	\$ 600,000	2036	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Land Acquisition	\$ 1,000,000	2042	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 2 Engineering	\$ 200,000	2046	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 2 Construction	\$ 3,700,000	2047	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 2 CA	\$ 370,000	2047	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 1-6 Ph 1 Closure*	\$ 3,100,000	2047	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Sedimentation Basin	\$ 250,000	2047	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Leachate Pond	\$ 1,000,000	2047	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facility Improvement - Landfill Gas Flare	\$ 1,000,000	2048	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 7 Engineering	\$ 200,000	2066	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 7 Construction	\$ 2,700,000	2067	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 7 CA	\$ 270,000	2067	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 6 Ph 2 Closure*	\$ 2,700,000	2067	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 8 Engineering	\$ 200,000	2083	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 8 Construction	\$ 1,500,000	2084	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 8 CA	\$ 200,000	2084	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 7 Closure*	\$ 4,000,000	2084	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell 8 Ph 2 Closure*	\$ 2,300,000	2088	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Insert Row Above Here</i>			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total CIP			\$ 250,000	\$ -	\$ 210,130	\$ 2,961,460	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Revenues

	2020 Rates	% Increase/Decrease	2021-2031										
			2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Annual Tonnage	89,600	1%	89,600	90,496	91,401	92,315	93,238	94,171	95,112	96,063	97,024	97,994	98,974
Tipping Fee	\$ 24.00	0%	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00
Total Revenues			\$ 2,150,400	\$ 2,171,904	\$ 2,193,623	\$ 2,215,559	\$ 2,237,715	\$ 2,260,092	\$ 2,282,693	\$ 2,305,520	\$ 2,328,575	\$ 2,351,861	\$ 2,375,379

	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$	-	-	-	-	434,490	-	-	-	-	-	-	-	-	-	-	-	-
\$	-	-	-	-	579,320	-	-	-	-	-	-	-	-	-	-	-	-
\$	-	-	-	-	1,737,960	-	-	-	-	-	-	-	-	-	-	-	-
\$	-	-	-	-	289,660	-	-	-	-	-	-	-	-	-	-	-	-
\$	-	-	-	-	868,980	-	-	-	-	-	-	-	-	-	-	-	-
\$	-	-	-	-	-	-	-	-	-	-	1,679,590	-	-	-	-	-	-
\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	370,790	-	-
\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7,031,090	-
\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	703,110	-
\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	475,080	-
\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,900,300	-
\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,947,810
\$	-	-	-	-	3,910,410	-	-	-	-	-	1,679,590	-	-	-	370,790	#####	1,947,810

	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
	99,964	100,964	101,973	102,993	104,023	105,063	106,114	107,175	108,247	109,329	110,422	111,527	112,642	113,768	114,906	116,055	117,216
\$	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
\$	2,399,133	2,423,125	2,447,356	2,471,829	2,496,548	2,521,513	2,546,728	2,572,196	2,597,917	2,623,897	2,650,136	2,676,637	2,703,403	2,730,437	2,757,742	2,785,319	2,813,172

2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065
118,388	119,572	120,767	121,975	123,195	124,427	125,671	126,928	128,197	129,479	130,774	132,081	133,402	134,736	136,084	137,444	138,819
\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00	\$ 24.00
\$ 2,841,304	\$ 2,869,717	\$ 2,898,414	\$ 2,927,398	\$ 2,956,672	\$ 2,986,239	\$ 3,016,102	\$ 3,046,263	\$ 3,076,725	\$ 3,107,492	\$ 3,138,567	\$ 3,169,953	\$ 3,201,653	\$ 3,233,669	\$ 3,266,006	\$ 3,298,666	\$ 3,331,653

NNSWC Revenue Analysis - Tonnage Decrease

Beginning Balance:	\$ 7,000,000.00
Interest:	3.50%
Inflation:	2.50%
Investment APR:	2.00%
Starting Year:	2021

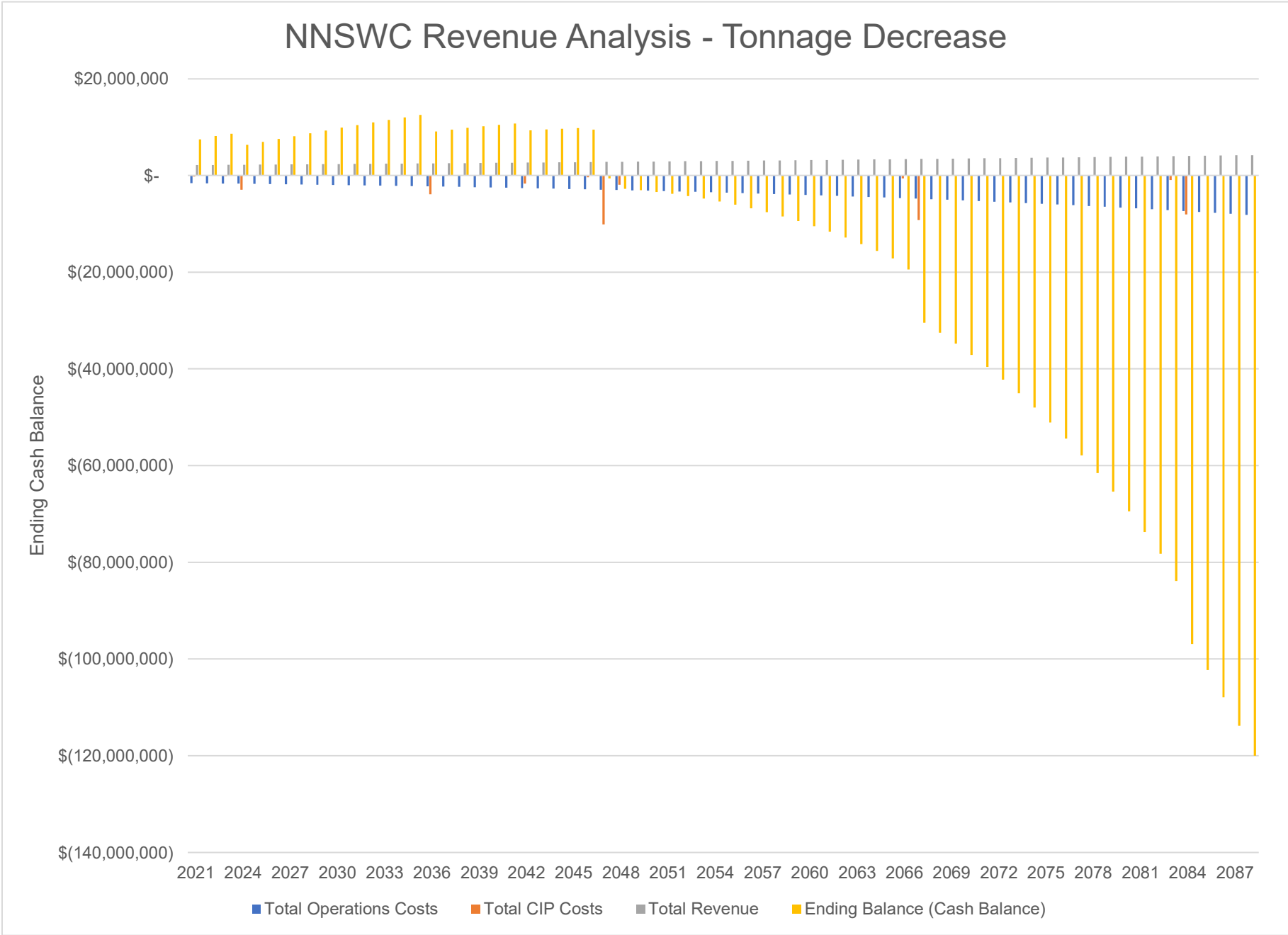
ProForma													
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Annual Tonnages	89,600	90,496	91,401	92,315	93,238	94,171	95,112	96,063	97,024	97,994	98,974	99,964	100,964
Fixed Fee \$	480,000	494,400	509,232	524,509	540,244	556,452	573,145	590,339	608,050	626,291	645,080	664,432	684,365
Tonnage Fee \$	358,400	361,984	365,604	369,260	372,952	376,682	380,449	384,253	388,096	391,977	395,897	399,856	403,854
Special Waste Fee \$	525	530	536	541	546	552	557	563	568	574	580	586	592
Total WCI Operations Costs \$	(838,925)	(856,914)	(875,371)	(894,310)	(913,743)	(933,685)	(954,151)	(975,156)	(996,714)	(1,018,842)	(1,041,556)	(1,064,874)	(1,088,811)
Total Coalition Operating Costs \$	(758,000)	(776,950)	(796,374)	(816,283)	(836,690)	(857,607)	(879,048)	(901,024)	(923,549)	(946,638)	(970,304)	(994,562)	(1,019,426)
Total Operations Costs \$	(1,596,925)	(1,633,864)	(1,671,745)	(1,710,593)	(1,750,433)	(1,791,293)	(1,833,199)	(1,876,179)	(1,920,263)	(1,965,480)	(2,011,860)	(2,059,435)	(2,108,237)
Total CIP Costs \$	(250,000)	-	(210,130)	(2,961,460)	-	-	-	-	-	-	-	-	-
Total Revenue \$	2,150,400	2,171,904	2,193,623	2,215,559	2,237,715	2,260,092	2,282,693	2,305,520	2,328,575	2,351,861	2,375,379	2,399,133	2,423,125
Beginning Balance \$	7,000,000	7,443,475	8,127,584	8,598,962	6,311,256	6,921,387	7,526,157	8,123,454	8,712,308	9,291,675	9,860,468	10,417,548	10,961,726
Annual Change \$	303,475	538,040	311,748	(2,456,494)	487,282	468,799	449,494	429,340	408,312	386,381	363,519	339,698	314,888
Change from Investments \$	140,000	146,070	159,630	168,787	122,849	135,971	147,804	159,513	171,056	182,412	193,561	204,480	215,145
Ending Balance (Cash Balance) \$	7,443,475	8,127,584	8,598,962	6,311,256	6,921,387	7,526,157	8,123,454	8,712,308	9,291,675	9,860,468	10,417,548	10,961,726	11,491,759

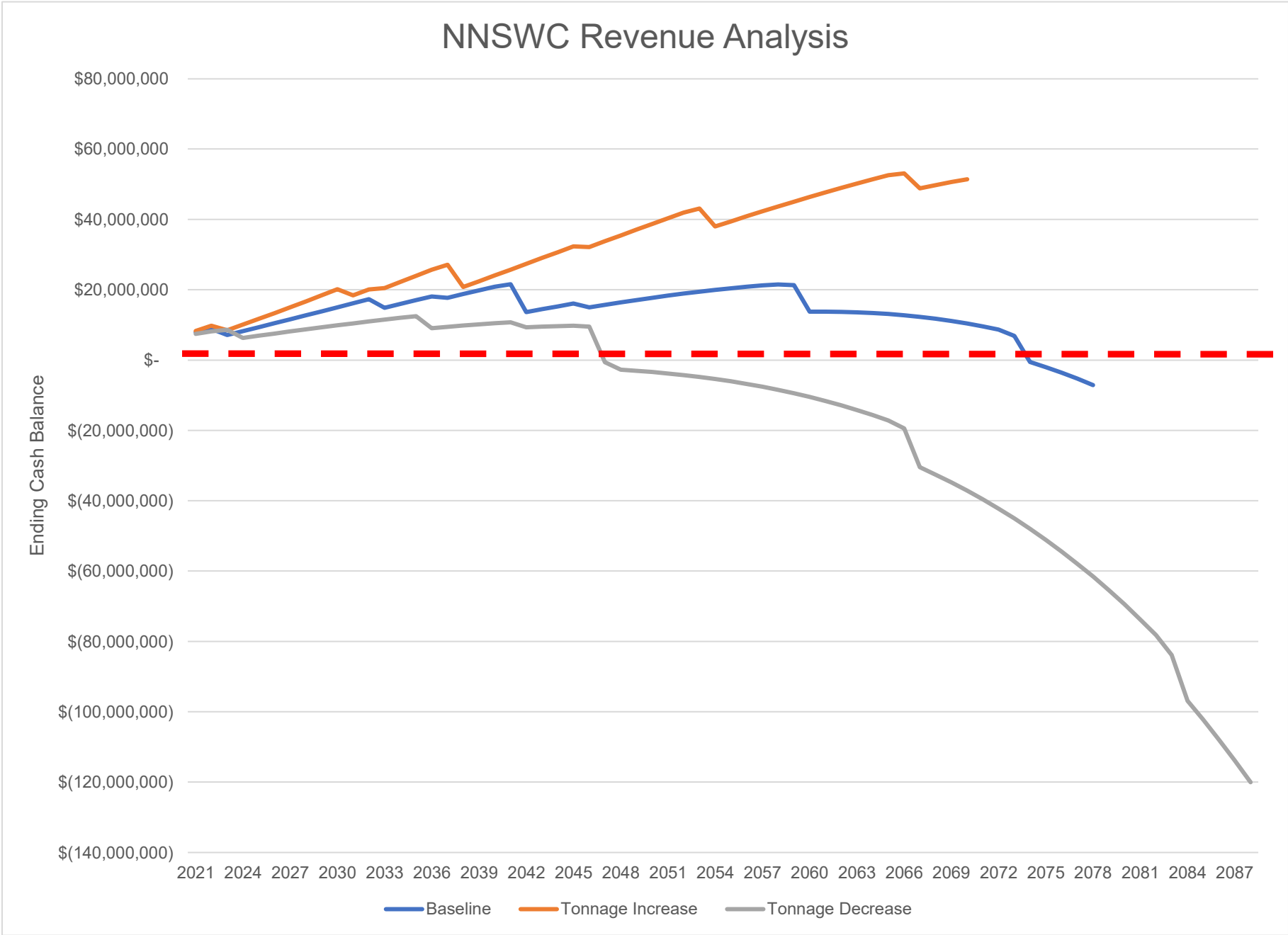
2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
101,973	102,993	104,023	105,063	106,114	107,175	108,247	109,329	110,422	111,527	112,642	113,768	114,906	116,055	117,216
\$ 704,896	\$ 726,043	\$ 747,824	\$ 770,259	\$ 793,367	\$ 817,168	\$ 841,683	\$ 866,933	\$ 892,941	\$ 919,730	\$ 947,322	\$ 975,741	\$ 1,005,013	\$ 1,035,164	\$ 1,066,219
\$ 407,893	\$ 411,972	\$ 416,091	\$ 420,252	\$ 424,455	\$ 428,699	\$ 432,986	\$ 437,316	\$ 441,689	\$ 446,106	\$ 450,567	\$ 455,073	\$ 459,624	\$ 464,220	\$ 468,862
\$ 597	\$ 603	\$ 610	\$ 616	\$ 622	\$ 628	\$ 634	\$ 641	\$ 647	\$ 653	\$ 660	\$ 667	\$ 673	\$ 680	\$ 687
\$ (1,113,386)	\$ (1,138,618)	\$ (1,164,525)	\$ (1,191,127)	\$ (1,218,443)	\$ (1,246,495)	\$ (1,275,303)	\$ (1,304,890)	\$ (1,335,278)	\$ (1,366,489)	\$ (1,398,549)	\$ (1,431,481)	\$ (1,465,310)	\$ (1,500,064)	\$ (1,535,768)
\$ (1,044,911)	\$ (1,071,034)	\$ (1,097,810)	\$ (1,125,255)	\$ (1,153,387)	\$ (1,182,221)	\$ (1,211,777)	\$ (1,242,071)	\$ (1,273,123)	\$ (1,304,951)	\$ (1,337,575)	\$ (1,371,014)	\$ (1,405,290)	\$ (1,440,422)	\$ (1,476,432)
\$ (2,158,298)	\$ (2,209,652)	\$ (2,262,335)	\$ (2,316,382)	\$ (2,371,830)	\$ (2,428,716)	\$ (2,487,080)	\$ (2,546,961)	\$ (2,608,401)	\$ (2,671,440)	\$ (2,736,124)	\$ (2,802,495)	\$ (2,870,600)	\$ (2,940,486)	\$ (3,012,200)
\$ -	\$ -	\$ (3,910,410)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,679,590)	\$ -	\$ -	\$ -	\$ (370,790)	\$ (10,109,580)	\$ (1,947,810)
\$ 2,447,356	\$ 2,471,829	\$ 2,496,548	\$ 2,521,513	\$ 2,546,728	\$ 2,572,196	\$ 2,597,917	\$ 2,623,897	\$ 2,650,136	\$ 2,676,637	\$ 2,703,403	\$ 2,730,437	\$ 2,757,742	\$ 2,785,319	\$ 2,813,172
\$ 11,491,759	\$ 12,006,349	\$ 12,504,143	\$ 9,073,316	\$ 9,455,006	\$ 9,815,473	\$ 10,151,550	\$ 10,461,566	\$ 10,743,749	\$ 9,316,664	\$ 9,503,979	\$ 9,657,696	\$ 9,775,063	\$ 9,483,128	\$ (595,790)
\$ 289,058	\$ 262,177	\$ (3,676,198)	\$ 205,131	\$ 174,898	\$ 143,479	\$ 110,837	\$ 76,935	\$ (1,637,855)	\$ 5,197	\$ (32,720)	\$ (72,058)	\$ (483,648)	\$ (10,264,746)	\$ (2,146,838)
\$ 225,532	\$ 235,616	\$ 245,371	\$ 176,559	\$ 185,569	\$ 192,598	\$ 199,179	\$ 205,248	\$ 210,770	\$ 182,118	\$ 186,437	\$ 189,425	\$ 191,713	\$ 185,828	\$ (15,632)
\$ 12,006,349	\$ 12,504,143	\$ 9,073,316	\$ 9,455,006	\$ 9,815,473	\$ 10,151,550	\$ 10,461,566	\$ 10,743,749	\$ 9,316,664	\$ 9,503,979	\$ 9,657,696	\$ 9,775,063	\$ 9,483,128	\$ (595,790)	\$ (2,758,260)

2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062
118,388	119,572	120,767	121,975	123,195	124,427	125,671	126,928	128,197	129,479	130,774	132,081	133,402	134,736
\$ 1,098,205	\$ 1,131,151	\$ 1,165,086	\$ 1,200,039	\$ 1,236,040	\$ 1,273,121	\$ 1,311,315	\$ 1,350,654	\$ 1,391,174	\$ 1,432,909	\$ 1,475,896	\$ 1,520,173	\$ 1,565,778	\$ 1,612,751
\$ 473,551	\$ 478,286	\$ 483,069	\$ 487,900	\$ 492,779	\$ 497,707	\$ 502,684	\$ 507,710	\$ 512,788	\$ 517,915	\$ 523,095	\$ 528,326	\$ 533,609	\$ 538,945
\$ 694	\$ 701	\$ 708	\$ 715	\$ 722	\$ 729	\$ 736	\$ 744	\$ 751	\$ 759	\$ 766	\$ 774	\$ 782	\$ 789
\$ (1,572,450)	\$ (1,610,138)	\$ (1,648,863)	\$ (1,688,653)	\$ (1,729,540)	\$ (1,771,557)	\$ (1,814,734)	\$ (1,859,108)	\$ (1,904,712)	\$ (1,951,583)	\$ (1,999,757)	\$ (2,049,272)	\$ (2,100,169)	\$ (2,152,486)
\$ (1,513,343)	\$ (1,551,177)	\$ (1,589,956)	\$ (1,629,705)	\$ (1,670,448)	\$ (1,712,209)	\$ (1,755,014)	\$ (1,798,890)	\$ (1,843,862)	\$ (1,889,958)	\$ (1,937,207)	\$ (1,985,637)	\$ (2,035,278)	\$ (2,086,160)
\$ (3,085,793)	\$ (3,161,315)	\$ (3,238,819)	\$ (3,318,358)	\$ (3,399,988)	\$ (3,483,765)	\$ (3,569,749)	\$ (3,657,998)	\$ (3,748,574)	\$ (3,841,541)	\$ (3,936,964)	\$ (4,034,910)	\$ (4,135,447)	\$ (4,238,646)
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 2,841,304	\$ 2,869,717	\$ 2,898,414	\$ 2,927,398	\$ 2,956,672	\$ 2,986,239	\$ 3,016,102	\$ 3,046,263	\$ 3,076,725	\$ 3,107,492	\$ 3,138,567	\$ 3,169,953	\$ 3,201,653	\$ 3,233,669
\$ (2,758,260)	\$ (3,057,601)	\$ (3,409,254)	\$ (3,816,643)	\$ (4,282,596)	\$ (4,810,063)	\$ (5,402,108)	\$ (6,061,907)	\$ (6,792,757)	\$ (7,598,079)	\$ (8,481,420)	\$ (9,446,459)	\$ (10,497,012)	\$ (11,637,035)
\$ (244,489)	\$ (291,598)	\$ (340,405)	\$ (390,960)	\$ (443,316)	\$ (497,526)	\$ (553,647)	\$ (611,735)	\$ (671,849)	\$ (734,049)	\$ (798,397)	\$ (864,957)	\$ (933,794)	\$ (1,004,977)
\$ (54,853)	\$ (60,055)	\$ (66,984)	\$ (74,993)	\$ (84,152)	\$ (94,518)	\$ (106,152)	\$ (119,115)	\$ (133,473)	\$ (149,292)	\$ (166,643)	\$ (185,596)	\$ (206,228)	\$ (228,616)
\$ (3,057,601)	\$ (3,409,254)	\$ (3,816,643)	\$ (4,282,596)	\$ (4,810,063)	\$ (5,402,108)	\$ (6,061,907)	\$ (6,792,757)	\$ (7,598,079)	\$ (8,481,420)	\$ (9,446,459)	\$ (10,497,012)	\$ (11,637,035)	\$ (12,870,628)

2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076
136,084	137,444	138,819	140,207	141,609	143,025	144,455	145,900	147,359	148,833	150,321	151,824	153,342	154,876
\$ 1,661,134	\$ 1,710,968	\$ 1,762,297	\$ 1,815,166	\$ 1,869,621	\$ 1,925,710	\$ 1,983,481	\$ 2,042,985	\$ 2,104,275	\$ 2,167,403	\$ 2,232,425	\$ 2,299,398	\$ 2,368,380	\$ 2,439,431
\$ 544,334	\$ 549,778	\$ 555,275	\$ 560,828	\$ 566,436	\$ 572,101	\$ 577,822	\$ 583,600	\$ 589,436	\$ 595,330	\$ 601,284	\$ 607,297	\$ 613,370	\$ 619,503
\$ 797	\$ 805	\$ 813	\$ 822	\$ 830	\$ 838	\$ 846	\$ 855	\$ 863	\$ 872	\$ 881	\$ 890	\$ 898	\$ 907
\$ (2,206,266)	\$ (2,261,551)	\$ (2,318,386)	\$ (2,376,816)	\$ (2,436,887)	\$ (2,498,648)	\$ (2,562,149)	\$ (2,627,440)	\$ (2,694,574)	\$ (2,763,606)	\$ (2,834,590)	\$ (2,907,584)	\$ (2,982,648)	\$ (3,059,842)
\$ (2,138,314)	\$ (2,191,772)	\$ (2,246,567)	\$ (2,302,731)	\$ (2,360,299)	\$ (2,419,306)	\$ (2,479,789)	\$ (2,541,784)	\$ (2,605,328)	\$ (2,670,462)	\$ (2,737,223)	\$ (2,805,654)	\$ (2,875,795)	\$ (2,947,690)
\$ (4,344,580)	\$ (4,453,323)	\$ (4,564,952)	\$ (4,679,546)	\$ (4,797,186)	\$ (4,917,955)	\$ (5,041,938)	\$ (5,169,224)	\$ (5,299,903)	\$ (5,434,067)	\$ (5,571,813)	\$ (5,713,238)	\$ (5,858,443)	\$ (6,007,532)
\$ -	\$ -	\$ -	\$ (607,590)	\$ (9,248,140)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 3,266,006	\$ 3,298,666	\$ 3,331,653	\$ 3,364,969	\$ 3,398,619	\$ 3,432,605	\$ 3,466,931	\$ 3,501,600	\$ 3,536,616	\$ 3,571,982	\$ 3,607,702	\$ 3,643,779	\$ 3,680,217	\$ 3,717,019
\$ (12,870,628)	\$ (14,202,042)	\$ (15,635,684)	\$ (17,176,118)	\$ (19,435,665)	\$ (30,464,338)	\$ (32,551,335)	\$ (34,765,336)	\$ (37,115,487)	\$ (39,607,433)	\$ (42,247,093)	\$ (45,040,594)	\$ (47,994,277)	\$ (51,114,704)
\$ (1,078,574)	\$ (1,154,657)	\$ (1,233,300)	\$ (1,922,167)	\$ (10,646,707)	\$ (1,485,350)	\$ (1,575,007)	\$ (1,667,624)	\$ (1,763,287)	\$ (1,862,085)	\$ (1,964,111)	\$ (2,069,459)	\$ (2,178,226)	\$ (2,290,513)
\$ (252,840)	\$ (278,984)	\$ (307,134)	\$ (337,380)	\$ (381,966)	\$ (601,647)	\$ (638,994)	\$ (682,527)	\$ (728,659)	\$ (777,575)	\$ (829,390)	\$ (884,224)	\$ (942,201)	\$ (1,003,450)
\$ (14,202,042)	\$ (15,635,684)	\$ (17,176,118)	\$ (19,435,665)	\$ (30,464,338)	\$ (32,551,335)	\$ (34,765,336)	\$ (37,115,487)	\$ (39,607,433)	\$ (42,247,093)	\$ (45,040,594)	\$ (47,994,277)	\$ (51,114,704)	\$ (54,408,666)

2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088
156,425	157,989	159,569	161,164	162,776	164,404	166,048	167,708	169,385	171,079	172,790	174,518
\$ 2,512,614	\$ 2,587,993	\$ 2,665,632	\$ 2,745,601	\$ 2,827,969	\$ 2,912,809	\$ 3,000,193	\$ 3,090,199	\$ 3,182,905	\$ 3,278,392	\$ 3,376,743	\$ 3,478,046
\$ 625,698	\$ 631,955	\$ 638,275	\$ 644,658	\$ 651,104	\$ 657,615	\$ 664,191	\$ 670,833	\$ 677,542	\$ 684,317	\$ 691,160	\$ 698,072
\$ 917	\$ 926	\$ 935	\$ 944	\$ 954	\$ 963	\$ 973	\$ 983	\$ 992	\$ 1,002	\$ 1,012	\$ 1,023
\$ (3,139,229)	\$ (3,220,874)	\$ (3,304,842)	\$ (3,391,203)	\$ (3,480,027)	\$ (3,571,387)	\$ (3,665,357)	\$ (3,762,014)	\$ (3,861,439)	\$ (3,963,711)	\$ (4,068,916)	\$ (4,177,140)
\$ (3,021,382)	\$ (3,096,917)	\$ (3,174,340)	\$ (3,253,698)	\$ (3,335,041)	\$ (3,418,417)	\$ (3,503,877)	\$ (3,591,474)	\$ (3,681,261)	\$ (3,773,292)	\$ (3,867,625)	\$ (3,964,315)
\$ (6,160,611)	\$ (6,317,790)	\$ (6,479,182)	\$ (6,644,901)	\$ (6,815,068)	\$ (6,989,804)	\$ (7,169,234)	\$ (7,353,488)	\$ (7,542,699)	\$ (7,737,003)	\$ (7,936,541)	\$ (8,141,455)
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (924,510)	\$ (8,054,760)	\$ -	\$ -	\$ -	\$ -
\$ 3,754,189	\$ 3,791,731	\$ 3,829,649	\$ 3,867,945	\$ 3,906,625	\$ 3,945,691	\$ 3,985,148	\$ 4,024,999	\$ 4,065,249	\$ 4,105,902	\$ 4,146,961	\$ 4,188,430
\$ (54,408,666)	\$ (57,883,192)	\$ (61,545,553)	\$ (65,403,272)	\$ (69,464,130)	\$ (73,736,178)	\$ (78,227,742)	\$ (83,871,944)	\$ (96,901,920)	\$ (102,284,474)	\$ (107,923,163)	\$ (113,831,055)
\$ (2,406,422)	\$ (2,526,059)	\$ (2,649,533)	\$ (2,776,956)	\$ (2,908,443)	\$ (3,044,113)	\$ (4,108,596)	\$ (11,383,249)	\$ (3,477,450)	\$ (3,631,102)	\$ (3,789,580)	\$ (3,953,025)
\$ (1,068,104)	\$ (1,136,302)	\$ (1,208,185)	\$ (1,283,902)	\$ (1,363,605)	\$ (1,447,451)	\$ (1,535,606)	\$ (1,646,727)	\$ (1,905,104)	\$ (2,007,587)	\$ (2,118,312)	\$ (2,234,255)
\$ (57,883,192)	\$ (61,545,553)	\$ (65,403,272)	\$ (69,464,130)	\$ (73,736,178)	\$ (78,227,742)	\$ (83,871,944)	\$ (96,901,920)	\$ (102,284,474)	\$ (107,923,163)	\$ (113,831,055)	\$ (120,018,335)









APPENDIX D – CONCEPTUAL EXPANSION ALTERNATIVES FIGURES



NOTES

1. EXISTING CONDITIONS BASED ON 2019 GOOGLE EARTH AERIAL.
2. EXISTING PERMITTED CONTOURS AND PROPOSED CONTOURS SHOWN ARE TOP OF LINER. CONTOUR INTERVAL IS 2-FEET.

LEGEND

-  EXISTING PERMITTED CONTOURS
-  PROPOSED EXPANSION CONTOURS
-  AREA BOUNDARY
-  PROPOSED ROAD

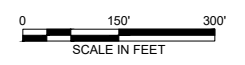
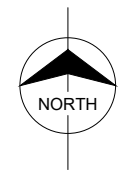


Figure A
 NNSWC Regional Landfill
 Conceptual Expansion Opt. 1
 Base Grades Plan



NOTES

1. EXISTING CONDITIONS BASED ON 2019 GOOGLE EARTH AERIAL.
2. EXISTING PERMITTED CONTOURS SHOWN ARE TOP OF FINAL COVER. CONTOUR INTERVAL IS 2 FEET.
3. PROPOSED CONTOURS SHOWN ARE TOP OF FINAL CONTOUR INTERVAL IS 10-FEET.

LEGEND

- EXISTING PERMITTED CONTOURS
- PROPOSED EXPANSION CONTOURS
- AREA BOUNDARY
- PROPOSED ROAD

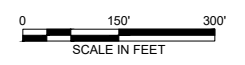
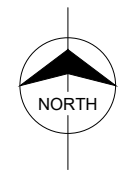






Figure B
 NNSWC Regional Landfill
 Conceptual Expansion Opt. 1
 Final Grades Plan



NOTES

1. EXISTING CONDITIONS BASED ON 2019 GOOGLE EARTH AERIAL.
2. EXISTING PERMITTED CONTOURS AND PROPOSED CONTOURS SHOWN ARE TOP OF LINER. CONTOUR INTERVAL IS 2-FEET.

LEGEND

-  EXISTING PERMITTED CONTOURS
-  PROPOSED EXPANSION CONTOURS
-  AREA BOUNDARY
-  PROPOSED ROAD

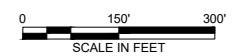
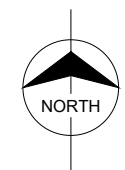






Figure C
 NNSWC Regional Landfill
 Conceptual Expansion Opt. 2
 Base Grades Plan



NOTES

1. EXISTING CONDITIONS BASED ON 2019 GOOGLE EARTH AERIAL.
2. EXISTING PERMITTED CONTOURS SHOWN ARE TOP OF FINAL COVER. CONTOUR INTERVAL IS 2 FEET.
3. PROPOSED CONTOURS SHOWN ARE TOP OF FINAL CONTOUR INTERVAL IS 10-FEET.

LEGEND

-  EXISTING PERMITTED CONTOURS
-  PROPOSED EXPANSION CONTOURS
-  AREA BOUNDARY
-  PROPOSED ROAD

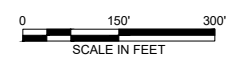
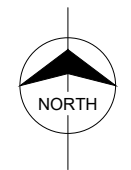


Figure D
 NNSWC Regional Landfill
 Conceptual Expansion Opt. 2
 Final Grades Plan



NOTES

1. EXISTING CONDITIONS BASED ON 2019 GOOGLE EARTH AERIAL.
2. EXISTING PERMITTED CONTOURS AND PROPOSED CONTOURS SHOWN ARE TOP OF LINER. CONTOUR INTERVAL IS 2-FEET.

LEGEND





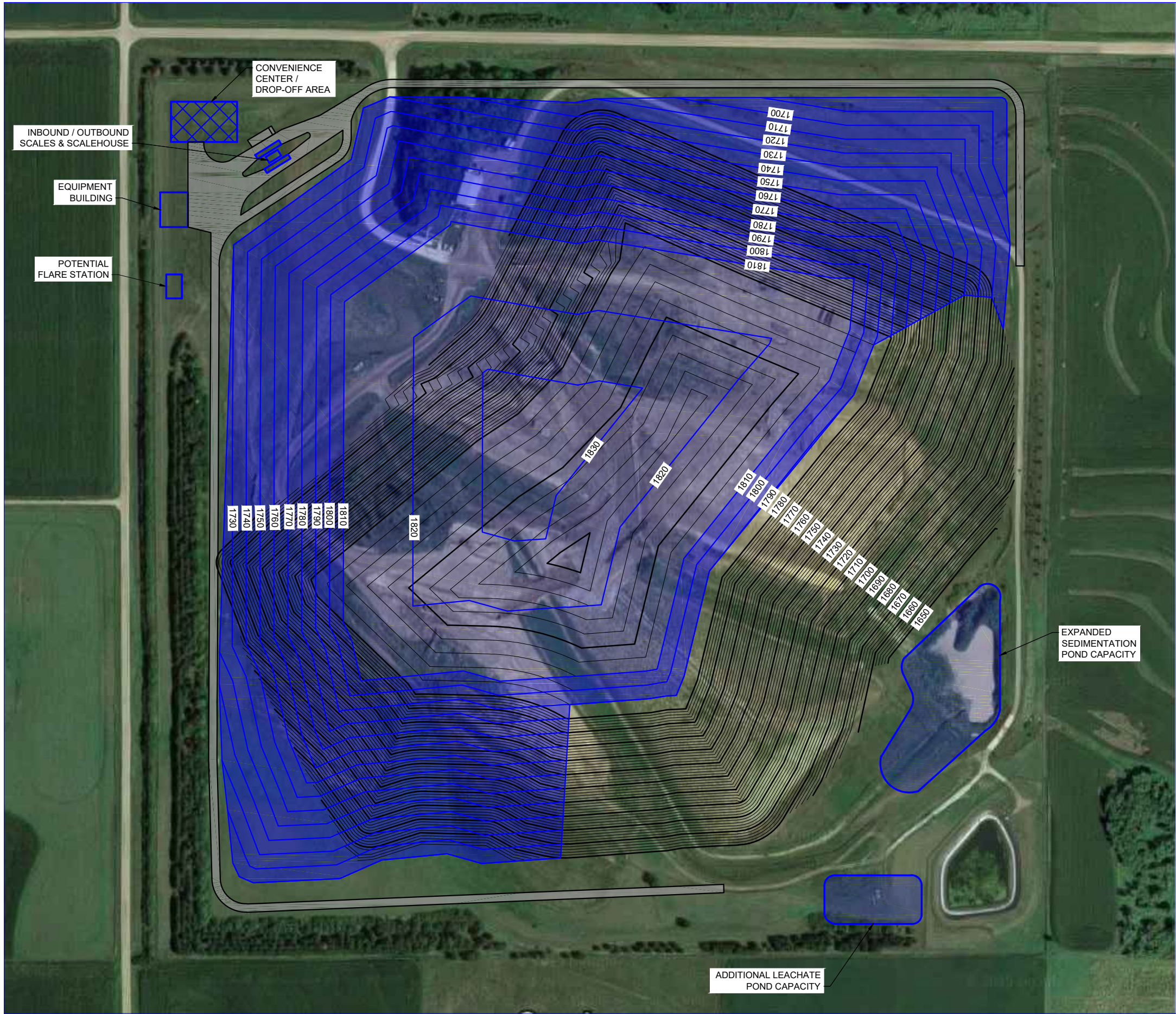
-  EXISTING PERMITTED CONTOURS
-  PROPOSED EXPANSION CONTOURS
-  AREA BOUNDARY
-  PROPOSED ROAD





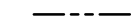

Figure E
 NNSWC Regional Landfill
 Conceptual Expansion Opt. 3A
 Base Grades Plan



NOTES

1. EXISTING CONDITIONS BASED ON 2019 GOOGLE EARTH AERIAL.
2. EXISTING PERMITTED CONTOURS SHOWN ARE TOP OF FINAL COVER. CONTOUR INTERVAL IS 2 FEET.
3. PROPOSED CONTOURS SHOWN ARE TOP OF FINAL CONTOUR INTERVAL IS 10-FEET.

LEGEND

-  EXISTING PERMITTED CONTOURS
-  PROPOSED EXPANSION CONTOURS
-  AREA BOUNDARY
-  PROPOSED ROAD

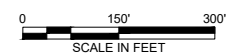
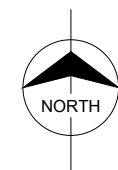






Figure F
 NNSWC Regional Landfill
 Conceptual Expansion Opt. 3A
 Final Grades Plan



NOTES

1. EXISTING CONDITIONS BASED ON 2019 GOOGLE EARTH AERIAL.
2. EXISTING PERMITTED CONTOURS AND PROPOSED CONTOURS SHOWN ARE TOP OF LINER. CONTOUR INTERVAL IS 2-FEET.

LEGEND

-  EXISTING PERMITTED CONTOURS
-  PROPOSED EXPANSION CONTOURS
-  AREA BOUNDARY
-  PROPOSED ROAD

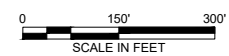
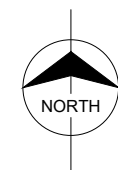




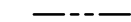

Figure G
 NNSWC Regional Landfill
 Conceptual Expansion Opt. 3B
 Base Grades Plan



NOTES

1. EXISTING CONDITIONS BASED ON 2019 GOOGLE EARTH AERIAL.
2. EXISTING PERMITTED CONTOURS SHOWN ARE TOP OF FINAL COVER. CONTOUR INTERVAL IS 2 FEET.
3. PROPOSED CONTOURS SHOWN ARE TOP OF FINAL CONTOUR INTERVAL IS 10-FEET.

LEGEND

-  EXISTING PERMITTED CONTOURS
-  PROPOSED EXPANSION CONTOURS
-  AREA BOUNDARY
-  PROPOSED ROAD

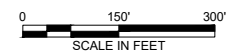
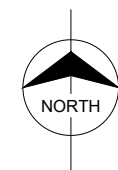


Figure H
 NNSWC Regional Landfill
 Conceptual Expansion Opt. 3B
 Final Grades Plan





APPENDIX E – PREFERRED EXPANSION OPTION FIGURES



NOTES

1. EXISTING CONDITIONS BASED ON 2019 GOOGLE EARTH AERIAL.
2. EXISTING PERMITTED CONTOURS AND PROPOSED CONTOURS SHOWN ARE TOP OF LINER. CONTOUR INTERVAL IS 2-FEET.

LEGEND

-  EXISTING PERMITTED CONTOURS
-  PROPOSED EXPANSION CONTOURS
-  AREA BOUNDARY
-  PROPOSED ROAD

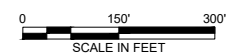
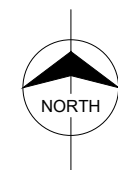
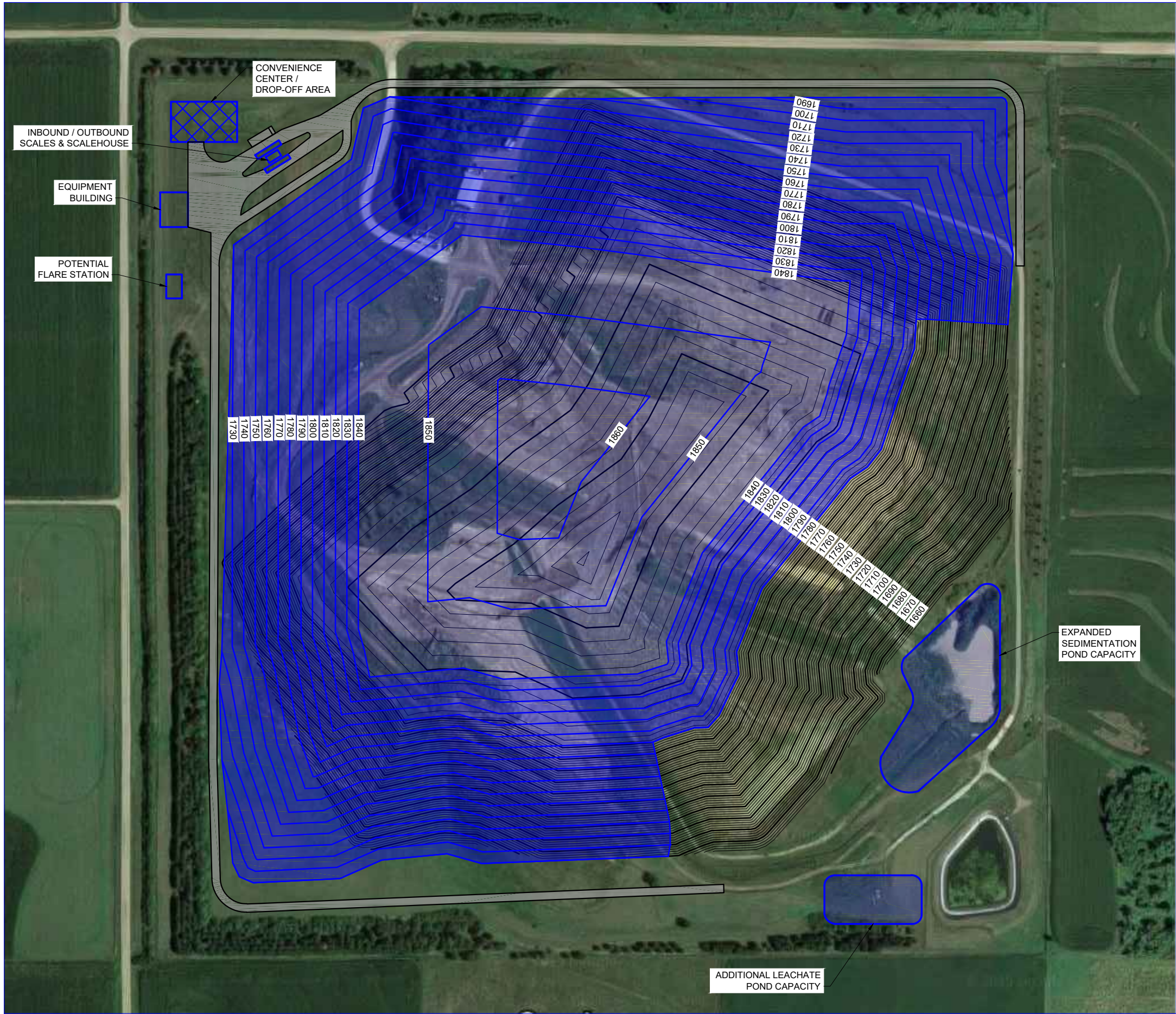





Figure 1
 NNSWC Regional Landfill
 Final Expansion Option
 Base Grades Plan

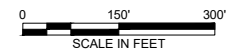
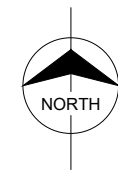



NOTES

1. EXISTING CONDITIONS BASED ON 2019 GOOGLE EARTH AERIAL.
2. EXISTING PERMITTED CONTOURS SHOWN ARE TOP OF FINAL COVER. CONTOUR INTERVAL IS 2 FEET.
3. PROPOSED CONTOURS SHOWN ARE TOP OF FINAL CONTOUR INTERVAL IS 10-FEET.

LEGEND

-  EXISTING PERMITTED CONTOURS
-  PROPOSED EXPANSION CONTOURS
-  PROPOSED ROAD



	<p>Figure 2 NNSWC Regional Landfill</p>
	<p>Final Expansion Option Final Grades Plan</p>



NOTES

1. EXISTING CONDITIONS BASED ON 2019 GOOGLE EARTH AERIAL.
2. EXISTING PERMITTED CONTOURS AND PROPOSED CONTOURS SHOWN ARE TOP OF LINER. CONTOUR INTERVAL IS 2-FEET.

LEGEND

- EXISTING PERMITTED CONTOURS
- PROPOSED EXPANSION CONTOURS
- PROPOSED ROAD
- LDT LEACHATE DRAINAGE TRENCH
- HLD HIGH CAPACITY LEACHATE DRAIN

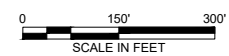
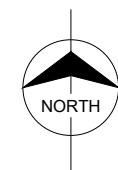
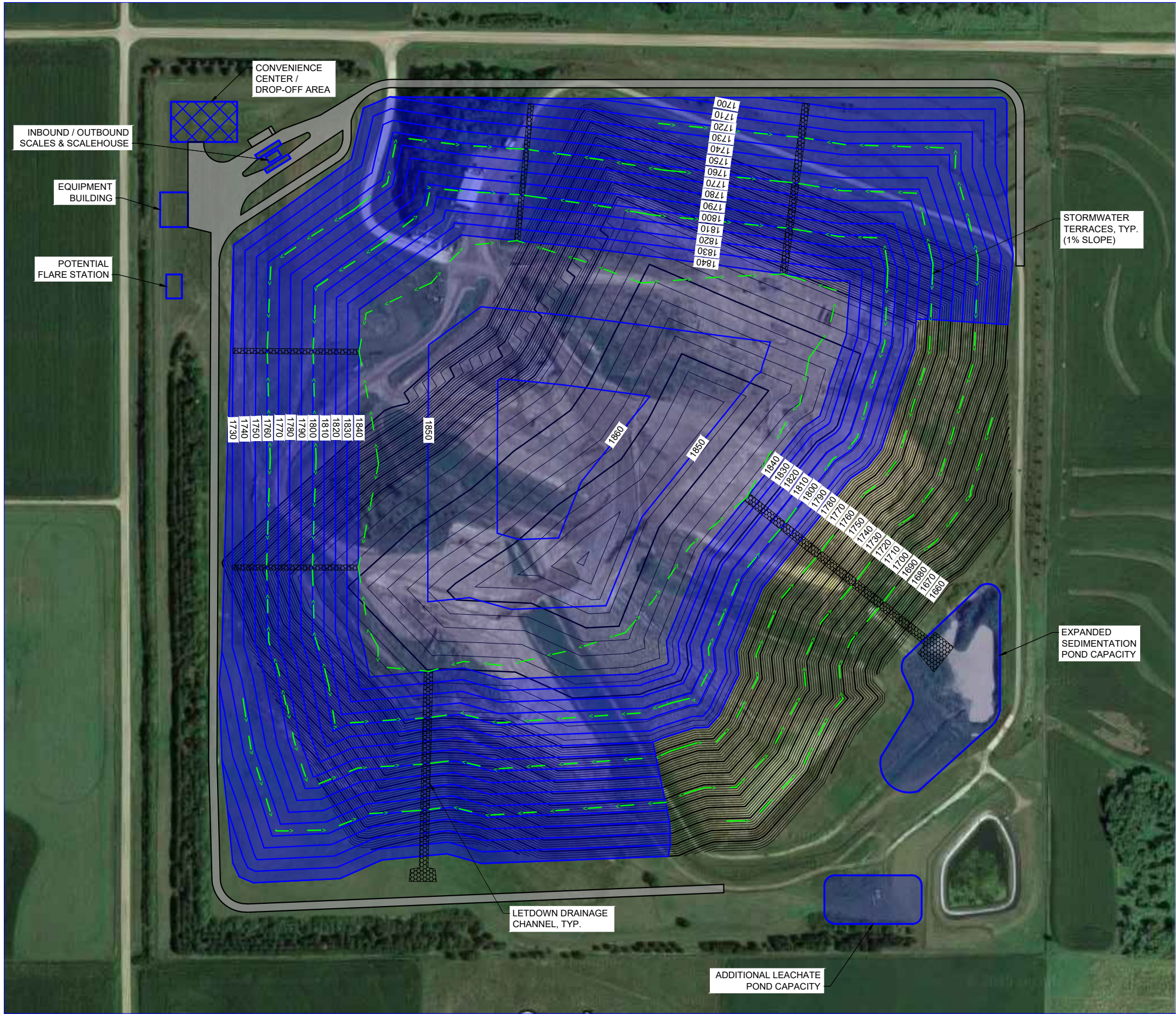






Figure 3
 NNSWC Regional Landfill
 Final Expansion Option
 Leachate Collection Plan



NOTES

1. EXISTING CONDITIONS BASED ON 2019 GOOGLE EARTH AERIAL.
2. EXISTING PERMITTED CONTOURS SHOWN ARE TOP OF FINAL COVER. CONTOUR INTERVAL IS 2 FEET.
3. PROPOSED CONTOURS SHOWN ARE TOP OF FINAL CONTOUR INTERVAL IS 10-FEET.

LEGEND

-  EXISTING PERMITTED CONTOURS
-  PROPOSED EXPANSION CONTOURS
-  PROPOSED ROAD
-  STORMWATER TERRACES

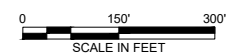
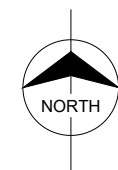
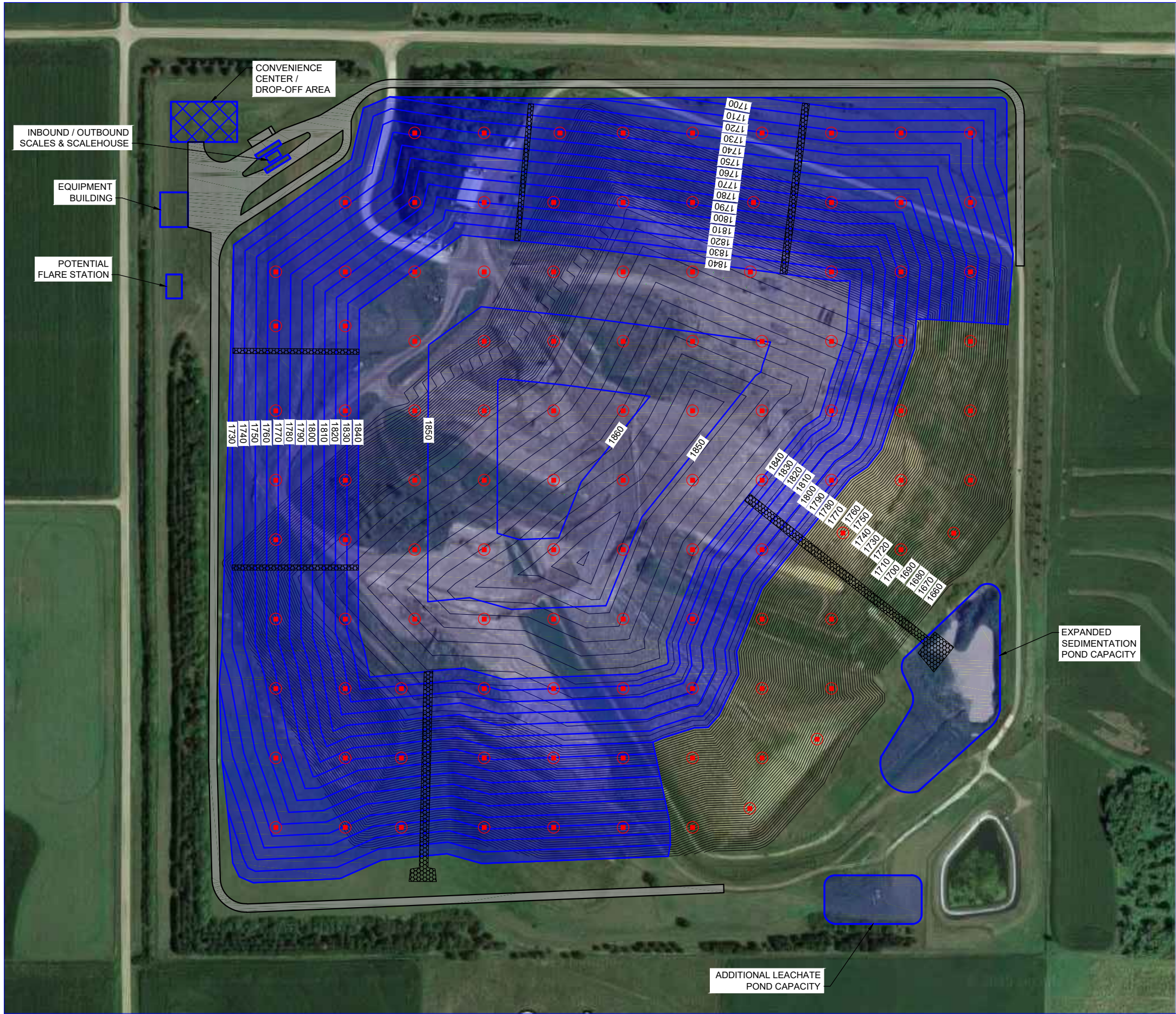


Figure 4
NNSWC Regional Landfill
Final Expansion Option
Stormwater Plan



NOTES

1. EXISTING CONDITIONS BASED ON 2019 GOOGLE EARTH AERIAL.
2. EXISTING PERMITTED CONTOURS SHOWN ARE TOP OF FINAL COVER. CONTOUR INTERVAL IS 2 FEET.
3. PROPOSED CONTOURS SHOWN ARE TOP OF FINAL CONTOUR INTERVAL IS 10-FEET.

LEGEND

- EXISTING PERMITTED CONTOURS
- PROPOSED EXPANSION CONTOURS
- PROPOSED ROAD
- GAS VENT

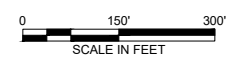
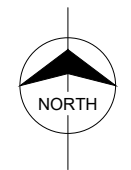


Figure 5
 NNSWC Regional Landfill
 Final Expansion Option
 Landfill Gas Vent Plan

APPENDIX F – LANDFILL STABILITY CALCULATIONS



Client:	NNSWC	Page	1	of	11
Project:	122625	Date:	9/28/2020	Made by:	Textor
NNSWC Landfill Expansion			Checked by:		
Slope Stability and Settlement			Prelim:		Final:

Introduction

This project involves the evaluation of existing conditions as well as design of a new expansion at the Northeast Nebraska Solid Waste Coalition (NNSWC) MSW landfill near Clarkson, Nebraska. For evaluation of existing conditions, previous design had stipulated a maximum side slope of 4H:1V for placed MSW. Survey information has confirmed that slopes have been placed at steeper slopes than this in some areas of the landfill. For the new expansion, MSW is to be placed to a higher elevation than currently permitted. For both of these conditions, slope stability and settlement calculations were performed to confirm minimum factors of safety are met for the existing and future conditions.

As part of previous design and permitting of the landfill, slope stability and settlement calculations were performed. These previous calculations and subsurface information were considered as part of the current evaluations. New geotechnical information was also obtained that was also considered.

Subsurface Information

As part of previous work at the site, 23 borings were drilled. These borings covered the footprint of the permitted landfill area and included borings (sampled and not sampled) and piezometers. Field and laboratory testing on a limited number of these borings was performed. Field testing included SPT sampling and vane shear tests. Laboratory testing included index testing, unconfined compression, consolidation and consolidated-undrained triaxial testing with pore pressure measurements.

For the current evaluation, additional field investigation and laboratory testing were performed. For the field investigation, geotechnical borings were performed, one on the east side and one on the west. The east boring was to coincide with a controlling section based on the higher slopes and liner configuration. The west boring was in an area where the landfill was going to be expanded to. Additionally, gas vent wells were installed to the north of the landfill. Samples were obtained during installation of two of these gas wells. Laboratory testing included index testing, unconsolidated-undrained triaxial tests, direct shear tests and consolidation tests.

General subsurface conditions at the site are made up of Loess soil over Glacial Till. Both soil types are generally classified as a Lean Clay based on Atterberg Limits results, with the Glacial Till being slightly more plastic than the Loess and containing more sand. The Loess soil layer has lower blow counts, higher moisture content and lower dry density compared to the Glacial Till. Based on this, the Loess soil was the controlling soil layer in terms of strength and consolidation.

The thickness of the Loess layer varied throughout the site. Original ground surface at the site varied significant, upwards of 100 feet between the highest and lowest ground surface elevation borings. Borings at higher ground elevations had thicker Loess deposits than borings at lower ground elevations. During development of the currently constructed landfill phases, civil grading was performed. This led to Loess thicknesses beneath the landfill varying from original thickness encountered.

Groundwater was generally found above the Loess-Glacial Till interface. The Loess soils in this zone had higher moisture contents, lower strengths and higher compressibility compared to Loess in the upper portions of the subsurface profile. Because of this, these soils were the focus of sampling and testing for the current investigation.

A plan view with borings, boring fence diagram, SPT blow counts and historical laboratory testing results are included in Attachment A.

Soil Design Parameters

Historical and current laboratory results are available to be considered when determining soil design parameters for design. While some of the testing, like consolidation testing, are directly comparable, there were modifications to the laboratory tests performed between the two investigations, specifically for strength testing. Historical strength testing included consolidated-undrained with pore pressure measurements triaxial testing (CU-bar), unconfined compression testing (UC) and in-situ vane shear testing. For the current conditions, strength testing included direct shear testing (DS) and unconsolidated-undrained triaxial testing (UU). Based on the differences in measured strengths and results, these different tests will all be evaluated separately in determining the design parameters.

Unit Weight

Based on historical testing results, average unit weights for the Loess and Glacial Till were calculated to be 114 and 121 pcf. These were used for the evaluations.



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Undrained Strength

Four different tests that measure undrained shear strengths have been performed during the historical and current investigations including CU-bar, UC, UU and vane shear testing. For CU-bar testing, the undrained shear strength measured is the total shear strength envelope which provides the relationship between undrained shear strength and effective stress. For the UC, UU and vane shear testing, cohesion or the undrained shear strength is measured for the effective stress associated with the sampling/testing depth.

Most laboratory strength testing was performed on the Loess, with the exception being one CU-bar test performed on Glacial Till. As noted previously, the Loess was found to be of higher moisture content, lower density and lower strength than the Glacial Till and thus will be the controlling soil for any slope stability calculations.

For CU-bar testing from the previous investigation, the total friction angle and cohesion for the Loess were 16 degrees and 540 psf, respectively and total friction angle and cohesion for the Glacial Till were 17 degrees and 179 psf, respectively. As noted, these design parameters are the total shear strength envelope and not an undrained cohesion value. Per requirements from the Nebraska Department of Natural Resources (NeDNR) during previous submittals, slope stability calculations were required to be performed using this total shear strength envelope. These values were used as the basis for the total shear strength envelope for the current evaluations.

Previous and current laboratory testing included UC, UU and vane shear testing. For UC testing, significantly lower strengths were measured. It is possible that this testing type led to artificially lower shear strengths. Since there is no confining stress used for UC testing, any disturbance or failure plane within the sample will lead to a premature failure. Loess is cemented by nature, making it highly susceptible to apparent strength loss because of disturbance during sampling causing a breakdown of the cemented structure. Based on this, UC results were not considered.

For UU testing, disturbance is still a concern. However, since the samples are confined during testing to the approximate in-situ effective stress the samples, the effects from disturbance are partially mitigated. Results of the UU testing did vary significantly though, with cohesions ranging from 570 to 1,627 psf with no apparent correlation with depth.

Vane shear testing was also performed during the previous investigation. Since this test does not require obtaining a sample, it provides the most direct measurement of the materials in-situ and will be affected the least by disturbance. Results of the vane shear testing provided cohesions between 1,600 and 1,640 psf at different depths. However, the maximum measurable cohesion for the apparatus used was 1,640 psf, indicating higher undrained cohesions may have been possible. The vane shear testing results were considered the most representative for undrained shear strengths and were thus relied upon most in determining the undrained cohesion.

For the Glacial Till, SPT blow counts were used to estimate cohesion. The average SPT blow count was calculated to be 16 blows per foot. Correcting for an auto hammer efficiency of 75%, the average SPT blow count will be 20 blows per foot. Using the cohesion relationship of cohesion = $N_{60}/8$, an undrained cohesion of 2,500 psf was used for the Glacial Till.

Drained Strength

To measure drained shear strength, CU-bar and DS tests were performed during the historical and current investigations, respectively. The results from these tests are comparable.

For CU-bar testing from the previous investigation, the effective friction angle and cohesion for the Loess were 28 degrees and 234 psf, respectively and effective friction angle and cohesion for the Glacial Till were 28.1 degrees and 156 psf. The Glacial Till values were used as the basis for the effective shear strength envelope for Glacial Till in the current evaluations. Adjusted values were used for the Loess as discussed below.

For DS testing, three tests were performed on Loess. Instead of evaluating the results of each of the tests separately, the results of all three tests were evaluated together (9 points). This is considered reasonable since the material is all one soil type (Loess) and each testing point should represent the relationship between shear strength and effective stress for the soil. This approach also allows for assessing the variation of each test result from the determined overall relationship.



Based on all the DS results, a friction angle of 25.5 degrees and a cohesion of 161 psf were calculated for Loess. This relationship has a coefficient of variation of 5% for all the data points, which indicates a good fit between the drained shear strength envelope and all the measured data.

For Loess, the DS results were used as the basis for the effective shear strength envelope. For Glacial Till, the CU-bar results were used.

Consolidation

Four consolidation tests have been performed, three during the original investigation and one during the current investigation. Measured consolidation parameters ranged as noted below:

- Consolidation Index: 0.23 to 0.33, average = 0.26
- Reconsolidation index: 0.03 to 0.04, average = 0.037
- P’c: 1.1 to 2.6 tsf, average = 1.6 tsf

Settlement evaluations will be performed for the range of results to understand the effect the variations will have on performance of the liner system.

Design Parameters

Soil Type	Unit Weight (pcf)	Undrained Cohesion (psf)	Total Strength Envelope		Effective Strength Envelope	
			Friction Angle (deg)	Cohesion (psf)	Friction Angle (deg)	Cohesion (psf)
Loess	114	1640	16	540	25.5	161
Glacial Till	121	2500	17	190	28.1	156

Current strength testing results and consolidation are included in Attachment B.

Sections

Sections that show existing contours and the currently permitted MSW slopes and extents were drawn. As noted previously, current MSW contours are outside of the permitted boundary. Additionally, increasing the permitted elevation of the MSW was also to be considered.

Sections A through G were drawn and evaluated. Section D was found to be the controlling section overall based on the geometry of the section, specifically the liner sloping towards the perimeter and the generally downward slope of the liner system at the perimeter edge. Both of these factors lead to the stability of Section D being the controlling stability for the landfill.

When drawing Section D, the cross-section was noted to be slightly askew from the slope face, leading to the horizontal distance being slightly exaggerated. This causes the measured slopes to be shallower than in actuality. To correct for this, the known 4H:1V slope that was drawn on the section was used to determine the required reduction factor needed. This factor was used in determining the actual slope of the current MSW surface at the site.

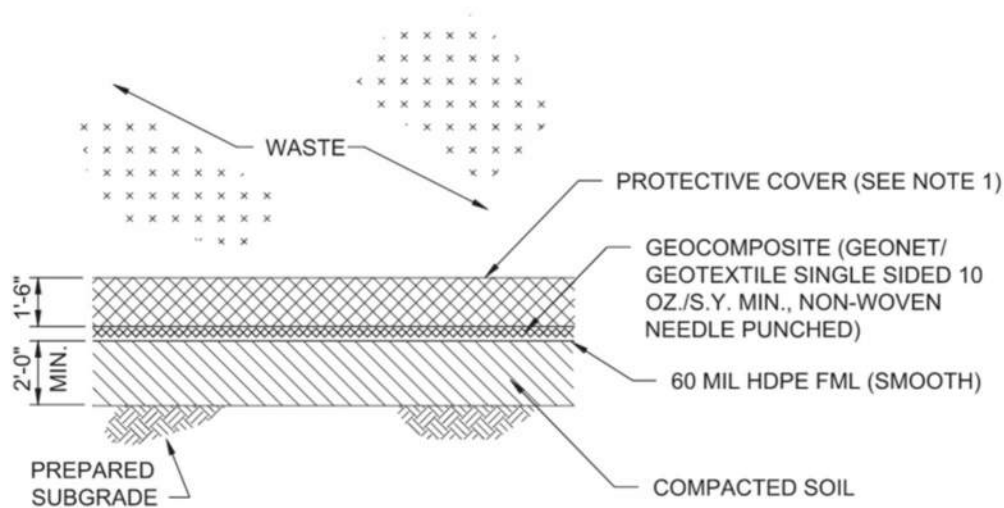
Another consideration in evaluating the existing MSW slope was how to consider differences in slope along the MSW surface. It can be seen that the slope does vary slightly, with the lower portion of Section D being steeper than the upper section. This level of detail does not affect the overall slope stability factors of safety. Therefore, the existing MSW surface was modeled with a single slope of 3.7H:1V that corresponds to the overall effective slope.

Additional crest elevation was also evaluated. To evaluate this, it was assumed that an adjusted sloped from the current conditions up to final design elevations would be constant. Based on evaluations, it was determined that the MSW surface above the current conditions can be stably placed at a 3.3H:1V slope and up to an outer crest elevation of 1840 feet.

For the new footprint addition to the landfill, along the west side, conditions were evaluated to determine how controlling this area may be in terms of stability. Based on subsurface conditions and grading, most of the Loess material will be removed. This material has been previously noted as being the weaker material at the site. Additionally, the landfill geometry will

require that the liner system in this area slope up significantly at the landfill perimeter which will also greatly increase the stability factor of safety, especially compared to the east side of Section D. Based on this, the new landfill addition was deemed not be a controlling section for evaluation.

The landfill has a geocomposite base liner. This liner is made up of the following materials:



The existing landfill geomembrane is made up of smooth HDPE liner except along the slopes on the perimeter of the landfill where the HDPE is textured. Drawings indicate this textured HDPE should extend towards the center of the landfill at least 5 feet beyond the inner edge of the perimeter slope. These different liner materials were incorporated into the stability models that evaluated liner strength.

The controlling interface for the liner is between the HDPE and geocomposite. Based on published interface shear strength results in GRI Report #30, this interface (smooth HDPE-geocomposite) has a peak friction angle of 15 degrees and a residual friction angle of 12 degrees. Previous testing was performed on the textured HDPE-geocomposite used for the liner. Results from this testing showed a peak friction angle and cohesion of 21 degrees and 100 psf, respectively and a residual friction angle and cohesion of 11.7 degrees and 87 psf, respectively. Based on the available information, smooth HDPE-geocomposite strengths were based on the GRI Report #30 values and textured HDPE-geocomposite strengths were based on previous material testing.

MSW was modeled utilizing a friction angle of 20 degrees, a cohesion of 500 psf and a total unit weight of 59 pcf. These values were based off previous calculations for the site and were based on published values for similar material.

As previously noted, the existing slopes are steeper than current permits allow. Additional slopes are to be modeled at 3.3H:1V slope which is steeper than any existing slopes. Based on this, the slope stability calculations for the full landfill height (up to elevation 1840 feet) will also apply to existing conditions.

Section information and liner interface strength information are included in Attachment C.

Slope Stability

Slope stability calculations were performed for Section D using UTexas4. Calculations were performed for the following conditions:

- End of Construction 1 – Undrained strength (cohesion), full MSW height
- End of Construction 2 – Total Shear Strength envelope, full MSW height
- Long-term Steady State 1 – Effective Shear Strength envelope, full MSW height



- Long-term Steady State 2 – Noncircular Surface Through Liner, Effective Shear Strength envelope, Peak liner strength, full MSW height
- Seismic – Total Shear Strength Envelope, full MSW height, 2% in 50 Years Seismic Event Peak Ground Acceleration

For the End of Construction 1 case, the cohesion values determined based on the UU and vane shear testing were used for modeling the Loess. These tests were performed on materials that were only consolidated under the existing soil conditions at the time of the investigations. During placement of the MSW, the materials will be loaded in an undrained manner as different layers of MSW are placed. After each loading, dissipation of excess pore pressures will occur, increasing the effective stress increases in the Loess and Glacial Till soils leading the undrained shear strength of these materials to increase with time compared to the original values based on the in-situ effective stresses. Based on this, using the undrained cohesion under full MSW landfill loading, essentially assuming the MSW is placed instantaneously, is somewhat conservative.

For the Seismic case, the 2014 USGS Deaggregation online program was utilized for determining the design seismic event peak ground acceleration. For a Site Class B/C, which represents acceleration on bedrock, the bedrock acceleration is 0.056g. To account for possible amplification of the seismic shaking through the soil column, the bedrock acceleration is factored by 1.6, leading to a peak ground acceleration of 0.09g. This was used for the seismic evaluation.

For all cases except Long-term Steady State 2, a “floating grid” search method was used for calculating the stability factor of safety. This method involves setting a gridded location of circular centers and then choosing a point along the surface to run all the circular surfaces through. UTexas4 will then cycle through all the circles based on the different circular centers. Multiple points along the surface were evaluated to determine the lowest factor of safety.

For the Long-term Steady State 2 case, noncircular surfaces are evaluated. Since this case is to evaluate any possible sliding along the liner interface, the surface must stay within the liner system. This requires a noncircular surface. Multiple different points along the slope and liner are evaluated to determine the controlling factor of safety.

Results of the slope stability analyses are listed below:

Case	Factor of Safety
EOC – 1	1.40
EOC – 2	1.61
LTSS – 1	1.96
LTSS – 2	1.51
Seismic	1.28

All these factors of safety meet generally accepted minimum factors of safety for slope stability as listed below:

- End of Construction – 1.3
- Long-term Steady State – 1.5
- Seismic – 1.1

As a comparison to current calculations, the calculated factor of safety for the EOC – 2 case in previous calculations was 1.96. Compared to the current EOC – 2 case value indicates the decrease in slope stability factor of safety caused by the steepened slopes and additional MSW height.

Inputs and outputs from the UTexas4 program and the 2014 USGS deaggregation for the site are included in Attachment D.

Settlement

Settlement was also evaluated to confirm that the liner grades are not decrease and appropriate flow towards the sumps is disrupted. The liner slopes to the east side of the landfill, with a slight southeasterly orientation.

As noted previously, it is expected that most of the settlement will occur in the softer weaker Loess layer. Differences in settlement will be greatly driven by differences in the thickness of Loess across the site. Based on the borings and sections



evaluated, the Loess material increases with thickness as one moves to the east and to the southeast. Based on this, it is expected that the highest settlements will occur along the east and southeast portions of the landfill which coincides with the locations of the sumps.

Settlement parameters varied between the different tests performed, including significant differences in the consolidation index and past preconsolidation pressures. To understand possible differences in the consolidation possible, two settlement scenarios were evaluated:

- Scenario 1: $C_c = 0.25$, $p'_c = 5.2$ ksf
- Scenario 2: $C_c = 0.33$, $p'_c = 2.6$ ksf

Scenario 1 roughly corresponds to the average values from the consolidation tests performed, both historical and current. It also matches the previously submitted calculations as part of previous permit submittals. Scenario 2 is based on the current consolidation test performed in the west expansion area of the Landfill.

For both cases, the amount of relative settlement across the site is controlled by the thickness of the Loess in a specific area and the loading from the MSW based on the final MSW surface slope. Based on the borings and conditions encountered, the Loess thickens in general from northwest to southwest.

The MSW landfill was modeled using fill areas. Areas with the MSW slopes were modeled as triangular shaped load distributions, with 0 psf at the landfill edges and 11.2 ksf at the inner edges (based on 190 feet of 59 pcf unit weight MSW). The center portion is modeled as a constant fill load with a bearing pressure of 11.2 ksf.

Maximum settlements vary between 35 (Scenario 1) and 70 inches (Scenario 2), depending on which consolidation parameters are used. The range in settlements were evaluated along the three query lines to understand the changes to the base liner slope that are caused by the settlement. Query 1 is along the north portion of the landfill, Query 2 is along the center of the landfill and Query 3 is along the south portion of the landfill.

Based on the Settle3D results, final slopes were calculated for each 100 feet section of the liners, as well as the overall slope from the landfill approximate center point. For Scenario 1, the minimum slope over a 100 feet section was estimated to be approximately 1.4% and the overall center to edge minimum slope was estimated to be 1.8%. For Scenario 2, the minimum slope over a 100 feet section was estimated to be approximately 0.9% and the overall center to edge minimum slope was estimated to be 1.6%. It should be noted that the design base liner slope is 2%.

For Scenario 2, these settlements are considered conservative. Out of the four consolidation tests performed at the site, this is the only results that showed such high consolidation parameters. Based on this, while these results indicate some areas with base slopes that will be lower than the recommended minimum value of 1.2% (per previous settlement evaluations), actual settlements are expected to be more in line with Scenario 1. Based on this, liner slope changes caused by settlement are not expected to be an issue.

Results from the Settle3D analysis are included in Attachment E.



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Attachment A – Boring Information



Gas Wells (2 ST samples) PZ-2S/2D

B-02-2020 (not drilled)

B-5

B-1

B-6

PZ-1D/1S

B-02-2020

B-2

PZ-3S

B-9

B-7

PZ-4S

B-8

B-01-2020

B-3

B-11

PZ-8S

PZ-5S

B-10

572nd Ave

B-12

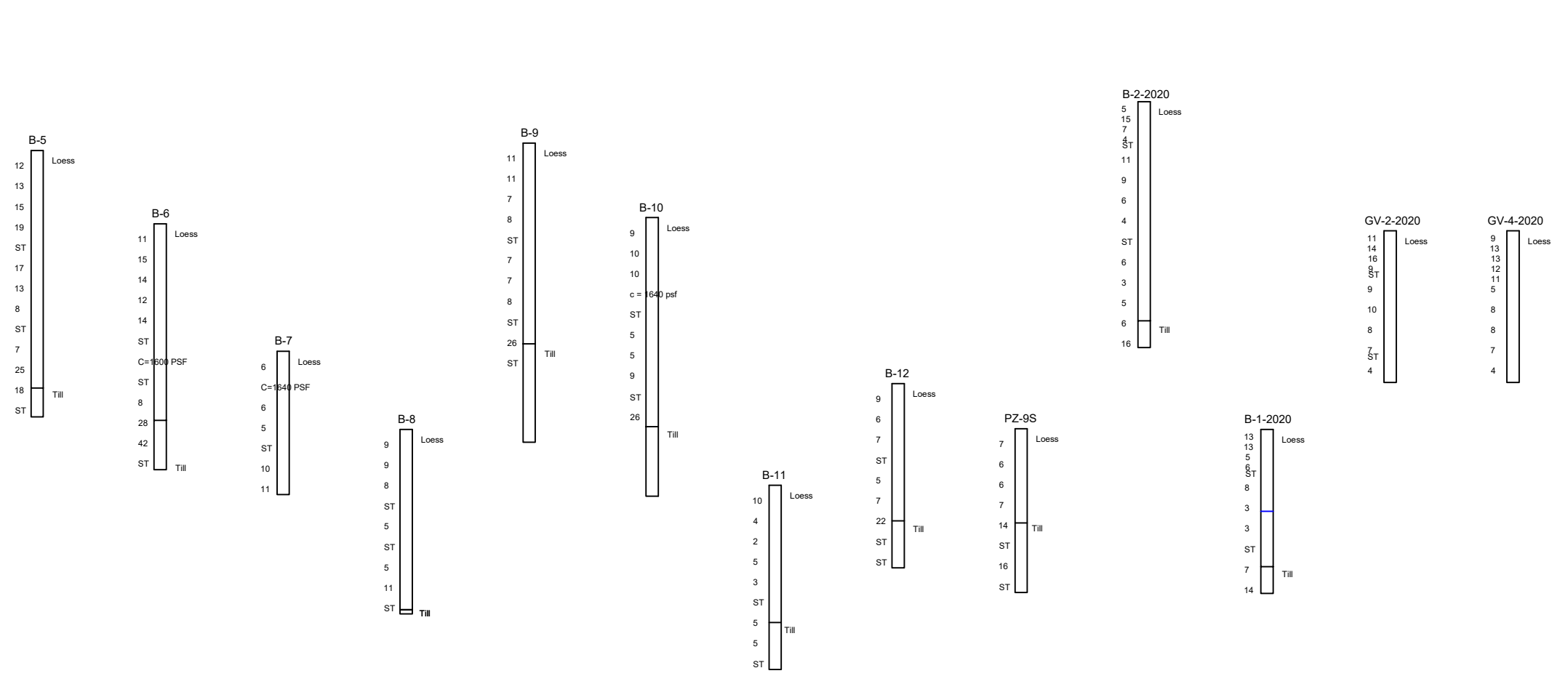
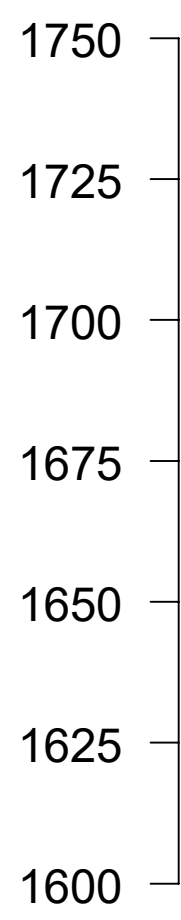
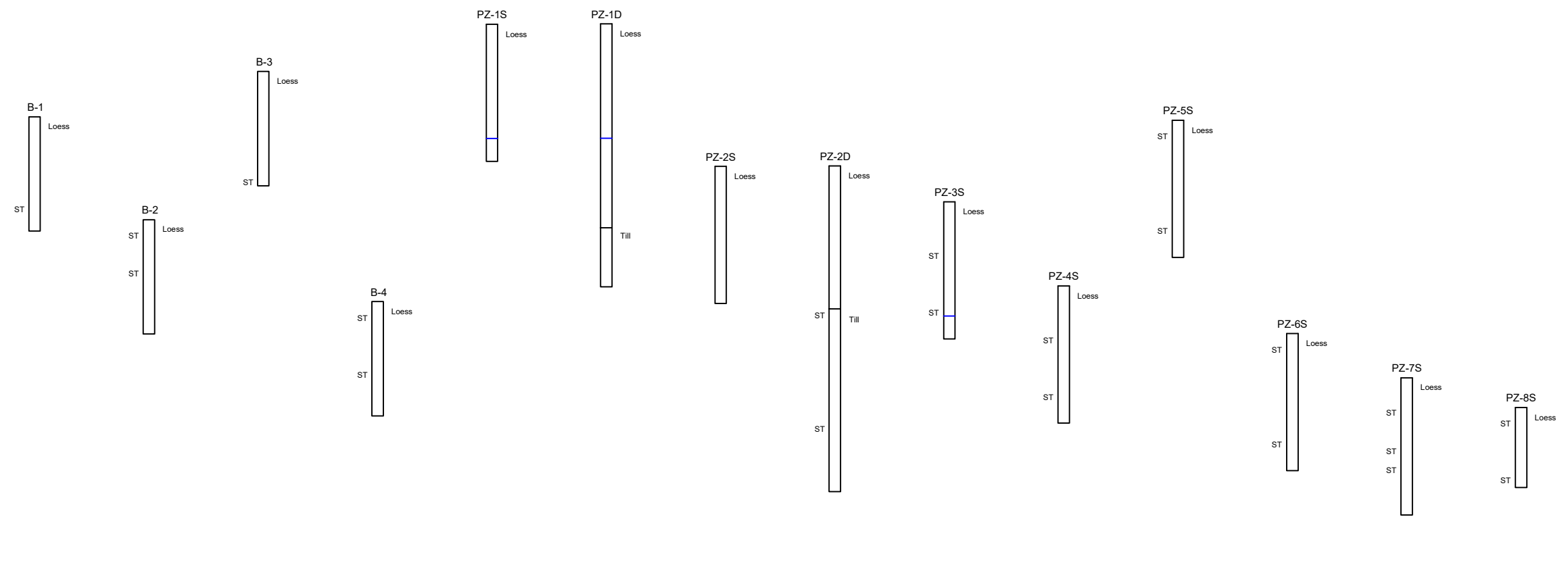
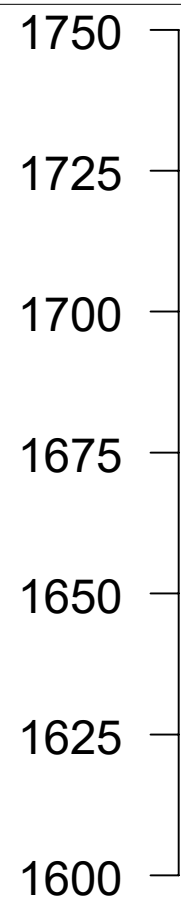
B-4

PZ-9S

PZ-6S

PZ-7S





Boring	Material	Depth (ft)	Blow Count (bpf)	Boring	Material	Depth (ft)	Blow Count (bpf)
B-5	Loess	3.5	12	PZ-9S	Loess	3.5	7
	Loess	8.5	13		Loess	8.5	6
	Loess	13.5	15		Loess	13.5	6
	Loess	18.5	19		Loess	18.5	7
	Loess	28.5	17		Till	23.5	14
	Loess	33.5	13		Till	33.5	16
	Loess	38.5	8	B-1-2020	Loess	1	13
	Loess	48.5	7		Loess	3.5	13
	Loess	53.5	25		Loess	6	5
	Till	58.5	18		Loess	8.5	6
B-6	Loess	3.5	11	Loess	13.5	8	
	Loess	8.5	15	Loess	18.5	3	
	Loess	13.5	14	Loess	23.5	3	
	Loess	18.5	12	Till	33.5	7	
	Loess	23.5	14	Till	38.5	14	
	Loess	43.5	8	B-2-2020	Loess	1	5
	Till	48.5	28		Loess	3.5	15
Till	53.5	42	Loess		6	7	
B-7	Loess	3.5	6		Loess	8.5	4
	Loess	13.5	6		Loess	13.5	11
	Loess	18.5	5		Loess	18.5	9
	Loess	28.5	10	Loess	23.5	6	
	Loess	33.5	11	Loess	28.5	4	
B-8	Loess	3.5	9	Loess	38.5	6	
	Loess	8.5	9	Loess	43.5	3	
	Loess	13.5	8	Loess	48.5	5	
	Loess	23.5	5	Till	53.5	6	
	Loess	33.5	5	Till	58.5	16	
B-9	Loess	38.5	11	GV-2	Loess	1	11
	Loess	3.5	11		Loess	3.5	14
	Loess	8.5	11		Loess	6	16
	Loess	13.5	7		Loess	8.5	9
	Loess	18.5	8		Loess	13.5	9
	Loess	28.5	7		Loess	18.5	10
Loess	33.5	7	Loess		23.5	8	
Loess	38.5	8	Loess		28.5	7	
Till	48.5	26	Loess	33.5	4		
B-10	Loess	3.5	9	GV-4	Loess	1	9
		8.5	10		Loess	3.5	13
		13.5	10		Loess	6	13
		28.5	5		Loess	8.5	12
		33.5	5		Loess	10	11
		38.5	9		Loess	13.5	5
		48.5	26		Loess	18.5	8
B-11	Loess	3.5	10		Loess	23.5	8
	Loess	8.5	4	Loess	28.5	7	
	Loess	13.5	2	Loess	33.5	4	
	Loess	18.5	5	B-12	Loess	3.5	9
	Loess	23.5	3		Loess	8.5	6
	Till	33.5	5		Loess	13.5	7
Till	38.5	5	Loess		23.5	5	
B-12	Loess	3.5	9		Loess	28.5	7
	Loess	8.5	6		Till	33.5	22
	Loess	13.5	7				
	Loess	23.5	5				
	Loess	28.5	7				
Till	33.5	22					

	Average	Median	Min	Max
Loess	8.9	8	2	26
Till	16.8	16	5	42

Boring	Depth (ft)	Material	LL	PL	PI	Shrinkage	MC (%)	DD (pcf)	Uncon (psf)	Cc	Cr	p'c (tsf)	OCR	c (psf)	phi (deg)	c' (psf)	phi' (deg)
B-5	8	Loess	39	19	20		21.8										
	23	Loess	39	18	21		23.1	94									
	38	Loess					30.4										
	43	Loess	35	19	16		30	88	850								
	63	Till	39	14	25		15.8	112									
B-6	13	Loess	37	20	17	9	24.1										
	28	Loess	40	19	21		28.2	85	1000								
	38	Loess	38	19	19		30.1	86									
	43	Loess					31.1										
	53	Till	41	18	23	17	18.5										
	58	Till	49	14	35		18.4	108									
B-7	8	Loess	37	20	17		31.8	86		0.26	0.03	2.64	5.1				
	23	Loess	43	16	27		28.8	91									
B-8	3	Loess	50	23	27		35.1										
	18	Loess	42	18	24		32.2	76		0.23	0.04	1.12	0.7				
	28	Loess	37	18	19		34.7	85		0.23	0.039	1.35	0.8				
	38.5	Loess					27.6										
	43	Till	39	17	22		31.4	93									
B-9	8	Loess	39	20	19	11	27.4										
	23	Loess	40	19	21		30.9	86						536	15.7	234	28
	43	Loess	32	18	14		22.4	97	1300								
	48	Till					21.5										
	53	Till	36	14	22		19.1	105	750								
	55	Till	38	14	24												
B-10	23	Loess	40	19	21		30.7	88	650								
	38	Loess	50	14	36		27.5										
	43	Loess	54	18	36		22.5	102									
	50	Loess	46	13	33		22.5										
B-11	3	Loess	47	27	20		30.5										
	8	Loess					31.4										
	13	Loess	39	20	19	20	31.7										
	23	Loess	40	18	22		33.4										
	28	Loess	41	19	22		32.4	87	200								
	38	Till	38	18	20		30.8	89									
B-12	8	Loess	42	20	22	18	30.6										
	18	Loess	43	17	26		32.6	89	350								
	28	Loess	40	20	20		34.7										
	38	Till	38	17	21		27.4	92						191	17.1	156	28.1
	43	Till	40	16	24		30.5	92	300								
PZ-95	8	Loess	38	19	19		25.5										
	28	Till	47	15	32		23.6	100	1200								
	38	Till	63	19	44		26.7	93									

Loess	Average	41	19	22
	Median	40	19	21
	Min	32	13	14
	Max	54	27	36

	29	89	725
	30.5	87.5	750
	21.8	76	200
	35.1	102	1300

Till	Average	43	16	27
	Median	39	16	24
	Min	36	14	20
	Max	63	19	44

	24	98	750
	23.6	93	750
	15.8	89	300
	31.4	112	1200

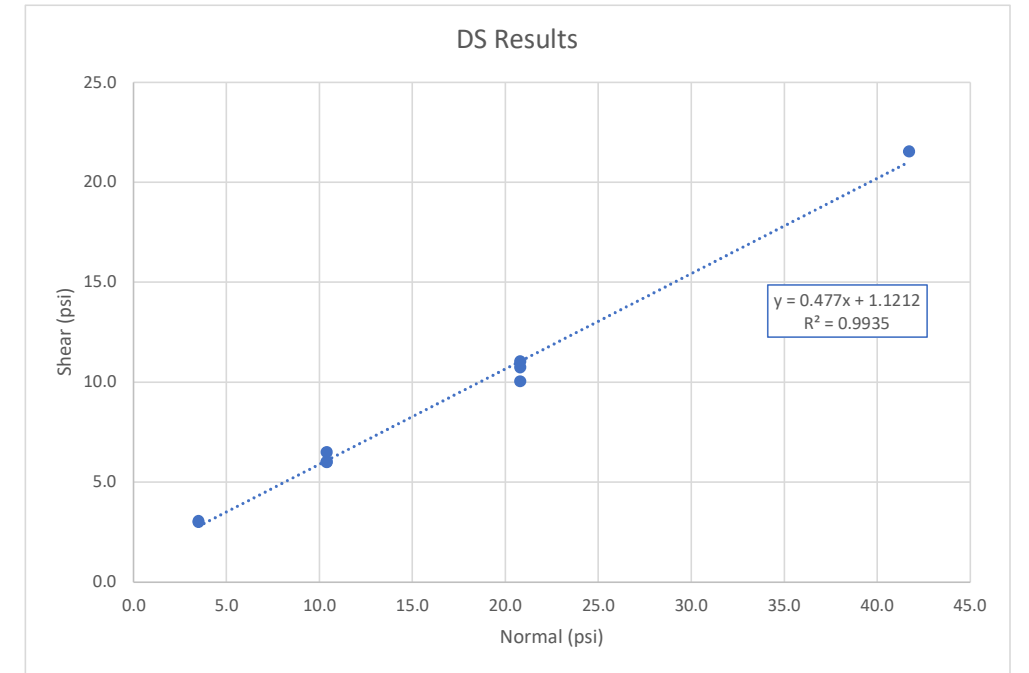


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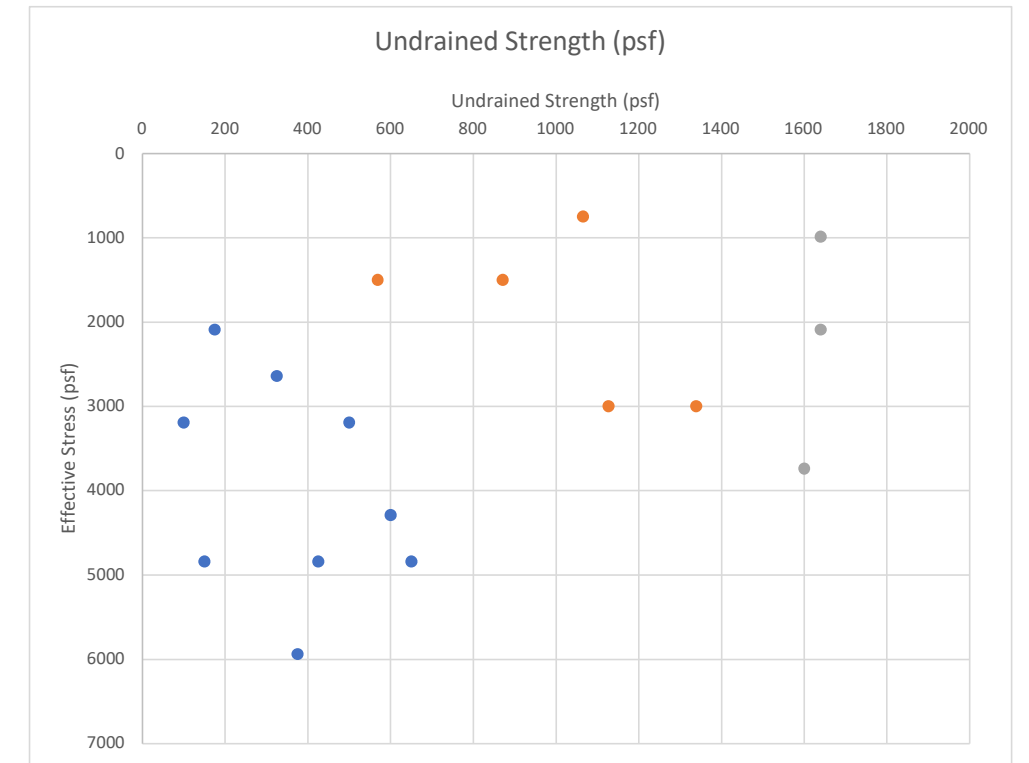
Attachment B – Current Testing Results

		Dry Density (pcf)	Moisture Content (%)	Atterbergs			Normal	Shear	Shear - Calculated	Difference	Difference^2
B-1, ST-1	10-12	93.6	23.4				3.5	3.0	2.8	0.21	0.04
		93.6	23.3	39	24	15	10.4	6.0	6.1	-0.08	0.01
		92.2	25.1				20.8	11.0	11.0	0.00	0.00
B-2, ST-2	33.5-35.5	85.6	32.3				10.4	6.5	6.1	0.42	0.17
		84.9	32.3	38	25	13	20.8	10.0	11.0	-1.00	1.01
		86.2	32.4				41.7	21.6	21.0	0.54	0.29
GV-2, ST-1	10-12	84.1	21.3				3.5	3.1	2.8	0.27	0.07
		85.5	22.2	23	23	12	10.4	6.0	6.1	-0.05	0.00
		85.1	21.6				20.8	10.8	11.0	-0.29	0.09

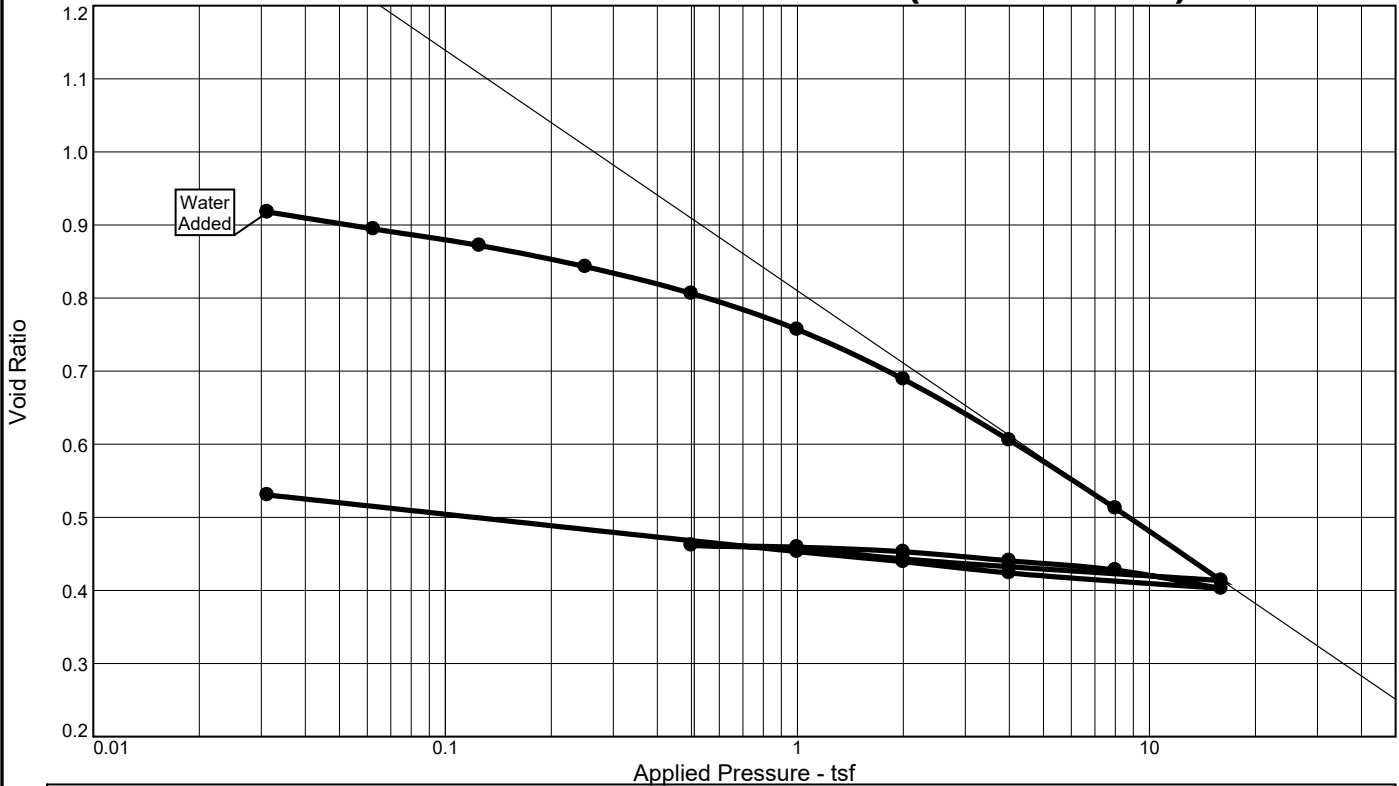
Phi (radians)	0.477	Sum	1.7	Previous Testing	
Cohesion	1.121	St Dev	0.46		
phi (deg)	25.5	Average	8.7	phi (deg)	28.1
c (psf)	161	COV	5%	c (psf)	156



		Material	Dry Density (pcf)	Moisture Content (%)	Atterbergs			Confining Pressure (psf)	Failure Stress (psf)	c-p ratio	Cohesion (psf)	Effective Stress (psf)
B-1, ST-2	28.5-30.5	Loess	92.8	29.9	44	21	23	1500	1742	0.58	871	1500
		Loess	90.3	30.7				1500	1138	0.38	569	1500
B-2, ST-1	10-12	Loess	95.8	26	36	24	12	750	3254	2.17	1627	750
		Loess	86	27.2				750	2131	1.42	1065.5	750
GV-2, ST-2	30-32	Loess	89.4	29.1	37	24	13	3000	2678	0.45	1339	3000
		Loess	89.7	30				3000	2254	0.38	1127	3000
B-5	43-45	Loess	88	30	35	19	16	0	850	0.09	425	4840
B-6	28-30	Loess	85	28.2	40	19	21	0	1000	0.16	500	3190
B-6	34	Loess						0		0.43	1600	3740
B-7	9	Loess						0		1.66	1640	990
B-9	43-45	Loess	97	22.4	32	18	14	0	1300	0.13	650	4840
B-9	53-55	Loess	105	19.1	36	14	22	0	750	0.06	375	5940
B-10	18-20	Loess						0		0.78	1640	2090
B-10	23-25	Loess	88	30.7	40	19	21	0	650	0.12	325	2640
B-11	28-30	Loess	87	32.4	41	19	22	0	200	0.03	100	3190
B-12	18-20	Loess	89	32.6	43	17	26	0	350	0.08	175	2090
B-12	43-45	Loess	92	30.5	40	16	24	0	300	0.03	150	4840
PZ-9S	38-40	Loess	100	23.6	47	15	32	0	1200	0.14	600	4290



One-Dimensional Consolidation (ASTM D2435)



Coefficients of Consolidation and Secondary Consolidation

No.	Load (tsf)	C_v (ft. ² /day)	C_α	No.	Load (tsf)	C_v (ft. ² /day)	C_α	No.	Load (tsf)	C_v (ft. ² /day)	C_α
7	1.00	0.155									
8	2.00	0.050									

Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (tsf)	P_c (tsf)	C_c	C_r	Initial Void Ratio
Saturation	Moisture									
102.3 %	34.7 %	87.9	44	23	2.70	0	1.3	0.33	0.04	0.917

MATERIAL DESCRIPTION

Brown, mottled gray, spotted reddish brown LEAN CLAY

USCS

AASHTO

Project No. 20-198T **Client:** Burns & McDonnell
Project: NNSWC Landfill, #122625
Depth: 28.5' - 30.5' **Sample Number:** B-1, ST-2

Remarks:



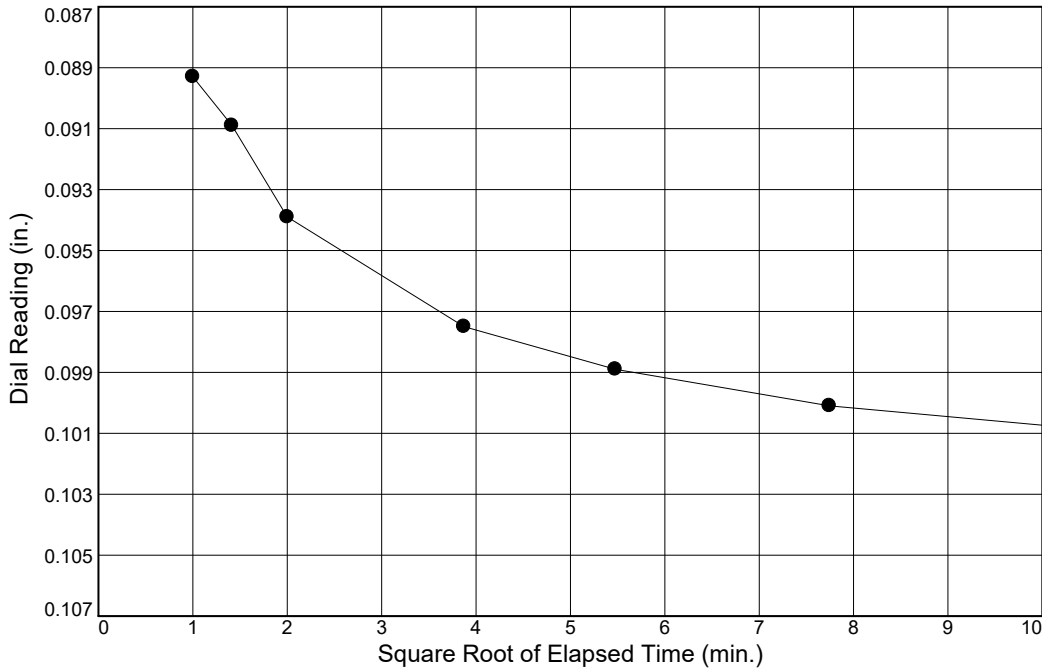
Figure 1 of 1

Tested By: D.B. **Checked By:** T.B.

Dial Reading vs. Time

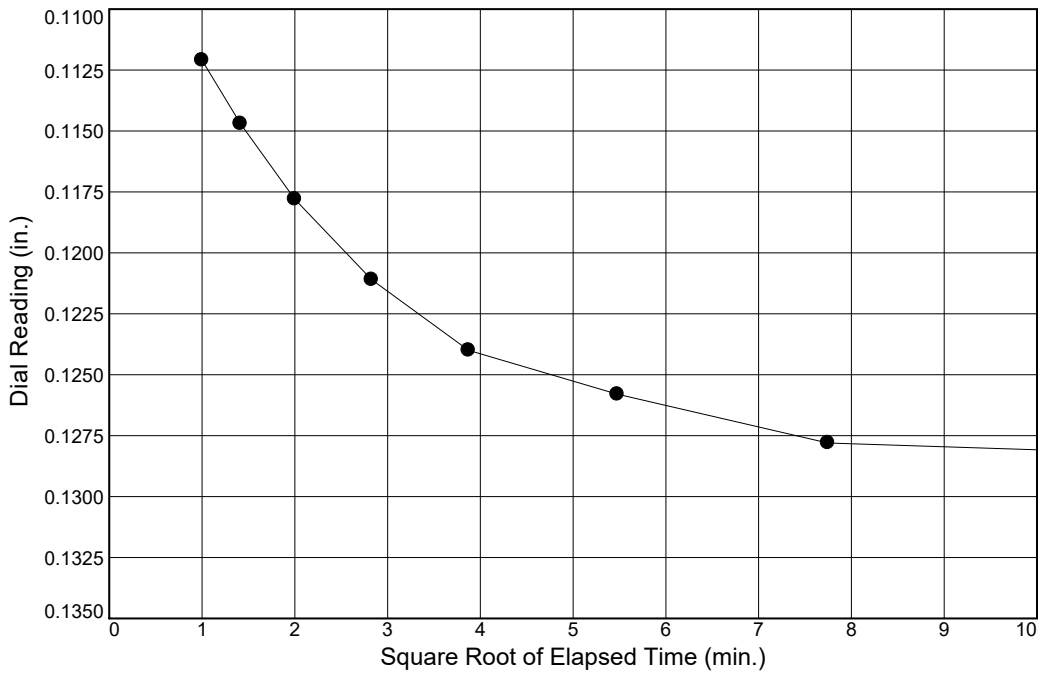
Project No.: 20-198T
 Project: NNSWC Landfill, #122625

Depth: 28.5' - 30.5' Sample Number: B-1, ST-2



Load No.= 7
 Load= 1.00 tsf
 $D_0 = 0.0845$
 $D_{90} = 0.0951$
 $D_{100} = 0.0962$
 $T_{90} = 6.83 \text{ min.}$

$C_v @ T_{90}$
 0.155 ft.²/day



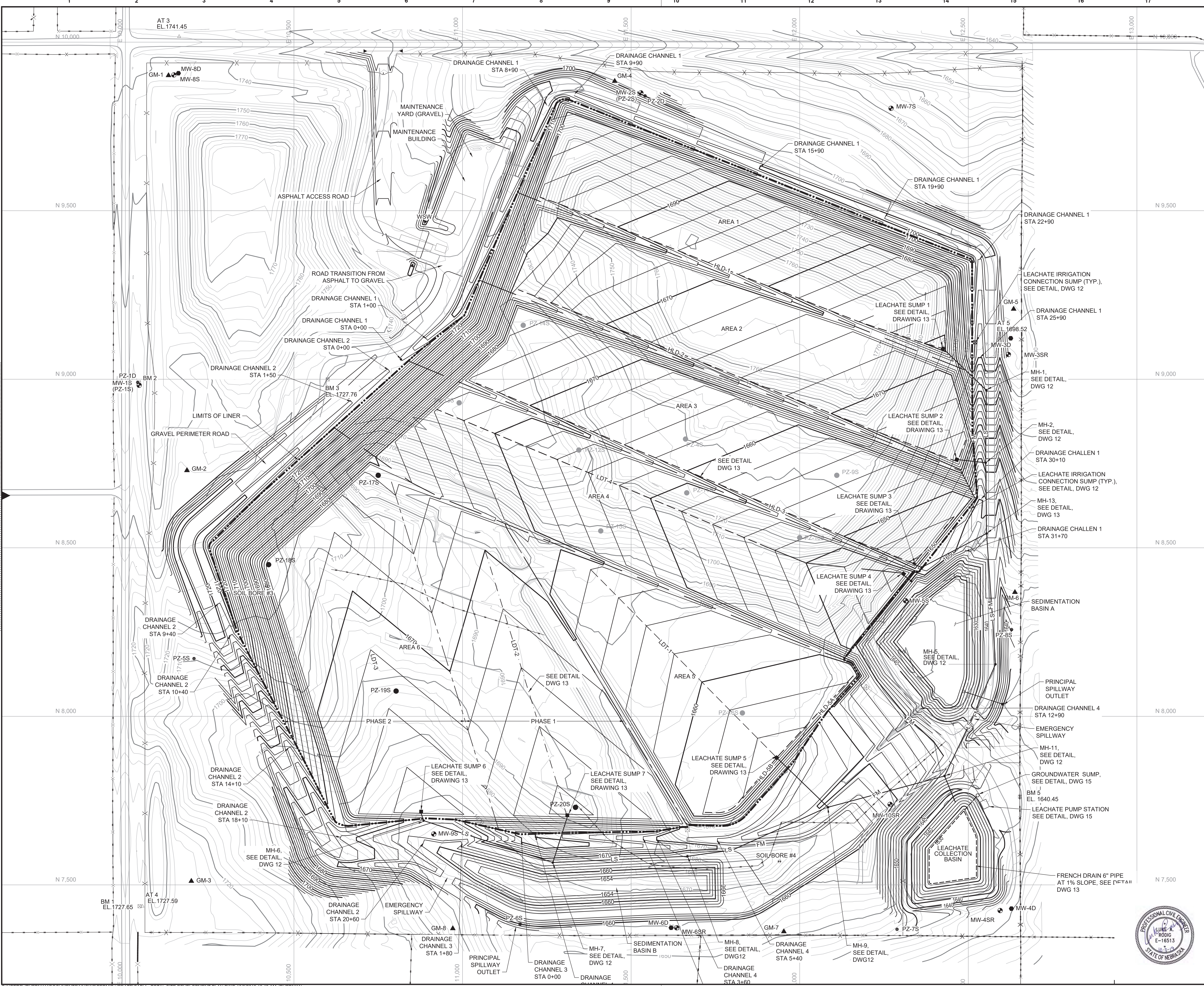
Load No.= 8
 Load= 2.00 tsf
 $D_0 = 0.1088$
 $D_{90} = 0.1246$
 $D_{100} = 0.1264$
 $T_{90} = 19.62 \text{ min.}$

$C_v @ T_{90}$
 0.050 ft.²/day



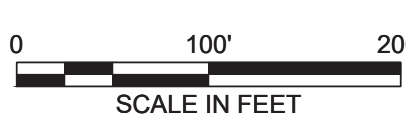
Client: NNSWC Page 9 of 11
Project: 122625 Date: 9/28/2020 Made by: Textor
NNWSC Landfill Expansion Checked by: _____
Slope Stability and Settlement Prelim: _____ Final: _____

Attachment C – Section and Liner Information



no.	date	by	ckd	description
A	10/03/19	LAR	SAM	ISSUED FOR PERMIT

- NOTES:
1. SITE TOPOGRAPHY WAS FLOWN APRIL 6, 1999 BY WESTERN AIR MAPS, INC., LEXEXA, KANSAS. TOPOGRAPHY WITHIN THE LANDFILL BOUNDARY IS FROM A SURVEY DATED NOVEMBER 27, 2018 BY JEVO CONSULTING GROUP, INC.
 2. LANDFILL BOTTOM ELEVATIONS SHOWN ARE TOP OF LINER.
 3. EXCAVATION CONTOURS IN THE LANDFILL AREA ARE A MINIMUM OF 2 FEET BELOW THE ELEVATIONS SHOWN ON THIS DRAWING.
 4. EXISTING PIEZOMETERS WITHIN LANDFILL AREA 6 WILL BE ABANDONED PRIOR TO CONSTRUCTION OF THE LANDFILL AREA.
 5. LAYOUT OF GROUNDWATER DRAINAGE SYSTEM BENEATH LANDFILL AREAS 3, 4, 5 AND 6 IS SHOWN ON DRAWING 17.



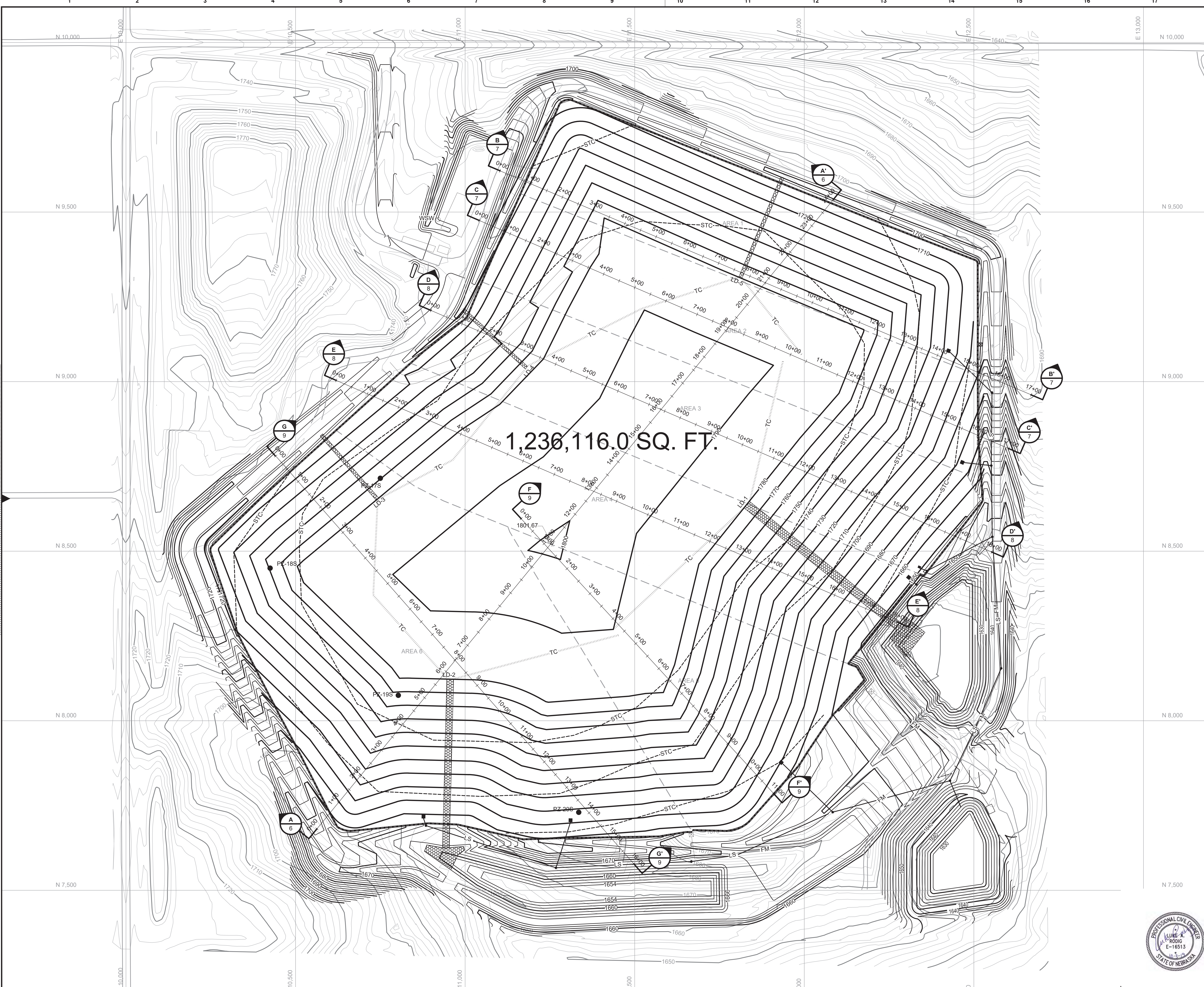
date	SEPTEMBER 2019	detailed	J. HEDMAN
designed	L. RODIG	checked	S. MARTIN

**NORTHEAST NEBRASKA
SOLID WASTE COALITION**

**PERMIT MODIFICATION
AND RENEWAL DRAWINGS**
TOTAL SITE DEVELOPMENT PLAN

project	118418	contract	
drawing	4	rev.	
sheet	9	of	24
file	4 - Total Site Development Plan.dwg		

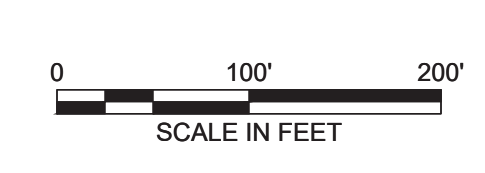




1,236,116.0 SQ. FT.

no.	date	by	ckd	description
A	10/03/19	LAR	SAM	ISSUED FOR PERMIT

- NOTES:
1. SITE TOPOGRAPHY WAS FLOWN APRIL 6, 1999 BY WESTERN AIR MAPS, INC., LEXEXA, KANSAS. TOPOTRAPHY WITHIN THE LANDFILL BOUNDARY IS FROM A SURVEY DATED NOVEMBER 27, 2018 BY JEO CONSULTING GROUP, INC.
 2. A SINGLE PHASE CLOSURE OF THE LANDFILL IS PROPOSED.



date	SEPTEMBER 2019	detailed	J. HEDMAN
designed	L. RODIG	checked	S. MARTIN

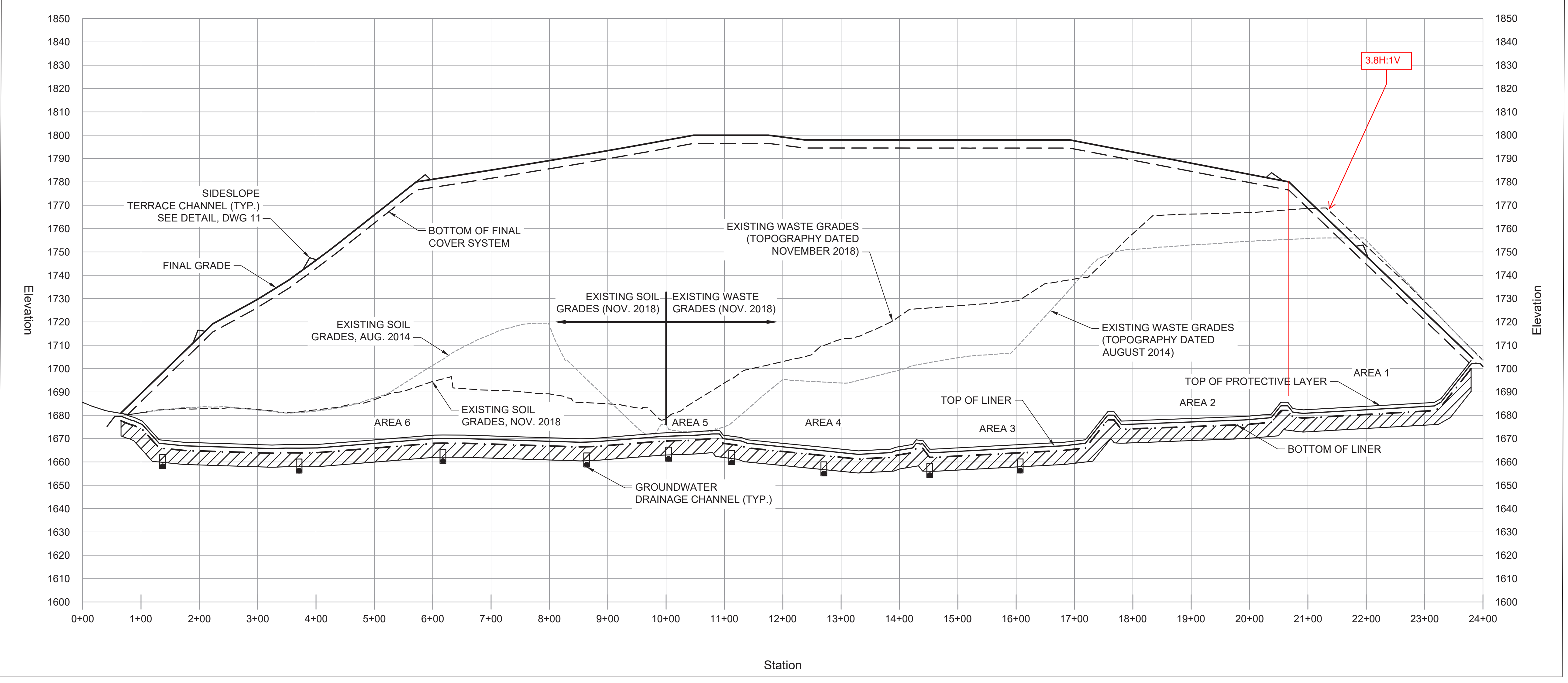
**NORTHEAST NEBRASKA
SOLID WASTE COALITION**

PERMIT MODIFICATION
AND RENEWAL DRAWINGS
FINAL CLOSURE PLAN

project	118418	contract	
drawing	5	rev.	
sheet	10	of	24
file	5 - Final Closure Plan.dwg		



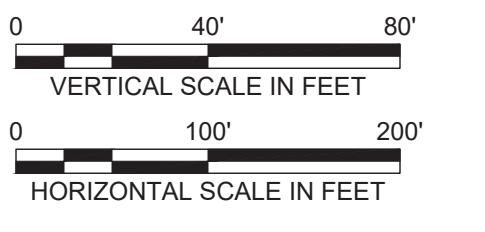
COPYRIGHT © 2019 BURNS & MCDONNELL ENGINEERING COMPANY, INC.



SECTION AREAS 1-6
(SOUTH TO NORTH)
VERTICAL SCALE: 1" = 40'
HORIZONTAL SCALE: 1" = 100'

LEGEND

	FINAL GRADE
	BOTTOM OF FINAL COVER SYSTEM
	EXISTING GRADE 2018
	EXISTING GRADE 2014
	TOP OF PROTECTIVE COVER
	TOP OF LINER
	BOTTOM OF LINER
	MINIMUM DESATURATED ZONE



date SEPTEMBER 2019	detailed J. HEDMAN
designed L. RODIG	checked S. MARTIN

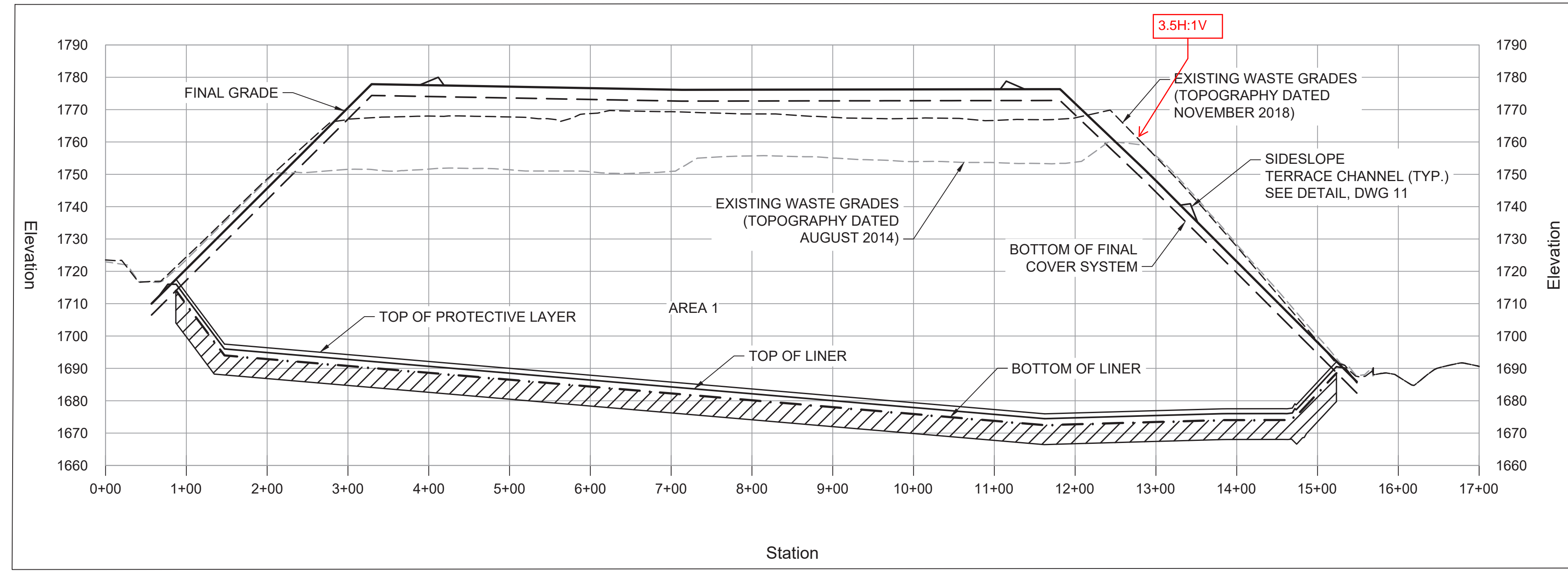
**NORTHEAST NEBRASKA
SOLID WASTE COALITION**



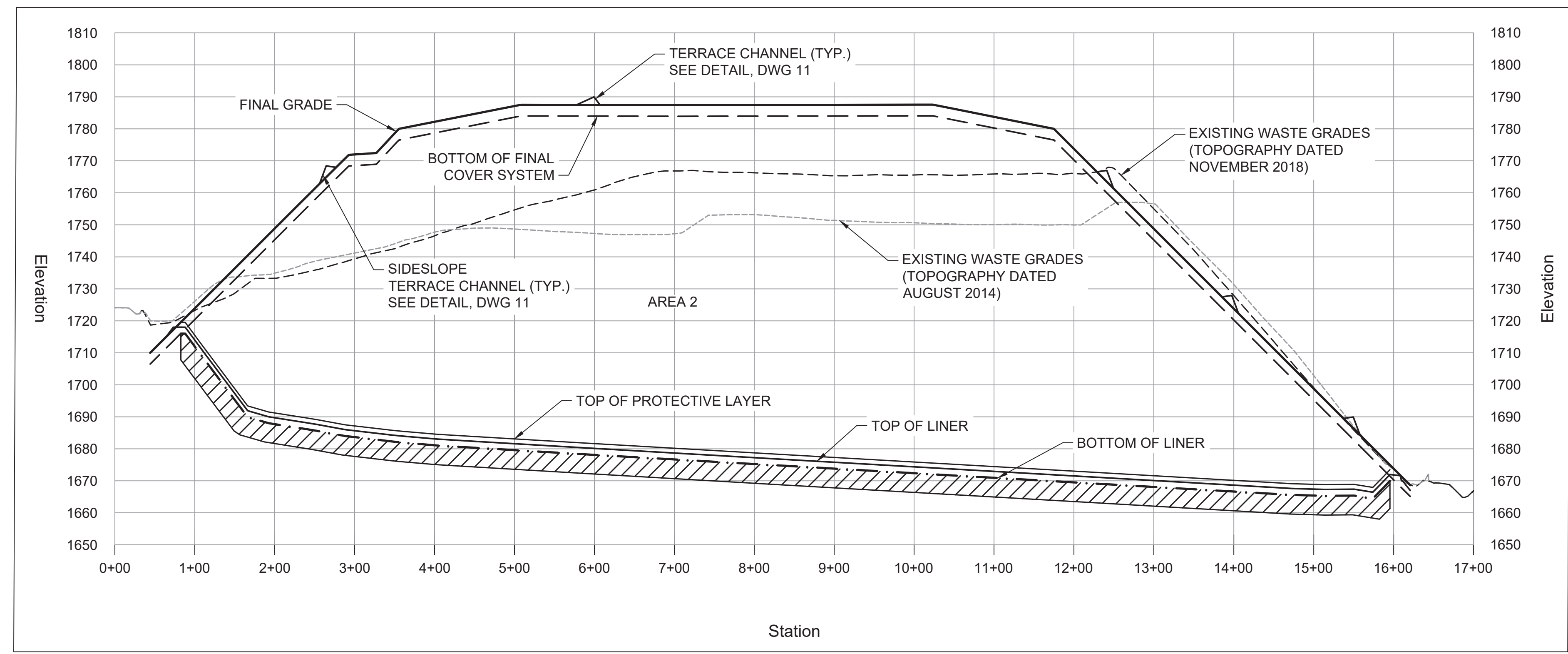
**PERMIT MODIFICATION
AND RENEWAL DRAWINGS**
LANDFILL CROSS SECTIONS 1

project 118418	contract
drawing 6	rev.
sheet 11	of 24 sheets
file 6 - Landfill Cross Sections 1.dwg	

Reduce x distance by 0.98



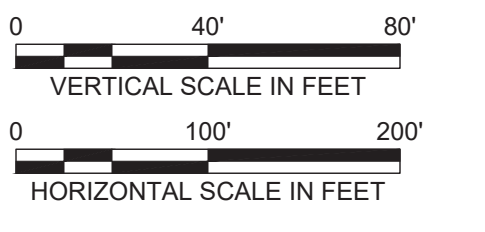
SECTION AREA 1 (WEST TO EAST) B-B'
 VERTICAL SCALE: 1" = 40'
 HORIZONTAL SCALE: 1" = 100'



SECTION AREA 2 (WEST TO EAST) C-C'
 VERTICAL SCALE: 1" = 40'
 HORIZONTAL SCALE: 1" = 100'

LEGEND

	FINAL GRADE
	BOTTOM OF FINAL COVER SYSTEM
	EXISTING GRADE 2018
	EXISTING GRADE 2014
	TOP OF PROTECTIVE COVER
	TOP OF LINER
	BOTTOM OF LINER
	MINIMUM DESATURATED ZONE



date SEPTEMBER 2019	detailed J. HEDMAN
designed L. RODIG	checked S. MARTIN

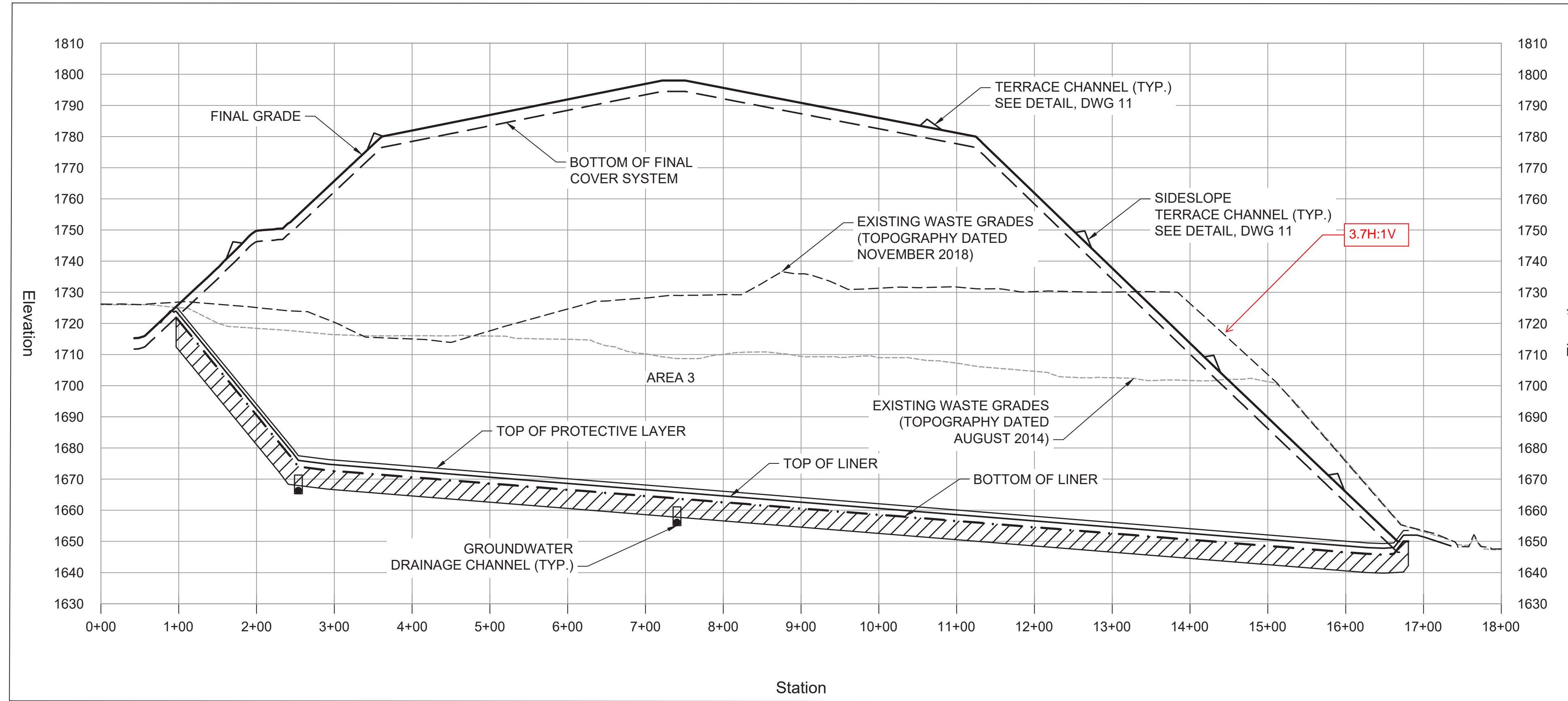
**NORTHEAST NEBRASKA
 SOLID WASTE COALITION**

**PERMIT MODIFICATION
 AND RENEWAL DRAWINGS
 LANDFILL CROSS SECTIONS 2**

project 118418	contract
drawing 7	rev.
sheet 12	of 24 sheets
file 7 - Landfill Cross Sections 2.dwg	

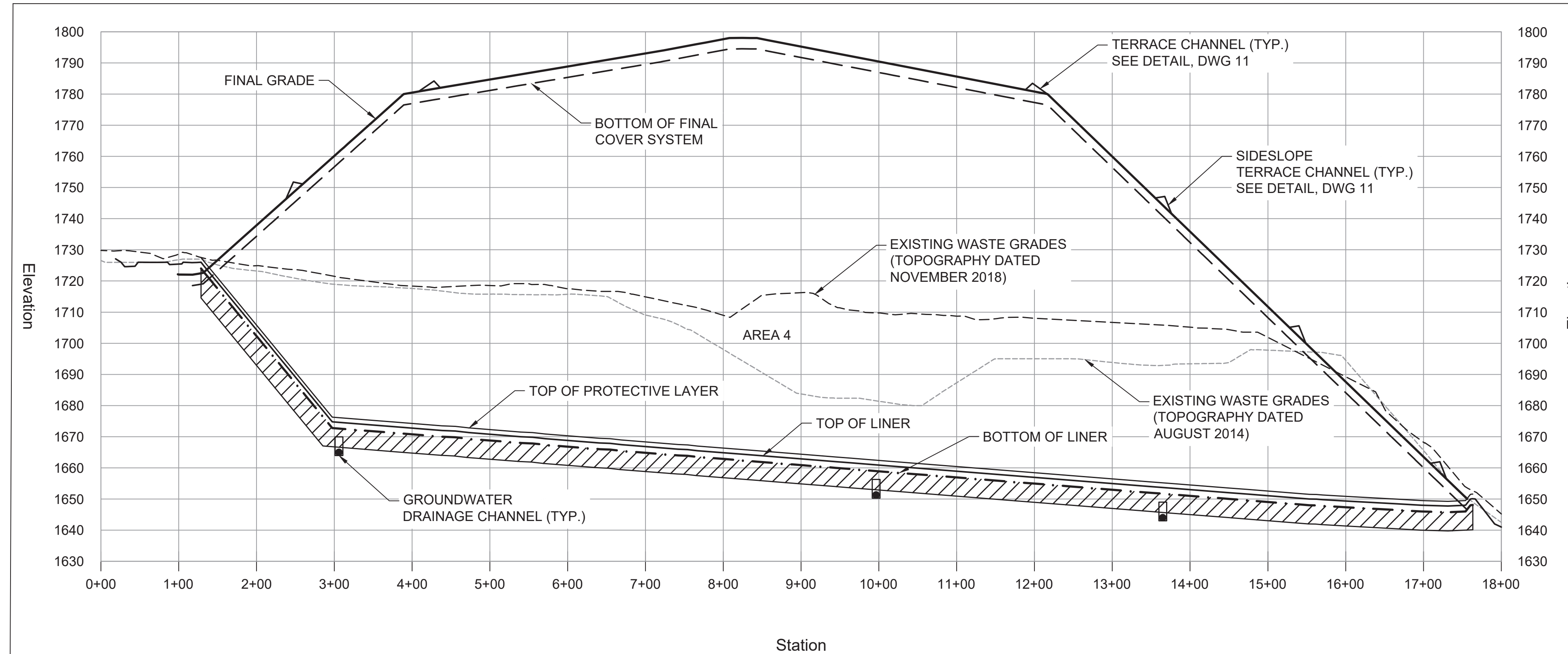


Reduce x distance by 0.967



SECTION AREA 3 (WEST TO EAST) D-D'
 VERTICAL SCALE: 1" = 40'
 HORIZONTAL SCALE: 1" = 100'

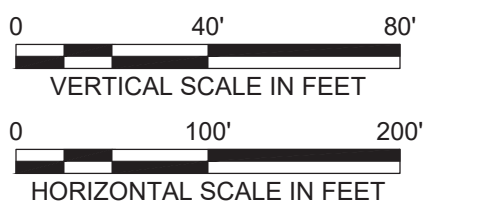
Reduce x distance by 0.97



SECTION AREA 4 (WEST TO EAST) E-E'
 VERTICAL SCALE: 1" = 40'
 HORIZONTAL SCALE: 1" = 100'

LEGEND

	FINAL GRADE
	BOTTOM OF FINAL COVER SYSTEM
	EXISTING GRADE 2018
	EXISTING GRADE 2014
	TOP OF PROTECTIVE COVER
	TOP OF LINER
	BOTTOM OF LINER
	MINIMUM DESATURATED ZONE



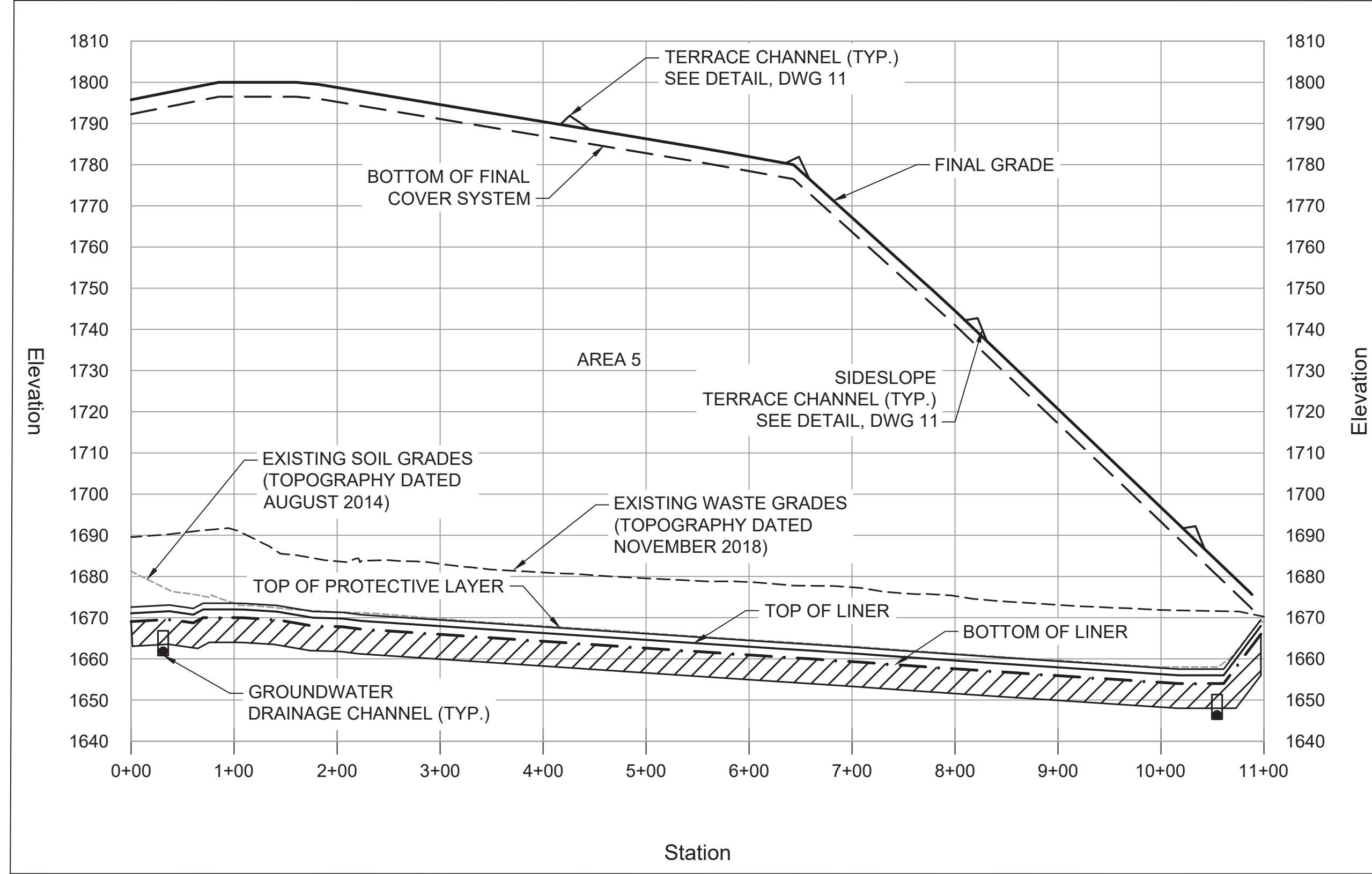
date SEPTEMBER 2019	detailed J. HEDMAN
designed L. RODIG	checked S. MARTIN

**NORTHEAST NEBRASKA
 SOLID WASTE COALITION**

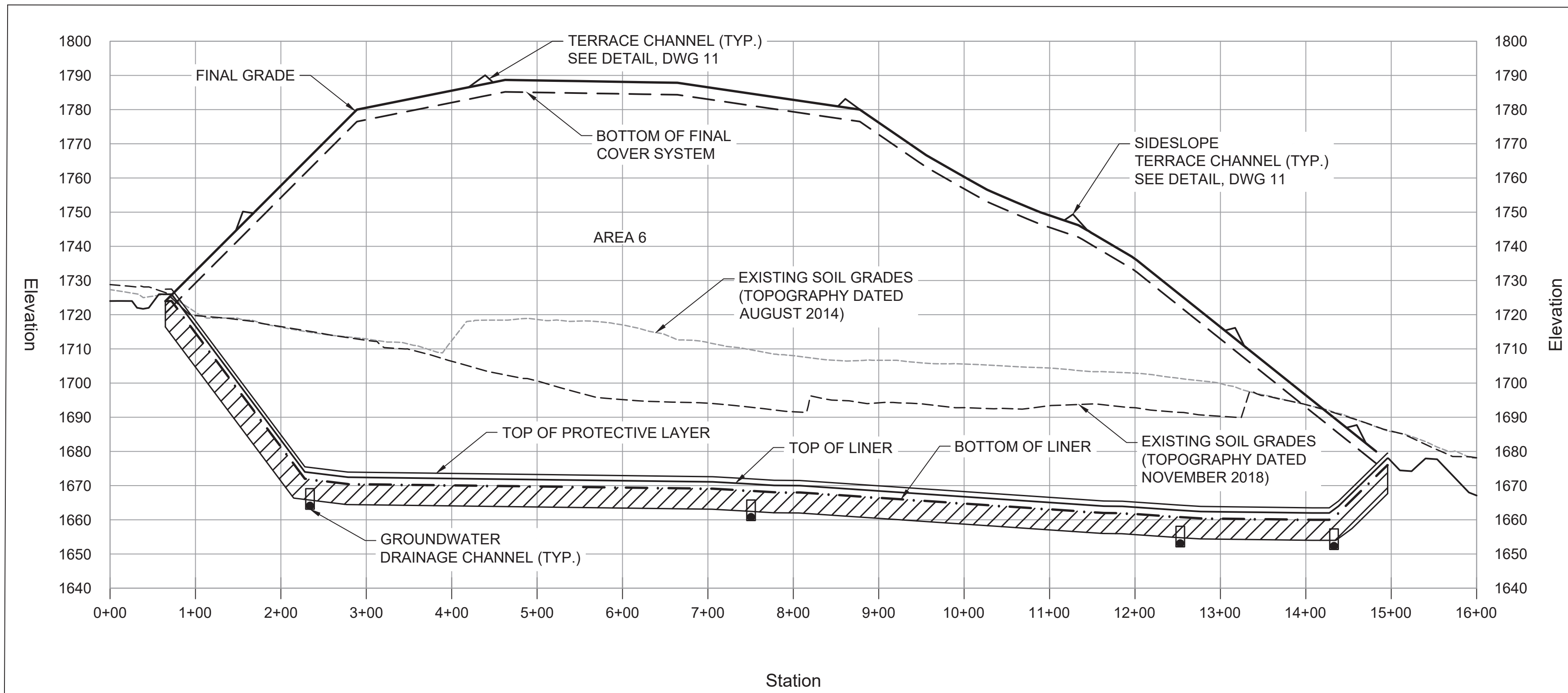
**PERMIT MODIFICATION
 AND RENEWAL DRAWINGS**
 LANDFILL CROSS SECTIONS 3

project 118418	contract
drawing 8	rev.
sheet 13	of 24 sheets
file 8 - Landfill Cross Sections 3.dwg	





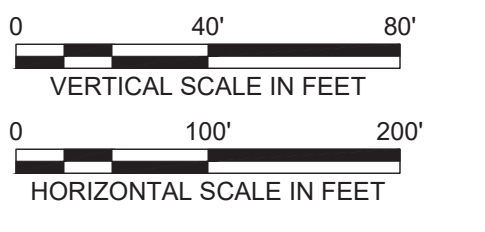
SECTION AREA 5 (WEST TO EAST) F-F'
 VERTICAL SCALE: 1" = 40'
 HORIZONTAL SCALE: 1" = 100'



SECTION AREA 6 (WEST TO EAST) G-G'
 VERTICAL SCALE: 1" = 40'
 HORIZONTAL SCALE: 1" = 100'

LEGEND

	FINAL GRADE
	BOTTOM OF FINAL COVER SYSTEM
	EXISTING GRADE 2018
	EXISTING GRADE 2014
	TOP OF PROTECTIVE COVER
	TOP OF LINER
	BOTTOM OF LINER
	MINIMUM DESATURATED ZONE



date SEPTEMBER 2019	detailed J. HEDMAN
designed L. RODIG	checked S. MARTIN

**NORTHEAST NEBRASKA
 SOLID WASTE COALITION**

**PERMIT MODIFICATION
 AND RENEWAL DRAWINGS
 LANDFILL CROSS SECTIONS 4**

project 118418	contract
drawing 9	rev.
sheet 14	of 24 sheets
file 9 - Landfill Cross Sections 4.dwg	



Appendix Table I. Summary of interface shear strengths.

Interface 1*	Interface 2*	Peak Strength					Residual Strength				
		Fig. No.	δ (deg)	Ca (kPa)	Points	R ²	Fig. No.	δ (deg)	Ca (kPa)	Points	R ²
HDPE-S	Granular Soil	1a	21	0	162	0.93	1b	17	0	128	0.92
HDPE-S	Cohesive Soil										
	Saturated	1c	11	7	79	0.94	1d	11	0	59	0.95
	Unsaturated	1c	22	0	44	0.93	1d	18	0	32	0.93
HDPE-S	NW-NP GT	1e	11	0	149	0.93	1f	9	0	82	0.96
HDPE-S	Geonet	1g	11	0	196	0.90	1h	9	0	118	0.93
HDPE-S	Geocomposite	1i	15	0	36	0.97	1j	12	0	30	0.93
HDPE-T	Granular Soil	2a	34	0	251	0.98	2b	31	0	239	0.96
HDPE-T	Cohesive Soil										
	Saturated	2c	18	10	167	0.93	2d	16	0	150	0.90
	Unsaturated	2c	19	23	62	0.91	2d	22	0	35	0.93
HDPE-T	NW-NP GT	2e	25	8	254	0.96	2f	17	0	217	0.95
HDPE-T	Geonet	2g	13	0	31	0.99	2h	10	0	27	0.99
HDPE-T	Geocomposite	2i	26	0	168	0.95	2j	15	0	164	0.94
LLDPE-S	Granular Soil	3a	27	0	6	1.00	3b	24	0	9	1.00
LLDPE-S	Cohesive Soil	3c	11	12.4	12	0.94	3d	12	3.7	9	0.93
LLDPE-S	NW-NP GT	3e	10	0	23	0.63	3f	9	0	23	0.49
LLDPE-S	Geonet	3g	11	0	9	0.99	3h	10	0	9	1.00
LLDPE-T	Granular Soil	4a	26	7.7	12	0.95	4b	25	5.2	12	0.95
LLDPE-T	Cohesive Soil	4c	21	5.8	12	1.00	4d	13	7.0	9	0.98
LLDPE-T	NW-NP GT	4e	26	8.1	9	1.00	4f	17	9.5	9	0.96
LLDPE-T	Geonet	4g	15	3.6	6	0.97	4h	11	0	6	0.98
PVC-S	Granular Soil	5a	26	0.4	6	0.99	5b	19	0	6	0.99
PVC-S	Cohesive Soil	5c	22	0.9	11	0.88	5d	15	0	9	0.95
PVC-S	NW-NP GT	5e	20	0	89	0.91	5f	16	0	83	0.74
PVC-S	NW-HB GT	5g	18	0	3	1.00	5h	12	0.1	3	1.00
PVC-S	Woven GT	5i	17	0	6	0.54	5j	7	0	6	0.93
PVC-S	Geonet	5k	18	0.1	3	1.00	5l	16	0.6	3	1.00

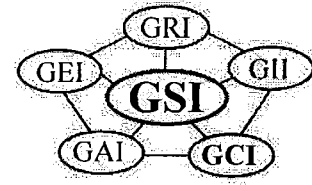
Appendix Table 1. (continued)

Interface 1*	Interface 2*	Peak Strength					Residual Strength				
		Fig. No.	δ (deg)	Ca (kPa)	Points	R ²	Fig. No.	δ (deg)	Ca (kPa)	Points	R ²
PVC-F	NW-NP GT	6a	27	0.2	26	0.95	6b	23	0	26	0.95
PVC-F	NW-HB GT	6c	30	0	8	0.97	6d	27	0	8	0.90
PVC-F	Woven GT	6e	15	0	6	0.78	6f	10	0	6	0.76
PVC-F	Geonet	6g	25	0	11	1.00	6h	19	0	11	0.99
PVC-F	Geocomposite	6i	27	1.1	5	1.00	6j	22	4.7	6	1.00
CSPE-R	Granular Soil	7a	36	0	3	1.00	7b	16	0	3	1.00
CSPE-R	Cohesive Soil	7c	31	5.7	6	0.71	7d	18	0	6	0.99
CSPE-R	NW-NP GT	7e	14	0	6	0.97	7f	10	0	6	0.98
CSPE-R	NW-HB GT	7g	21	0	3	1.00	7h	10	0	3	1.00
CSPE-R	Woven GT	7i	11	0	6	0.92	7j	11	0	3	1.00
CSPE-R	Geonet	7k	28	0	9	0.87	7l	16	0	9	0.80
NW-NP GT	Granular Soil	8a	33	0	290	0.97	8b	33	0	117	0.96
NW-HB GT	Granular Soil	8c	28	0	6	0.99	8d	16	0	6	0.91
Woven GT	Granular Soil	8e	32	0	81	0.99	8f	29	0	28	0.98
NW-NP GT	Cohesive Soil	9a	30	5	79	0.96	9b	21	0	28	0.79
NW-HB GT	Cohesive Soil	9c	29	0.9	15	0.71	9d	10	0	15	0.83
Woven GT	Cohesive Soil	9e	29	0	34	0.94	9f	19	0	16	0.86
GCL Reinforced (internal)	N/A	10a	16	38	406	0.85	10b	6	12	182	0.91
GCL (NW-NP GT)	HDPE-T	11a	23	8	180	0.95	11b	13	0	157	0.90
GCL (W-SF GT)	HDPE-T	11c	18	11	196	0.96	11d	12	0	153	0.92
Geonet	NW-NP GT	12a	23	0	52	0.97	12b	16	0	32	0.97
Geocomposite (NW-NP GT)	Granular Soil	13a	27	14	14	0.86	13b	21	8	10	0.92



Geosynthetic Research Institute

475 Kedron Avenue
Folsom, PA 19033-1208 USA
TEL (610) 522-8440
FAX (610) 522-8441



**Direct Shear Database of
Geosynthetic-to-Geosynthetic and Geosynthetic-to-Soil Interfaces**

by

**George R. Koerner, Ph.D., P.E.
Geosynthetic Research Institute
Folsom, PA 19033-1208
gkoerner@dca.net**

and

**Dhani Narejo, Ph.D.
GSE Lining Technology, Inc.
Houston, TX 77073
dnarejo@gseworld.com**


GRI Report #30

June 14, 2005

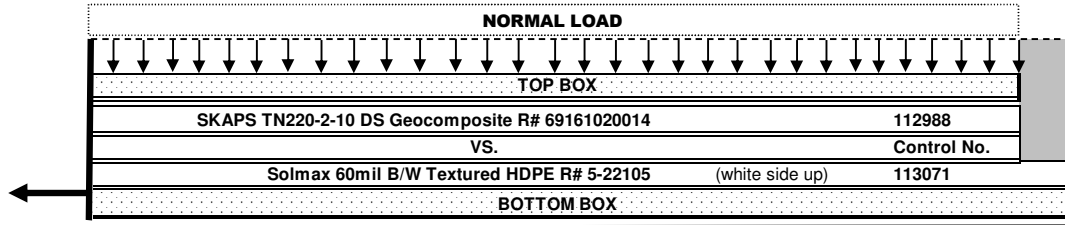


TABLE 2
 CLIENT: JJ Westhoff Construction
 PROJECT: NNSWC

INTERFACE SHEAR TEST RESULT (ASTM D5321)
 TRI Job No. G160536

Reviewed By: 
 Date: 13-Jun-2016

TEST CONFIGURATION 2



TEST CONDITIONS:

SAMPLE PREPARATION:

1. Specimens were cut along machine direction to 14" x 17" for the upper box, and 14" x 19" for the lower box, with an effective test area of 12" x 12".
2. Geosynthetic specimens were secured via flat bar clamping mechanisms complete with bolts and nuts (7-pairs).

CONSOLIDATION:

1. Each set of specimen was consolidated under **dry** condition for **4 hours** at normal load before shearing.
2. Normal loads were applied using **bladder** for the 9 psi and 6 psi loads and **dead weights** for the 3 psi load.

SHEAR TEST:

1. Shear test was conducted at **0.04 in/min**.
2. Sheared at a maximum of **3.0 inch** horizontal displacement
3. The test specimens were sheared at **dry** condition.
4. Test were performed in general accordance with ASTM D5321 using Geotac Direct Shear machine with effective test area of 12 in X 12 in.

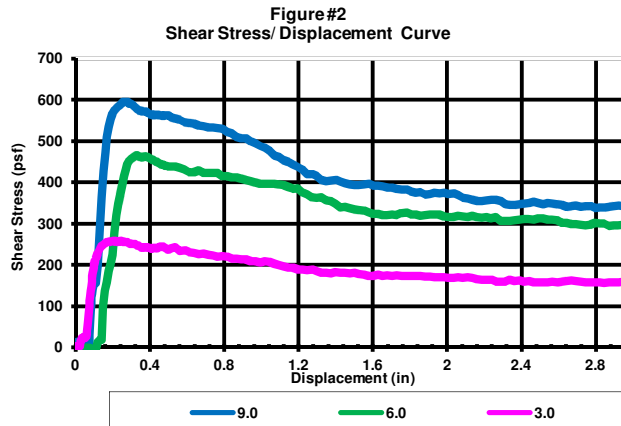
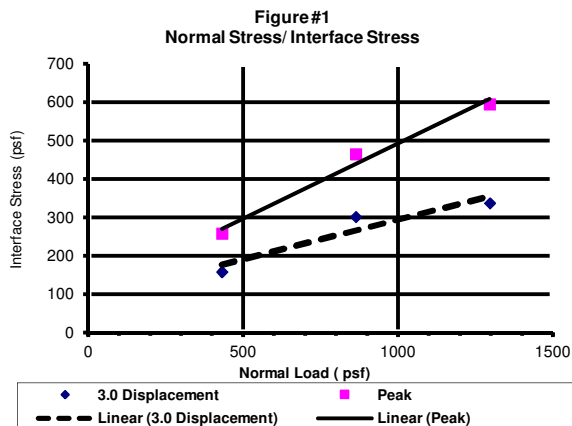
TEST RESULTS:

Normal Stresses Applied		Pre-test Asperity Heights (mils)	PEAK STRENGTH		POST- PEAK STRENGTH AT 3.0 INCHES	
(psi)	(psf)		Shear Stress (psf)	Secant Angle (degrees)	Shear Stress (psf)	Secant Angle (degrees)
3.0	432	18	258	31	158	20
6.0	864	17	465	28	302	19
9.0	1,296	18	595	25	337	15
COHESION (psf) :			102		87	
COEFFICIENT OF FRICTION :			0.39		0.21	
FRICTION ANGLE (degrees) :			21.3		11.7	

NOTE: The friction angles and cohesion results given here are based on mathematically determined best fit line.

OBSERVATIONS:

1. No tilting of the system or any abnormalities observed during and after the test.
2. Superficial abrasion on the geosynthetics interfacing sides (typical to all loads).
3. No tearing, stretching and wrinkling observed on the specimens.
4. Sliding occurred between the two interfacing surfaces.



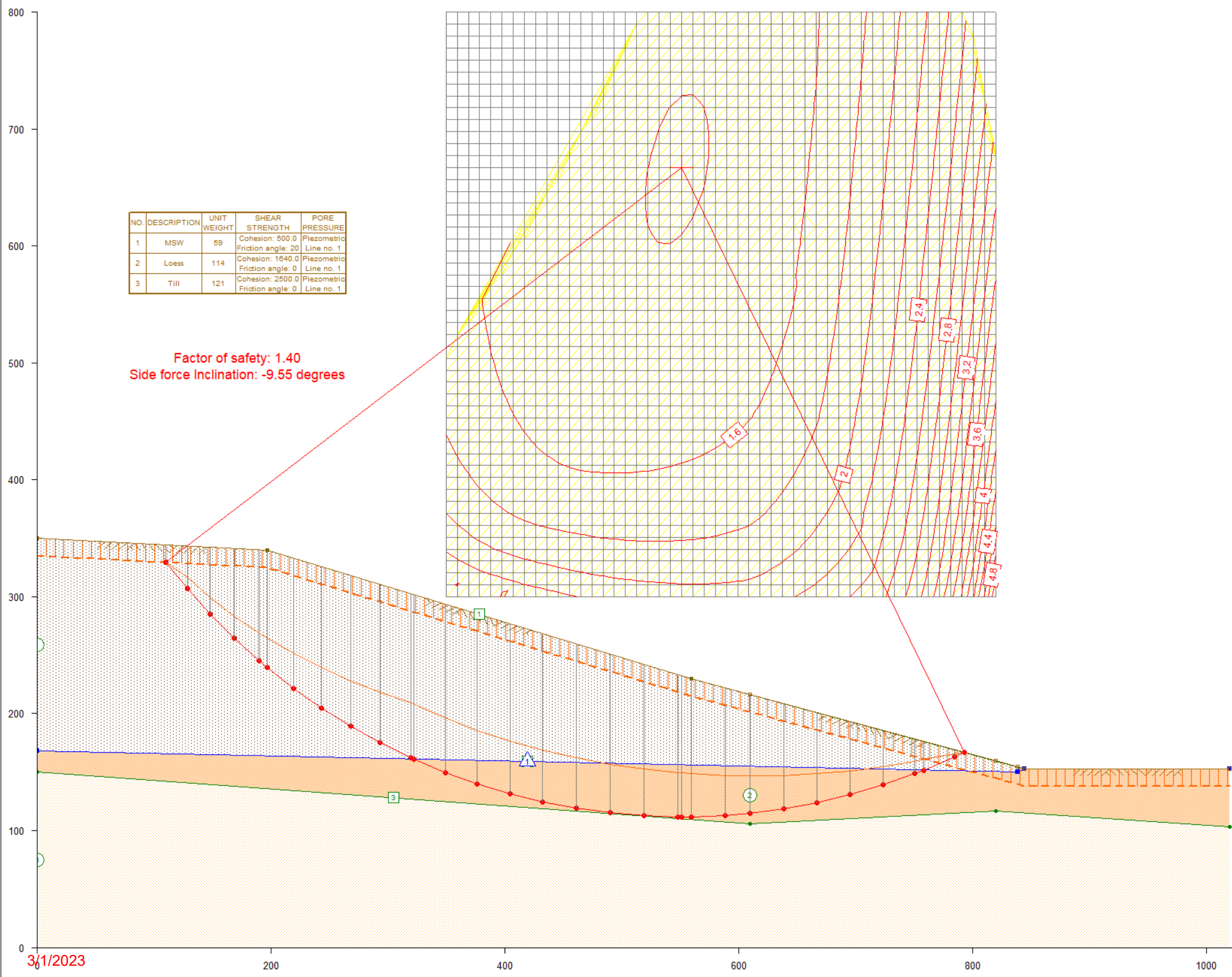
By accepting the data and results presented on this report, the Client agrees to limit the liability of TRI from Client and all other parties for claims on issues, due to the use of this data, to the cost for the respective tests presented in this report; and the Client agrees to indemnify and hold harmless TRI from and against all liabilities in excess of the aforementioned limit.





Client: NNSWC Page 10 of 11
Project: 122625 Date: 9/28/2020 Made by: Textor
NNWSC Landfill Expansion Checked by: _____
Slope Stability and Settlement Prelim: _____ Final: _____

Attachment D – Utexas4 Input/Output and USGS Deaggregation



End of Construction - 1
Undrained Cohesion
9/29/2020
Textor

NNSWC Landfill Expansion

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GRAphics

HEAding follows -

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#122625

PROfile lines

1 1 MSW
0 350
197 340
560 230
845 153

2 2 Loess
0 168
839 150
845 153
1020 153

3 3 Till
0 150.4
610 106
820 116.5
1020 102.9

MATerial properties

1 MSW
59 = unit weight
Conventional Shear Strength
500 20
Piezometric Line
1
2 Loess
114 = unit weight
Conventional Shear Strength
1640 0
Piezometric Line
1
3 Till
121 = unit weight
Conventional Shear Strength
2500 00
Piezometric Line
1

PIEzometric line

1 Piezometric Line
0 168
839 150
845 153
1020 153

LABel

NNSWC Landfill Evaluation - Section D EOC - 1

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ANALYSIS/COMPUTATION

Circular Search 2

50 50

350 300 350 800 820 800 820 300

5 5

Tangent

0 150.4

610 106

820 116.5

1020 102.9

Minimum

5000

Crack

15 D

Short

COMpute

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TABLE NO. 1

COMPUTER PROGRAM DESIGNATION: UTEXAS4

Originally Coded By Stephen G. Wright

Version No. 4.1.0.8 - Last Revision Date: 11/9/2009

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TABLE NO. 3

* NEW PROFILE LINE DATA *

----- Profile Line No. 1 - Material Type (Number): 1 -----

Description: MSW

Point	X	Y
1	0.00	350.00
2	197.00	340.00
3	560.00	230.00
4	845.00	153.00

----- Profile Line No. 2 - Material Type (Number): 2 -----

Description: Loess

Point	X	Y
1	0.00	168.00
2	839.00	150.00
3	845.00	153.00
4	1020.00	153.00

----- Profile Line No. 3 - Material Type (Number): 3 -----

Description: Till

Point	X	Y
1	0.00	150.40
2	610.00	106.00
3	820.00	116.50
4	1020.00	102.90

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TABLE NO. 4

* NEW MATERIAL PROPERTY DATA - CONVENTIONAL/FIRST-STAGE COMPUTATIONS *

----- DATA FOR MATERIAL NUMBER 1 -----

Description: MSW

Constant unit weight of soil (material): 59.0

CONVENTIONAL (ISOTROPIC) SHEAR STRENGTHS
Cohesion - - - - - 500.0
Friction angle - - - - - 20.00 (degrees)

Pore water pressures are defined by a piezometric line.
Piezometric line number: 1
Negative pore water pressures are NOT allowed - set to zero.

----- DATA FOR MATERIAL NUMBER 2 -----

Description: Loess

Constant unit weight of soil (material): 114.0

CONVENTIONAL (ISOTROPIC) SHEAR STRENGTHS
Cohesion - - - - - 1640.0
Friction angle - - - - - 0.00 (degrees)

Pore water pressures are defined by a piezometric line.
Piezometric line number: 1
Negative pore water pressures are NOT allowed - set to zero.

----- DATA FOR MATERIAL NUMBER 3 -----

Description: Till

Constant unit weight of soil (material): 121.0

CONVENTIONAL (ISOTROPIC) SHEAR STRENGTHS
Cohesion - - - - - 2500.0
Friction angle - - - - - 0.00 (degrees)

Pore water pressures are defined by a piezometric line.
Piezometric line number: 1
Negative pore water pressures are NOT allowed - set to zero.

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NNSWC Landfill Evaluation - Section D EOC - 1
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TABLE NO. 6

* NEW PIEZOMETRIC LINE DATA - CONVENTIONAL/FIRST-STAGE COMPUTATIONS *

----- Piezometric Line Number 1 -----

Description: Piezometric Line
Unit weight of fluid (water): 62.4

Point	X	Y
1	0.00	168.00
2	839.00	150.00
3	845.00	153.00
4	1020.00	153.00

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TABLE NO. 16

* NEW ANALYSIS/COMPUTATION DATA *

Search will be conducted using a fixed grid.
Number of Points Across Grid: 50
Number of Points Up Grid: 50

Table with 3 columns: Grid Corner Number, X, Y. Rows 1-4 showing coordinates for grid corners.

----- Control Parameters for Finding "Critical" Radius -----
Initial number of subdivisions between maximum and minimum
radius for finding a critical radius/radii: 5

Minimum radius increment for terminating subdivision of radii: 5.000

The following criteria will be used for determining
the maximum and minimum radii:

Table with 4 columns: Tangent Line, X, Y. Rows showing values for tangent lines at 0.00, 610.00, 820.00, and 1020.00.

Minimum weight required for computations to be performed: 5000

Depth of crack: 15.000
Automatic search output will be in short form.

The following represent default values or values that were previously defined:
Subtended angle for slice subdivision: 3.00(degrees)
There is no water in a crack.
Conventional (single-stage) computations will be performed.
Seismic coefficient: 0.000
Unit weight of water (or other fluid) in crack: 62.4
Search will be continued after the initial mode to find a most critical circle.
No restrictions exist on the lateral extent of the search.
No shear surfaces other than the most critical will be saved for display later.
Neither slope face was explicitly designated for analysis.
Radii for each grid point will be sorted in the order of increasing radius.
Critical circles for grid points will be output in the order of increasing factor of safety.
Standard sign convention used for direction of shear stress on shear surface.
Procedure of Analysis: Spencer

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Iteration limit: 100
Force imbalance: 1.000000e-005 (fraction of total weight)
Moment imbalance: 1.000000e-005 (fraction of moment due to total weight)
Initial trial factor of safety: 3.000
Initial trial side force inclination: 17.189 (degrees)
Minimum (most negative) side force inclination allowed in Spencer's procedure: -10.00

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TABLE NO. 26

* NEW, COMPUTED SLOPE GEOMETRY DATA *

These slope geometry were generated from the Profile Lines.

Point	X	Y
1	0.00	350.00
2	197.00	340.00
3	560.00	230.00
4	610.00	216.49
5	820.00	159.75
6	839.00	154.62
7	845.00	153.00
8	1020.00	153.00

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TABLE NO. 38

* FINAL SUMMARY OF COMPUTATIONS WITH FIXED-GRID *

Number of circles attempted: 2500
Number of circles for which F calculated: 2194
Circle with Lowest Factor of Safety:
 X coordinate for center: 551.43
 Y coordinate for center: 667.35
 Radius of circle: 555.614
Factor of safety: 1.395
Side force inclination: -9.55
Time Required for Computations: 2.0 seconds

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TABLE NO. 43

 * Coordinate, Weight, Strength and Pore Water Pressure *
 * Information for Individual Slices for Conventional *
 * Computations or First Stage of Multi-Stage Computations. *
 * (Information is for the critical shear surface in the *
 * case of an automatic search.) *

Slice No.	X	Y	Slice Weight	Matl. No.	Cohesion	Friction Angle	Pore Pressure
1	110.41	329.40	27891	1	500.0	20.00	0.0
	119.56	318.09					
2	128.70	306.78	53947	1	500.0	20.00	0.0
	138.43	295.96					
3	148.15	285.15	81378	1	500.0	20.00	0.0
	158.43	274.86					
4	168.71	264.57	109698	1	500.0	20.00	0.0
	179.51	254.83					
5	190.31	245.09	38620	1	500.0	20.00	0.0
	193.66	242.27					
6	197.00	239.46	143163	1	500.0	20.00	0.0
	208.44	230.48					
7	219.88	221.50	163279	1	500.0	20.00	0.0
	231.77	213.13					
8	243.67	204.76	181815	1	500.0	20.00	0.0
	255.98	197.02					
9	268.30	189.28	198390	1	500.0	20.00	0.0
	281.00	182.20					
10	293.71	175.12	212660	1	500.0	20.00	0.0
	306.76	168.71					
11	319.82	162.31	22354	1	500.0	20.00	0.0
	321.17	161.69					
12	322.52	161.08	233245	2	1640.0	0.00	334.2
	335.92	155.44					
13	349.32	149.79	256933	2	1640.0	0.00	958.0
	363.01	144.86					
14	376.69	139.93	275810	2	1640.0	0.00	1491.7
	390.61	135.71					
15	404.53	131.50	289457	2	1640.0	0.00	1933.9
	418.65	128.03					
16	432.78	124.55	297547	2	1640.0	0.00	2283.3
	447.06	121.82					
17	461.35	119.08	299847	2	1640.0	0.00	2539.1
	475.76	117.10					
18	490.16	115.12	296224	2	1640.0	0.00	2700.5
	504.66	113.90					
19	519.15	112.67	286642	2	1640.0	0.00	2767.0
	533.69	112.21					
20	548.22	111.74	30790	2	1640.0	0.00	2774.7
	549.83	111.74					
	551.43	111.73					

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21	555.71	111.77	81339	2	1640.0	0.00	2765.0
	560.00	111.80					
22	574.53	112.40	264080	2	1640.0	0.00	2700.0
	589.06	113.01					
23	599.53	113.92	177661	2	1640.0	0.00	2572.0
	610.00	114.83					
24	624.42	116.74	223134	2	1640.0	0.00	2362.7
	638.84	118.65					
25	653.13	121.31	192308	2	1640.0	0.00	2038.8
	667.43	123.98					
26	681.57	127.39	156830	2	1640.0	0.00	1621.9
	695.71	130.79					
27	709.65	134.94	117228	2	1640.0	0.00	1113.1
	723.60	139.08					
28	737.30	143.95	74113	2	1640.0	0.00	513.8
	751.01	148.81					
29	754.71	150.27	12486	2	1640.0	0.00	95.9
	758.42	151.73					
30	771.77	157.50	24082	1	500.0	20.00	0.0
	785.12	163.27					
31	789.09	165.15	1386	1	500.0	20.00	0.0
	793.07	167.03					

No water in crack.

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TABLE NO. 44

```
*****  
* Seismic Forces and Forces Due to Distributed Loads for *  
* Individual Slices for Conventional Computations or the *  
* First Stage of Multi-Stage Computations. *  
* (Information is for the critical shear surface in the *  
* case of an automatic search.) *  
*****
```

There are no seismic forces or forces due to distributed loads
for the current shear surface

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TABLE NO. 47

 * Information for the Iterative Solution for the Factor of *
 * Safety and Side Force Inclination by Spencer's Procedure *

Allowable force imbalance for convergence: 48
 Allowable moment imbalance for convergence: 21311

Iter- ation	Trial Factor of Safety	Trial Side Inclination (degrees)	Force Imbalance (lbs.)	Moment Imbalance (ft.-lbs.)	Delta-F	Delta Theta (degrees)
1	3.00000	-17.1887	-4.887e+005	1.094e+008		
					First-order corrections to F and Theta	-4.3415 32.2236
					Reduced values - Deltas were too large	-0.3860 2.8648
2	2.61402	-14.3239	-4.367e+005	9.791e+007		
					First-order corrections to F and Theta	-2.6194 16.8599
					Reduced values - Deltas were too large	-0.4451 2.8648
3	2.16894	-11.4592	-3.440e+005	7.787e+007		
					First-order corrections to F and Theta	-1.2482 4.7023
					Reduced values - Deltas were too large	-0.5000 1.8837
4	1.66894	-9.5755	-1.624e+005	3.805e+007		
					First-order corrections to F and Theta	-0.3257 0.0422
					Second-order corrections to F and Theta	-0.2801 0.0251
5	1.38884	-9.5503	4.405e+003	-1.022e+006		
					First-order corrections to F and Theta	0.0062 -0.0029
					Second-order corrections to F and Theta	0.0062 -0.0029
6	1.39508	-9.5532	-8.297e-002	1.890e+001		
					First-order corrections to F and Theta	-0.0000 0.0000

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TABLE NO. 55

* Check of Computations by Spencer's Procedure (Results are for the *
* critical shear surface in the case of an automatic search.) *

Summation of Horizontal Forces: 4.12944e-010

Summation of Vertical Forces: 4.96372e-010

Summation of Moments: 1.38545e-006

Mohr Coulomb Shear Force/Shear Strength Check Summation: 1.20161e-010

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TABLE NO. 58

 * Final Results for Stresses Along the Shear Surface *
 * (Results are for the critical shear surface in the case of a search.) *

SPENCER'S PROCEDURE USED TO COMPUTE THE FACTOR OF SAFETY
 Factor of Safety: 1.395 Side Force Inclination: -9.55

----- VALUES AT CENTER OF BASE OF SLICE -----

Slice No.	X-Center	Y-Center	Total	Effective	Shear Stress
			Normal Stress	Normal Stress	
1	119.56	318.09	768.1	768.1	558.8
2	138.43	295.96	1699.0	1699.0	801.7
3	158.43	274.86	2641.3	2641.3	1047.5
4	179.51	254.83	3585.0	3585.0	1293.7
5	193.66	242.27	4201.3	4201.3	1454.5
6	208.44	230.48	4668.1	4668.1	1576.3
7	231.77	213.13	5303.0	5303.0	1741.9
8	255.98	197.02	5887.6	5887.6	1894.5
9	281.00	182.20	6415.6	6415.6	2032.2
10	306.76	168.71	6880.9	6880.9	2153.6
11	321.17	161.69	7118.5	7118.5	2215.6
12	335.92	155.44	7847.0	7512.8	1175.6
13	363.01	144.86	8639.2	7681.2	1175.6
14	390.61	135.71	9276.1	7784.4	1175.6
15	418.65	128.03	9752.4	7818.5	1175.6
16	447.06	121.82	10063.4	7780.1	1175.6
17	475.76	117.10	10205.1	7666.0	1175.6
18	504.66	113.90	10173.6	7473.1	1175.6
19	533.69	112.21	9965.8	7198.8	1175.6
20	549.83	111.74	9794.7	7020.0	1175.6
21	555.71	111.77	9709.1	6944.0	1175.6
22	574.53	112.40	9399.0	6699.0	1175.6
23	599.53	113.92	8916.1	6344.1	1175.6
24	624.42	116.74	8276.3	5913.6	1175.6
25	653.13	121.31	7372.8	5334.0	1175.6
26	681.57	127.39	6281.8	4660.0	1175.6
27	709.65	134.94	5001.6	3888.5	1175.6
28	737.30	143.95	3530.0	3016.2	1175.6
29	754.71	150.27	2510.8	2414.9	1175.6
30	771.77	157.50	1449.7	1449.7	736.6
31	789.09	165.15	536.9	536.9	498.5

NNSWC Landfill Expansion

Cross-Section: D

Case: End of Construction 1 – Undrained Cohesion

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NNSWC Landfill Evaluation - Section D EOC - 1
 #122625

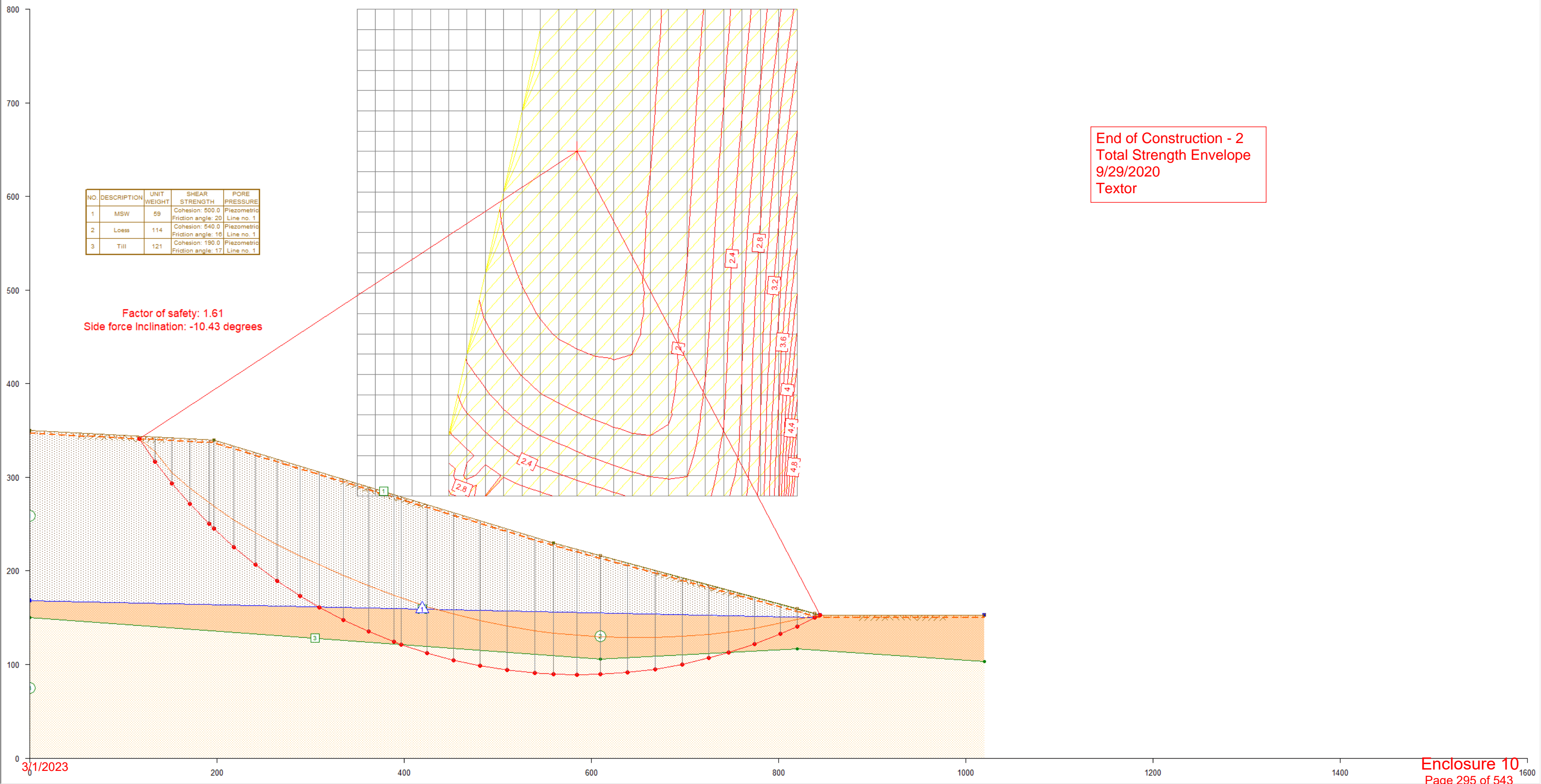
TABLE NO. 59

 * Final Results for Side Forces and Stresses Between Slices *
 * (Results are for the critical shear surface in the case of a search.) *

----- VALUES AT RIGHT SIDE OF SLICE -----

Slice No.	X-Right	Side Force	Y-Coord. of Side Force Location	Fraction of Height	Sigma at Top	Sigma at Bottom
1	128.70	7252	316.55	0.266	-78.4	468.2
2	148.15	28706	299.11	0.244	-265.9	1253.4
3	168.71	61999	283.56	0.247	-411.7	2002.5
4	190.31	104466	268.98	0.251	-535.3	2698.4
5	197.00	118581	264.74	0.251	-571.2	2897.4
6	219.88	167041	251.51	0.269	-569.8	3522.6
7	243.67	215047	239.39	0.286	-497.8	4000.1
8	268.30	260107	228.26	0.302	-374.9	4348.2
9	293.71	299886	218.16	0.317	-207.9	4570.5
10	319.82	332264	209.16	0.334	2.7	4662.3
11	322.52	335066	208.31	0.335	26.8	4663.8
12	349.32	392917	196.35	0.323	-164.0	5543.8
13	376.69	446748	185.81	0.315	-330.6	6381.2
14	404.53	492782	176.67	0.310	-463.8	7138.5
15	432.78	527880	168.84	0.308	-559.3	7789.1
16	461.35	549600	162.27	0.307	-615.8	8313.8
17	490.16	556261	156.90	0.307	-633.8	8698.2
18	519.15	546979	152.71	0.309	-614.1	8931.2
19	548.22	521711	149.67	0.311	-558.6	9004.7
20	551.43	517981	149.40	0.312	-550.6	9003.0
21	560.00	507112	148.75	0.313	-527.0	8988.6
22	589.06	460934	147.25	0.314	-489.7	8819.3
23	610.00	419522	146.84	0.315	-450.0	8588.8
24	638.84	353064	147.20	0.317	-378.4	8111.3
25	667.43	279151	148.60	0.320	-290.0	7440.5
26	695.71	202022	151.03	0.324	-185.1	6556.1
27	723.60	126753	154.51	0.330	-50.1	5400.9
28	751.01	59230	159.30	0.355	252.0	3697.2
29	758.42	42976	161.24	0.386	538.1	2898.6
30	785.12	6066	165.82	0.431	596.1	1428.5
31	793.07	-0	167.03	0.000	0.0	0.0

Read end-of-file on input while looking for another command word.
 End of input data assumed - normal termination.



End of Construction - 2
Total Strength Envelope
9/29/2020
Textor

NNSWC Landfill Expansion

Cross-Section: D

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UTEXAS4 Input File

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GRaphics

HEAding follows -

NNSWC Landfill Evaluation - Section D EOC - 2
#122625

PROfile lines

1 1 MSW
0 350
197 340
560 230
845 153

2 2 Loess
0 168
839 150
845 153
1020 153

3 3 Till
0 150.4
610 106
820 116.5
1020 102.9

MATerial properties

1 MSW
59 = unit weight
Conventional Shear Strength
500 20
Piezometric Line
1

2 Loess
114 = unit weight
Conventional Shear Strength
540 16
Piezometric Line
1

3 Till
121 = unit weight
Conventional Shear Strength
190 17
Piezometric Line
1

PIEzometric line

1 Piezometric Line
0 168
839 150
845 153
1020 153

LABel

NNSWC Landfill Evaluation - Section D EOC - 2

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ANALYSIS/COMPUTATION

Circular Search 2

25 25

350 280 350 800 820 800 820 280

5 5

Point

845 153

Minimum

5000

Crack

3 D

Short

COMpute

NNSWC Landfill Expansion

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TABLE NO. 1

COMPUTER PROGRAM DESIGNATION: UTEXAS4

Originally Coded By Stephen G. Wright

Version No. 4.1.0.8 - Last Revision Date: 11/9/2009

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```
*****  
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NNSWC Landfill Expansion

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NNSWC Landfill Evaluation - Section D EOC - 2
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TABLE NO. 3

* NEW PROFILE LINE DATA *

----- Profile Line No. 1 - Material Type (Number): 1 -----

Description: MSW

Point	X	Y
1	0.00	350.00
2	197.00	340.00
3	560.00	230.00
4	845.00	153.00

----- Profile Line No. 2 - Material Type (Number): 2 -----

Description: Loess

Point	X	Y
1	0.00	168.00
2	839.00	150.00
3	845.00	153.00
4	1020.00	153.00

----- Profile Line No. 3 - Material Type (Number): 3 -----

Description: Till

Point	X	Y
1	0.00	150.40
2	610.00	106.00
3	820.00	116.50
4	1020.00	102.90

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NNSWC Landfill Evaluation - Section D EOC - 2
#122625

TABLE NO. 4

* NEW MATERIAL PROPERTY DATA - CONVENTIONAL/FIRST-STAGE COMPUTATIONS *

----- DATA FOR MATERIAL NUMBER 1 -----

Description: MSW

Constant unit weight of soil (material): 59.0

CONVENTIONAL (ISOTROPIC) SHEAR STRENGTHS
Cohesion - - - - - 500.0
Friction angle - - - - 20.00 (degrees)

Pore water pressures are defined by a piezometric line.
Piezometric line number: 1
Negative pore water pressures are NOT allowed - set to zero.

----- DATA FOR MATERIAL NUMBER 2 -----

Description: Loess

Constant unit weight of soil (material): 114.0

CONVENTIONAL (ISOTROPIC) SHEAR STRENGTHS
Cohesion - - - - - 540.0
Friction angle - - - - 16.00 (degrees)

Pore water pressures are defined by a piezometric line.
Piezometric line number: 1
Negative pore water pressures are NOT allowed - set to zero.

----- DATA FOR MATERIAL NUMBER 3 -----

Description: Till

Constant unit weight of soil (material): 121.0

CONVENTIONAL (ISOTROPIC) SHEAR STRENGTHS
Cohesion - - - - - 190.0
Friction angle - - - - 17.00 (degrees)

Pore water pressures are defined by a piezometric line.
Piezometric line number: 1
Negative pore water pressures are NOT allowed - set to zero.

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NNSWC Landfill Evaluation - Section D EOC - 2
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TABLE NO. 6

* NEW PIEZOMETRIC LINE DATA - CONVENTIONAL/FIRST-STAGE COMPUTATIONS *

----- Piezometric Line Number 1 -----

Description: Piezometric Line
Unit weight of fluid (water): 62.4

Point	X	Y
1	0.00	168.00
2	839.00	150.00
3	845.00	153.00
4	1020.00	153.00

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NNSWC Landfill Evaluation - Section D EOC - 2
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TABLE NO. 16

* NEW ANALYSIS/COMPUTATION DATA *

Search will be conducted using a fixed grid.
Number of Points Across Grid: 25
Number of Points Up Grid: 25

Table with 3 columns: Grid Corner Number, X, Y. Rows 1-4 with coordinates (350.00, 280.00), (350.00, 800.00), (820.00, 800.00), (820.00, 280.00).

----- Control Parameters for Finding "Critical" Radius -----
Initial number of subdivisions between maximum and minimum
radius for finding a critical radius/radii: 5
Minimum radius increment for terminating subdivision of radii: 5.000

The following criteria will be used for determining
the maximum and minimum radii:
Point circles pass through - X: 845.00 Y: 153.00
Minimum weight required for computations to be performed: 5000

Depth of crack: 3.000
Automatic search output will be in short form.

The following represent default values or values that were previously defined:
Subtended angle for slice subdivision: 3.00(degrees)
There is no water in a crack.
Conventional (single-stage) computations will be performed.
Seismic coefficient: 0.000
Unit weight of water (or other fluid) in crack: 62.4
Search will be continued after the initial mode to find a most critical circle.
No restrictions exist on the lateral extent of the search.
No shear surfaces other than the most critical will be saved for display later.
Neither slope face was explicitly designated for analysis.
Radii for each grid point will be sorted in the order of increasing radius.
Critical circles for grid points will be output in the order of increasing factor of safety.
Standard sign convention used for direction of shear stress on shear surface.
Procedure of Analysis: Spencer

Iteration limit: 100
Force imbalance: 1.000000e-005 (fraction of total weight)
Moment imbalance: 1.000000e-005 (fraction of moment due to total weight)
Initial trial factor of safety: 3.000

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Initial trial side force inclination: 17.189 (degrees)

Minimum (most negative) side force inclination allowed in Spencer's procedure: -10.00

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TABLE NO. 26

* NEW, COMPUTED SLOPE GEOMETRY DATA *

These slope geometry were generated from the Profile Lines.

Point	X	Y
1	0.00	350.00
2	197.00	340.00
3	560.00	230.00
4	610.00	216.49
5	820.00	159.75
6	839.00	154.62
7	845.00	153.00
8	1020.00	153.00

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TABLE NO. 38

* FINAL SUMMARY OF COMPUTATIONS WITH FIXED-GRID *

Number of circles attempted: 625
Number of circles for which F calculated: 434
Circle with Lowest Factor of Safety:
 X coordinate for center: 585.00
 Y coordinate for center: 648.33
 Radius of circle: 559.424
Factor of safety: 1.615
Side force inclination: -10.43
Time Required for Computations: 0.0 seconds

NNSWC Landfill Expansion

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TABLE NO. 43

 * Coordinate, Weight, Strength and Pore Water Pressure *
 * Information for Individual Slices for Conventional *
 * Computations or First Stage of Multi-Stage Computations. *
 * (Information is for the critical shear surface in the *
 * case of an automatic search.) *

Slice No.	X	Y	Slice Weight	Matl. No.	Cohesion	Friction Angle	Pore Pressure
1	117.54	341.03	14403	1	500.0	20.00	0.0
	125.90	329.01					
	134.26	316.99					
2	143.24	305.42	39530	1	500.0	20.00	0.0
	152.22	293.85					
3	161.79	282.77	66662	1	500.0	20.00	0.0
	171.36	271.69					
4	181.50	261.12	95313	1	500.0	20.00	0.0
	191.64	250.56					
5	194.32	247.94	29138	1	500.0	20.00	0.0
	197.00	245.33					
6	207.81	235.45	129198	1	500.0	20.00	0.0
	218.62	225.58					
7	229.94	216.28	151845	1	500.0	20.00	0.0
	241.25	206.98					
8	253.04	198.29	173452	1	500.0	20.00	0.0
	264.82	189.60					
9	277.04	181.53	193587	1	500.0	20.00	0.0
	289.27	173.47					
10	299.47	167.41	170344	1	500.0	20.00	0.0
	309.67	161.36					
11	322.60	154.49	234390	2	540.0	16.00	411.5
	335.53	147.61					
12	348.80	141.43	266841	2	540.0	16.00	1191.1
	362.08	135.24					
13	375.66	129.76	295205	2	540.0	16.00	1883.1
	389.24	124.28					
14	393.02	122.90	85568	2	540.0	16.00	2288.1
	396.79	121.52					
15	410.71	116.95	325228	3	190.0	17.00	2635.4
	424.62	112.39					
16	438.76	108.56	343559	3	190.0	17.00	3121.6
	452.89	104.73					
17	467.21	101.65	355973	3	190.0	17.00	3514.9
	481.52	98.56					
18	495.98	96.23	362167	3	190.0	17.00	3814.4
	510.44	93.90					
19	525.00	92.33	361942	3	190.0	17.00	4019.0
	539.56	90.76					
20	549.78	90.11	249669	3	190.0	17.00	4124.1
	560.00	89.47					

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21	572.50	89.19	297612	3	190.0	17.00	4151.4
	585.00	88.91					
22	597.50	89.19	286593	3	190.0	17.00	4117.9
	610.00	89.47					
23	624.61	90.51	316658	3	190.0	17.00	3999.5
	639.21	91.54					
24	653.75	93.34	290864	3	190.0	17.00	3783.4
	668.28	95.14					
25	682.70	97.70	259370	3	190.0	17.00	3472.7
	697.12	100.26					
26	711.38	103.57	222625	3	190.0	17.00	3068.1
	725.65	106.88					
27	736.27	109.86	140677	3	190.0	17.00	2642.2
	746.88	112.84					
28	760.79	117.45	147989	2	540.0	16.00	2136.0
	774.69	122.05					
29	788.33	127.37	101479	2	540.0	16.00	1479.6
	801.97	132.70					
30	810.99	136.68	40937	2	540.0	16.00	868.6
	820.00	140.66					
31	829.50	145.28	18495	2	540.0	16.00	307.3
	839.00	149.90					
32	842.00	151.45	853	2	540.0	16.00	3.2
	845.00	153.00					

No water in crack.

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TABLE NO. 44

* Seismic Forces and Forces Due to Distributed Loads for *
* Individual Slices for Conventional Computations or the *
* First Stage of Multi-Stage Computations. *
* (Information is for the critical shear surface in the *
* case of an automatic search.) *

There are no seismic forces or forces due to distributed loads
for the current shear surface

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TABLE NO. 47

 * Information for the Iterative Solution for the Factor of *
 * Safety and Side Force Inclination by Spencer's Procedure *

Allowable force imbalance for convergence: 61
 Allowable moment imbalance for convergence: 29327

Iter- ation	Trial Factor of Safety	Trial Side Force Inclination (degrees)	Force Imbalance (lbs.)	Moment Imbalance (ft.-lbs.)	Delta-F	Delta Theta (degrees)
1	3.00000	-17.1887	-4.772e+005	9.213e+007		
					First-order corrections to F and Theta	-2.9468 15.7925
					Reduced values - Deltas were too large	-0.5000 2.6796
2	2.50000	-14.5091	-3.755e+005	7.252e+007		
					First-order corrections to F and Theta	-1.4753 7.7105
					Reduced values - Deltas were too large	-0.5000 2.6132
3	2.00000	-11.8959	-2.109e+005	4.140e+007		
					First-order corrections to F and Theta	-0.4871 2.0260
					Second-order corrections to F and Theta	-0.3989 1.5442
4	1.60111	-10.3517	8.981e+003	-1.556e+006		
					First-order corrections to F and Theta	0.0134 -0.0805
					Second-order corrections to F and Theta	0.0135 -0.0815
5	1.61461	-10.4332	-6.503e-001	9.328e+001		
					First-order corrections to F and Theta	-0.0000 0.0000

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TABLE NO. 55

* Check of Computations by Spencer's Procedure (Results are for the *
* critical shear surface in the case of an automatic search.) *

Summation of Horizontal Forces: 5.44605e-010

Summation of Vertical Forces: 4.96989e-010

Summation of Moments: 5.93853e-005

Mohr Coulomb Shear Force/Shear Strength Check Summation: 1.97582e-010

NNSWC Landfill Expansion

Cross-Section: D

Case: End of Construction 2 – Total Strength Envelope

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TABLE NO. 58

 * Final Results for Stresses Along the Shear Surface *
 * (Results are for the critical shear surface in the case of a search.) *

SPENCER'S PROCEDURE USED TO COMPUTE THE FACTOR OF SAFETY
 Factor of Safety: 1.615 Side Force Inclination: -10.43

----- VALUES AT CENTER OF BASE OF SLICE -----

Slice No.	X-Center	Y-Center	Total	Effective	Shear Stress
			Normal Stress	Normal Stress	
1	125.90	329.01	305.7	305.7	378.6
2	143.24	305.42	1251.1	1251.1	591.7
3	161.79	282.77	2220.0	2220.0	810.1
4	181.50	261.12	3201.1	3201.1	1031.3
5	194.32	247.94	3824.5	3824.5	1171.8
6	207.81	235.45	4314.0	4314.0	1282.2
7	229.94	216.28	5029.2	5029.2	1443.4
8	253.04	198.29	5701.9	5701.9	1595.0
9	277.04	181.53	6324.9	6324.9	1735.4
10	299.47	167.41	6843.8	6843.8	1852.4
11	322.60	154.49	7737.6	7326.1	1635.5
12	348.80	141.43	8818.8	7627.7	1689.1
13	375.66	129.76	9763.3	7880.1	1733.9
14	393.02	122.90	10308.8	8020.7	1758.9
15	410.71	116.95	10795.3	8159.9	1662.8
16	438.76	108.56	11435.9	8314.3	1692.0
17	467.21	101.65	11907.3	8392.3	1706.8
18	495.98	96.23	12202.2	8387.8	1705.9
19	525.00	92.33	12313.8	8294.7	1688.3
20	549.78	90.11	12271.4	8147.3	1660.4
21	572.50	89.19	12117.6	7966.3	1626.1
22	597.50	89.19	11838.6	7720.7	1579.6
23	624.61	90.51	11374.1	7374.6	1514.1
24	653.75	93.34	10689.9	6906.5	1425.4
25	682.70	97.70	9788.9	6316.3	1313.7
26	711.38	103.57	8663.0	5594.8	1177.1
27	736.27	109.86	7494.0	4851.9	1036.4
28	760.79	117.45	6253.0	4117.0	1065.6
29	788.33	127.37	4552.1	3072.5	880.1
30	810.99	136.68	2951.5	2082.9	704.3
31	829.50	145.28	1466.9	1159.6	540.4
32	842.00	151.45	482.4	479.2	419.5

NNSWC Landfill Expansion

Cross-Section: D

Case: End of Construction 2 – Total Strength Envelope

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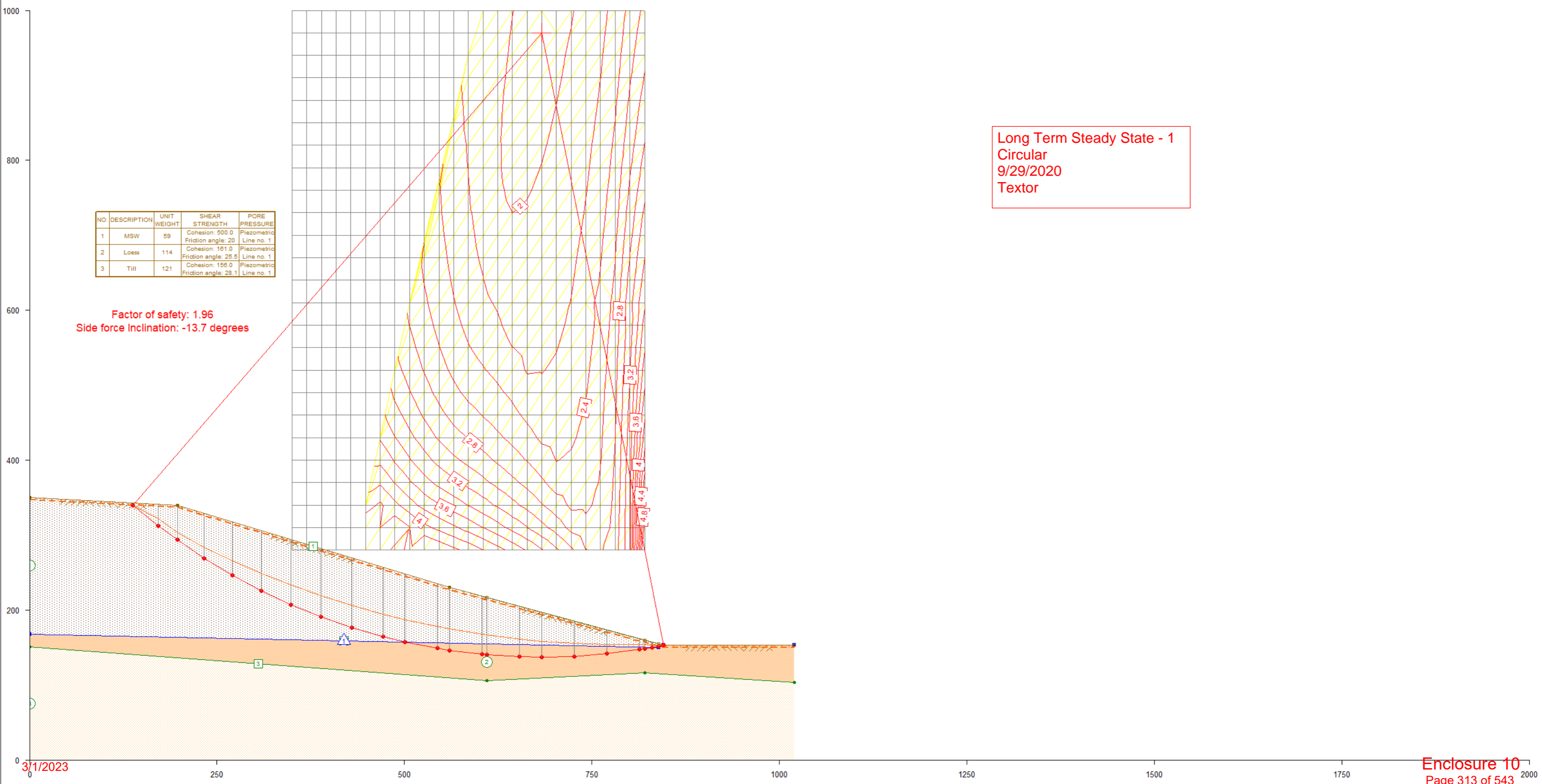
TABLE NO. 59

 * Final Results for Side Forces and Stresses Between Slices *
 * (Results are for the critical shear surface in the case of a search.) *

----- VALUES AT RIGHT SIDE OF SLICE -----

Slice No.	X-Right	Side Force	Y-Coord. of Side Force Location	Fraction of Height	Sigma at Top	Sigma at Bottom
1	134.26	1037	327.47	0.400	15.6	62.2
2	152.22	19663	304.84	0.227	-254.9	1053.6
3	171.36	53924	288.41	0.240	-425.4	1949.1
4	191.64	101442	272.77	0.248	-572.0	2796.1
5	197.00	115386	268.84	0.248	-611.0	3008.4
6	218.62	173848	254.30	0.266	-637.4	3807.4
7	241.25	235731	240.70	0.282	-597.9	4474.4
8	264.82	298302	227.92	0.295	-517.7	5036.2
9	289.27	358886	215.97	0.307	-407.0	5501.1
10	309.67	404743	206.92	0.315	-297.4	5806.7
11	335.53	469853	195.22	0.317	-309.5	6453.9
12	362.08	535180	184.07	0.316	-363.2	7166.3
13	389.24	596139	173.77	0.314	-425.5	7872.0
14	396.79	611570	171.11	0.314	-441.6	8058.0
15	424.62	664713	161.86	0.312	-530.8	8772.8
16	452.89	705138	153.75	0.311	-594.7	9388.2
17	481.52	730140	146.79	0.311	-628.9	9881.3
18	510.44	737828	140.96	0.311	-631.3	10234.8
19	539.56	727186	136.27	0.313	-601.4	10436.1
20	560.00	708767	133.66	0.314	-561.8	10482.0
21	585.00	674317	131.21	0.315	-546.4	10419.6
22	610.00	627435	129.57	0.316	-512.7	10228.5
23	639.21	558469	128.69	0.317	-450.5	9834.7
24	668.28	477205	128.90	0.320	-364.8	9253.1
25	697.12	387756	130.17	0.323	-262.1	8490.1
26	725.65	295306	132.43	0.326	-162.9	7574.8
27	746.88	227469	134.66	0.327	-121.5	6833.0
28	774.69	138810	138.90	0.337	67.5	5399.0
29	801.97	65105	144.09	0.357	282.3	3728.7
30	820.00	28295	148.25	0.397	560.8	2354.2
31	839.00	4082	152.00	0.445	571.2	1128.3
32	845.00	-0	153.00	0.000	0.0	0.0

Read end-of-file on input while looking for another command word.
 End of input data assumed - normal termination.



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UTEXAS4 Input File

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GRAphics

HEAding follows -

NNSWC Landfill Evaluation - Section D LTSS - 1
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PROfile lines

1 1 MSW
0 350
197 340
560 230
845 153

2 2 Loess
0 168
839 150
845 153
1020 153

3 3 Till
0 150.4
610 106
820 116.5
1020 102.9

MATERial properties

1 MSW
59 = unit weight
Conventional Shear Strength
500 20
Piezometric Line
1

2 Loess
114 = unit weight
Conventional Shear Strength
161 25.5
Piezometric Line
1

3 Till
121 = unit weight
Conventional Shear Strength
156 28.1
Piezometric Line
1

PIEzometric line

1 Piezometric Line
0 168
839 150
845 153
1020 153

LABel

NNSWC Landfill Evaluation - Section D LTSS - 1

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ANALYSIS/COMPUTATION

Circular Search 2

25 25

350 280 350 1000 820 1000 820 280

5 5

Point

845 153

Minimum

5000

Crack

3 D

Short

COMpute

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TABLE NO. 1

COMPUTER PROGRAM DESIGNATION: UTEXAS4

Originally Coded By Stephen G. Wright

Version No. 4.1.0.8 - Last Revision Date: 11/9/2009

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```
*****  
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* BEEN VERIFIED BY INDEPENDENT ANALYSES, EXPERIMENTAL DATA *  
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NNSWC Landfill Evaluation - Section D LTSS - 1
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TABLE NO. 3

* NEW PROFILE LINE DATA *

----- Profile Line No. 1 - Material Type (Number): 1 -----

Description: MSW

Point	X	Y
1	0.00	350.00
2	197.00	340.00
3	560.00	230.00
4	845.00	153.00

----- Profile Line No. 2 - Material Type (Number): 2 -----

Description: Loess

Point	X	Y
1	0.00	168.00
2	839.00	150.00
3	845.00	153.00
4	1020.00	153.00

----- Profile Line No. 3 - Material Type (Number): 3 -----

Description: Till

Point	X	Y
1	0.00	150.40
2	610.00	106.00
3	820.00	116.50
4	1020.00	102.90

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TABLE NO. 4

* NEW MATERIAL PROPERTY DATA - CONVENTIONAL/FIRST-STAGE COMPUTATIONS *

----- DATA FOR MATERIAL NUMBER 1 -----

Description: MSW

Constant unit weight of soil (material): 59.0

CONVENTIONAL (ISOTROPIC) SHEAR STRENGTHS
Cohesion - - - - - 500.0
Friction angle - - - - - 20.00 (degrees)

Pore water pressures are defined by a piezometric line.
Piezometric line number: 1
Negative pore water pressures are NOT allowed - set to zero.

----- DATA FOR MATERIAL NUMBER 2 -----

Description: Loess

Constant unit weight of soil (material): 114.0

CONVENTIONAL (ISOTROPIC) SHEAR STRENGTHS
Cohesion - - - - - 161.0
Friction angle - - - - - 25.50 (degrees)

Pore water pressures are defined by a piezometric line.
Piezometric line number: 1
Negative pore water pressures are NOT allowed - set to zero.

----- DATA FOR MATERIAL NUMBER 3 -----

Description: Till

Constant unit weight of soil (material): 121.0

CONVENTIONAL (ISOTROPIC) SHEAR STRENGTHS
Cohesion - - - - - 156.0
Friction angle - - - - - 28.10 (degrees)

Pore water pressures are defined by a piezometric line.
Piezometric line number: 1
Negative pore water pressures are NOT allowed - set to zero.

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TABLE NO. 6

* NEW PIEZOMETRIC LINE DATA - CONVENTIONAL/FIRST-STAGE COMPUTATIONS *

----- Piezometric Line Number 1 -----

Description: Piezometric Line
Unit weight of fluid (water): 62.4

Point	X	Y
1	0.00	168.00
2	839.00	150.00
3	845.00	153.00
4	1020.00	153.00

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TABLE NO. 16

* NEW ANALYSIS/COMPUTATION DATA *

Search will be conducted using a fixed grid.
Number of Points Across Grid: 25
Number of Points Up Grid: 25

Table with 3 columns: Grid Corner Number, X, Y. Rows 1-4 with coordinates: (1, 350.00, 280.00), (2, 350.00, 1000.00), (3, 820.00, 1000.00), (4, 820.00, 280.00)

----- Control Parameters for Finding "Critical" Radius -----
Initial number of subdivisions between maximum and minimum
radius for finding a critical radius/radii: 5
Minimum radius increment for terminating subdivision of radii: 5.000

The following criteria will be used for determining
the maximum and minimum radii:
Point circles pass through - X: 845.00 Y: 153.00
Minimum weight required for computations to be performed: 5000

Depth of crack: 3.000
Automatic search output will be in short form.

The following represent default values or values that were previously defined:
Subtended angle for slice subdivision: 3.00(degrees)
There is no water in a crack.
Conventional (single-stage) computations will be performed.
Seismic coefficient: 0.000
Unit weight of water (or other fluid) in crack: 62.4
Search will be continued after the initial mode to find a most critical circle.
No restrictions exist on the lateral extent of the search.
No shear surfaces other than the most critical will be saved for display later.
Neither slope face was explicitly designated for analysis.
Radii for each grid point will be sorted in the order of increasing radius.
Critical circles for grid points will be output in the order of increasing factor of safety.
Standard sign convention used for direction of shear stress on shear surface.
Procedure of Analysis: Spencer

Iteration limit: 100
Force imbalance: 1.000000e-005 (fraction of total weight)
Moment imbalance: 1.000000e-005 (fraction of moment due to total weight)
Initial trial factor of safety: 3.000

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Initial trial side force inclination: 17.189 (degrees)

Minimum (most negative) side force inclination allowed in Spencer's procedure: -10.00

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TABLE NO. 26

* NEW, COMPUTED SLOPE GEOMETRY DATA *

These slope geometry were generated from the Profile Lines.

Point	X	Y
1	0.00	350.00
2	197.00	340.00
3	560.00	230.00
4	610.00	216.49
5	820.00	159.75
6	839.00	154.62
7	845.00	153.00
8	1020.00	153.00

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TABLE NO. 38

* FINAL SUMMARY OF COMPUTATIONS WITH FIXED-GRID *

Number of circles attempted: 625
Number of circles for which F calculated: 402
Circle with Lowest Factor of Safety:
 X coordinate for center: 682.92
 Y coordinate for center: 970.00
 Radius of circle: 832.923
Factor of safety: 1.956
Side force inclination: -13.70
Time Required for Computations: 0.0 seconds

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TABLE NO. 43

 * Coordinate, Weight, Strength and Pore Water Pressure *
 * Information for Individual Slices for Conventional *
 * Computations or First Stage of Multi-Stage Computations. *
 * (Information is for the critical shear surface in the *
 * case of an automatic search.) *

Slice No.	X	Y	Slice Weight	Matl. No.	Cohesion	Friction Angle	Pore Pressure
1	138.08	339.99					
	154.94	326.17	31770	1	500.0	20.00	0.0
	171.80	312.34					
2	184.40	302.92	56084	1	500.0	20.00	0.0
	197.00	293.51					
3	215.04	281.25	113392	1	500.0	20.00	0.0
	233.07	269.00					
4	251.72	257.71	144617	1	500.0	20.00	0.0
	270.37	246.42					
5	289.59	236.12	171938	1	500.0	20.00	0.0
	308.81	225.82					
6	328.54	216.54	194631	1	500.0	20.00	0.0
	348.27	207.26					
7	368.46	199.03	212061	1	500.0	20.00	0.0
	388.65	190.79					
8	409.24	183.63	223692	1	500.0	20.00	0.0
	429.83	176.46					
9	450.77	170.38	229091	1	500.0	20.00	0.0
	471.71	164.30					
10	486.19	160.78	156537	1	500.0	20.00	0.0
	500.68	157.26					
11	522.07	153.05	232102	2	161.0	25.50	234.2
	543.46	148.83					
12	551.73	147.52	90789	2	161.0	25.50	539.6
	560.00	146.20					
13	581.64	143.54	234359	2	161.0	25.50	747.3
	603.28	140.89					
14	606.64	140.58	35762	2	161.0	25.50	898.6
	610.00	140.28					
15	631.76	138.94	221189	2	161.0	25.50	967.8
	653.52	137.60					
16	668.22	137.34	136382	2	161.0	25.50	1018.8
	682.92	137.08					
17	704.71	137.65	173486	2	161.0	25.50	950.5
	726.51	138.22					
18	748.24	139.93	129305	2	161.0	25.50	749.9
	769.98	141.64					
19	791.60	144.49	74049	2	161.0	25.50	407.5
	813.21	147.33					
20	816.61	147.88	6088	2	161.0	25.50	162.0
	820.00	148.44					

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21	825.07	149.31	5973	2	161.0	25.50	61.5
	830.13	150.19					
22	834.57	151.01	2516	1	500.0	20.00	0.0
	839.00	151.83					
23	842.00	152.42	494	1	500.0	20.00	0.0
	845.00	153.00					

No water in crack.

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TABLE NO. 44

* Seismic Forces and Forces Due to Distributed Loads for *
* Individual Slices for Conventional Computations or the *
* First Stage of Multi-Stage Computations. *
* (Information is for the critical shear surface in the *
* case of an automatic search.) *

There are no seismic forces or forces due to distributed loads
for the current shear surface

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TABLE NO. 47

 * Information for the Iterative Solution for the Factor of *
 * Safety and Side Force Inclination by Spencer's Procedure *

Allowable force imbalance for convergence: 29
 Allowable moment imbalance for convergence: 13890

Iter- ation	Trial Factor of Safety	Trial Side Force Inclination (degrees)	Force Imbalance (lbs.)	Moment Imbalance (ft.-lbs.)	Delta-F	Delta Theta (degrees)
1	3.00000	-17.1887	-2.410e+005	7.040e+007		
					First-order corrections to F and Theta	-2.5893 101.4771
					Reduced values - Deltas were too large	-0.0731 2.8648
2	2.92690	-14.3239	-2.342e+005	6.843e+007		
					First-order corrections to F and Theta	-1.8723 39.1924
					Reduced values - Deltas were too large	-0.1369 2.8648
3	2.79004	-11.4592	-2.164e+005	6.348e+007		
					First-order corrections to F and Theta	-0.7626 -41.3580
					Reduced values - Deltas were too large	-0.0528 -2.8648
4	2.73722	-14.3239	-2.014e+005	5.867e+007		
					First-order corrections to F and Theta	-1.1261 4.0438
					Reduced values - Deltas were too large	-0.5000 1.7954
5	2.23722	-12.5285	-9.172e+004	2.803e+007		
					First-order corrections to F and Theta	-0.3164 -1.9538
					Second-order corrections to F and Theta	-0.2848 -1.2280
6	1.95242	-13.7566	1.599e+003	-5.617e+005		
					First-order corrections to F and Theta	0.0040 0.0534
					Second-order corrections to F and Theta	0.0040 0.0538
7	1.95643	-13.7027	-8.833e-003	3.944e+000		
					First-order corrections to F and Theta	-0.0000 -0.0000

NNSWC Landfill Expansion

Cross-Section: D

Case: Long Term Steady State 1 – Circular

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NNSWC Landfill Evaluation - Section D LTSS - 1
#122625

TABLE NO. 55

* Check of Computations by Spencer's Procedure (Results are for the *
* critical shear surface in the case of an automatic search.) *

Summation of Horizontal Forces: 1.06996e-010

Summation of Vertical Forces: 2.13797e-010

Summation of Moments: 7.65845e-008

Mohr Coulomb Shear Force/Shear Strength Check Summation: 6.27561e-011

NNSWC Landfill Expansion

Cross-Section: D

Case: Long Term Steady State 1 – Circular

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TABLE NO. 58

 * Final Results for Stresses Along the Shear Surface *
 * (Results are for the critical shear surface in the case of a search.) *

SPENCER'S PROCEDURE USED TO COMPUTE THE FACTOR OF SAFETY
 Factor of Safety: 1.956 Side Force Inclination: -13.70

----- VALUES AT CENTER OF BASE OF SLICE -----

Slice No.	X-Center	Y-Center	Total	Effective	Shear Stress
			Normal Stress	Normal Stress	
1	154.94	326.17	608.2	608.2	368.7
2	184.40	302.92	1643.3	1643.3	561.3
3	215.04	281.25	2432.3	2432.3	708.1
4	251.72	257.71	3115.0	3115.0	835.1
5	289.59	236.12	3712.0	3712.0	946.1
6	328.54	216.54	4213.7	4213.7	1039.5
7	368.46	199.03	4610.8	4610.8	1113.4
8	409.24	183.63	4894.7	4894.7	1166.2
9	450.77	170.38	5056.9	5056.9	1196.3
10	486.19	160.78	5102.0	5102.0	1204.7
11	522.07	153.05	5234.6	5000.4	1301.4
12	551.73	147.52	5387.1	4847.5	1264.1
13	581.64	143.54	5400.8	4653.5	1216.8
14	606.64	140.58	5381.9	4483.3	1175.3
15	631.76	138.94	5207.2	4239.3	1115.8
16	668.22	137.34	4849.0	3830.2	1016.1
17	704.71	137.65	4246.1	3295.5	885.7
18	748.24	139.93	3261.0	2511.1	694.5
19	791.60	144.49	1947.1	1539.6	457.6
20	816.61	147.88	1062.0	900.0	301.7
21	825.07	149.31	721.4	659.9	243.2
22	834.57	151.01	449.5	449.5	339.2
23	842.00	152.42	223.1	223.1	297.1

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Cross-Section: D

Case: Long Term Steady State 1 – Circular

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TABLE NO. 59

 * Final Results for Side Forces and Stresses Between Slices *
 * (Results are for the critical shear surface in the case of a search.) *

----- VALUES AT RIGHT SIDE OF SLICE -----

Slice No.	X-Right	Side Force	Y-Coord. of Side Force Location	Fraction of Height	Sigma at Top	Sigma at Bottom
1	171.80	4512	322.05	0.336	2.1	300.8
2	197.00	21809	303.17	0.208	-342.9	1254.3
3	233.07	56868	283.58	0.243	-500.6	2340.1
4	270.37	97209	265.63	0.269	-508.5	3155.9
5	308.81	138483	248.86	0.287	-466.2	3817.3
6	348.27	176759	233.28	0.299	-401.7	4354.0
7	388.65	208646	218.96	0.309	-324.3	4772.9
8	429.83	231423	205.93	0.317	-237.7	5073.6
9	471.71	243138	194.25	0.324	-143.6	5253.5
10	500.68	244199	187.06	0.329	-75.8	5306.3
11	543.46	232275	178.11	0.340	99.5	5137.8
12	560.00	225383	174.95	0.343	152.6	5073.2
13	603.28	200659	167.61	0.345	178.7	4857.8
14	610.00	195955	166.60	0.345	181.6	4814.1
15	653.52	160325	160.96	0.348	204.6	4435.6
16	682.92	132174	158.06	0.351	233.7	4067.2
17	726.51	87443	155.16	0.362	312.6	3318.4
18	769.98	44883	153.98	0.390	469.1	2288.3
19	813.21	13111	153.66	0.444	593.0	1194.0
20	820.00	9798	153.68	0.463	656.1	1025.8
21	830.13	5959	153.23	0.445	568.0	1128.0
22	839.00	2103	153.15	0.472	608.0	857.2
23	845.00	-0	153.00	1.000	0.0	0.0

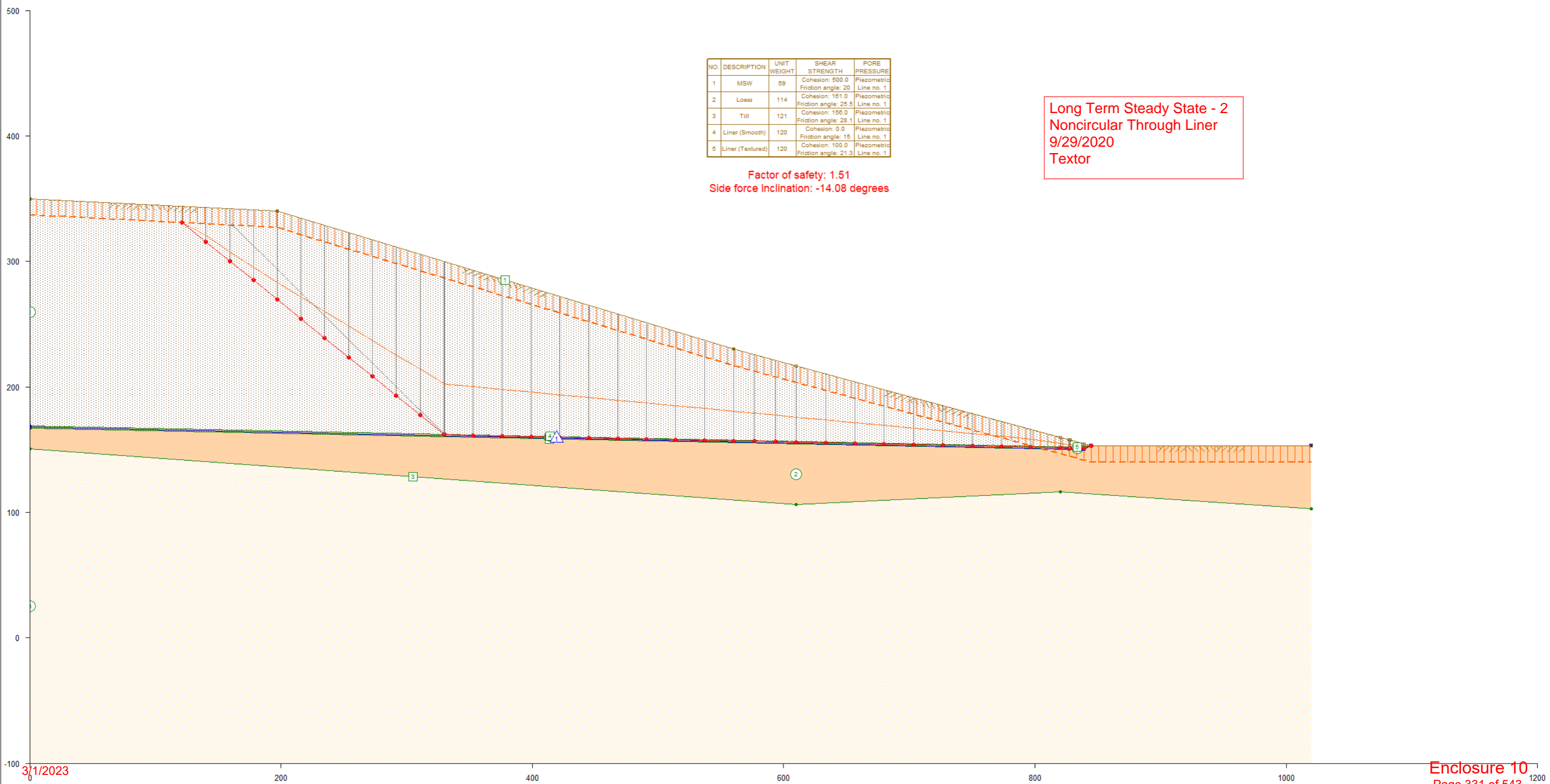
Read end-of-file on input while looking for another command word.
 End of input data assumed - normal termination.



NO.	DESCRIPTION	UNIT WEIGHT	SHEAR STRENGTH	PORE PRESSURE
1	MSW	59	Cohesion: 500.0 Friction angle: 20	Piezometric Line no. 1
2	Loess	114	Cohesion: 161.0 Friction angle: 25.5	Piezometric Line no. 1
3	Till	121	Cohesion: 156.0 Friction angle: 28.1	Piezometric Line no. 1
4	Liner (Smooth)	120	Cohesion: 0.0 Friction angle: 15	Piezometric Line no. 1
5	Liner (Textured)	120	Cohesion: 100.0 Friction angle: 21.3	Piezometric Line no. 1

Long Term Steady State - 2
 Noncircular Through Liner
 9/29/2020
 Textor

Factor of safety: 1.51
 Side force Inclination: -14.08 degrees



3/1/2023

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UTEXAS4 Input File

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GRAphics

HEAding follows -

NNSWC Landfill Evaluation - Section D LTSS - 2

#122625

PROfile lines

1 1 MSW

0 350

197 340

560 230

845 153

2 2 Loess

0 166.8

827 150.24

839 150

845 153

1020 153

3 3 Till

0 150.4

610 106

820 116.5

1020 102.9

4 4 Liner (smooth)

0 168.8

828 152.24

5 5 Liner (textured)

827 150.24

828 152.24

839 152

845 153

MATerial properties

1 MSW

59 = unit weight

Conventional Shear Strength

500 20

Piezometric Line

1

2 Loess

114 = unit weight

Conventional Shear Strength

161 25.5

Piezometric Line

1

3 Till

121 = unit weight

Conventional Shear Strength

156 28.1

Piezometric Line

1

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```
4 Liner (Smooth)
  120 = unit weight
  Conventional Shear Strength
    0 15
  Piezometric Line
    1
5 Liner (Textured)
  120 = unit weight
  Conventional Shear Strength
    100 21.3
  Piezometric Line
    1
```

```
PIEzometric line
  1 Piezometric Line
    0 168
    839 150
    845 153
    1020 153
```

```
LABel
NNSWC Landfill Evaluation - Section D LTSS - 2
ANALYSIS/COMPUTATION
  NonCircular Search
    150 340
    330 162
    839 151 fixed
    845 153 fixed
```

```
5 1
Crack
13 D
Short
```

```
COMpute
```

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TABLE NO. 1

COMPUTER PROGRAM DESIGNATION: UTEXAS4

Originally Coded By Stephen G. Wright

Version No. 4.1.0.8 - Last Revision Date: 11/9/2009

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```
*****
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* BEEN VERIFIED BY INDEPENDENT ANALYSES, EXPERIMENTAL DATA *
* OR FIELD EXPERIENCE. THE USER SHOULD UNDERSTAND THE ALGORITHMS *
* AND ANALYTICAL PROCEDURES USED IN THIS SOFTWARE AND MUST HAVE *
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TABLE NO. 3

* NEW PROFILE LINE DATA *

----- Profile Line No. 1 - Material Type (Number): 1 -----

Description: MSW

Point	X	Y
1	0.00	350.00
2	197.00	340.00
3	560.00	230.00
4	845.00	153.00

----- Profile Line No. 2 - Material Type (Number): 2 -----

Description: Loess

Point	X	Y
1	0.00	166.80
2	827.00	150.24
3	839.00	150.00
4	845.00	153.00
5	1020.00	153.00

----- Profile Line No. 3 - Material Type (Number): 3 -----

Description: Till

Point	X	Y
1	0.00	150.40
2	610.00	106.00
3	820.00	116.50
4	1020.00	102.90

----- Profile Line No. 4 - Material Type (Number): 4 -----

Description: Liner (smooth)

Point	X	Y
1	0.00	168.80
2	828.00	152.24

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----- Profile Line No. 5 - Material Type (Number): 5 -----

Description: Liner (textured)

Point	X	Y
1	827.00	150.24
2	828.00	152.24
3	839.00	152.00
4	845.00	153.00

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TABLE NO. 4

* NEW MATERIAL PROPERTY DATA - CONVENTIONAL/FIRST-STAGE COMPUTATIONS *

----- DATA FOR MATERIAL NUMBER 1 -----

Description: MSW

Constant unit weight of soil (material): 59.0

CONVENTIONAL (ISOTROPIC) SHEAR STRENGTHS

Cohesion - - - - - 500.0

Friction angle - - - - 20.00 (degrees)

Pore water pressures are defined by a piezometric line.

Piezometric line number: 1

Negative pore water pressures are NOT allowed - set to zero.

----- DATA FOR MATERIAL NUMBER 2 -----

Description: Loess

Constant unit weight of soil (material): 114.0

CONVENTIONAL (ISOTROPIC) SHEAR STRENGTHS

Cohesion - - - - - 161.0

Friction angle - - - - 25.50 (degrees)

Pore water pressures are defined by a piezometric line.

Piezometric line number: 1

Negative pore water pressures are NOT allowed - set to zero.

----- DATA FOR MATERIAL NUMBER 3 -----

Description: Till

Constant unit weight of soil (material): 121.0

CONVENTIONAL (ISOTROPIC) SHEAR STRENGTHS

Cohesion - - - - - 156.0

Friction angle - - - - 28.10 (degrees)

Pore water pressures are defined by a piezometric line.

Piezometric line number: 1

Negative pore water pressures are NOT allowed - set to zero.

----- DATA FOR MATERIAL NUMBER 4 -----

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Description: Liner (Smooth)

Constant unit weight of soil (material): 120.0

CONVENTIONAL (ISOTROPIC) SHEAR STRENGTHS

Cohesion - - - - - 0.0

Friction angle - - - - 15.00 (degrees)

Pore water pressures are defined by a piezometric line.

Piezometric line number: 1

Negative pore water pressures are NOT allowed - set to zero.

----- DATA FOR MATERIAL NUMBER 5 -----

Description: Liner (Textured)

Constant unit weight of soil (material): 120.0

CONVENTIONAL (ISOTROPIC) SHEAR STRENGTHS

Cohesion - - - - - 100.0

Friction angle - - - - 21.30 (degrees)

Pore water pressures are defined by a piezometric line.

Piezometric line number: 1

Negative pore water pressures are NOT allowed - set to zero.

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TABLE NO. 6

* NEW PIEZOMETRIC LINE DATA - CONVENTIONAL/FIRST-STAGE COMPUTATIONS *

----- Piezometric Line Number 1 -----

Description: Piezometric Line
Unit weight of fluid (water): 62.4

Point	X	Y
1	0.00	168.00
2	839.00	150.00
3	845.00	153.00
4	1020.00	153.00

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TABLE NO. 16

* NEW ANALYSIS/COMPUTATION DATA *

Coordinates of points on shear surface which are to be shifted

Point	X	Y	Shift Angle
1	150.00	340.00	angle to be computed - moveable
2	330.00	162.00	angle to be computed - moveable
3	839.00	151.00	- fixed
4	845.00	153.00	- fixed

Initial distance for shifting points on shear surface = 5.000

Final distance for shifting points on shear surface = 1.000

Maximum steepness permitted for toe of shear surface = 50.00

Depth of crack: 13.000

Automatic search output will be in short form.

The following represent default values or values that were previously defined:
Maximum increment for slice subdivision: 30
There is no water in a crack.
Conventional (single-stage) computations will be performed.
Seismic coefficient: 0.000
Unit weight of water (or other fluid) in crack: 62.4
Maximum number of passes for noncircular search: 50
No restrictions exist on the lateral extent of the search.
No shear surfaces other than the most critical will be saved for display later.
Neither slope face was explicitly designated for analysis.
Standard sign convention used for direction of shear stress on shear surface.
Procedure of Analysis: Spencer

Iteration limit: 100
Force imbalance: 1.000000e-005 (fraction of total weight)
Moment imbalance: 1.000000e-005 (fraction of moment due to total weight)
Minimum weight required for computations to be performed: 100
Initial trial factor of safety: 3.000
Initial trial side force inclination: 17.189 (degrees)
Minimum (most negative) side force inclination allowed in Spencer's procedure: -10.00

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Case: Long Term Steady State 2 – Noncircular Through Liner

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TABLE NO. 26

* NEW, COMPUTED SLOPE GEOMETRY DATA *

These slope geometry were generated from the Profile Lines.

Table with 3 columns: Point, X, Y. Rows 1-10 showing coordinates for profile lines.

Left end point on noncircular shear surface adjusted to:
X: 161.31, Y: 328.81
Adjustment was made to put end point at bottom of crack.

Noncircular Shear Surface Points After End Point Adjustment
Coordinates of points on shear surface which are to be shifted

Table with 4 columns: Point, X, Y, Shift Angle. Rows 1-4 showing coordinates and shift status for noncircular shear surface points.

Computed crack depth: 13.00

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TABLE NO. 40

 * Short-Form Output Table for Search with Noncircular Shear Surfaces *

Shift Distance	Factor of Safety	Point	X	Y	Point	X	Y
5.000	1.525	1	161.31	328.81	3	839.00	151.00
		2	330.00	162.00	4	845.00	153.00
End of Trial: 1							
2.500	1.525	1	161.31	328.81	3	839.00	151.00
		2	330.00	162.00	4	845.00	153.00
End of Trial: 2							
2.500	1.523	1	158.82	328.94	3	839.00	151.00
		2	329.97	161.93	4	845.00	153.00
End of Trial: 3							
2.500	1.520	1	156.32	329.06	3	839.00	151.00
		2	329.95	161.91	4	845.00	153.00
End of Trial: 4							
2.500	1.518	1	153.82	329.19	3	839.00	151.00
		2	329.95	161.90	4	845.00	153.00
End of Trial: 5							
2.500	1.516	1	151.33	329.32	3	839.00	151.00
		2	329.95	161.89	4	845.00	153.00
End of Trial: 6							
2.500	1.514	1	148.83	329.45	3	839.00	151.00
		2	329.95	161.89	4	845.00	153.00
End of Trial: 7							
2.500	1.513	1	146.33	329.57	3	839.00	151.00
		2	329.95	161.89	4	845.00	153.00
End of Trial: 8							
2.500	1.511	1	143.84	329.70	3	839.00	151.00
		2	329.95	161.89	4	845.00	153.00
End of Trial: 9							
2.500	1.510	1	141.34	329.83	3	839.00	151.00
		2	329.95	161.89	4	845.00	153.00
End of Trial: 10							
2.500	1.509	1	138.84	329.95	3	839.00	151.00
		2	329.95	161.90	4	845.00	153.00
End of Trial: 11							
2.500	1.508	1	136.35	330.08	3	839.00	151.00
		2	329.95	161.90	4	845.00	153.00
End of Trial: 12							
2.500	1.507	1	133.85	330.21	3	839.00	151.00
		2	329.95	161.90	4	845.00	153.00
End of Trial: 13							
2.500	1.506	1	131.35	330.33	3	839.00	151.00
		2	329.95	161.90	4	845.00	153.00
End of Trial: 14							
2.500	1.506	1	128.86	330.46	3	839.00	151.00
		2	329.95	161.90	4	845.00	153.00
End of Trial: 15							

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2.500	1.506	1	126.36	330.59	3	839.00	151.00
		2	329.95	161.90	4	845.00	153.00
End of Trial: 16							
2.500	1.506	1	123.86	330.71	3	839.00	151.00
		2	329.95	161.90	4	845.00	153.00
End of Trial: 17							
2.500	1.506	1	121.37	330.84	3	839.00	151.00
		2	329.95	161.90	4	845.00	153.00
End of Trial: 18							
1.250	1.505	1	121.37	330.84	3	839.00	151.00
		2	329.95	161.90	4	845.00	153.00
End of Trial: 19							
0.625	1.505	1	121.37	330.84	3	839.00	151.00
		2	329.95	161.90	4	845.00	153.00
End of Trial: 20							

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TABLE NO. 41

 * Critical Noncircular Shear Surface *

***** CRITICAL NONCIRCULAR SHEAR SURFACE *****

X: 121.37 Y: 330.84
 X: 329.95 Y: 161.90
 X: 839.00 Y: 151.00
 X: 845.00 Y: 153.00

Minimum factor of safety: 1.505
 Side force inclination: -14.08

Time required to find most critical surface: 0.0 seconds
 Number of passes required to find most critical surface: 20
 Total number of shear surfaces attempted: 100
 Total number of shear surfaces for which the factor of safety
 was successfully calculated: 100

Pass	Shift Distance	Pt.	Max. Dist. Moved	Minimum F	n Tried	n Computed
1	5.0000	1	5.000	1.5246	5	5
2	2.5000	1	2.500	1.5225	10	10
3	2.5000	1	2.500	1.5203	15	15
4	2.5000	1	2.500	1.5181	20	20
5	2.5000	1	2.500	1.5161	25	25
6	2.5000	1	2.500	1.5142	30	30
7	2.5000	1	2.500	1.5126	35	35
8	2.5000	1	2.500	1.5112	40	40
9	2.5000	1	2.500	1.5098	45	45
10	2.5000	1	2.500	1.5087	50	50
11	2.5000	1	2.500	1.5078	55	55
12	2.5000	1	2.500	1.5070	60	60
13	2.5000	1	2.500	1.5064	65	65
14	2.5000	1	2.500	1.5060	70	70
15	2.5000	1	2.500	1.5057	75	75
16	2.5000	1	2.500	1.5055	80	80
17	2.5000	1	2.500	1.5055	85	85
18	2.5000	2	0.001	1.5055	90	90
19	1.2500	1	1.250	1.5055	95	95
20	0.6250	1	0.625	1.5055	100	100

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TABLE NO. 43

 * Coordinate, Weight, Strength and Pore Water Pressure *
 * Information for Individual Slices for Conventional *
 * Computations or First Stage of Multi-Stage Computations. *
 * (Information is for the critical shear surface in the *
 * case of an automatic search.) *

Slice No.	X	Y	Slice Weight	Matl. No.	Cohesion	Friction Angle	Pore Pressure
1	121.37	330.84	22510	1	500.0	20.00	0.0
	130.82	323.18					
	140.27	315.52					
2	149.73	307.87	38524	1	500.0	20.00	0.0
	159.18	300.21					
3	168.64	292.55	54538	1	500.0	20.00	0.0
	178.09	284.90					
4	187.55	277.24	70552	1	500.0	20.00	0.0
	197.00	269.58					
5	206.47	261.91	84049	1	500.0	20.00	0.0
	215.94	254.24					
6	225.41	246.57	94776	1	500.0	20.00	0.0
	234.88	238.90					
7	244.35	231.23	105503	1	500.0	20.00	0.0
	253.82	223.56					
8	263.29	215.90	116230	1	500.0	20.00	0.0
	272.76	208.23					
9	282.23	200.56	126957	1	500.0	20.00	0.0
	291.70	192.89					
10	301.16	185.22	137684	1	500.0	20.00	0.0
	310.63	177.55					
11	320.10	169.88	148411	1	500.0	20.00	0.0
	329.57	162.21					
12	329.76	162.06	3069	4	0.0	15.00	0.0
	329.95	161.90					
13	341.45	161.66	183091	4	0.0	15.00	0.0
	352.96	161.41					
14	364.46	161.16	174344	4	0.0	15.00	0.0
	375.96	160.92					
15	387.46	160.67	165597	4	0.0	15.00	0.0
	398.97	160.42					
16	410.47	160.18	156849	4	0.0	15.00	0.0
	421.97	159.93					
17	433.47	159.69	148102	4	0.0	15.00	0.0
	444.98	159.44					
18	456.48	159.19	139354	4	0.0	15.00	0.0
	467.98	158.95					
19	479.48	158.70	130607	4	0.0	15.00	0.0
	490.99	158.45					
20	502.49	158.21	121860	4	0.0	15.00	0.0
	513.99	157.96					

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21	525.49	157.71	113112	4	0.0	15.00	0.0
	537.00	157.47					
22	548.50	157.22	104365	4	0.0	15.00	0.0
	560.00	156.98					
23	568.33	156.80	70416	4	0.0	15.00	0.0
	576.67	156.62					
24	585.00	156.44	66363	4	0.0	15.00	0.0
	593.33	156.26					
25	601.67	156.08	62310	4	0.0	15.00	0.0
	610.00	155.90					
26	621.67	155.65	80425	4	0.0	15.00	0.0
	633.33	155.41					
27	645.00	155.16	72482	4	0.0	15.00	0.0
	656.67	154.91					
28	668.33	154.66	64538	4	0.0	15.00	0.0
	680.00	154.41					
29	691.67	154.16	56595	4	0.0	15.00	0.0
	703.33	153.91					
30	715.00	153.66	48651	4	0.0	15.00	0.0
	726.67	153.41					
31	738.33	153.16	40707	4	0.0	15.00	0.0
	750.00	152.91					
32	761.67	152.66	32764	4	0.0	15.00	0.0
	773.33	152.41					
33	785.00	152.16	24820	4	0.0	15.00	0.0
	796.67	151.91					
34	808.33	151.66	16877	4	0.0	15.00	0.0
	820.00	151.41					
35	823.50	151.33	3514	4	0.0	15.00	0.0
	827.00	151.26					
36	827.25	151.25	225	4	0.0	15.00	0.0
	827.50	151.25					
37	827.75	151.24	219	5	100.0	21.30	0.0
	828.00	151.24					
38	833.50	151.12	3910	5	100.0	21.30	0.0
	839.00	151.00					
39	842.00	152.00	824	5	100.0	21.30	0.0
	845.00	153.00					

No water in crack.

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TABLE NO. 44

```
*****  
* Seismic Forces and Forces Due to Distributed Loads for *  
* Individual Slices for Conventional Computations or the *  
* First Stage of Multi-Stage Computations. *  
* (Information is for the critical shear surface in the *  
* case of an automatic search.) *  
*****
```

There are no seismic forces or forces due to distributed loads
for the current shear surface

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TABLE NO. 47

 * Information for the Iterative Solution for the Factor of *
 * Safety and Side Force Inclination by Spencer's Procedure *

Allowable force imbalance for convergence: 31
 Allowable moment imbalance for convergence: 13005

Iter- ation	Trial Factor of Safety	Trial Side Force Inclination (degrees)	Force Imbalance (lbs.)	Moment Imbalance (ft.-lbs.)	Delta-F	Delta Theta (degrees)
1	3.00000	-17.1887	-3.532e+005	1.001e+008		
					First-order corrections to F and Theta	-2.5433 -11.7406
					Reduced values - Deltas were too large	-0.5000 -2.3081
2	2.50000	-19.4969	-2.718e+005	7.577e+007		
					First-order corrections to F and Theta	-3.1412 89.5246
					Reduced values - Deltas were too large	-0.1005 2.8648
3	2.39948	-16.6321	-2.627e+005	7.327e+007		
					First-order corrections to F and Theta	-2.2300 48.5728
					Reduced values - Deltas were too large	-0.1315 2.8648
4	2.26796	-13.7673	-2.461e+005	6.881e+007		
					First-order corrections to F and Theta	-1.0828 -3.6784
					Reduced values - Deltas were too large	-0.5000 -1.6985
5	1.76796	-15.4658	-1.027e+005	2.736e+007		
					First-order corrections to F and Theta	-0.3153 2.2262
					Second-order corrections to F and Theta	-0.2681 1.4680
6	1.49989	-13.9978	2.391e+003	-5.412e+005		
					First-order corrections to F and Theta	0.0056 -0.0803
					Second-order corrections to F and Theta	0.0056 -0.0810
7	1.50550	-14.0788	-3.429e-002	4.524e+000		
					First-order corrections to F and Theta	-0.0000 0.0000

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TABLE NO. 55

* Check of Computations by Spencer's Procedure (Results are for the *
* critical shear surface in the case of an automatic search.) *

Summation of Horizontal Forces: 1.99341e-010

Summation of Vertical Forces: 2.28370e-010

Summation of Moments: 1.10645e-007

Mohr Coulomb Shear Force/Shear Strength Check Summation: 7.01221e-011

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TABLE NO. 58

 * Final Results for Stresses Along the Shear Surface *
 * (Results are for the critical shear surface in the case of a search.) *

SPENCER'S PROCEDURE USED TO COMPUTE THE FACTOR OF SAFETY
 Factor of Safety: 1.505 Side Force Inclination: -14.08

----- VALUES AT CENTER OF BASE OF SLICE -----

Slice No.	X-Center	Y-Center	Total	Effective	Shear Stress
			Normal Stress	Normal Stress	
1	130.82	323.18	750.8	750.8	513.6
2	149.73	307.87	1383.6	1383.6	666.6
3	168.64	292.55	2016.4	2016.4	819.6
4	187.55	277.24	2649.3	2649.3	972.6
5	206.47	261.91	3177.3	3177.3	1100.3
6	225.41	246.57	3600.5	3600.5	1202.6
7	244.35	231.23	4023.8	4023.8	1304.9
8	263.29	215.90	4447.0	4447.0	1407.2
9	282.23	200.56	4870.2	4870.2	1509.5
10	301.16	185.22	5293.4	5293.4	1611.9
11	320.10	169.88	5716.6	5716.6	1714.2
12	329.76	162.06	6244.4	6244.4	1111.4
13	341.45	161.66	8251.3	8251.3	1468.6
14	364.46	161.16	7857.1	7857.1	1398.4
15	387.46	160.67	7462.9	7462.9	1328.2
16	410.47	160.18	7068.7	7068.7	1258.1
17	433.47	159.69	6674.5	6674.5	1187.9
18	456.48	159.19	6280.2	6280.2	1117.8
19	479.48	158.70	5886.0	5886.0	1047.6
20	502.49	158.21	5491.8	5491.8	977.4
21	525.49	157.71	5097.6	5097.6	907.3
22	548.50	157.22	4703.4	4703.4	837.1
23	568.33	156.80	4380.2	4380.2	779.6
24	585.00	156.44	4128.1	4128.1	734.7
25	601.67	156.08	3876.0	3876.0	689.9
26	621.67	155.65	3573.5	3573.5	636.0
27	645.00	155.16	3220.5	3220.5	573.2
28	668.33	154.66	2867.6	2867.6	510.4
29	691.67	154.16	2514.6	2514.6	447.6
30	715.00	153.66	2161.7	2161.7	384.7
31	738.33	153.16	1808.7	1808.7	321.9
32	761.67	152.66	1455.8	1455.8	259.1
33	785.00	152.16	1102.8	1102.8	196.3
34	808.33	151.66	749.9	749.9	133.5
35	823.50	151.33	520.5	520.5	92.6
36	827.25	151.25	463.7	463.7	82.5
37	827.75	151.24	481.2	481.2	191.0
38	833.50	151.12	391.9	391.9	167.9

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39	842.00	152.00	230.2	230.2	126.0
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TABLE NO. 59

 * Final Results for Side Forces and Stresses Between Slices *
 * (Results are for the critical shear surface in the case of a search.) *

----- VALUES AT RIGHT SIDE OF SLICE -----

Slice No.	X-Right	Side Force	Y-Coord. of Side Force Location	Fraction of Height	Sigma at Top	Sigma at Bottom
1	140.27	1841	320.81	0.193	-54.9	185.4
2	159.18	10691	307.32	0.170	-243.1	740.3
3	178.09	26551	295.17	0.183	-413.5	1332.2
4	197.00	49419	283.23	0.194	-569.9	1931.3
5	215.94	78182	271.51	0.216	-668.3	2563.7
6	234.88	111640	260.00	0.235	-710.1	3126.7
7	253.82	149793	248.53	0.252	-718.2	3646.9
8	272.76	192641	237.05	0.265	-705.4	4139.6
9	291.70	240184	225.54	0.276	-679.3	4614.0
10	310.63	292422	214.02	0.285	-644.3	5075.6
11	329.57	349355	202.46	0.292	-603.5	5528.2
12	329.95	350890	202.19	0.292	-607.6	5547.1
13	352.96	320251	200.02	0.294	-558.2	5288.8
14	375.96	291076	197.86	0.296	-508.3	5031.0
15	398.97	263364	195.70	0.298	-457.8	4773.9
16	421.97	237116	193.54	0.300	-406.7	4517.6
17	444.98	212333	191.39	0.303	-355.0	4262.4
18	467.98	189013	189.23	0.306	-302.7	4008.8
19	490.99	167156	187.08	0.310	-249.9	3757.0
20	513.99	146764	184.92	0.314	-196.7	3508.0
21	537.00	127835	182.75	0.318	-143.4	3262.7
22	560.00	110370	180.56	0.323	-90.7	3022.7
23	576.67	98587	178.98	0.325	-72.9	2849.5
24	593.33	87482	177.39	0.326	-54.4	2676.1
25	610.00	77054	175.81	0.329	-35.2	2502.4
26	633.33	63596	173.61	0.332	-7.2	2259.3
27	656.67	51466	171.41	0.337	22.9	2015.6
28	680.00	40666	169.24	0.344	55.8	1771.4
29	703.33	31196	167.07	0.352	92.7	1526.8
30	726.67	23054	164.93	0.365	134.8	1282.1
31	750.00	16242	162.79	0.384	184.3	1038.8
32	773.33	10759	160.61	0.411	243.5	802.5
33	796.67	6606	158.23	0.447	308.0	597.5
34	820.00	3782	155.10	0.442	287.6	591.3
35	827.00	3194	153.88	0.397	177.8	760.0
36	827.50	3156	153.78	0.391	163.7	781.0
37	828.00	3063	153.73	0.393	166.0	768.7
38	839.00	1254	152.75	0.484	303.6	368.3
39	845.00	-0	153.00	0.000	0.0	0.0

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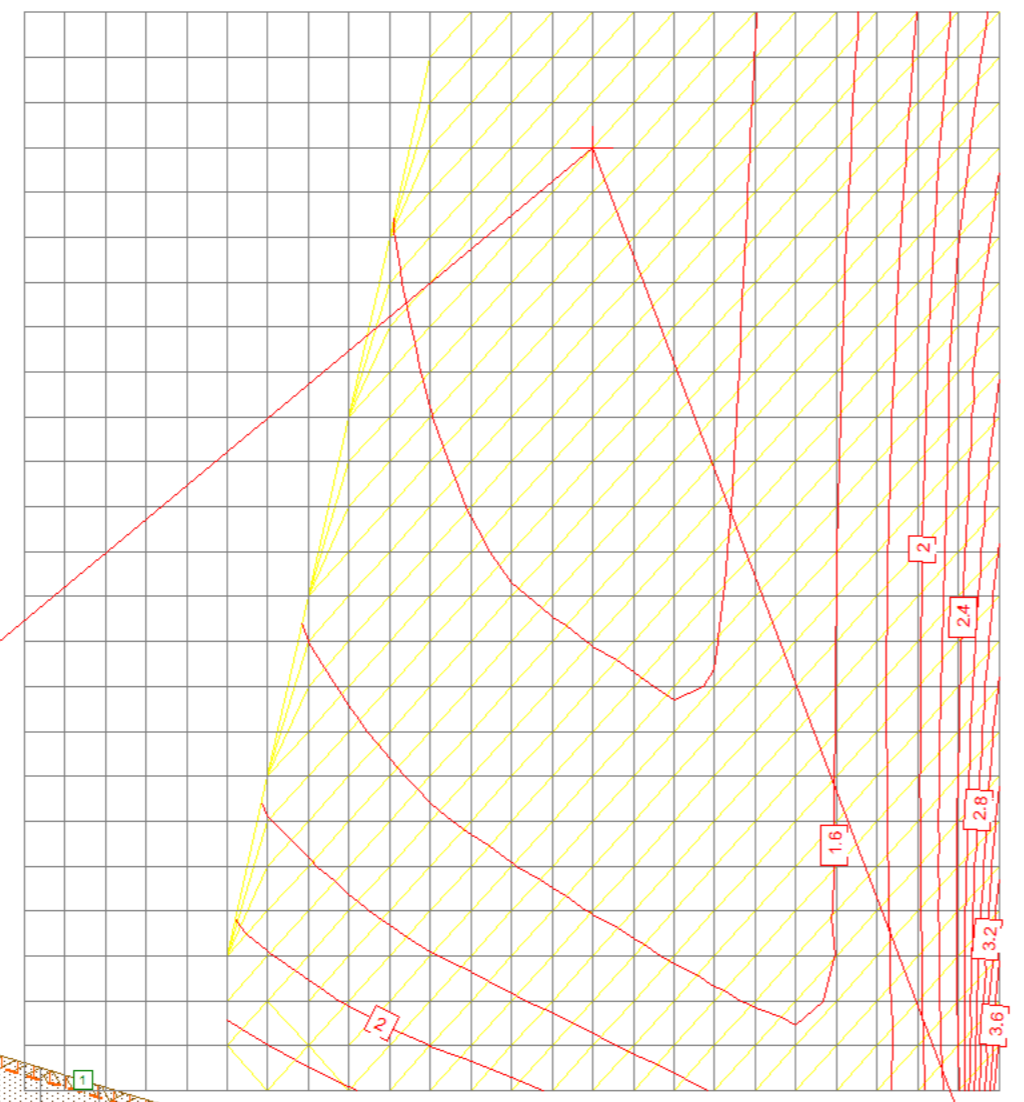
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Read end-of-file on input while looking for another command word.
End of input data assumed - normal termination.

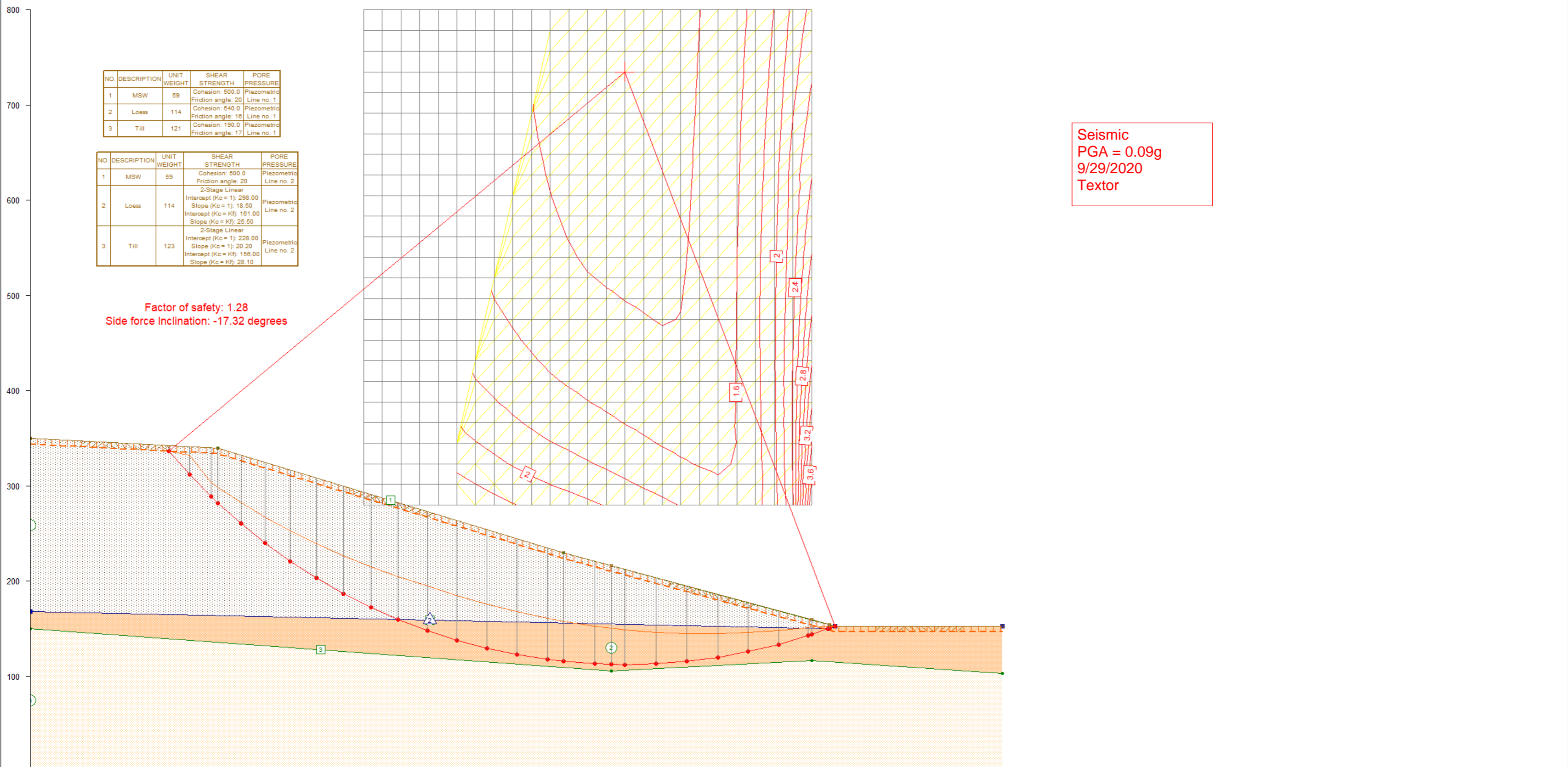
NO.	DESCRIPTION	UNIT WEIGHT	SHEAR STRENGTH	PORE PRESSURE
1	MSW	59	Cohesion: 500.0 Friction angle: 20	Piezometric Line no. 1
2	Loess	114	Cohesion: 540.0 Friction angle: 16	Piezometric Line no. 1
3	Till	121	Cohesion: 190.0 Friction angle: 17	Piezometric Line no. 1

NO.	DESCRIPTION	UNIT WEIGHT	SHEAR STRENGTH	PORE PRESSURE
1	MSW	59	Cohesion: 500.0 Friction angle: 20	Piezometric Line no. 2
2	Loess	114	2-Stage Linear Intercept (Kc = 1): 298.00 Slope (Kc = 1): 18.50 Intercept (Kc = Kf): 161.00 Slope (Kc = Kf): 25.50	Piezometric Line no. 2
3	Till	123	2-Stage Linear Intercept (Kc = 1): 228.00 Slope (Kc = 1): 20.20 Intercept (Kc = Kf): 156.00 Slope (Kc = Kf): 28.10	Piezometric Line no. 2

Factor of safety: 1.28
Side force Inclination: -17.32 degrees



Seismic
PGA = 0.09g
9/29/2020
Textor



3/1/2023

NNSWC Landfill Expansion

Cross-Section: D

Case: Seismic

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UTEXAS4 Input File

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GRaphics

HEAding follows -

NNSWC Landfill Evaluation - Section D Seismic

#122625

PROfile lines

1 1 MSW
0 350
197 340
560 230
845 153

2 2 Loess
0 168
839 150
845 153
1020 153

3 3 Till
0 150.4
610 106
820 116.5
1020 102.9

MATerial properties

1 MSW
59 = unit weight
Conventional Shear Strength
500 20
Piezometric Line
1

2 Loess
114 = unit weight
Conventional Shear Strength
540 16
Piezometric Line
1

3 Till
121 = unit weight
Conventional Shear Strength
190 17
Piezometric Line
1

PIEzometric line

1 Piezometric Line
0 168
839 150
845 153
1020 153

Second Stage input activated

MATerial properties

NNSWC Landfill Expansion

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```
1 MSW
  59 = unit weight
  Conventional Shear Strength
    500 20
  Piezometric Line
    2
2 Loess
  114 = unit weight
  2-Stage Linear Strength Envelope
    298 18.5 161 25.5
  Piezometric Line
    2
3 Till
  123 = unit weight
  2-Stage Linear Strength Envelope
    228 20.2 156 28.1
  Piezometric Line
    2
```

```
PIEzometric line
  2 Piezometric Line
    0 168
    839 150
    845 153
    1020 153
```

```
LAbel
NNSWC Landfill Evaluation - Section D Seismic
ANALYSIS/COMPUTATION
  Circular Search 2
    25 25
    350 280 350 800 820 800 820 280
    5 5
  Point
    845 153

  Minimum
    5000
  Crack
    6 D
  Seismic
    0.09
  Two-stage Computation
  Short
```

```
COMpute
```

NNSWC Landfill Expansion

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TABLE NO. 1

COMPUTER PROGRAM DESIGNATION: UTEXAS4

Originally Coded By Stephen G. Wright

Version No. 4.1.0.8 - Last Revision Date: 11/9/2009

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```
*****  
* RESULTS OF COMPUTATIONS PERFORMED USING THIS SOFTWARE *  
* SHOULD NOT BE USED FOR DESIGN PURPOSES UNLESS THEY HAVE *  
* BEEN VERIFIED BY INDEPENDENT ANALYSES, EXPERIMENTAL DATA *  
* OR FIELD EXPERIENCE. THE USER SHOULD UNDERSTAND THE ALGORITHMS *  
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*****
```

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Name of input data file:
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Conditions\Section D\Final\Section D Seismic.dat

NNSWC Landfill Evaluation - Section D Seismic
#122625

TABLE NO. 3

* NEW PROFILE LINE DATA *

----- Profile Line No. 1 - Material Type (Number): 1 -----

Description: MSW

Point	X	Y
1	0.00	350.00
2	197.00	340.00
3	560.00	230.00
4	845.00	153.00

----- Profile Line No. 2 - Material Type (Number): 2 -----

Description: Loess

Point	X	Y
1	0.00	168.00
2	839.00	150.00
3	845.00	153.00
4	1020.00	153.00

----- Profile Line No. 3 - Material Type (Number): 3 -----

Description: Till

Point	X	Y
1	0.00	150.40
2	610.00	106.00
3	820.00	116.50
4	1020.00	102.90

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NNSWC Landfill Evaluation - Section D Seismic
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TABLE NO. 4

* NEW MATERIAL PROPERTY DATA - CONVENTIONAL/FIRST-STAGE COMPUTATIONS *

----- DATA FOR MATERIAL NUMBER 1 -----

Description: MSW

Constant unit weight of soil (material): 59.0

CONVENTIONAL (ISOTROPIC) SHEAR STRENGTHS
Cohesion - - - - - 500.0
Friction angle - - - - 20.00 (degrees)

Pore water pressures are defined by a piezometric line.
Piezometric line number: 1
Negative pore water pressures are NOT allowed - set to zero.

----- DATA FOR MATERIAL NUMBER 2 -----

Description: Loess

Constant unit weight of soil (material): 114.0

CONVENTIONAL (ISOTROPIC) SHEAR STRENGTHS
Cohesion - - - - - 540.0
Friction angle - - - - 16.00 (degrees)

Pore water pressures are defined by a piezometric line.
Piezometric line number: 1
Negative pore water pressures are NOT allowed - set to zero.

----- DATA FOR MATERIAL NUMBER 3 -----

Description: Till

Constant unit weight of soil (material): 121.0

CONVENTIONAL (ISOTROPIC) SHEAR STRENGTHS
Cohesion - - - - - 190.0
Friction angle - - - - 17.00 (degrees)

Pore water pressures are defined by a piezometric line.
Piezometric line number: 1
Negative pore water pressures are NOT allowed - set to zero.

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NNSWC Landfill Evaluation - Section D Seismic
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TABLE NO. 6

* NEW PIEZOMETRIC LINE DATA - CONVENTIONAL/FIRST-STAGE COMPUTATIONS *

----- Piezometric Line Number 1 -----

Description: Piezometric Line
Unit weight of fluid (water): 62.4

Point	X	Y
1	0.00	168.00
2	839.00	150.00
3	845.00	153.00
4	1020.00	153.00

NNSWC Landfill Expansion

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UTEXAS4 Output File

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Kc = Kf ENVELOPE:

Intercept of envelope ("d") - - - - - 156.0

Slope of envelope ("psi") - - - - - 28.10 (degrees)

Pore water pressures are defined by a piezometric line.

Piezometric line number: 2

Negative pore water pressures are NOT allowed - set to zero.

NNSWC Landfill Expansion

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TABLE NO. 16

* NEW ANALYSIS/COMPUTATION DATA *

Search will be conducted using a fixed grid.
Number of Points Across Grid: 25
Number of Points Up Grid: 25

Table with 3 columns: Grid Corner Number, X, Y. Rows 1-4 with coordinates (350.00, 280.00), (350.00, 800.00), (820.00, 800.00), (820.00, 280.00).

----- Control Parameters for Finding "Critical" Radius -----
Initial number of subdivisions between maximum and minimum
radius for finding a critical radius/radii: 5

Minimum radius increment for terminating subdivision of radii: 5.000

The following criteria will be used for determining
the maximum and minimum radii:
Point circles pass through - X: 845.00 Y: 153.00
Minimum weight required for computations to be performed: 5000

Depth of crack: 6.000
Seismic coefficient: 0.090
Seismic force acts at center of gravity.
Two-stage computations will be performed.
Automatic search output will be in short form.

The following represent default values or values that were previously defined:
Subtended angle for slice subdivision: 3.00(degrees)
There is no water in a crack.
Unit weight of water (or other fluid) in crack: 62.4
Search will be continued after the initial mode to find a most critical circle.
No restrictions exist on the lateral extent of the search.
No shear surfaces other than the most critical will be saved for display later.
Neither slope face was explicitly designated for analysis.
Radii for each grid point will be sorted in the order of increasing radius.
Critical circles for grid points will be output in the order of increasing factor of safety.
Standard sign convention used for direction of shear stress on shear surface.
Procedure of Analysis: Spencer

Iteration limit: 100
Force imbalance: 1.000000e-005 (fraction of total weight)
Moment imbalance: 1.000000e-005 (fraction of moment due to total weight)

NNSWC Landfill Expansion

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Initial trial factor of safety: 3.000

Initial trial side force inclination: 17.189 (degrees)

Minimum (most negative) side force inclination allowed in Spencer's procedure: -10.00

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TABLE NO. 26

* NEW, COMPUTED SLOPE GEOMETRY DATA *

These slope geometry were generated from the Profile Lines.

Point	X	Y
1	0.00	350.00
2	197.00	340.00
3	560.00	230.00
4	610.00	216.49
5	820.00	159.75
6	839.00	154.62
7	845.00	153.00
8	1020.00	153.00

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TABLE NO. 38

* FINAL SUMMARY OF COMPUTATIONS WITH FIXED-GRID *

Number of circles attempted: 625
Number of circles for which F calculated: 432
Circle with Lowest Factor of Safety:
 X coordinate for center: 624.17
 Y coordinate for center: 735.00
 Radius of circle: 622.488
Factor of safety: 1.283
Side force inclination: -17.32
Time Required for Computations: 0.0 seconds

NNSWC Landfill Expansion

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21	672.99	114.64	232149	2	540.0	16.00	2428.5
	689.23	115.92					
22	705.39	118.05	200409	2	540.0	16.00	2172.6
	721.55	120.18					
23	737.57	123.15	162483	2	540.0	16.00	1811.5
	753.59	126.11					
24	769.43	129.92	118926	2	540.0	16.00	1346.2
	785.28	133.72					
25	800.90	138.35	70398	2	540.0	16.00	777.9
	816.53	142.98					
26	818.26	143.55	4735	2	540.0	16.00	430.3
	820.00	144.12					
27	828.52	147.08	13375	2	540.0	16.00	196.2
	837.04	150.04					
28	838.02	150.40	518	1	500.0	20.00	0.0
	839.00	150.76					
29	842.00	151.88	684	1	500.0	20.00	0.0
	845.00	153.00					

No water in crack.

NNSWC Landfill Expansion

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Case: Seismic

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21	672.99	114.64	232149	2	2253.3	0.00	0.0
	689.23	115.92					
22	705.39	118.05	200409	2	2028.2	0.00	0.0
	721.55	120.18					
23	737.57	123.15	162483	2	1753.5	0.00	0.0
	753.59	126.11					
24	769.43	129.92	118926	2	1424.0	0.00	0.0
	785.28	133.72					
25	800.90	138.35	70398	2	1031.0	0.00	0.0
	816.53	142.98					
26	818.26	143.55	4735	2	782.3	0.00	0.0
	820.00	144.12					
27	828.52	147.08	13375	2	609.3	0.00	0.0
	837.04	150.04					
28	838.02	150.40	518	1	500.0	20.00	0.0
	839.00	150.76					
29	842.00	151.88	684	1	500.0	20.00	0.0
	845.00	153.00					

NNSWC Landfill Expansion

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NNSWC Landfill Evaluation - Section D Seismic
#122625

TABLE NO. 55

* Check of Computations by Spencer's Procedure (Results are for the *
* critical shear surface in the case of an automatic search.) *

Summation of Horizontal Forces: 2.42782e-010

Summation of Vertical Forces: 2.85587e-010

Summation of Moments: -1.43070e-008

Mohr Coulomb Shear Force/Shear Strength Check Summation: 9.15175e-011

NNSWC Landfill Expansion

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NNSWC Landfill Evaluation - Section D Seismic
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TABLE NO. 58

 * Final Results for Stresses Along the Shear Surface *
 * (Results are for the critical shear surface in the case of a search.) *

SPENCER'S PROCEDURE USED TO COMPUTE THE FACTOR OF SAFETY
 Factor of Safety: 1.283 Side Force Inclination: -17.32

----- VALUES AT CENTER OF BASE OF SLICE -----

Slice No.	X-Center	Y-Center	Total	Effective	Shear
			Normal Stress	Normal Stress	
1	156.63	324.35	435.7	435.7	513.4
2	178.76	300.45	1342.6	1342.6	770.6
3	193.57	285.50	1945.8	1945.8	941.7
4	209.14	271.34	2422.0	2422.0	1076.9
5	233.98	250.26	3099.8	3099.8	1269.2
6	259.88	230.50	3746.9	3746.9	1452.7
7	286.78	212.12	4354.6	4354.6	1625.1
8	314.61	195.18	4914.9	4914.9	1784.1
9	343.29	179.72	5420.0	5420.0	1927.4
10	372.11	166.04	5854.8	5854.8	2050.8
11	401.62	153.88	6484.8	6484.8	2136.0
12	432.34	143.03	7282.0	7282.0	2173.9
13	463.58	133.80	7926.0	7926.0	2192.0
14	495.26	126.22	8405.3	8405.3	2188.3
15	527.30	120.31	8708.2	8708.2	2160.7
16	551.70	116.80	8830.5	8830.5	2125.1
17	576.25	114.57	8837.2	8837.2	2078.3
18	601.25	113.00	8776.9	8776.9	2023.7
19	617.08	112.59	8666.3	8666.3	1979.0
20	640.46	112.94	8384.7	8384.7	1896.3
21	672.99	114.64	7822.9	7822.9	1756.4
22	705.39	118.05	7017.8	7017.8	1580.9
23	737.57	123.15	5952.0	5952.0	1366.8
24	769.43	129.92	4605.0	4605.0	1109.9
25	800.90	138.35	2951.0	2951.0	803.6
26	818.26	143.55	1910.7	1910.7	609.8
27	828.52	147.08	1206.9	1206.9	474.9
28	838.02	150.40	751.6	751.6	603.0
29	842.00	151.88	548.4	548.4	545.3

NNSWC Landfill Expansion

Cross-Section: D

Case: Seismic

Filename: 20200929 Profile D Seismic_output (textor).docx

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NNSWC Landfill Evaluation - Section D Seismic
 #122625

TABLE NO. 59

 * Final Results for Side Forces and Stresses Between Slices *
 * (Results are for the critical shear surface in the case of a search.) *

----- VALUES AT RIGHT SIDE OF SLICE -----

Slice No.	X-Right	Side Force	Y-Coord. of Side Force Location	Fraction of Height	Sigma at Top	Sigma at Bottom
1	167.38	1728	331.84	0.671	113.8	-1.5
2	190.14	21287	304.03	0.296	-89.0	877.2
3	197.00	30003	298.72	0.286	-141.7	1133.0
4	221.28	66533	282.48	0.305	-150.1	1910.3
5	246.67	110227	267.31	0.321	-90.5	2569.1
6	273.09	158193	252.96	0.333	0.2	3146.6
7	300.48	207508	239.45	0.343	111.2	3649.4
8	328.75	255307	226.84	0.352	239.8	4074.0
9	357.83	298866	215.20	0.360	387.6	4411.7
10	386.40	334331	205.02	0.369	551.1	4643.1
11	416.83	367286	194.92	0.374	682.1	4913.3
12	447.84	397513	185.15	0.374	738.7	5285.8
13	479.32	420966	176.13	0.373	760.4	5677.4
14	511.21	434354	168.09	0.371	769.8	6031.2
15	543.40	435255	161.16	0.370	780.1	6307.2
16	560.00	430375	158.05	0.370	787.5	6409.7
17	592.49	409856	152.90	0.367	729.4	6522.8
18	610.00	392806	150.65	0.366	703.9	6520.1
19	624.17	376036	149.10	0.365	687.0	6481.8
20	656.75	328085	146.43	0.365	664.3	6257.6
21	689.23	269244	145.02	0.368	667.2	5826.7
22	721.55	203359	144.88	0.373	704.0	5163.1
23	753.59	135770	146.01	0.386	790.5	4235.0
24	785.28	73440	148.39	0.414	959.5	3000.1
25	816.53	25162	151.49	0.480	1196.0	1516.0
26	820.00	21107	151.97	0.502	1306.5	1270.9
27	837.04	6403	152.65	0.511	1278.7	1114.6
28	839.00	4651	152.80	0.529	1348.9	950.0
29	845.00	-0	153.00	0.000	0.0	0.0

Read end-of-file on input while looking for another command word.
 End of input data assumed - normal termination.

Unified Hazard Tool



Please do not use this tool to obtain ground motion parameter values for the design code reference documents covered by the [U.S. Seismic Design Maps web tools](#) (e.g., the International Building Code and the ASCE 7 or 41 Standard). The values returned by the two applications are not identical.

^ Input

Edition

Spectral Period

Latitude

Decimal degrees

Time Horizon

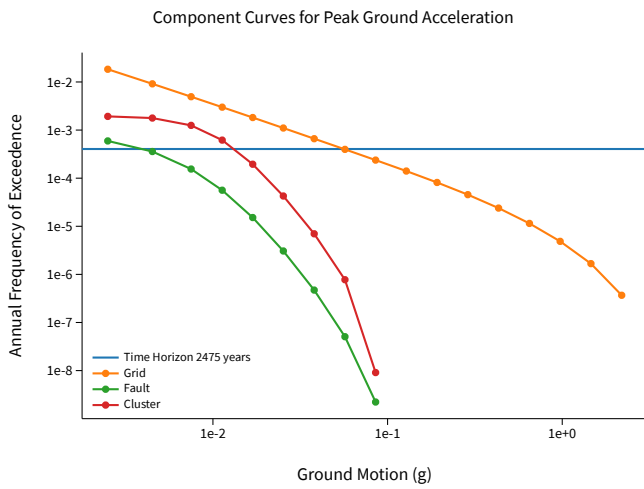
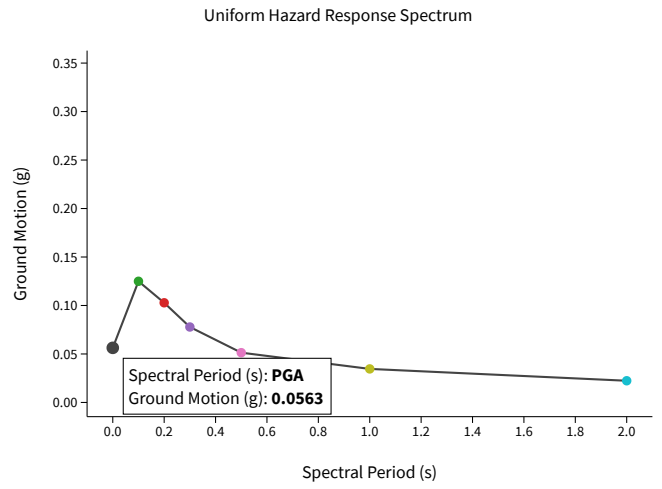
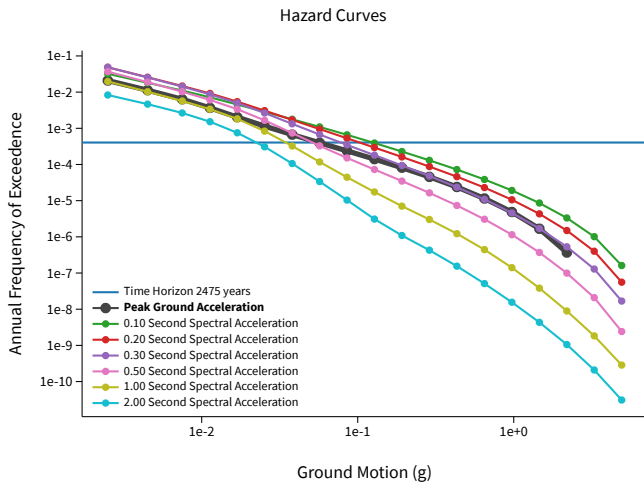
Return period in years

Longitude

Decimal degrees, negative values for western longitudes

Site Class

^ Hazard Curve

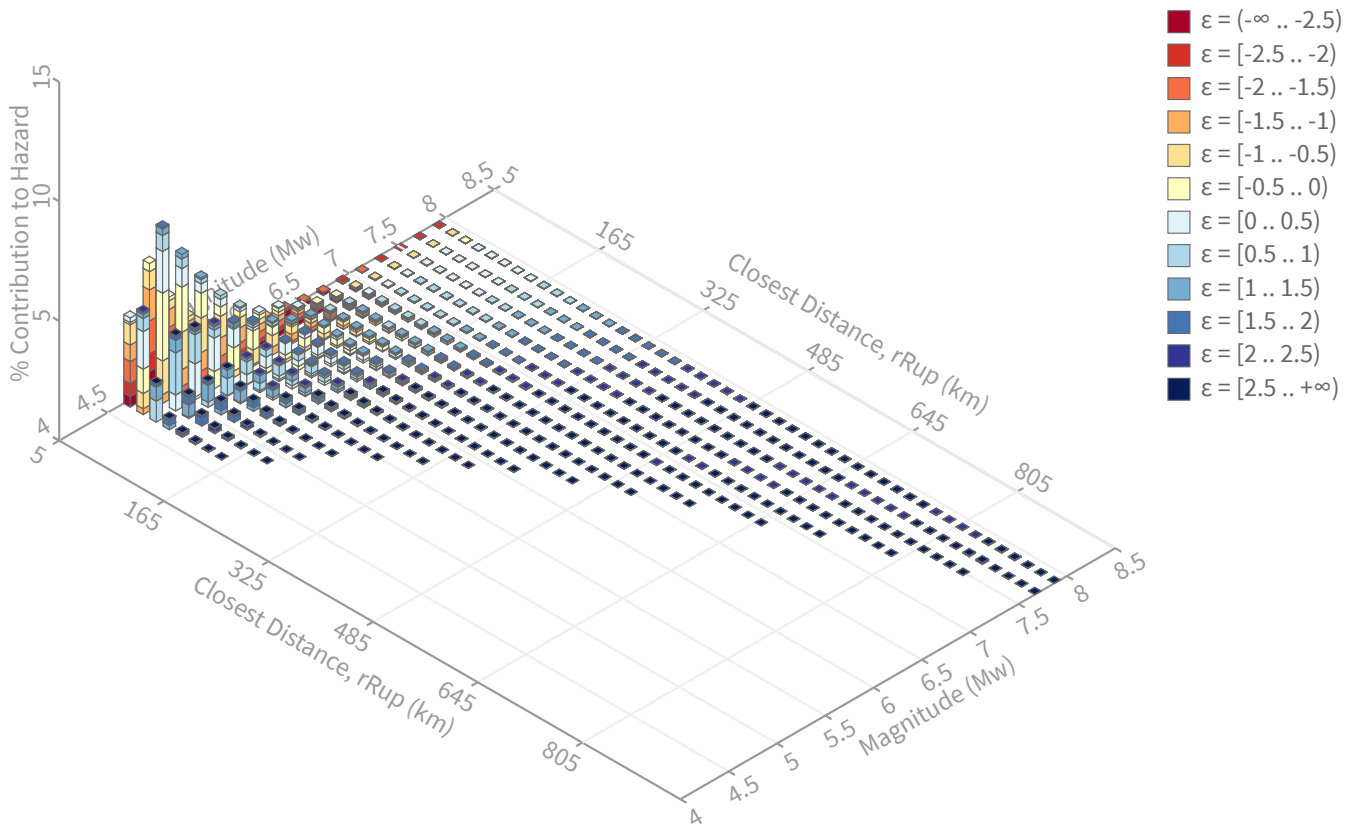


[View Raw Data](#)

Deaggregation

Component

Total



Summary statistics for, Deaggregation: Total

Deaggregation targets

Return period: 2475 yrs

Exceedance rate: 0.0004040404 yr⁻¹

PGA ground motion: 0.056319493 g

Recovered targets

Return period: 2475.3467 yrs

Exceedance rate: 0.00040398381 yr⁻¹

Totals

Binned: 100 %

Residual: 0 %

Trace: 1.87 %

Mean (over all sources)

m: 5.47

r: 58.9 km

ε₀: -0.33 σ

Mode (largest m-r bin)

m: 4.9

r: 29.48 km

ε₀: -0.14 σ

Contribution: 7.34 %

Mode (largest m-r-ε₀ bin)

m: 4.9

r: 29.13 km

ε₀: -0.25 σ

Contribution: 2.84 %

Discretization

r: min = 0.0, max = 1000.0, Δ = 20.0 km

m: min = 4.4, max = 9.4, Δ = 0.2

ε: min = -3.0, max = 3.0, Δ = 0.5 σ

Epsilon keys

ε0: [-∞ .. -2.5)

ε1: [-2.5 .. -2.0)

ε2: [-2.0 .. -1.5)

ε3: [-1.5 .. -1.0)

ε4: [-1.0 .. -0.5)

ε5: [-0.5 .. 0.0)

ε6: [0.0 .. 0.5)

ε7: [0.5 .. 1.0)

ε8: [1.0 .. 1.5)

ε9: [1.5 .. 2.0)

ε10: [2.0 .. 2.5)

ε11: [2.5 .. +∞]

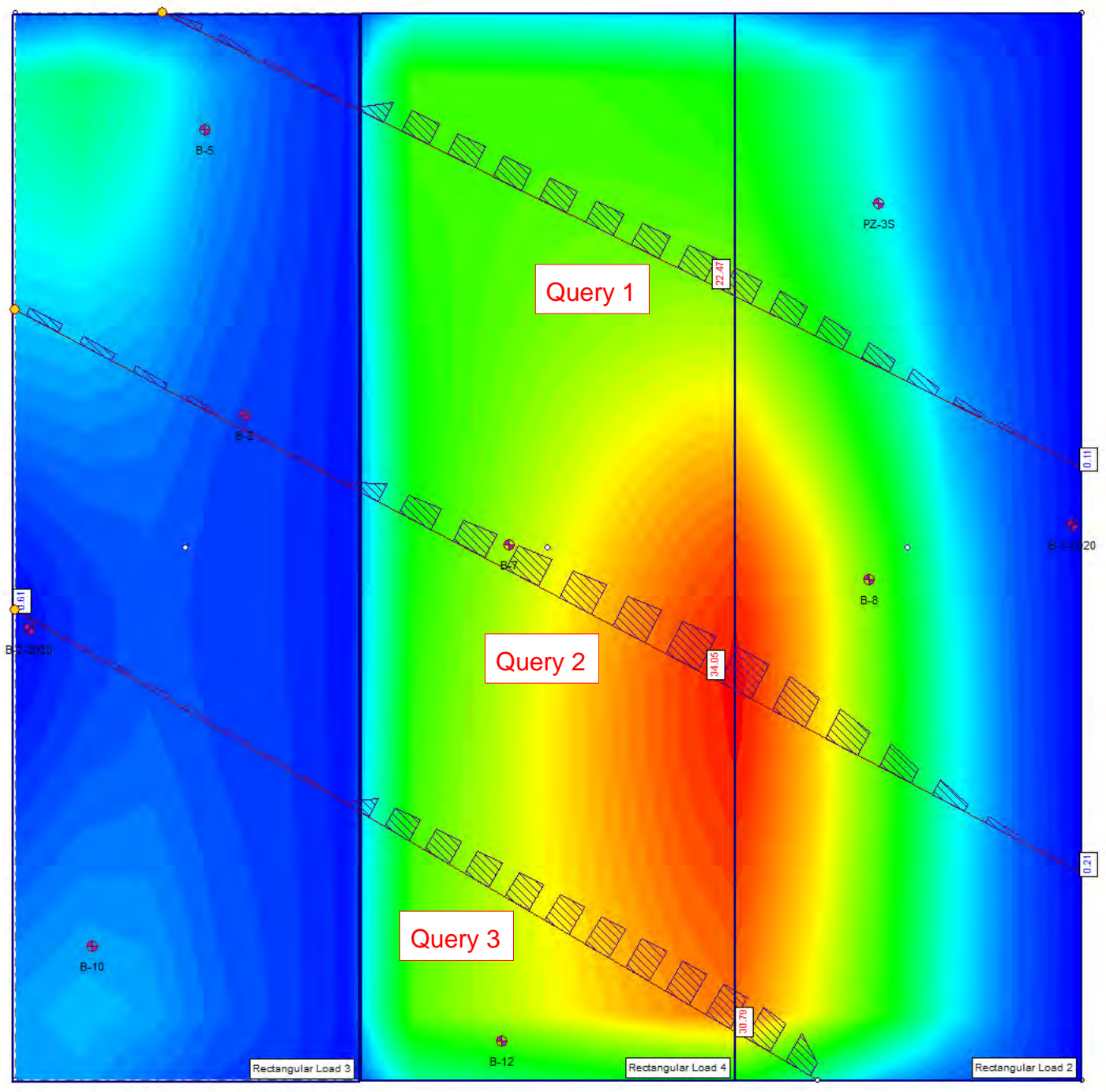
Deaggregation Contributors

Source Set ↳ Source	Type	r	m	ϵ_0	lon	lat	az	%
USGS Fixed Smoothing Zone 1 (opt)	Grid							38.34
PointSourceFinite: -97.092, 42.033		27.64	5.23	-0.67	97.092°W	42.033°N	360.00	4.16
PointSourceFinite: -97.092, 42.078		32.51	5.27	-0.43	97.092°W	42.078°N	360.00	3.12
PointSourceFinite: -97.092, 41.988		22.80	5.19	-0.98	97.092°W	41.988°N	360.00	3.10
PointSourceFinite: -97.092, 41.943		18.00	5.16	-1.39	97.092°W	41.943°N	360.00	2.88
PointSourceFinite: -97.092, 41.898		13.31	5.14	-1.95	97.092°W	41.898°N	360.00	2.52
PointSourceFinite: -97.092, 42.123		37.38	5.32	-0.23	97.092°W	42.123°N	360.00	2.49
PointSourceFinite: -97.092, 42.168		42.25	5.36	-0.07	97.092°W	42.168°N	360.00	2.31
PointSourceFinite: -97.092, 42.213		47.11	5.41	0.07	97.092°W	42.213°N	360.00	2.19
PointSourceFinite: -97.092, 41.853		8.92	5.13	-2.65	97.092°W	41.853°N	360.00	2.07
PointSourceFinite: -97.092, 42.258		51.97	5.46	0.19	97.092°W	42.258°N	360.00	1.67
PointSourceFinite: -97.092, 42.303		56.82	5.50	0.30	97.092°W	42.303°N	360.00	1.35
PointSourceFinite: -97.092, 42.393		66.51	5.60	0.46	97.092°W	42.393°N	360.00	1.12
SSCn Fixed Smoothing Zone 1 (opt)	Grid							38.34
PointSourceFinite: -97.092, 42.033		27.64	5.23	-0.67	97.092°W	42.033°N	360.00	4.16
PointSourceFinite: -97.092, 42.078		32.51	5.27	-0.43	97.092°W	42.078°N	360.00	3.12
PointSourceFinite: -97.092, 41.988		22.80	5.19	-0.98	97.092°W	41.988°N	360.00	3.10
PointSourceFinite: -97.092, 41.943		18.00	5.16	-1.39	97.092°W	41.943°N	360.00	2.88
PointSourceFinite: -97.092, 41.898		13.31	5.14	-1.95	97.092°W	41.898°N	360.00	2.52
PointSourceFinite: -97.092, 42.123		37.38	5.32	-0.23	97.092°W	42.123°N	360.00	2.49
PointSourceFinite: -97.092, 42.168		42.25	5.36	-0.07	97.092°W	42.168°N	360.00	2.31
PointSourceFinite: -97.092, 42.213		47.11	5.41	0.07	97.092°W	42.213°N	360.00	2.19
PointSourceFinite: -97.092, 41.853		8.92	5.13	-2.65	97.092°W	41.853°N	360.00	2.07
PointSourceFinite: -97.092, 42.258		51.97	5.46	0.19	97.092°W	42.258°N	360.00	1.67
PointSourceFinite: -97.092, 42.303		56.82	5.50	0.30	97.092°W	42.303°N	360.00	1.35
PointSourceFinite: -97.092, 42.393		66.51	5.60	0.46	97.092°W	42.393°N	360.00	1.12
USGS Adaptive Smoothing Zone 1 (opt)	Grid							11.55
SSCn Adaptive Smoothing Zone 1 (opt)	Grid							11.55

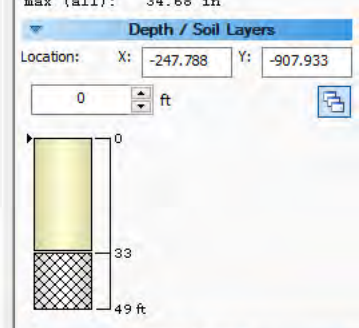
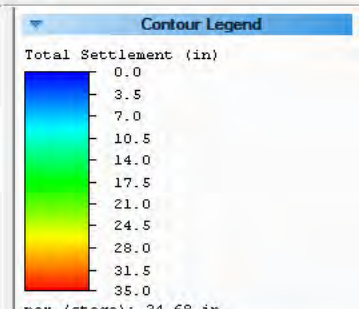
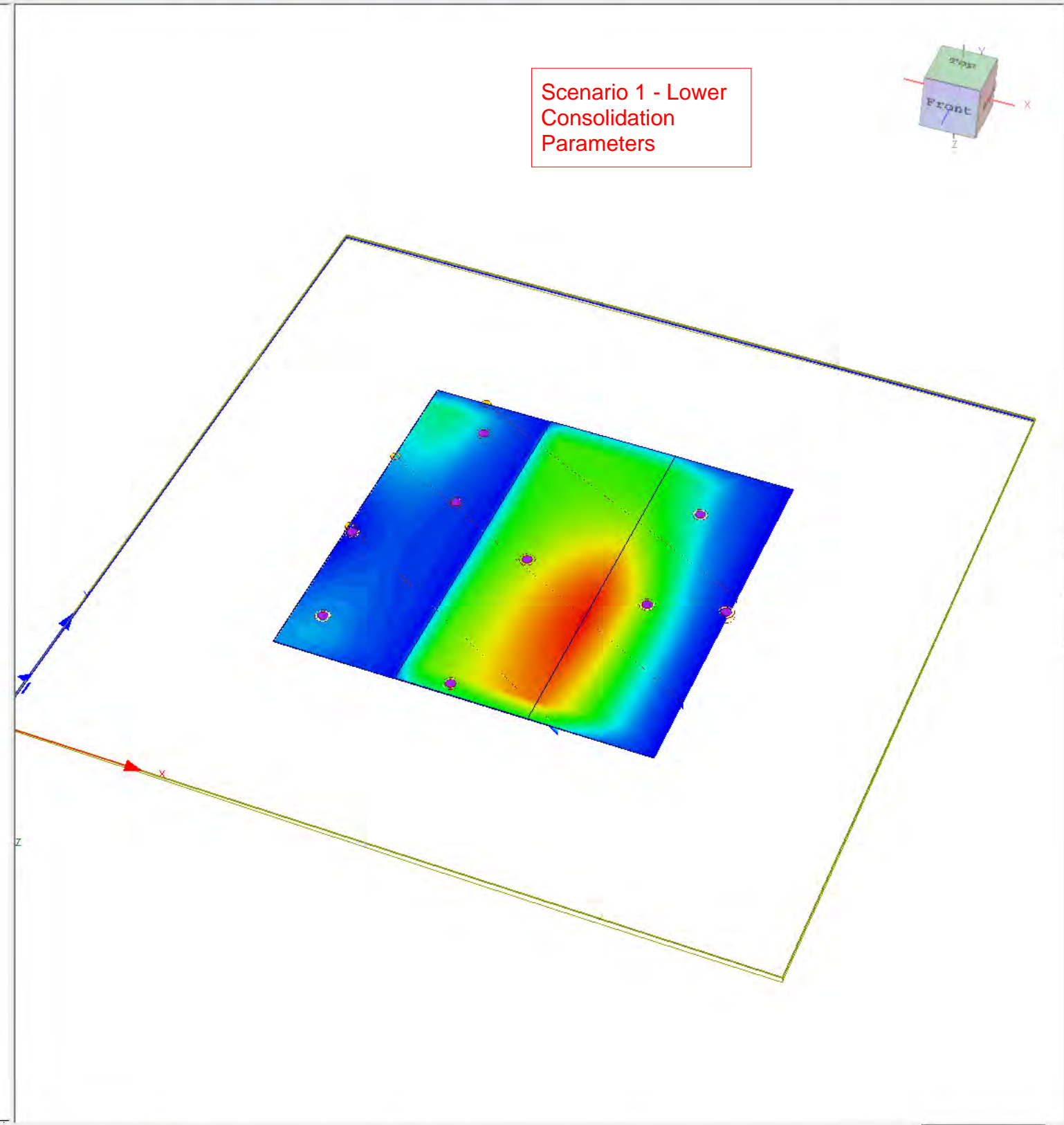
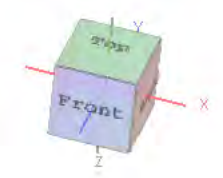


Client: NNSWC Page 11 of 11
Project: 122625 Date: 9/28/2020 Made by: Textor
NNWSC Landfill Expansion Checked by: _____
Slope Stability and Settlement Prelim: _____ Final: _____

Attachment E - Settlement



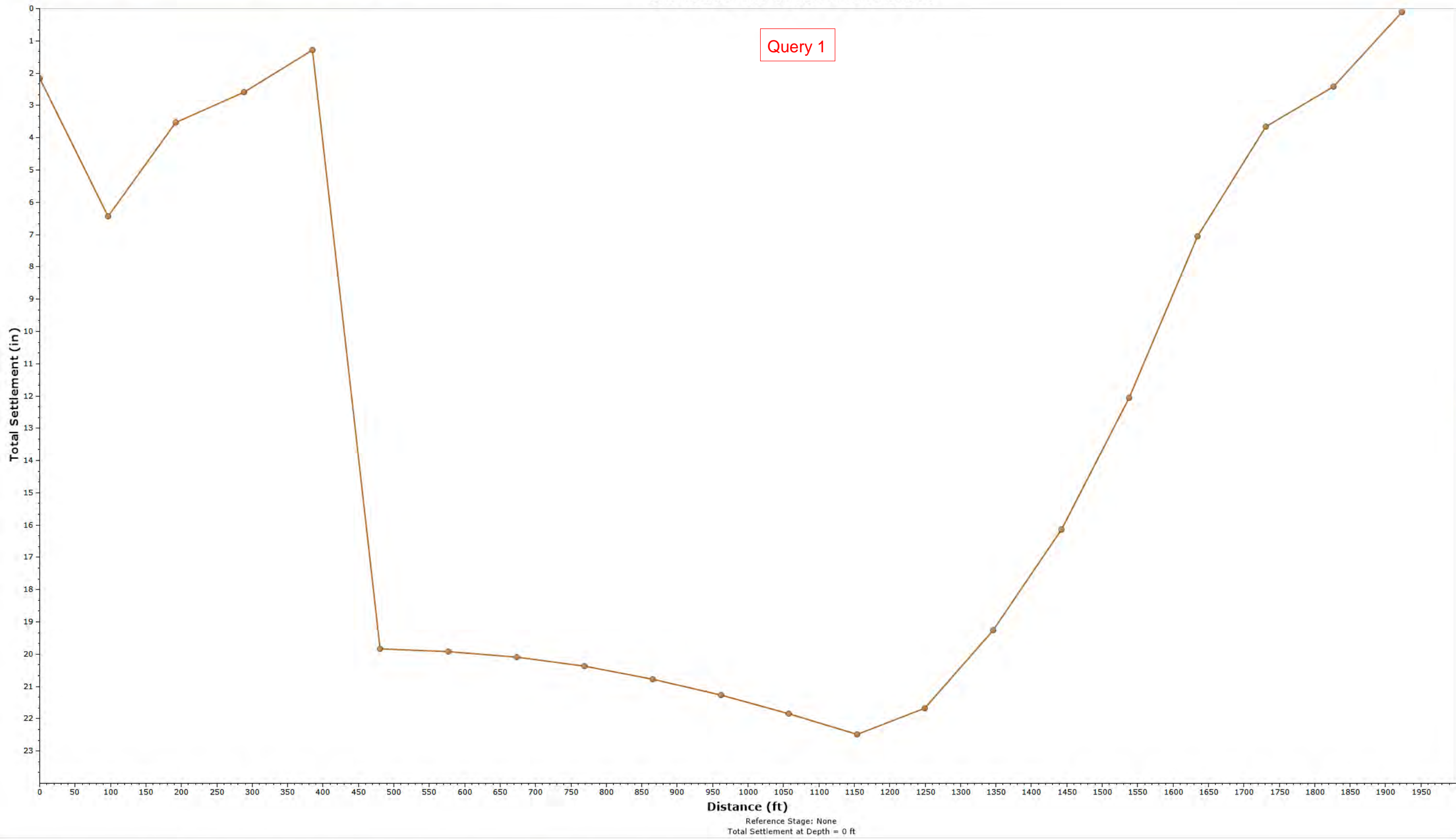
Scenario 1 - Lower Consolidation Parameters



- View Controls
- Line Queries
 - Piezometric Lines
 - Field Point Grid
 - Deformed Contours
 - Loads
 - Soil Column
 - Boreholes
 - Draw Materials on all Queries

Distance vs. Total Settlement

Query 1



Query Line 1 (Stage 1)

Chart Controls

Defaults...

Titles

Chart Title Distance vs. Total Settlement
Footer, Line 1 Total Settlement at Depth = ...
Footer, Line 2 Reference Stage: None
Horizontal Axis Distance (ft)
Vertical Axis Total Settlement (in)

Markers and Lines

Show Point ... Yes
Show Labels No
Show Grid Li... No

Fonts

Title Font Verdana, 18, Bold
Footer Font Verdana, 8
Axes Font Verdana, 12, Bold
Axes Numb... Verdana, 8
Legend Font Verdana, 8
Value Labels... Verdana, 8

Legend

Show Legend Yes
Legend hori... Right outside
Legend vert... Center

Colors

Chart Backg...
Title Text C...
Grid Lines C...
Legend Bac...
Axes Color
Axes Text C...
Label Backg...
Label Text ...

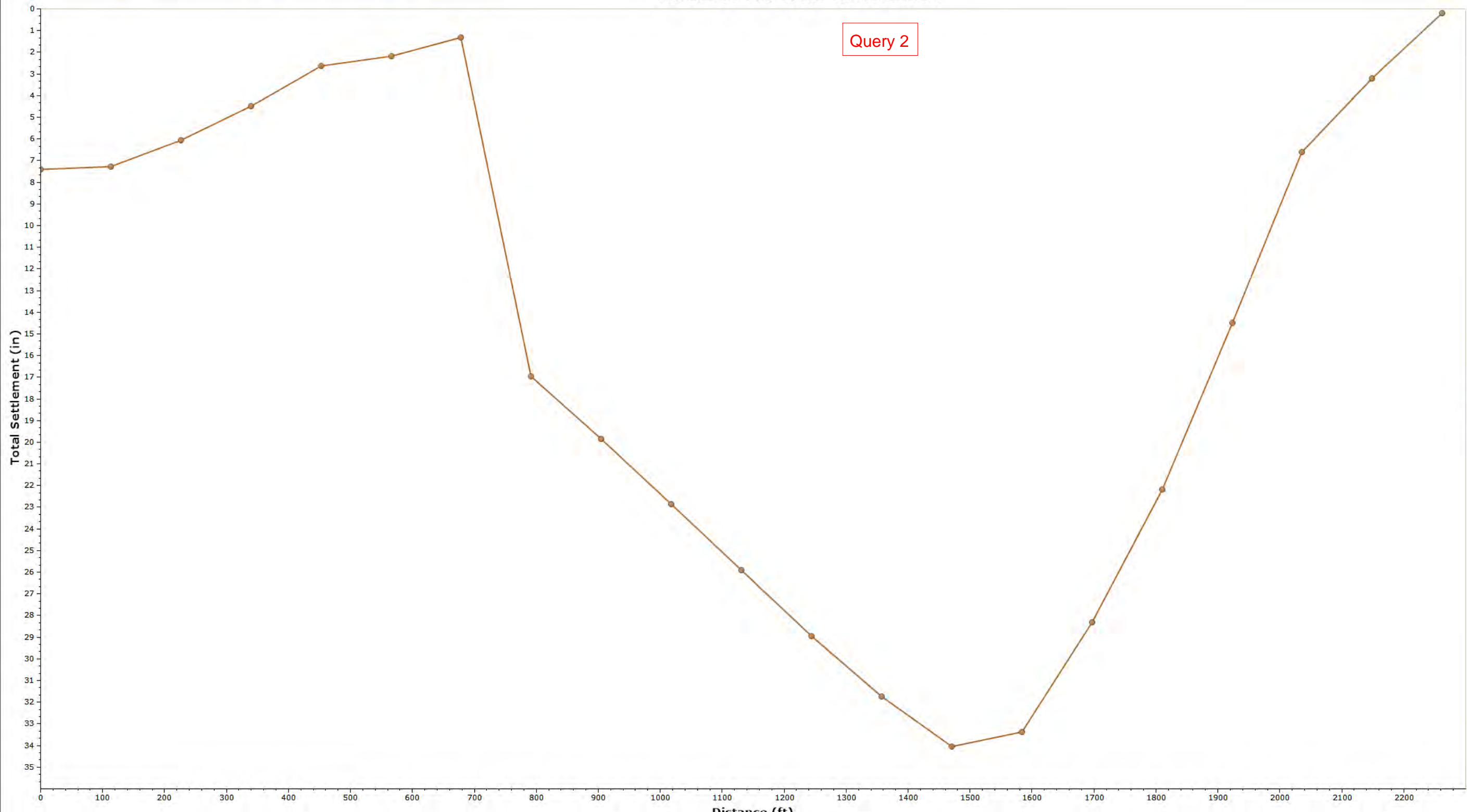
Axes

Logarithmic ... No
Logarithmic ... No
Reverse Ho... No
Reverse Ver... Yes
Swap Axes No
Horizontal M... 0
Horizontal M... 2000
Vertical Mini... 0
Vertical Max... 24

Soil Bands

Distance vs. Total Settlement

Query 2



Query Line 2 (Stage 1)

Chart Controls

Defaults...

Titles

Chart Title Distance vs. Total Settlement
Footer, Line 1 Total Settlement at Depth = ...
Footer, Line 2 Reference Stage: None
Horizontal Axis Distance (ft)
Vertical Axis Total Settlement (in)

Markers and Lines

Show Point ... Yes
Show Labels No
Show Grid Li... No

Fonts

Title Font Verdana, 18, Bold
Footer Font Verdana, 8
Axes Font Verdana, 12, Bold
Axes Numb... Verdana, 8
Legend Font Verdana, 8
Value Labels... Verdana, 8

Legend

Show Legend Yes
Legend hori... Right outside
Legend vert... Center

Colors

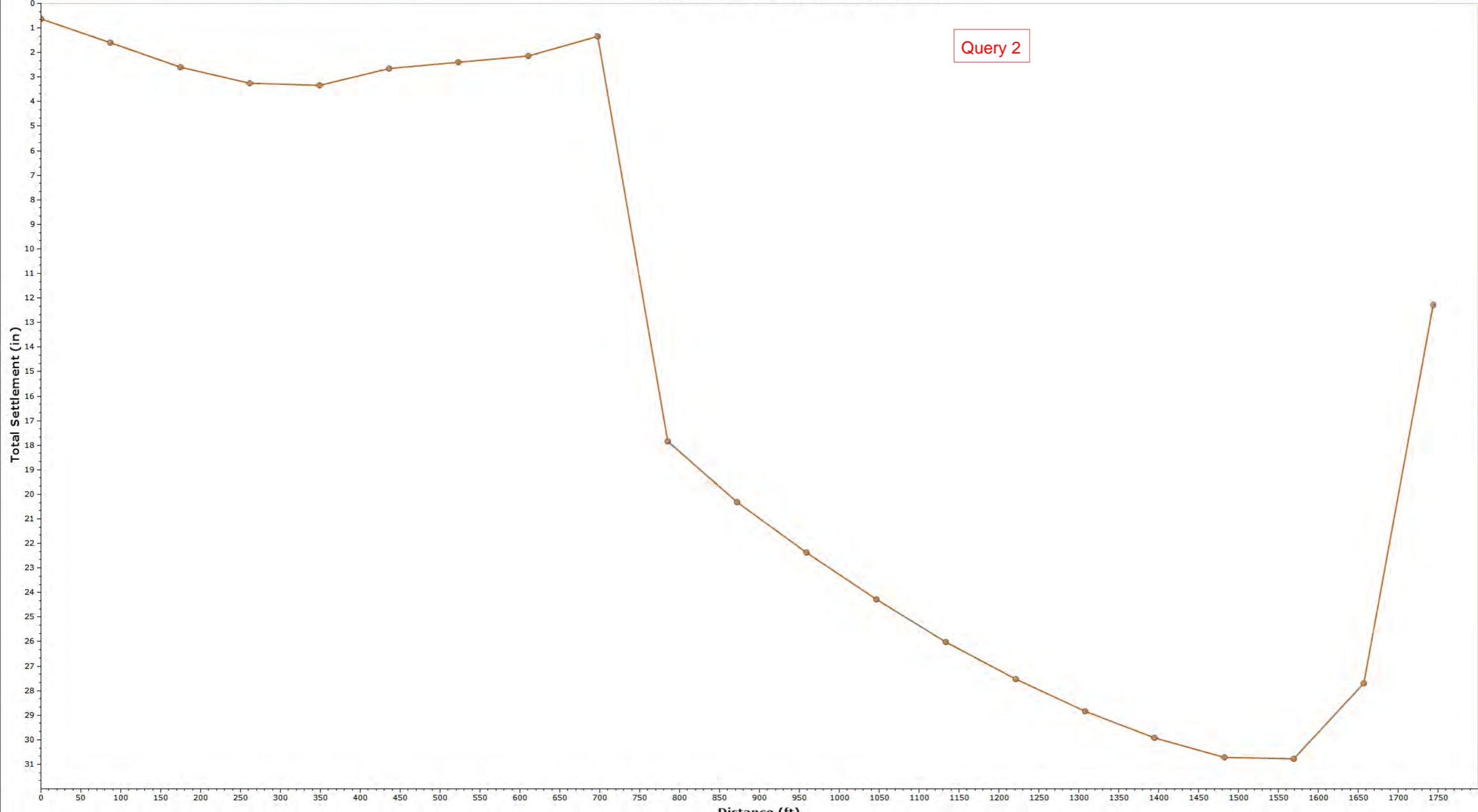
Chart Backg...
Title Text C...
Grid Lines C...
Legend Bac...
Axes Color
Axes Text C...
Label Backg...
Label Text ...

Axes

Logarithmic ... No
Logarithmic ... No
Reverse Ho... No
Reverse Ver... Yes
Swap Axes No
Horizontal M... 0
Horizontal M... 2300
Vertical Mini... 0
Vertical Max... 36

Soil Bands

Distance vs. Total Settlement



Query 2

Query Line 3 (Stage 1)

Chart Controls

Defaults...

Titles

Chart Title Distance vs. Total Settlement
Footer, Line 1 Total Settlement at Depth = ...
Footer, Line 2 Reference Stage: None
Horizontal Axis Distance (ft)
Vertical Axis Total Settlement (in)

Markers and Lines

Show Point ... Yes
Show Labels No
Show Grid Li... No

Fonts

Title Font Verdana, 18, Bold
Footer Font Verdana, 8
Axes Font Verdana, 12, Bold
Axes Numb... Verdana, 8
Legend Font Verdana, 8
Value Labels... Verdana, 8

Legend

Show Legend Yes
Legend hori... Right outside
Legend vert... Center

Colors

Chart Backg...
Title Text C...
Grid Lines C...
Legend Bac...
Axes Color
Axes Text C...
Label Backg...
Label Text ...

Axes

Logarithmic ... No
Logarithmic ... No
Reverse Ho... No
Reverse Ver... Yes
Swap Axes No
Horizontal M... 0
Horizontal M... 1800
Vertical Mini... 0
Vertical Max... 32

Soil Bands

Settle3 Analysis Information

NNSWC Landfill

Project Settings

Document Name	NNSWC Landfill_lower consol
Project Title	NNSWC Landfill
Author	Textor
Company	Burns & McDonnell
Date Created	9/28/2020, 1:47:46 PM
Stress Computation Method	Boussinesq
Minimum settlement ratio for subgrade modulus	0.9

Use average properties to calculate layered stresses

Improve consolidation accuracy

Ignore negative effective stresses in settlement calculations

Stage Settings

Stage #	Name
1	Stage 1

Results

Time taken to compute: 0.827822 seconds

Stage: Stage 1

Data Type	Minimum	Maximum
Total Settlement [in]	0	34.679
Total Consolidation Settlement [in]	0	34.679
Virgin Consolidation Settlement [in]	0	29.6952
Recompression Consolidation Settlement [in]	0	5.02985
Immediate Settlement [in]	0	0
Loading Stress ZZ [ksf]	-0.149402	11.201
Loading Stress XX [ksf]	-3.32198	21.6191
Loading Stress YY [ksf]	-7.25564	17.1292
Effective Stress ZZ [ksf]	-0.149375	14.18
Effective Stress XX [ksf]	-3.14441	21.6191
Effective Stress YY [ksf]	-7.25564	17.1292
Total Stress ZZ [ksf]	-0.149375	16.4676
Total Stress XX [ksf]	-3.14441	21.6191
Total Stress YY [ksf]	-7.25564	17.1292
Modulus of Subgrade Reaction (Total) [ksf/ft]	-1.05011	240.53
Modulus of Subgrade Reaction (Immediate) [ksf/ft]	0	0
Modulus of Subgrade Reaction (Consolidation) [ksf/ft]	-1.05011	240.53
Total Strain	-0.0108322	0.12451
Pore Water Pressure [ksf]	0	2.4336
Degree of Consolidation [%]	0	100
Pre-consolidation Stress [ksf]	5.2	14.1791
Over-consolidation Ratio	1	9589.5
Void Ratio	0.663431	0.920581
Hydroconsolidation Settlement [in]	0	0
Undrained Shear Strength	0	1.38203

Loads

1. Rectangular Load: "Rectangular Load 2"

Length	650 ft
Width	2000 ft
Rotation angle	0 degrees
Load Type	Flexible
Area of Load	1.3e+06 ft ²
Depth	0 ft
Installation Stage	Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
187.93	-980.156	11.2
837.93	-980.156	0
837.93	1019.84	0
187.93	1019.84	11.2

2. Rectangular Load: "Rectangular Load 3"

Length 650 ft
 Width 2000 ft
 Rotation angle 0 degrees
 Load Type Flexible
 Area of Load 1.3e+06 ft²
 Depth 0 ft
 Installation Stage Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1166.41	-981.797	11.2
-516.406	-981.797	0
-516.406	1018.2	0
-1166.41	1018.2	11.2

3. Rectangular Load: "Rectangular Load 4"

Length 700 ft
 Width 2000 ft
 Rotation angle 0 degrees
 Load Type Flexible
 Area of Load 1.4e+06 ft²
 Load 11.2 ksf
 Depth 0 ft
 Installation Stage Stage 1

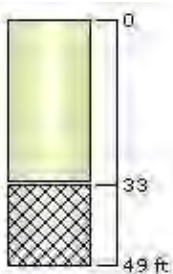
Coordinates

X [ft]	Y [ft]
-512.07	-980.156
187.93	-980.156
187.93	1019.84
-512.07	1019.84

Soil Layers

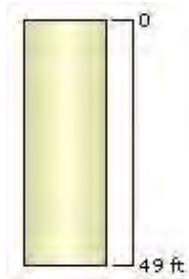
B-1-2020: (822.496, 60.2182)

Layer #	Type	Thickness [ft]	Depth [ft]
1	Loess	33	0



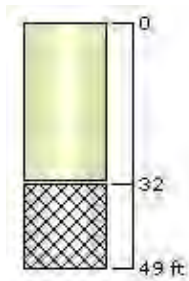
B-8: (441.284, -42.893)

Layer #	Type	Thickness [ft]	Depth [ft]
1	Loess	49	0



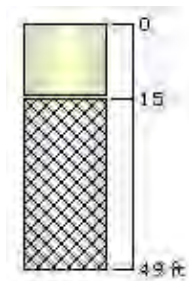
B-7: (-233.341, 22.6781)

Layer #	Type	Thickness [ft]	Depth [ft]
1	Loess	32	0



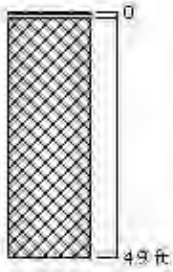
B-2: (-729.306, 264.932)

Layer #	Type	Thickness [ft]	Depth [ft]
1	Loess	15	0



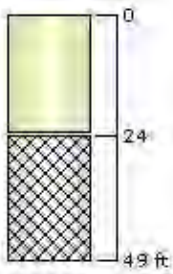
B-2-2020: (-1133.55, -134.67)

Layer #	Type	Thickness [ft]	Depth [ft]
1	Loess	1	0



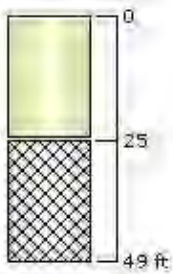
PZ-3S: (459.995, 661.964)

Layer #	Type	Thickness [ft]	Depth [ft]
1	Loess	24	0



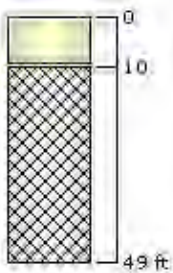
B-5: (-805.35, 800.205)

Layer #	Type	Thickness [ft]	Depth [ft]
1	Loess	25	0



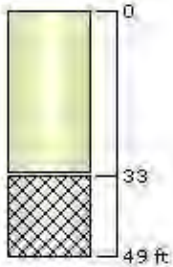
B-10: (-1016.43, -729.047)

Layer #	Type	Thickness [ft]	Depth [ft]
1	Loess	10	0




B-12: (-247.788, -907.933)

Layer #	Type	Thickness [ft]	Depth [ft]
1	Loess	33	0



Soil Properties

Property	Loess
Color	
Unit Weight [kips/ft ³]	0.114
Saturated Unit Weight [kips/ft ³]	0.114
K0	1
Primary Consolidation	Enabled
Material Type	Non-Linear
Cc	0.25
Cr	0.03
e0	0.9
Pc [ksf]	5.2
Undrained Su A [kips/ft ²]	0
Undrained Su S	0.2
Undrained Su m	0.8
Piezo Line ID	1

Groundwater

Groundwater method Piezometric Lines
 Water Unit Weight 0.0624 kips/ft³

Piezometric Line Entities

ID	Depth (ft)
1	10 ft

Query Lines

Line #	Query Line Name	Start Location	End Location	Horizontal Divisions	Vertical Divisions
1	Query Line 1	-885.244, 1021.43	838.629, 169.144	20	Auto: 49
2	Query Line 2	-1161.37, 465.727	838.629, -591.478	20	Auto: 37
3	Query Line 3	-1161.37, -97.1745	343.454, -978.572	20	Auto: 31

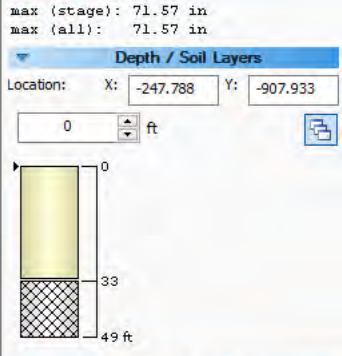
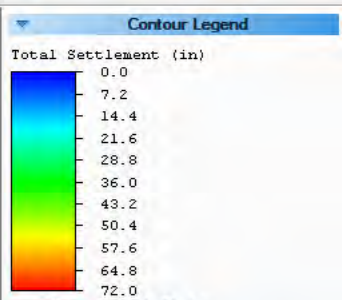
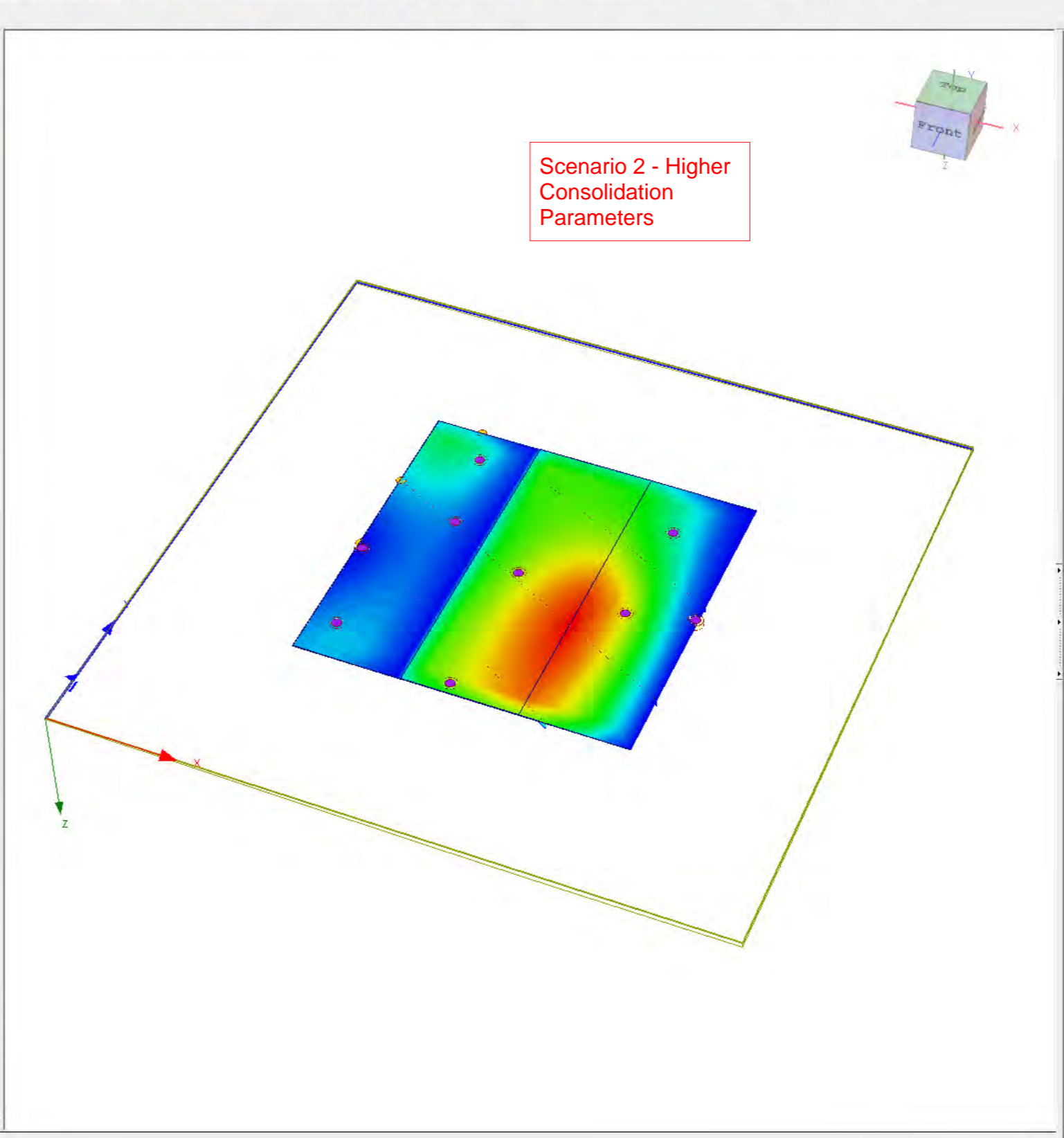
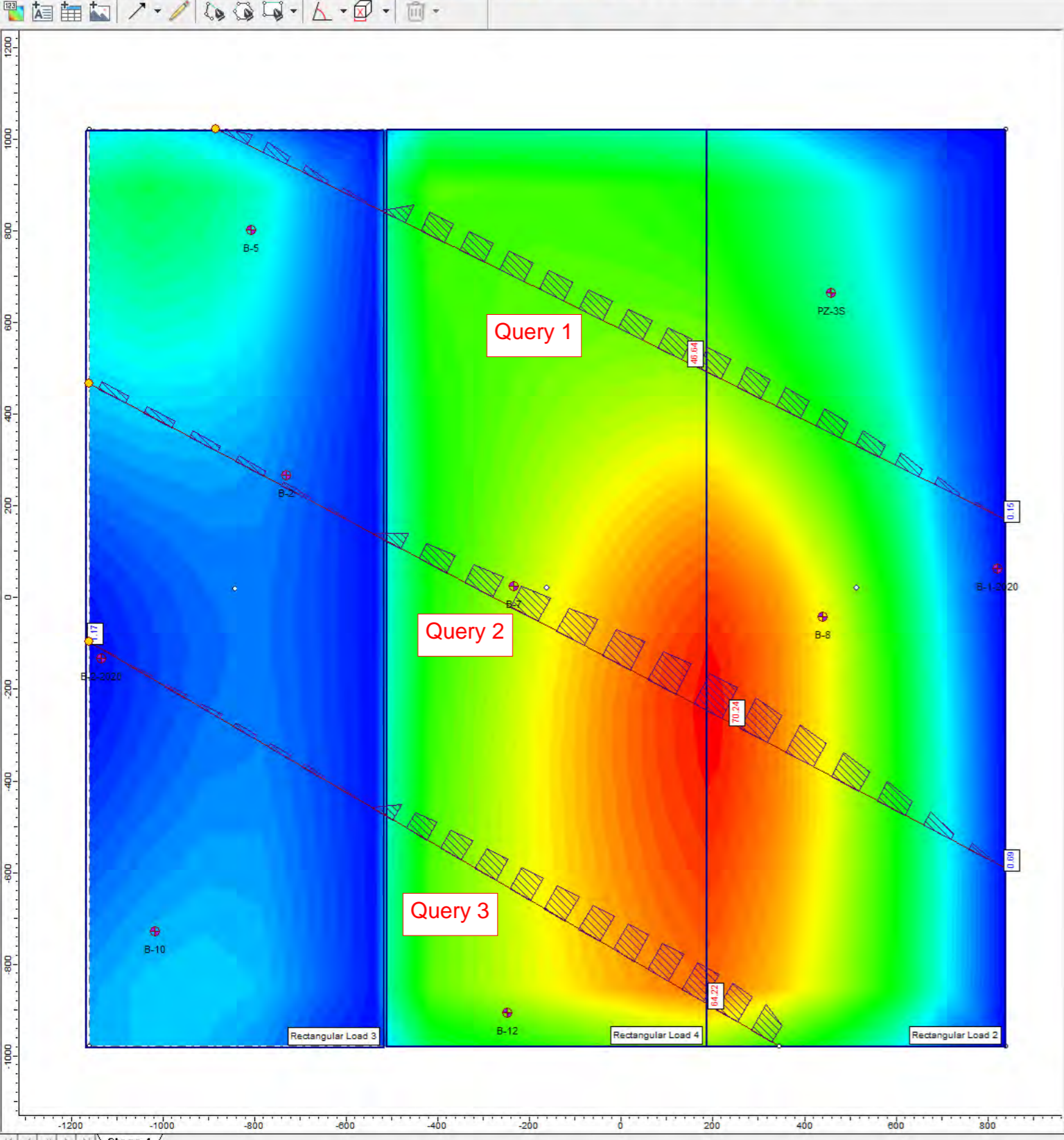
Field Point Grid

Number of points 373

Expansion Factor 1

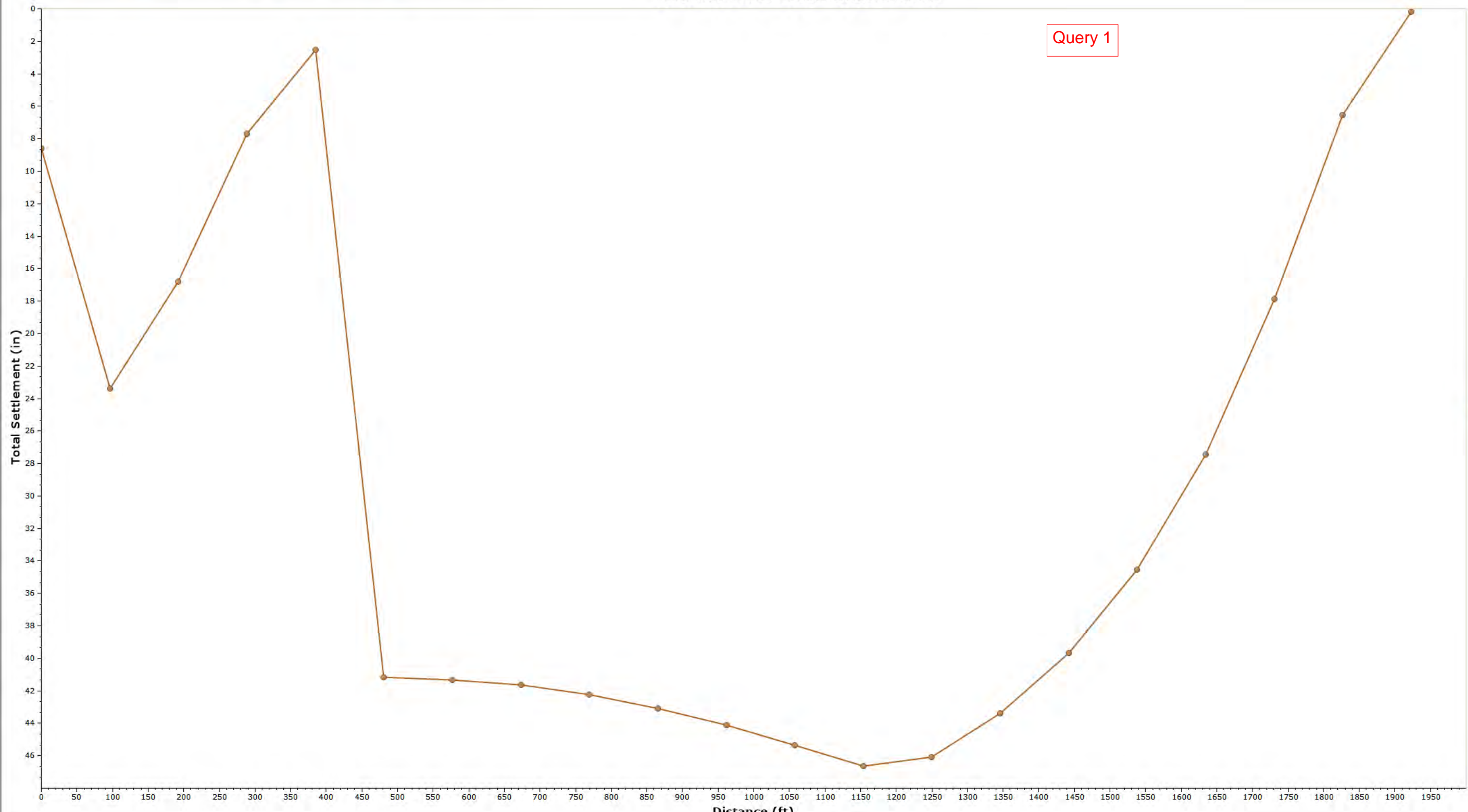
Grid Coordinates

X [ft]	Y [ft]
1837.93	2019.84
1837.93	-1981.8
-2166.41	-1981.8
-2166.41	2019.84



- View Controls
- Line Queries
 - Piezometric Lines
 - Field Point Grid
 - Deformed Contours
 - Loads
 - Soil Column
 - Boreholes
 - Draw Materials on all Queries

Distance vs. Total Settlement



Query 1

Query Line 1 (Stage 1)

Chart Controls

Defaults...

Titles

Chart Title Distance vs. Total Settlement
 Footer, Line 1 Total Settlement at Depth = ...
 Footer, Line 2 Reference Stage: None
 Horizontal Axis Distance (ft)
 Vertical Axis Total Settlement (in)

Markers and Lines

Show Point ... Yes
 Show Labels No
 Show Grid U... No

Fonts

Title Font Verdana, 18, Bold
 Footer Font Verdana, 8
 Axes Font Verdana, 12, Bold
 Axes Numb... Verdana, 8
 Legend Font Verdana, 8
 Value Labels... Verdana, 8

Legend

Show Legend Yes
 Legend hori... Right outside
 Legend vert... Center

Colors

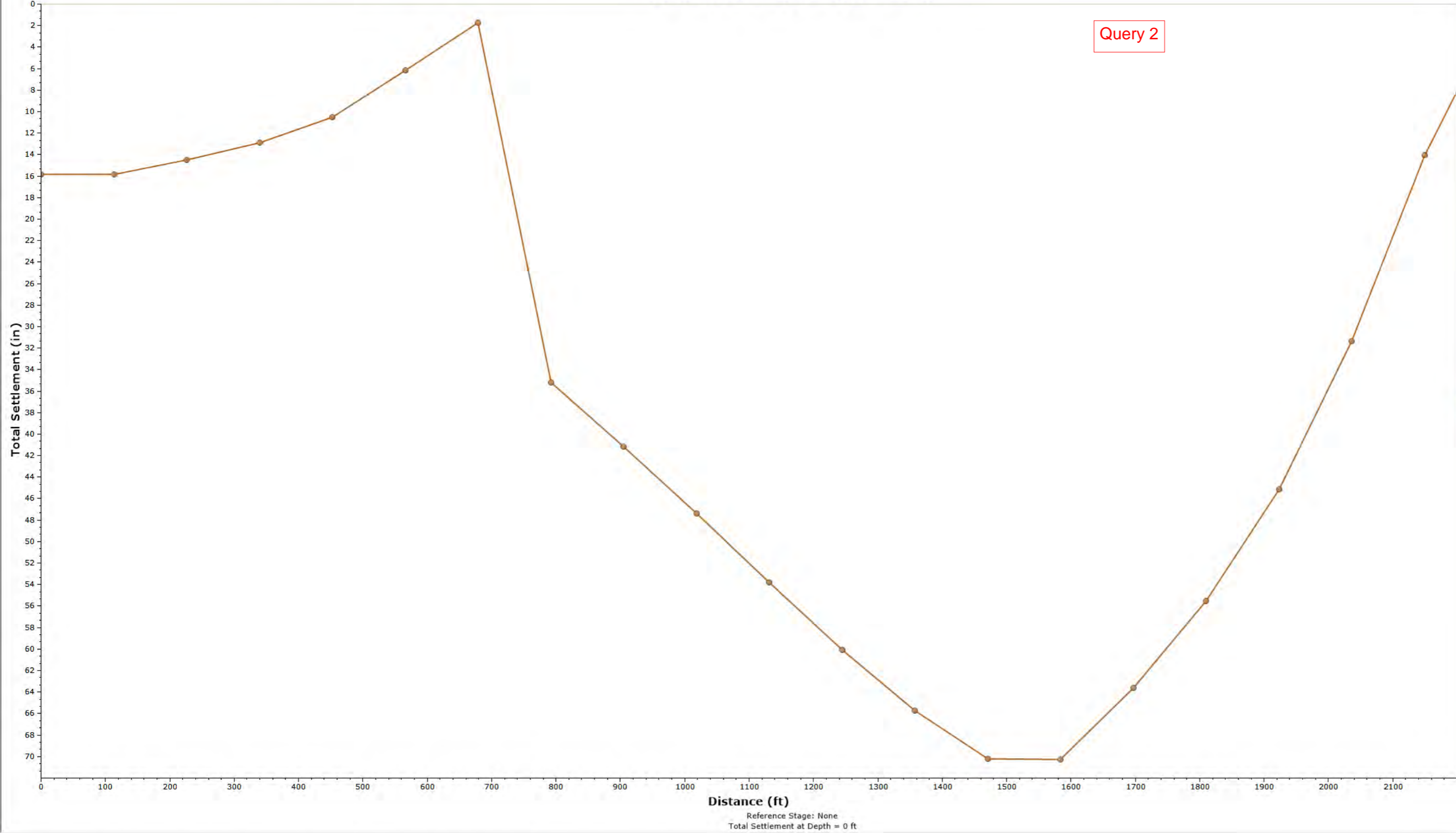
Chart Backg...
 Title Text C...
 Grid Lines C...
 Legend Bac...
 Axes Color
 Axes Text C...
 Label Backg...
 Label Text ...

Axes

Logarithmic ... No
 Logarithmic ... No
 Reverse Ho... No
 Reverse Ver... Yes
 Swap Axes No
 Horizontal M... -0
 Horizontal M... 2000
 Vertical Mini... 0
 Vertical Max... 48

Soil Bands

Distance vs. Total Settlement



Query 2

Query Line 2 (Stage 1)

Chart Controls

Defaults...

Titles

Chart Title Distance vs. Total Settlement
Footer, Line 1 Total Settlement at Depth = ...
Footer, Line 2 Reference Stage: None
Horizontal Axis Distance (ft)
Vertical Axis Total Settlement (in)

Markers and Lines

Show Point ... Yes
Show Labels No
Show Grid Li... No

Fonts

Title Font Verdana, 18, Bold
Footer Font Verdana, 8
Axes Font Verdana, 12, Bold
Axes Numb... Verdana, 8
Legend Font Verdana, 8
Value Labels... Verdana, 8

Legend

Show Legend Yes
Legend hori... Right outside
Legend vert... Center

Colors

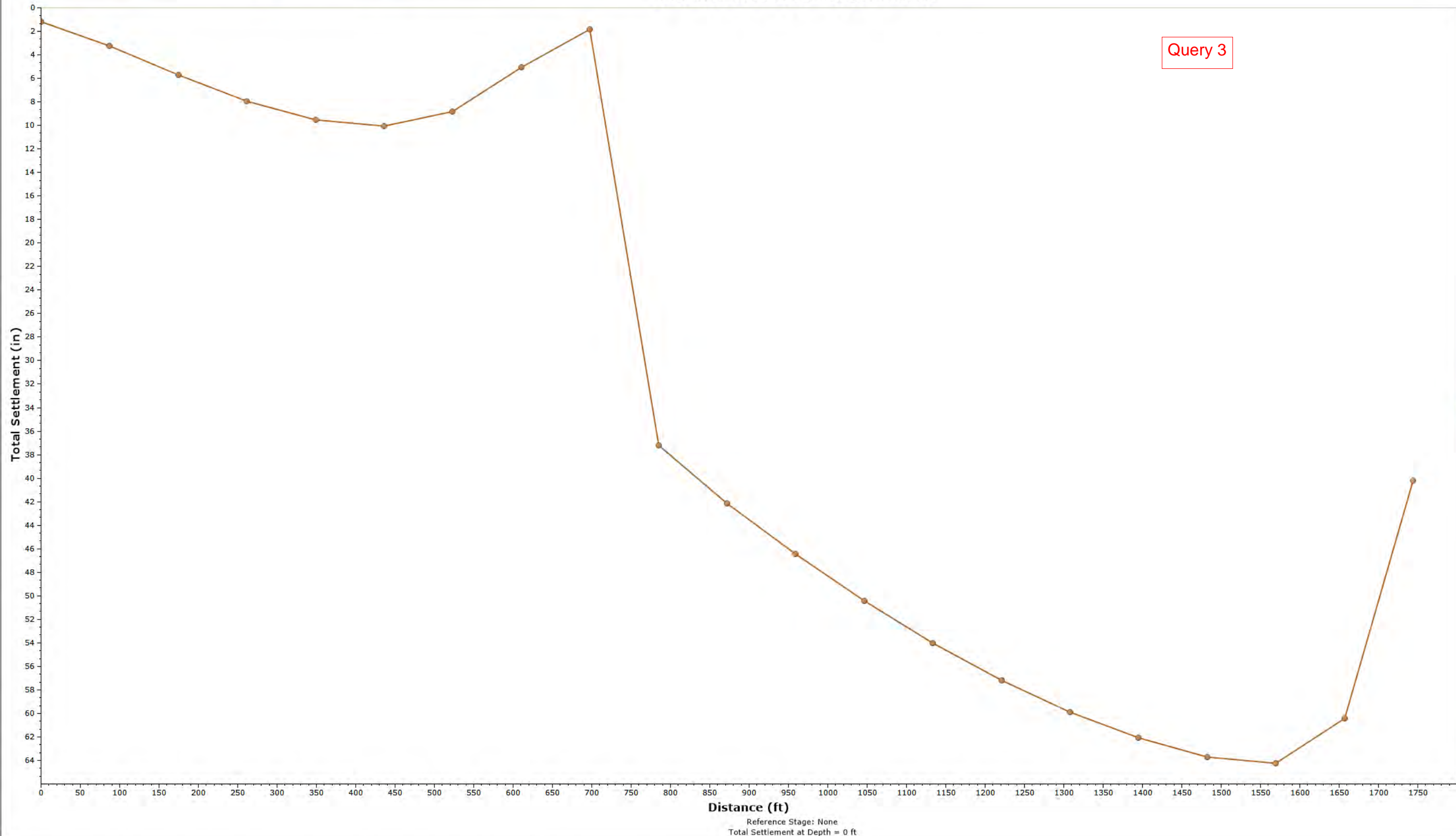
Chart Backg...
Title Text C...
Grid Lines C...
Legend Bac...
Axes Color
Axes Text C...
Label Backg...
Label Text ...

Axes

Logarithmic ... No
Logarithmic ... No
Reverse Ho... No
Reverse Ver... Yes
Swap Axes No
Horizontal M... 0
Horizontal M... 2200
Vertical Mini... 0
Vertical Max... 72

Soil Bands

Distance vs. Total Settlement



Query 3

Query Line 3 (Stage 1)

Chart Controls

Defaults...

- Titles**
 - Chart Title: Distance vs. Total Settlement
 - Footer, Line 1: Total Settlement at Depth = ...
 - Footer, Line 2: Reference Stage: None
 - Horizontal Axis: Distance (ft)
 - Vertical Axis: Total Settlement (in)
- Markers and Lines**
 - Show Point ...: Yes
 - Show Labels: No
 - Show Grid Li...: No
- Fonts**
 - Title Font: Verdana, 18, Bold
 - Footer Font: Verdana, 8
 - Axes Font: Verdana, 12, Bold
 - Axes Numb...: Verdana, 8
 - Legend Font: Verdana, 8
 - Value Labels...: Verdana, 8
- Legend**
 - Show Legend: Yes
 - Legend hori...: Right outside
 - Legend vert...: Center
- Colors**
 - Chart Backg...:
 - Title Text C...:
 - Grid Lines C...:
 - Legend Bac...:
 - Axes Color:
 - Axes Text C...:
 - Label Backg...:
 - Label Text ...:
- Axes**
 - Logarithmic ...: No
 - Logarithmic ...: No
 - Reverse Ho...: No
 - Reverse Ver...: Yes
 - Swap Axes: No
 - Horizontal M...: 0
 - Horizontal M...: 1800
 - Vertical Mini...: 0
 - Vertical Max...: 66
- Soil Bands**

Settle3 Analysis Information

NNSWC Landfill

Project Settings

Document Name	NNSWC Landfill_higher consol
Project Title	NNSWC Landfill
Author	Textor
Company	Burns & McDonnell
Date Created	9/28/2020, 1:47:46 PM
Stress Computation Method	Boussinesq
Minimum settlement ratio for subgrade modulus	0.9

Use average properties to calculate layered stresses

Improve consolidation accuracy

Ignore negative effective stresses in settlement calculations

Stage Settings

Stage #	Name
1	Stage 1

Results

Time taken to compute: 0.80128 seconds

Stage: Stage 1

Data Type	Minimum	Maximum
Total Settlement [in]	0	71.5678
Total Consolidation Settlement [in]	0	71.5678
Virgin Consolidation Settlement [in]	0	68.471
Recompression Consolidation Settlement [in]	0	3.09702
Immediate Settlement [in]	0	0
Loading Stress ZZ [ksf]	-0.149402	11.201
Loading Stress XX [ksf]	-3.32198	21.6191
Loading Stress YY [ksf]	-7.25564	17.1292
Effective Stress ZZ [ksf]	-0.149375	14.18
Effective Stress XX [ksf]	-3.14441	21.6191
Effective Stress YY [ksf]	-7.25564	17.1292
Total Stress ZZ [ksf]	-0.149375	16.4676
Total Stress XX [ksf]	-3.14441	21.6191
Total Stress YY [ksf]	-7.25564	17.1292
Modulus of Subgrade Reaction (Total) [ksf/ft]	-0.787582	125.765
Modulus of Subgrade Reaction (Immediate) [ksf/ft]	0	0
Modulus of Subgrade Reaction (Consolidation) [ksf/ft]	-0.787582	125.765
Total Strain	-0.014443	0.211389
Pore Water Pressure [ksf]	0	2.4336
Degree of Consolidation [%]	0	100
Pre-consolidation Stress [ksf]	2.6	14.1791
Over-consolidation Ratio	1	4794.75
Void Ratio	0.498361	0.927442
Hydroconsolidation Settlement [in]	0	0
Undrained Shear Strength	0	0.793766

Loads

1. Rectangular Load: "Rectangular Load 2"

Length	650 ft
Width	2000 ft
Rotation angle	0 degrees
Load Type	Flexible
Area of Load	1.3e+06 ft ²
Depth	0 ft
Installation Stage	Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
187.93	-980.156	11.2
837.93	-980.156	0
837.93	1019.84	0
187.93	1019.84	11.2

2. Rectangular Load: "Rectangular Load 3"

Length 650 ft
 Width 2000 ft
 Rotation angle 0 degrees
 Load Type Flexible
 Area of Load 1.3e+06 ft²
 Depth 0 ft
 Installation Stage Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1166.41	-981.797	11.2
-516.406	-981.797	0
-516.406	1018.2	0
-1166.41	1018.2	11.2

3. Rectangular Load: "Rectangular Load 4"

Length 700 ft
 Width 2000 ft
 Rotation angle 0 degrees
 Load Type Flexible
 Area of Load 1.4e+06 ft²
 Load 11.2 ksf
 Depth 0 ft
 Installation Stage Stage 1

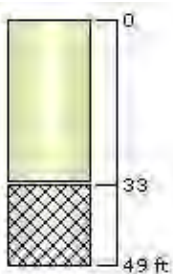
Coordinates

X [ft]	Y [ft]
-512.07	-980.156
187.93	-980.156
187.93	1019.84
-512.07	1019.84

Soil Layers

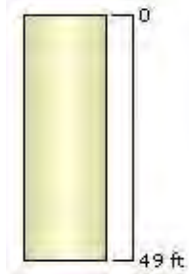
B-1-2020: (822.496, 60.2182)

Layer #	Type	Thickness [ft]	Depth [ft]
1	Loess	33	0



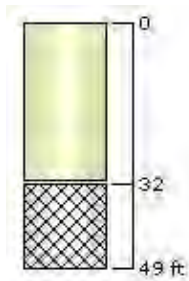
B-8: (441.284, -42.893)

Layer #	Type	Thickness [ft]	Depth [ft]
1	Loess	49	0



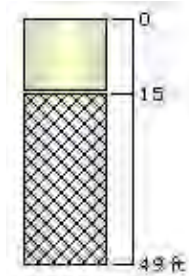
B-7: (-233.341, 22.6781)

Layer #	Type	Thickness [ft]	Depth [ft]
1	Loess	32	0



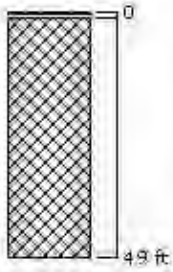
B-2: (-729.306, 264.932)

Layer #	Type	Thickness [ft]	Depth [ft]
1	Loess	15	0



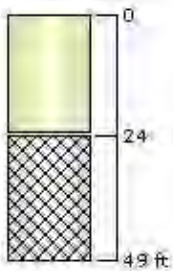
B-2-2020: (-1133.55, -134.67)

Layer #	Type	Thickness [ft]	Depth [ft]
1	Loess	1	0



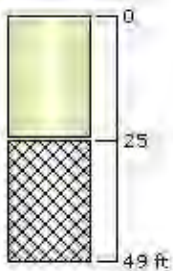
PZ-3S: (459.995, 661.964)

Layer #	Type	Thickness [ft]	Depth [ft]
1	Loess	24	0



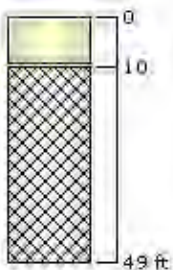
B-5: (-805.35, 800.205)

Layer #	Type	Thickness [ft]	Depth [ft]
1	Loess	25	0



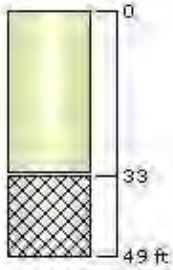
B-10: (-1016.43, -729.047)

Layer #	Type	Thickness [ft]	Depth [ft]
1	Loess	10	0



B-12: (-247.788, -907.933)

Layer #	Type	Thickness [ft]	Depth [ft]
1	Loess	33	0



Soil Properties

Property	Loess
Color	
Unit Weight [kips/ft ³]	0.114
Saturated Unit Weight [kips/ft ³]	0.114
K0	1
Primary Consolidation	Enabled
Material Type	Non-Linear
Cc	0.33
Cr	0.04
e0	0.9
Pc [ksf]	2.6
Undrained Su A [kips/ft ²]	0
Undrained Su S	0.2
Undrained Su m	0.8
Piezo Line ID	1

Groundwater

Groundwater method Piezometric Lines
 Water Unit Weight 0.0624 kips/ft³

Piezometric Line Entities

ID	Depth (ft)
1	10 ft

Query Lines

Line #	Query Line Name	Start Location	End Location	Horizontal Divisions	Vertical Divisions
1	Query Line 1	-885.244, 1021.43	838.629, 169.144	20	Auto: 49
2	Query Line 2	-1161.37, 465.727	838.629, -591.478	20	Auto: 37
3	Query Line 3	-1161.37, -97.1745	343.454, -978.572	20	Auto: 31

Field Point Grid

Number of points 373

Expansion Factor 1

Grid Coordinates

X [ft]	Y [ft]
1837.93	2019.84
1837.93	-1981.8
-2166.41	-1981.8
-2166.41	2019.84

Lower Consolidation
Query 1

Station	Original EL (ft)	Settlement (in)	Settlement (ft)	Final EL (ft)	Slope
0	650	22	1.83	648.17	
100	648	22	1.83	646.17	-0.020
200	646	22	1.83	644.17	-0.020
300	644	21	1.75	642.25	-0.019
400	642	18	1.50	640.50	-0.018
500	640	15	1.25	638.75	-0.018
600	638	11	0.92	637.08	-0.017
700	636	6	0.50	635.50	-0.016
800	634	4	0.33	633.67	-0.018
900	632	1	0.08	631.92	-0.018
					-0.018

Higher Consolidation
Query 1

Station	Original EL (ft)	Settlement (in)	Settlement (ft)	Final EL (ft)	Slope
0	650	45	3.75	646.25	
100	648	46	3.83	644.17	-0.021
200	646	46	3.83	642.17	-0.020
300	644	44	3.67	640.33	-0.018
400	642	42	3.50	638.50	-0.018
500	640	38	3.17	636.83	-0.017
600	638	31	2.58	635.42	-0.014
700	636	23	1.92	634.08	-0.013
800	634	15	1.25	632.75	-0.013
900	632	4	0.33	631.67	-0.011
					-0.016

Query 2

Station	Original EL (ft)	Settlement (in)	Settlement (ft)	Final EL (ft)	Slope
0	650	24	2.00	648.00	
100	648	26	2.17	645.83	-0.022
200	646	29	2.42	643.58	-0.023
300	644	32	2.67	641.33	-0.023
400	642	34	2.83	639.17	-0.022
500	640	35	2.92	637.08	-0.021
600	638	34	2.83	635.17	-0.019
700	636	30	2.50	633.50	-0.017
800	634	23	1.92	632.08	-0.014
900	632	18	1.50	630.50	-0.016
1000	630	12	1.00	629.00	-0.015
					-0.019

Station	Original EL (ft)	Settlement (in)	Settlement (ft)	Final EL (ft)	Slope
0	650	46	3.83	646.17	
100	648	52	4.33	643.67	-0.025
200	646	58	4.83	641.17	-0.025
300	644	64	5.33	638.67	-0.025
400	642	68	5.67	636.33	-0.023
500	640	70	5.83	634.17	-0.022
600	638	70	5.83	632.17	-0.020
700	636	62	5.17	630.83	-0.013
800	634	57	4.75	629.25	-0.016
900	632	49	4.08	627.92	-0.013
1000	630	36	3.00	627.00	-0.009
					-0.019

Query 3

Station	Original EL (ft)	Settlement (in)	Settlement (ft)	Final EL (ft)	Slope
0	650	23	1.92	648.08	
100	648	26	2.17	645.83	-0.023
200	646	27	2.25	643.75	-0.021
300	644	29	2.42	641.58	-0.022
400	642	30	2.50	639.50	-0.021
500	640	31	2.58	637.42	-0.021
600	638	30	2.50	635.50	-0.019
700	636	24	2.00	634.00	-0.015
					-0.020

Query 3

Station	Original EL (ft)	Settlement (in)	Settlement (ft)	Final EL (ft)	Slope
0	650	50	4.17	645.83	
100	648	54	4.50	643.50	-0.023
200	646	57	4.75	641.25	-0.023
300	644	60	5.00	639.00	-0.023
400	642	62	5.17	636.83	-0.022
500	640	64	5.33	634.67	-0.022
600	638	62	5.17	632.83	-0.018
700	636	54	4.50	631.50	-0.013
					-0.020

APPENDIX G – LANDFILL VOLUME AND SOIL CALCULATIONS

ATTACHMENT 1
Northeast Nebraska Solid Waste Coalition
Remaining Airspace Projections w/ Expansion - No Waste Change

4/9/2021
 by:PRF
 ck:LAR

MSW/Industrial Tonnage (Assumed) =	112,000	tons	Remaining Area Capacity
Predicted Future Generation Growth =	1.00%		Area 1/2/3/4/5 2,210,000
Aispace Utilization Factor (AUF) =	1,296	lb/cy	Area 6 PH 1 2,060,000
Ultimate Capacity without final cover and protective soil layer (waste + soil) =	17,530,000	cy	Area 6 PH 2 4,180,000
			Area 7 3,900,000
			Area 8 970,000
			Total 13,320,000

Year	Total Tonnage	Waste Annual MSW/Industrial Airspace Consumed (cy)	Waste Remaining Expansion Ultimate Capacity (cy)	Year End Remaining Cell Capacity	Active Area
2021	112,000	172,840	13,147,160	2,037,160	Area 1/2/3/4/5
2022	113,120	174,568	12,972,593	1,862,593	
2023	114,251	176,314	12,796,279	1,686,279	
2024	115,394	178,077	12,618,202	3,568,202	Area 6 PH 1
2025	116,548	179,857	12,438,345	3,388,345	
2026	117,713	181,656	12,256,689	3,206,689	
2027	118,890	183,473	12,073,216	3,023,216	
2028	120,079	185,307	11,887,909	2,837,909	
2029	121,280	187,160	11,700,748	2,650,748	
2030	122,493	189,032	11,511,716	2,461,716	
2031	123,718	190,922	11,320,794	2,270,794	
2032	124,955	192,832	11,127,962	2,077,962	
2033	126,204	194,760	10,933,203	1,883,203	
2034	127,466	196,707	10,736,495	1,686,495	
2035	128,741	198,675	10,537,821	1,487,821	
2036	130,029	200,661	10,337,159	1,287,159	
2037	131,329	202,668	10,134,491	1,084,491	
2038	132,642	204,695	9,929,797	879,797	
2039	133,969	206,742	9,723,055	673,055	
2040	135,308	208,809	9,514,246	464,246	
2041	136,661	210,897	9,303,349	253,349	
2042	138,028	213,006	9,090,343	40,343	
2043	139,408	215,136	8,875,207	4,005,207	Area 6 PH 2
2044	140,802	217,287	8,657,920	3,787,920	
2045	142,210	219,460	8,438,459	3,568,459	
2046	143,632	221,655	8,216,804	3,346,804	
2047	145,069	223,871	7,992,933	3,122,933	
2048	146,519	226,110	7,766,823	2,896,823	
2049	147,985	228,371	7,538,452	2,668,452	
2050	149,464	230,655	7,307,797	2,437,797	
2051	150,959	232,962	7,074,835	2,204,835	
2052	152,469	235,291	6,839,544	1,969,544	
2053	153,993	237,644	6,601,900	1,731,900	
2054	155,533	240,021	6,361,879	1,491,879	
2055	157,089	242,421	6,119,459	1,249,459	
2056	158,660	244,845	5,874,614	1,004,614	
2057	160,246	247,293	5,627,320	757,320	
2058	161,849	249,766	5,377,554	507,554	
2059	163,467	252,264	5,125,290	255,290	
2060	165,102	254,787	4,870,503	503	
2061	166,753	257,334	4,613,169	3,643,169	Area 7
2062	168,420	259,908	4,353,261	3,383,261	
2063	170,104	262,507	4,090,754	3,120,754	
2064	171,806	265,132	3,825,622	2,855,622	
2065	173,524	267,783	3,557,839	2,587,839	

2066	175,259	270,461	3,287,378	2,317,378
2067	177,011	273,166	3,014,212	2,044,212
2068	178,782	275,897	2,738,315	1,768,315
2069	180,569	278,656	2,459,658	1,489,658
2070	182,375	281,443	2,178,215	1,208,215
2071	184,199	284,257	1,893,958	923,958
2072	186,041	287,100	1,606,858	636,858
2073	187,901	289,971	1,316,887	346,887
2074	189,780	292,871	1,024,017	54,017
2075	191,678	295,799	728,217	728,217 Area 8
2076	193,595	298,757	429,460	429,460
2077	195,531	301,745	127,715	127,715
2078	197,486	304,762	-177,047	-177,047 Life Depleted May 2078
2079	199,461	307,810	-484,857	-484,857
2080	201,455	310,888	-795,745	-795,745

ATTACHMENT 2
Northeast Nebraska Solid Waste Coalition
Remaining Airspace Projections w/ Expansion - 20% Waste Decrease

4/9/2021
 by:PRF
 ck:LAR

MSW/Industrial Tonnage (Assumed) =	89,600	tons	Remaining Area Capacity
Predicted Future Generation Growth =	1.00%		Area 1/2/3/4/5 2,210,000
Airspace Utilization Factor (AUF) =	1,296	lb/cy	Area 6 PH 1 2,060,000
Ultimate Capacity without final cover and protective soil layer (waste + soil) =	17,530,000	cy	Area 6 PH 2 4,180,000
			Area 7 3,900,000
			Area 8 970,000
			Total 13,320,000

Year	Total Tonnage	Waste Annual MSW/Industrial Airspace Consumed (cy)	Waste Remaining Expansion Ultimate Capacity (cy)	Year End Remaining Cell Capacity	Active Area
2021	89,600	138,272	13,181,728	2,071,728	Area 1/2/3/4/5
2022	90,496	139,654	13,042,074	1,932,074	
2023	91,401	141,051	12,901,023	1,791,023	
2024	92,315	142,461	12,758,562	3,708,562	Area 6 PH 1
2025	93,238	143,886	12,614,676	3,564,676	
2026	94,171	145,325	12,469,351	3,419,351	
2027	95,112	146,778	12,322,573	3,272,573	
2028	96,063	148,246	12,174,327	3,124,327	
2029	97,024	149,728	12,024,599	2,974,599	
2030	97,994	151,226	11,873,373	2,823,373	
2031	98,974	152,738	11,720,635	2,670,635	
2032	99,964	154,265	11,566,370	2,516,370	
2033	100,964	155,808	11,410,562	2,360,562	
2034	101,973	157,366	11,253,196	2,203,196	
2035	102,993	158,940	11,094,256	2,044,256	
2036	104,023	160,529	10,933,727	1,883,727	
2037	105,063	162,134	10,771,593	1,721,593	
2038	106,114	163,756	10,607,837	1,557,837	
2039	107,175	165,393	10,442,444	1,392,444	
2040	108,247	167,047	10,275,397	1,225,397	
2041	109,329	168,718	10,106,679	1,056,679	
2042	110,422	170,405	9,936,275	886,275	
2043	111,527	172,109	9,764,166	714,166	
2044	112,642	173,830	9,590,336	540,336	
2045	113,768	175,568	9,414,767	364,767	
2046	114,906	177,324	9,237,444	187,444	
2047	116,055	179,097	9,058,346	8,346	
2048	117,216	180,888	8,877,458	4,007,458	Area 6 PH 2
2049	118,388	182,697	8,694,761	3,824,761	
2050	119,572	184,524	8,510,237	3,640,237	
2051	120,767	186,369	8,323,868	3,453,868	
2052	121,975	188,233	8,135,635	3,265,635	
2053	123,195	190,115	7,945,520	3,075,520	
2054	124,427	192,016	7,753,503	2,883,503	
2055	125,671	193,937	7,559,567	2,689,567	
2056	126,928	195,876	7,363,691	2,493,691	
2057	128,197	197,835	7,165,856	2,295,856	
2058	129,479	199,813	6,966,043	2,096,043	
2059	130,774	201,811	6,764,232	1,894,232	
2060	132,081	203,829	6,560,403	1,690,403	
2061	133,402	205,868	6,354,535	1,484,535	
2062	134,736	207,926	6,146,609	1,276,609	
2063	136,084	210,006	5,936,603	1,066,603	
2064	137,444	212,106	5,724,498	854,498	
2065	138,819	214,227	5,510,271	640,271	

2066	140,207	216,369	5,293,902	423,902	
2067	141,609	218,533	5,075,370	205,370	
2068	143,025	220,718	4,854,652	3,884,652	Area 7
2069	144,455	222,925	4,631,727	3,661,727	
2070	145,900	225,154	4,406,572	3,436,572	
2071	147,359	227,406	4,179,166	3,209,166	
2072	148,833	229,680	3,949,487	2,979,487	
2073	150,321	231,977	3,717,510	2,747,510	
2074	151,824	234,297	3,483,213	2,513,213	
2075	153,342	236,639	3,246,574	2,276,574	
2076	154,876	239,006	3,007,568	2,037,568	
2077	156,425	241,396	2,766,172	1,796,172	
2078	157,989	243,810	2,522,362	1,552,362	
2079	159,569	246,248	2,276,114	1,306,114	
2080	161,164	248,710	2,027,404	1,057,404	
2081	162,776	251,198	1,776,206	806,206	
2082	164,404	253,710	1,522,497	552,497	
2083	166,048	256,247	1,266,250	296,250	
2084	167,708	258,809	1,007,441	37,441	
2085	169,385	261,397	746,044	746,044	Area 8
2086	171,079	264,011	482,032	482,032	
2087	172,790	266,651	215,381	215,381	
2088	174,518	269,318	-53,937	-53,937	Life Depleted October 2088
2089	176,263	272,011	-325,948	-325,948	
2090	178,026	274,731	-600,679	-600,679	

ATTACHMENT 3
Northeast Nebraska Solid Waste Coalition
Remaining Airspace Projections w/ Expansion - 20% Waste Increase

4/9/2021
 by:PRF
 ck:LAR

MSW/Industrial Tonnage (Assumed) =	134,400	tons	Remaining Area Capacity
Predicted Future Generation Growth =	1.00%		Area 1/2/3/4/5 2,210,000
Airspace Utilization Factor (AUF) =	1,296	lb/cy	Area 6 PH 1 2,060,000
Ultimate Capacity without final cover and protective soil layer (waste + soil) =	17,530,000	cy	Area 6 PH 2 4,180,000
			Area 7 3,900,000
			Area 8 970,000
			Total 13,320,000

Year	Total Tonnage	Waste Annual MSW/Industrial Airspace Consumed (cy)	Waste Remaining Expansion Ultimate Capacity (cy)	Year End Remaining Cell Capacity	Active Area
2021	134,400	207,407	13,112,593	2,002,593	Area 1/2/3/4/5
2022	135,744	209,481	12,903,111	1,793,111	
2023	137,101	211,576	12,691,535	1,581,535	
2024	138,472	213,692	12,477,843	3,427,843	Area 6 PH 1
2025	139,857	215,829	12,262,014	3,212,014	
2026	141,256	217,987	12,044,027	2,994,027	
2027	142,668	220,167	11,823,859	2,773,859	
2028	144,095	222,369	11,601,491	2,551,491	
2029	145,536	224,593	11,376,898	2,326,898	
2030	146,991	226,838	11,150,060	2,100,060	
2031	148,461	229,107	10,920,953	1,870,953	
2032	149,946	231,398	10,689,555	1,639,555	
2033	151,445	233,712	10,455,843	1,405,843	
2034	152,960	236,049	10,219,794	1,169,794	
2035	154,489	238,409	9,981,385	931,385	
2036	156,034	240,794	9,740,591	690,591	
2037	157,595	243,201	9,497,390	447,390	
2038	159,171	245,634	9,251,756	201,756	
2039	160,762	248,090	9,003,666	4,133,666	Area 6 PH 2
2040	162,370	250,571	8,753,095	3,883,095	
2041	163,994	253,076	8,500,019	3,630,019	
2042	165,633	255,607	8,244,412	3,374,412	
2043	167,290	258,163	7,986,249	3,116,249	
2044	168,963	260,745	7,725,504	2,855,504	
2045	170,652	263,352	7,462,151	2,592,151	
2046	172,359	265,986	7,196,165	2,326,165	
2047	174,082	268,646	6,927,520	2,057,520	
2048	175,823	271,332	6,656,187	1,786,187	
2049	177,582	274,046	6,382,142	1,512,142	
2050	179,357	276,786	6,105,356	1,235,356	
2051	181,151	279,554	5,825,802	955,802	
2052	182,962	282,349	5,543,453	673,453	
2053	184,792	285,173	5,258,280	388,280	
2054	186,640	288,025	4,970,255	100,255	
2055	188,506	290,905	4,679,350	3,709,350	Area 7
2056	190,391	293,814	4,385,536	3,415,536	
2057	192,295	296,752	4,088,784	3,118,784	
2058	194,218	299,720	3,789,065	2,819,065	
2059	196,160	302,717	3,486,348	2,516,348	
2060	198,122	305,744	3,180,604	2,210,604	
2061	200,103	308,801	2,871,803	1,901,803	
2062	202,104	311,889	2,559,913	1,589,913	
2063	204,125	315,008	2,244,905	1,274,905	
2064	206,167	318,158	1,926,747	956,747	
2065	208,228	321,340	1,605,407	635,407	

2066	210,311	324,553	1,280,853	310,853	
2067	212,414	327,799	953,055	953,055	Area 8
2068	214,538	331,077	621,978	621,978	
2069	216,683	334,388	287,590	287,590	
2070	218,850	337,732	-50,141	-50,141	Life Depleted November 2070
2071	221,039	341,109	-391,250	-391,250	
2072	223,249	344,520	-735,770	-735,770	

ATTACHMENT 4
Northeast Nebraska Solid Waste Coalition
Expansion Soil Balance Calculations

4/9/2021
 by:PRF
 ck:LAR

Available Soil		
NW Borrow Soil Volume (from surface)	309,481	CY
Soil Volume to be Excavated from Area 6 thru 8	1,839,091	CY
Total Available Soil =	2,148,571	CY

Net Fill Volume Total - cy

Soil Required		
Remaining Fill Volume (Areas 1-8)	13,320,000	CY
Remaining Daily and Intermediate Cover to be Placed (4:1 waste:soil ratio)	2,648,111.33	CY
Final Cover Volume (includes sand layer)	576,145	CY
Final Cover Placed to Date	0	CY
Sand Layer Final Cover Volume (to be imported)	-82,306	CY
Protective Cover Remaining to be Placed (Area 6 thru Area 8)	117,939	CY
Total Soil Required =	3,259,889	CY

Total Soil Available = 2,148,571 CY
 Total Soil Required for life of Landfill = 3,259,889 CY
Total Site Soil Balance = (1,111,318) CY

ATTACHMENT 5
Northeast Nebraska Solid Waste Coalition
Remaining Soil Projections w/ Expansion - No Waste Change

4/9/2021
 by:PRF
 ck:LAR

MSW/Industrial Tonnage (Assumed) = 112,000 tons
 Predicted Future Generation Growth = 1.00%
 Airspace Utilization Factor (AUF) = 1,296 lb/cy

		² Remaining Protective Cover Soil (CY)		Remaining Available Soil (CY)	
³ Remaining Final Cover Soil (CY)		Area 1/2/3/4/5	0	NW Borrow	309,481
Area 1-6 PH1	125,862	Area 6 PH 1	22,514	Area 1/2/3/4/5	0
Area 6 PH 2	110,473	Area 6 PH 2	46,276	Area 6 PH 1	187,578
Area 7	164,832	Area 7	33,830	Area 6 PH 2	788,070
Area 8	92,671	Area 8	15,319	Area 7	764,895
Total	493,839	Total	117,939	Area 8	98,547
				Total	2,148,571

1. Required daily and intermediate cover assumes a 4:1 waste:soil ratio.
2. Protective cover to be placed at the time of construction of the new Area. Reference remaining airspace projection calculations for Area construction timing details.
3. Final cover placement is sequenced to match construction of the new Area to maximize the usage of excavated soils.

Year	Total Tonnage	Waste Annual MSW/Industrial Airspace Consumed (CY)	Daily and Int. Cover Placed (CY) ¹	Final Cover Placed (CY) ³	Protective Cover Placed (CY) ²	Ultimate Remaining Available Soil	Year End Remaining Available Soil	Borrow Source
2021	112,000	172,840	34,362			2,114,209	153,216	Area 6 PH 1 Excavation
2022	113,120	174,568	34,705			2,079,504	118,511	
2023	114,251	176,314	35,052		22,514	2,021,937	60,944	Stockpile Remaining Area 6 PH 1 Excavation at NW Borrow
2024	115,394	178,077	35,403			1,986,534	335,022	NW Borrow
2025	116,548	179,857	35,757			1,950,777	299,265	
2026	117,713	181,656	36,115			1,914,663	263,150	
2027	118,890	183,473	36,476			1,878,187	226,674	
2028	120,079	185,307	36,840			1,841,347	189,834	
2029	121,280	187,160	37,209			1,804,138	152,625	
2030	122,493	189,032	37,581			1,766,557	115,044	
2031	123,718	190,922	37,957			1,728,600	77,087	
2032	124,955	192,832	38,336			1,690,264	38,751	
2033	126,204	194,760	38,720			1,651,544	788,102	Area 6 PH 2 Excavation
2034	127,466	196,707	39,107			1,612,437	748,995	
2035	128,741	198,675	39,498			1,572,939	709,497	
2036	130,029	200,661	39,893			1,533,047	669,604	
2037	131,329	202,668	40,292			1,492,755	629,312	
2038	132,642	204,695	40,695			1,452,060	588,618	

2039	133,969	206,742	41,102			1,410,958	547,516	
2040	135,308	208,809	41,513			1,369,446	506,003	
2041	136,661	210,897	41,928			1,327,518	464,075	
2042	138,028	213,006	42,347	125,862	46,276	1,113,033	249,590	Stockpile Remaining Area 6 PH 2 Excavation Off-Site
2043	139,408	215,136	42,771			1,070,262	722,125	Area 7 Excavation
2044	140,802	217,287	43,198			1,027,064	678,926	
2045	142,210	219,460	43,630			983,433	635,296	
2046	143,632	221,655	44,067			939,367	591,230	
2047	145,069	223,871	44,507			894,860	546,722	
2048	146,519	226,110	44,952			849,907	501,770	
2049	147,985	228,371	45,402			804,505	456,368	
2050	149,464	230,655	45,856			758,650	410,512	
2051	150,959	232,962	46,314			712,335	364,198	
2052	152,469	235,291	46,778			665,558	317,420	
2053	153,993	237,644	47,245			618,312	270,175	
2054	155,533	240,021	47,718			570,594	222,457	
2055	157,089	242,421	48,195			522,399	174,262	
2056	158,660	244,845	48,677			473,723	125,585	
2057	160,246	247,293	49,164			424,559	76,422	
2058	161,849	249,766	49,655			374,904	26,766	
2059	163,467	252,264	50,152			324,752	226,205	Area 6 PH 2 Excavation Stockpile
2060	165,102	254,787	50,653	110,473	33,830	129,795	31,248	
2061	166,753	257,334	51,160			78,635	78,635	Area 8 Excavation
2062	168,420	259,908	51,672			26,964	26,964	
2063	170,104	262,507	52,188			-25,225	-25,225	Soil Depleted July 2063
2064	171,806	265,132	52,710			-77,935	-77,935	
2065	173,524	267,783	53,237			-131,172	-131,172	
2066	175,259	270,461	53,770			-184,941	-184,941	
2067	177,011	273,166	54,307			-239,249	-239,249	
2068	178,782	275,897	54,850			-294,099	-294,099	
2069	180,569	278,656	55,399			-349,498	-349,498	
2070	182,375	281,443	55,953			-405,451	-405,451	
2071	184,199	284,257	56,512			-461,963	-461,963	
2072	186,041	287,100	57,078			-519,041	-519,041	
2073	187,901	289,971	57,648			-576,689	-576,689	
2074	189,780	292,871	58,225	164,832	15,319	-815,065	-815,065	
2075	191,678	295,799	58,807			-873,872	-873,872	
2076	193,595	298,757	59,395			-933,267	-933,267	
2077	195,531	301,745	59,989			-993,256	-993,256	
2078	197,486	304,762	25,391	92,671		-1,111,318	-1,111,318	Life Depleted May 2078

ATTACHMENT 6
Northeast Nebraska Solid Waste Coalition
Remaining Soil Projections w/ Expansion - 20% Waste Decrease

4/9/2021
 by:PRF
 ck:LAR

MSW/Industrial Tonnage (Assumed) = **89,600** tons
 Predicted Future Generation Growth = 1.00%
 Airspace Utilization Factor (AUF) = 1,296 lb/cy

		² Remaining Protective Cover Soil (CY)		Remaining Available Soil	
³ Remaining Final Cover Soil (CY)		Area 1/2/3/4/5	0	NW Borrow	309,481
Area 1-6 PH1	125,862	Area 6 PH 1	22,514	Area 1/2/3/4/5	0
Area 6 PH 2	110,473	Area 6 PH 2	46,276	Area 6 PH 1	187,578
Area 7	164,832	Area 7	33,830	Area 6 PH 2	788,070
Area 8	92,671	Area 8	15,319	Area 7	764,895
Total	493,839	Total	117,939	Area 8	98,547
				Total	2,148,571

1. Required daily and intermediate cover assumes a 4:1 waste:soil ratio.
2. Protective cover to be placed at the time of construction of the new Area. Reference remaining airspace projection calculations for Area construction timing details.
3. Final cover placement is sequenced to match construction of the new Area to maximize the usage of excavated soils.

Year	Total Tonnage	Waste Annual MSW/Industrial Airspace Consumed (CY)	Daily and Int. Cover Placed (CY) ¹	Final Cover Placed (CY) ³	Protective Cover Placed (CY) ²	Ultimate Remaining Available Soil	Year End Remaining Available Soil	Borrow Source
2021	89,600	138,272	27,489			2,121,082	160,088	Area 6 PH 1 Excavation
2022	90,496	139,654	27,764			2,093,317	132,324	
2023	91,401	141,051	28,042		22,514	2,042,761	81,768	Stockpile Remaining Area 6 PH 1 Excavation at NW Borrow
2024	92,315	142,461	28,322			2,014,439	362,926	NW Borrow
2025	93,238	143,886	28,606			1,985,833	334,320	
2026	94,171	145,325	28,892			1,956,942	305,429	
2027	95,112	146,778	29,181			1,927,761	276,248	
2028	96,063	148,246	29,472			1,898,289	246,776	
2029	97,024	149,728	29,767			1,868,522	217,009	
2030	97,994	151,226	30,065			1,838,457	186,944	
2031	98,974	152,738	30,365			1,808,092	156,579	
2032	99,964	154,265	30,669			1,777,422	125,910	
2033	100,964	155,808	30,976			1,746,447	94,934	
2034	101,973	157,366	31,285			1,715,161	63,649	
2035	102,993	158,940	31,598			1,683,563	32,050	
2036	104,023	160,529	31,914			1,651,649	788,206	Area 6 PH 2 Excavation
2037	105,063	162,134	32,233			1,619,415	755,973	
2038	106,114	163,756	32,556			1,586,859	723,417	

2039	107,175	165,393	32,881			1,553,978	690,536	
2040	108,247	167,047	33,210			1,520,768	657,325	
2041	109,329	168,718	33,542			1,487,226	623,783	
2042	110,422	170,405	33,878			1,453,348	589,905	
2043	111,527	172,109	34,216			1,419,131	555,689	
2044	112,642	173,830	34,559			1,384,573	521,130	
2045	113,768	175,568	34,904			1,349,669	486,226	
2046	114,906	177,324	35,253			1,314,415	450,973	
2047	116,055	179,097	35,606	125,862	46,276	1,106,671	243,229	Stockpile Remaining Area 6 PH 2 Excavation Off-Site
2048	117,216	180,888	35,962			1,070,710	728,933	Area 7 Excavation
2049	118,388	182,697	36,321			1,034,388	692,612	
2050	119,572	184,524	36,685			997,703	655,927	
2051	120,767	186,369	37,052			960,652	618,876	
2052	121,975	188,233	37,422			923,230	581,454	
2053	123,195	190,115	37,796			885,434	543,657	
2054	124,427	192,016	38,174			847,259	505,483	
2055	125,671	193,937	38,556			808,703	466,927	
2056	126,928	195,876	38,942			769,762	427,986	
2057	128,197	197,835	39,331			730,431	388,655	
2058	129,479	199,813	39,724			690,707	348,930	
2059	130,774	201,811	40,122			650,585	308,809	
2060	132,081	203,829	40,523			610,062	268,286	
2061	133,402	205,868	40,928			569,134	227,358	
2062	134,736	207,926	41,337			527,797	186,021	
2063	136,084	210,006	41,751			486,047	144,270	
2064	137,444	212,106	42,168			443,878	102,102	
2065	138,819	214,227	42,590			401,289	59,513	
2066	140,207	216,369	43,016			358,273	16,497	
2067	141,609	218,533	43,446	110,473	33,830	170,524	71,977	Area 6 PH 2 Excavation Stockpile
2068	143,025	220,718	43,880			126,644	28,097	
2069	144,455	222,925	44,319			82,325	82,325	Area 8 Excavation
2070	145,900	225,154	44,762			37,562	37,562	
2071	147,359	227,406	45,210			-7,648	-7,648	Soil Depleted November 2071
2072	148,833	229,680	45,662			-53,310	-53,310	
2073	150,321	231,977	46,119			-99,428	-99,428	
2074	151,824	234,297	46,580			-146,008	-146,008	
2075	153,342	236,639	47,046			-193,054	-193,054	
2076	154,876	239,006	47,516			-240,570	-240,570	
2077	156,425	241,396	47,991			-288,561	-288,561	
2078	157,989	243,810	48,471			-337,032	-337,032	
2079	159,569	246,248	48,956			-385,988	-385,988	
2080	161,164	248,710	49,445			-435,433	-435,433	
2081	162,776	251,198	49,940			-485,373	-485,373	
2082	164,404	253,710	50,439			-535,813	-535,813	
2083	166,048	256,247	50,944			-586,756	-586,756	

2084	167,708	258,809	51,453	164,832	15,319	-818,360	-818,360	
2085	169,385	261,397	51,968			-870,328	-870,328	
2086	171,079	264,011	52,487			-922,815	-922,815	
2087	172,790	266,651	53,012			-975,827	-975,827	
2088	174,518	269,318	42,819	92,671		-1,111,318	-1,111,318	Life Depleted October 2088

ATTACHMENT 7
Northeast Nebraska Solid Waste Coalition
Remaining Soil Projections w/ Expansion - 20% Waste Increase

4/8/2021
 by:PRF
 ck:LAR

MSW/Industrial Tonnage (Assumed) = 134,400 tons
 Predicted Future Generation Growth = 1.00%
 Airspace Utilization Factor (AUF) = 1,296 lb/cy

		² Remaining Protective Cover Soil (CY)		Remaining Available Soil	
³ Remaining Final Cover Soil (CY)		Area 1/2/3/4/5	0	NW Borrow	309,481
Area 1-6 PH1	125,862	Area 6 PH 1	22,514	Area 1/2/3/4/5	0
Area 6 PH 2	110,473	Area 6 PH 2	46,276	Area 6 PH 1	187,578
Area 7	164,832	Area 7	33,830	Area 6 PH 2	788,070
Area 8	92,671	Area 8	15,319	Area 7	764,895
Total	493,839	Total	117,939	Area 8	98,547
				Total	2,148,571

1. Required daily and intermediate cover assumes a 4:1 waste:soil ratio.
2. Protective cover to be placed at the time of construction of the new Area. Reference remaining airspace projection calculations for Area construction timing details.
3. Final cover placement is sequenced to match construction of the new Area to maximize the usage of excavated soils.

Year	Total Tonnage	Waste Annual MSW/Industrial Airspace Consumed (cy)	Daily and Int. Cover Placed (CY) ¹	Final Cover Placed (CY) ³	Protective Cover Placed (CY) ²	Ultimate Remaining Available Soil	Year End Remaining Available Soil	Borrow Source
2021	134,400	207,407	41,234			2,107,337	146,344	Area 6 PH 1 Excavation
2022	135,744	209,481	41,646			2,065,691	104,697	
2023	137,101	211,576	42,063		22,514	2,001,113	40,120	Stockpile Remaining Area 6 PH 1 Excavation at NW Borrow
2024	138,472	213,692	42,484			1,958,630	307,117	NW Borrow
2025	139,857	215,829	42,908			1,915,721	264,209	
2026	141,256	217,987	43,337			1,872,384	220,871	
2027	142,668	220,167	43,771			1,828,613	177,100	
2028	144,095	222,369	44,209			1,784,405	132,892	
2029	145,536	224,593	44,651			1,739,754	88,241	
2030	146,991	226,838	45,097			1,694,657	43,144	
2031	148,461	229,107	45,548			1,649,109	785,667	Area 6 PH 2 Excavation
2032	149,946	231,398	46,004			1,603,105	739,663	
2033	151,445	233,712	46,464			1,556,642	693,199	
2034	152,960	236,049	46,928			1,509,714	646,271	
2035	154,489	238,409	47,398			1,462,316	598,874	
2036	156,034	240,794	47,871			1,414,445	551,002	
2037	157,595	243,201	48,350			1,366,094	502,652	
2038	159,171	245,634	48,834	125,862	46,276	1,145,123	281,680	Stockpile Remaining Area 6 PH 2 Excavation Off-Site

2039	160,762	248,090	49,322			1,095,801	715,573	Area 7 Excavation
2040	162,370	250,571	49,815			1,045,985	665,758	
2041	163,994	253,076	50,313			995,672	615,445	
2042	165,633	255,607	50,817			944,855	564,628	
2043	167,290	258,163	51,325			893,531	513,303	
2044	168,963	260,745	51,838			841,693	461,465	
2045	170,652	263,352	52,356			789,336	409,109	
2046	172,359	265,986	52,880			736,456	356,229	
2047	174,082	268,646	53,409			683,048	302,820	
2048	175,823	271,332	53,943			629,105	248,878	
2049	177,582	274,046	54,482			574,623	194,395	
2050	179,357	276,786	55,027			519,596	139,368	
2051	181,151	279,554	55,577			464,018	83,791	
2052	182,962	282,349	56,133			407,885	27,658	
2053	184,792	285,173	56,694			351,191	252,644	Area 6 PH 2 Excavation Stockpile
2054	186,640	288,025	57,261	110,473	33,830	149,627	51,079	
2055	188,506	290,905	57,834			91,793	91,793	Area 8 Excavation
2056	190,391	293,814	58,412			33,380	33,380	
2057	192,295	296,752	58,996			-25,616	-25,616	Soil Depleted July 2057
2058	194,218	299,720	59,586			-85,203	-85,203	
2059	196,160	302,717	60,182			-145,385	-145,385	
2060	198,122	305,744	60,784			-206,169	-206,169	
2061	200,103	308,801	61,392			-267,561	-267,561	
2062	202,104	311,889	62,006			-329,567	-329,567	
2063	204,125	315,008	62,626			-392,193	-392,193	
2064	206,167	318,158	63,252			-455,445	-455,445	
2065	208,228	321,340	63,885			-519,329	-519,329	
2066	210,311	324,553	64,524	164,832	15,319	-764,004	-764,004	
2067	212,414	327,799	65,169			-829,173	-829,173	
2068	214,538	331,077	65,820			-894,993	-894,993	
2069	216,683	334,388	66,479			-961,472	-961,472	
2070	218,850	337,732	57,175	92,671		-1,111,318	-1,111,318	Life Depleted November 2070







APPENDIX H – AREA CLOSURE SEQUENCING FIGURES



NOTES

1. EXISTING CONDITIONS BASED ON 2019 GOOGLE EARTH AERIAL.
2. PROPOSED CONTOURS SHOWN ARE TOP OF FINAL COVER. CONTOUR INTERVAL IS 10-FEET.

LEGEND

-  INTERMEDIATE COVER CONTOURS
-  FINAL COVER CONTOURS
-  ROAD/INTERMEDIATE COVER
-  PROPOSED FINAL COVER CLOSURE
-  PROPOSED EXISTING FINAL COVER
-  PROPOSED ACTIVE AREA

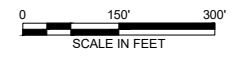
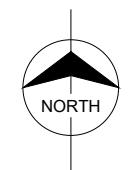
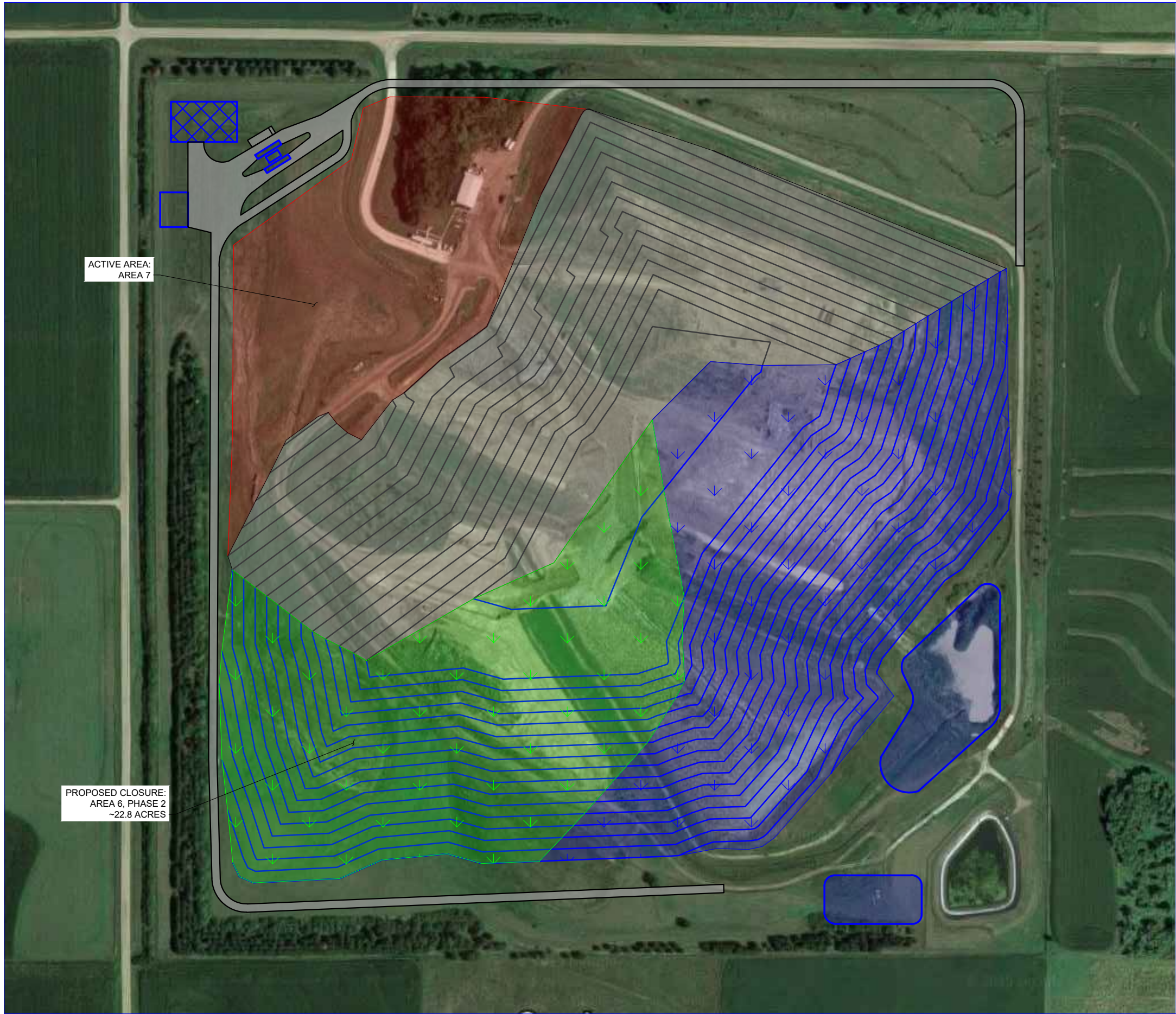








Figure 1
NNSWC Regional Landfill
Area Closure Sequencing
Area 1-6, Phase 1



NOTES

1. EXISTING CONDITIONS BASED ON 2019 GOOGLE EARTH AERIAL.
2. PROPOSED CONTOURS SHOWN ARE TOP OF FINAL COVER. CONTOUR INTERVAL IS 10-FEET.

LEGEND

-  INTERMEDIATE COVER CONTOURS
-  FINAL COVER CONTOURS
-  ROAD/INTERMEDIATE COVER
-  PROPOSED FINAL COVER CLOSURE
-  PROPOSED EXISTING FINAL COVER
-  PROPOSED ACTIVE AREA

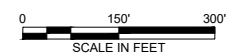
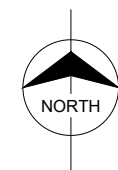
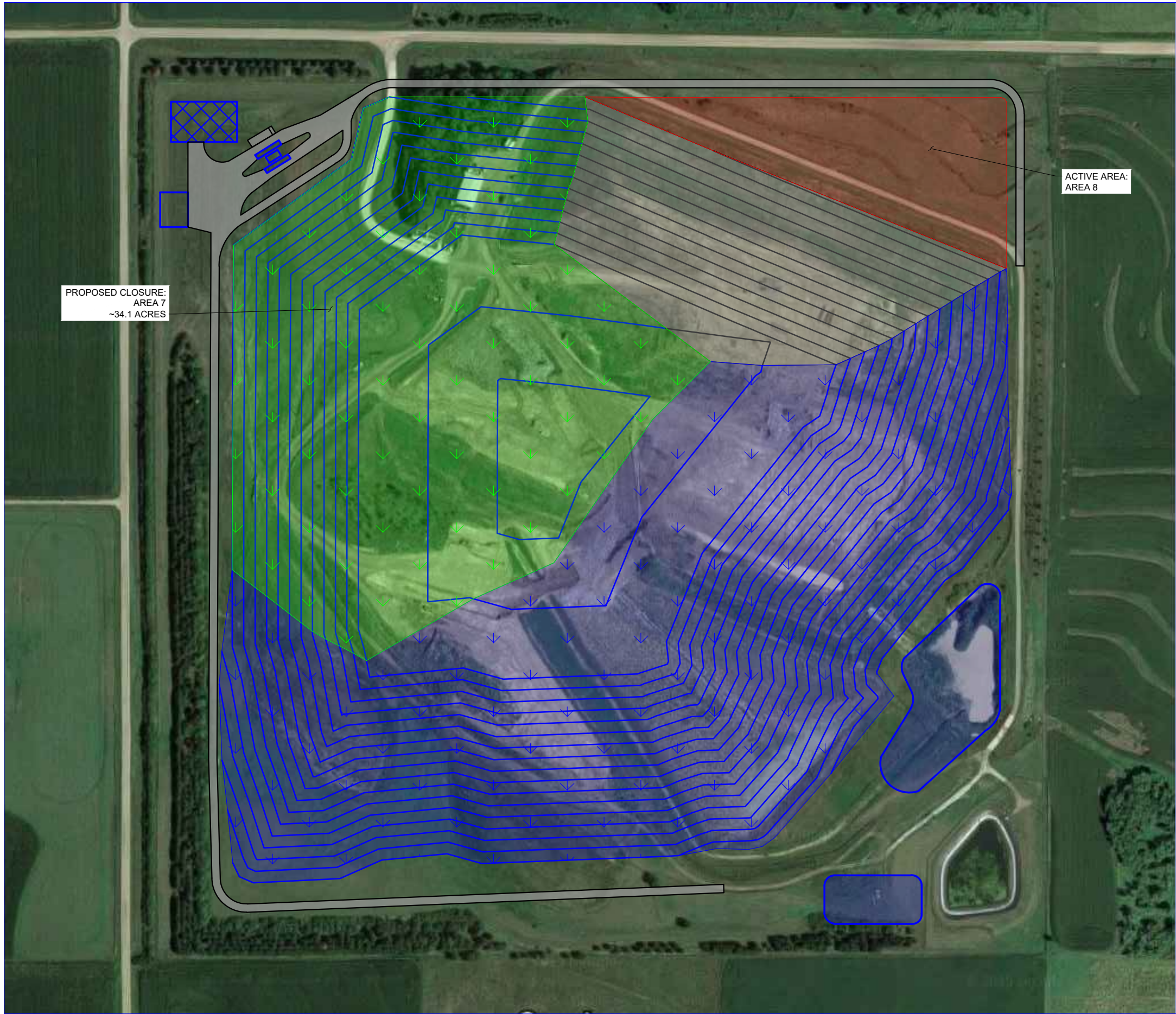


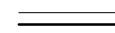


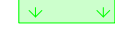


Figure 2
NNSWC Regional Landfill
Area Closure Sequencing
Area 6, Phase 2



NOTES

1. EXISTING CONDITIONS BASED ON 2019 GOOGLE EARTH AERIAL.
2. PROPOSED CONTOURS SHOWN ARE TOP OF FINAL COVER. CONTOUR INTERVAL IS 10-FEET.

LEGEND

-  INTERMEDIATE COVER CONTOURS
-  FINAL COVER CONTOURS
-  ROAD/INTERMEDIATE COVER
-  PROPOSED FINAL COVER CLOSURE
-  PROPOSED EXISTING FINAL COVER
-  PROPOSED ACTIVE AREA

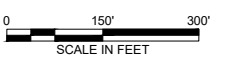
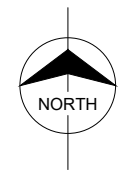
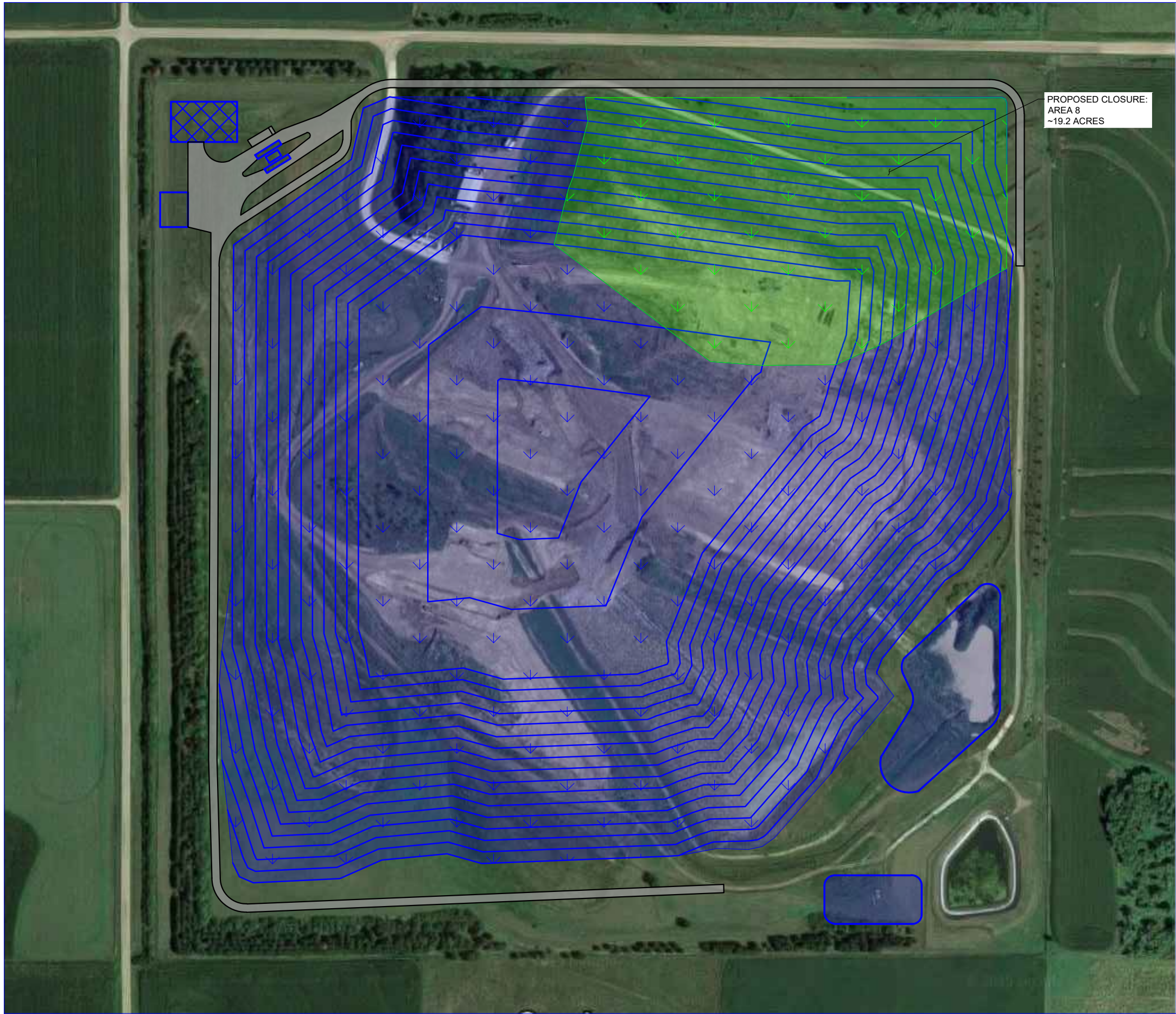


Figure 3
NNSWC Regional Landfill
Area Closure Sequencing
Area 7

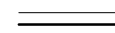


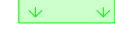




PROPOSED CLOSURE:
AREA 8
~19.2 ACRES

NOTES

1. EXISTING CONDITIONS BASED ON 2019 GOOGLE EARTH AERIAL.
2. PROPOSED CONTOURS SHOWN ARE TOP OF FINAL COVER. CONTOUR INTERVAL IS 10-FEET.

LEGEND

-  INTERMEDIATE COVER CONTOURS
-  FINAL COVER CONTOURS
-  ROAD/INTERMEDIATE COVER
-  PROPOSED FINAL COVER CLOSURE
-  PROPOSED EXISTING FINAL COVER
-  PROPOSED ACTIVE AREA

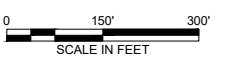
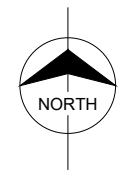


Figure 4
NNSWC Regional Landfill
Area Closure Sequencing
Area 8

APPENDIX I – ALTERNATIVE LANDFILL COVER ACAP STUDY



U.S. EPA Contaminated Site Cleanup Information (CLU-IN)

[CLU-IN | Databases](#) | [Alternative Landfill Cover Project Profiles](#) | [Capillary Barrier ET Covers at Douglas County Recycling and Disposal Facility, Bennington, NE](#)

Alternative Landfill Cover Project Profiles

Capillary Barrier ET Covers at Douglas County Recycling and Disposal Facility, Bennington, NE

- [Home](#)
- [Search Profiles](#)
- [Submit a New Profile](#)
- [Update an Existing Profile](#)
- [Description of Web Site](#)
- [Disclaimer](#)
- [More Information on MSW Final Covers](#)

Last Updated: September 5, 2008

Site Information

Site Name, Location: Douglas County Recycling and Disposal Facility, Bennington, NE USA
(EPA Region 7)

Site Type: MSW landfill

Superfund Site: No

Federal Facility: No

Bottom liner: Yes Climate: Mesic climate where evapotranspiration generally exceeds precipitation. Warm summers, cool winters, and moderate rainfall. Summer rains account for 75% of annual precipitation. Average annual snowfall is 32 inches. Annual Precipitation: 28 inches

Project Information

Project Name: Capillary Barrier ET Covers at Douglas County Recycling and Disposal Facility, Bennington, NE

Project Scale: Demonstration

Demonstration Program: Alternate Cover Assessment Program (ACAP)

Project Status: Installed

Date Installed: August 2000

Project Description/ Purpose: This project compares three designs: 2 capillary barrier ET covers and 1 RCRA D (composite barrier) cover. The purpose of this project is to determine whether the percolation rates for the capillary barrier ET covers are either less than 0.12 in/year or the percolation rate for the RCRA D cover. This project is included in the ACAP.

Monitoring System: Lysimeter constructed as 33-foot by 66-foot "bathtub" lined with a linear-low density polyethylene (LLDPE) geomembrane and geocomposite drainage layer. Lysimeter connected to flow monitoring system for percolation and runoff. Water content reflectometers used to measure soil moisture. Heat dissipation units to measure soil matric potential and soil temperature. Groundwater monitoring wells are also used.

There are 2 different covers at this project.

Cover 1 Information

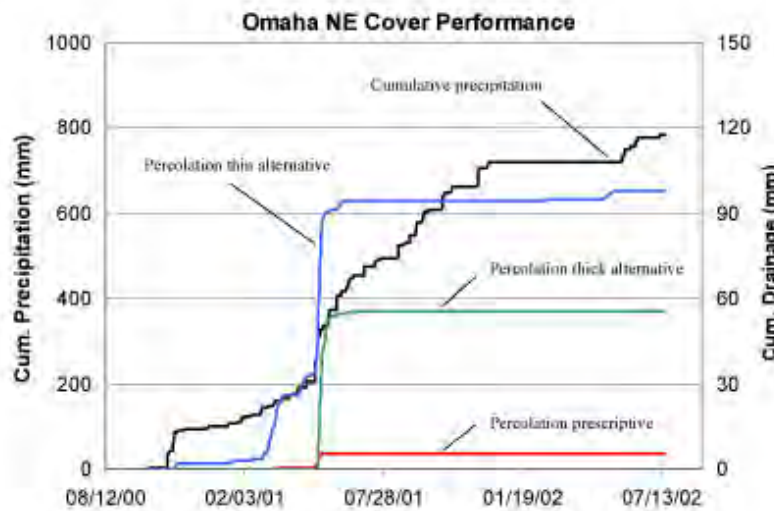
- Cover Type:** Capillary Barrier Evapotranspiration
- Cover Number:** 1
- Design of Cover:** From surface downward: 6 inches of topsoil, 18 inches of moderately compacted silty clay, and 6 inches of sand
- Types of Vegetation:** Mixture of local warm and cool season grasses
- Cover Installation:** Topsoil and silty clay obtained from nearby borrow area. Soil lifts were compacted to 85% per standard Proctor.
- Drainage Layer:** No
- Biointrusion Layer:** No
- Gas Collection Layer:** No
- Water Balance Model:** UNSAT-H
- Modeling Results:** Annual percolation over a 7-year period was estimated at 0.008 in/year. Annual percolation over a 7-year period for the RCRA cover was 0.0006 in/year.

Per NDEE required permeability no greater than 1×10^{-5} cm/s

6.44×10^{-10} cm/s

Performance Data Available: Yes

Summary and Description of Performance Data: The figure below shows the actual performance results for this cover during the period from October 2000 to July 2002. The percolation (infiltration) during the first year shown was 100 mm/yr, relative to precipitation of 600 mm/yr. The infiltration during the second year shown was negligible (10 months), relative to precipitation of 200 mm/yr. This figure was excerpted from the following source document, Alternative Cover Assessment Program, 2002 Annual Report, Desert Research Institute, available at <http://www.acap.dri.edu/>.



3.17×10^{-7} cm/s

Figure 29. Cover performance at Omaha NE.

Comments: Below the cover is a root barrier zone, a lightweight non-woven geotextile studded with nodules that slowly release trifluralin to inhibit and redirect root growth rather than killing it. The following items will require regulatory approval: 1) an equivalence criterion of 3.0 mm/yr or the flux recorded on a prescriptive test pad, whichever is greater; 2) a 2-year test period; 3) permission to irrigate with well water or leachate.

Reference(s) Bolen, M.M. and others. 2001. Alternative Cover Assessment Program: Phase II Report. University of Wisconsin-Madison. Geo Engineering Report 01-10. Madison, WI. September.

Personal communication between Danielle Gratton, Tetra Tech EM Inc., and Bill Albright, Desert Research Institute. February 14, 2002.

HDR Engineering, Inc., and Daniel B. Stephens & Associates. 2000. Alternative Cover Design Report for Waste Management of Nebraska, Inc., Douglas County Recycling and Disposal Facility, Bennington Nebraska. April.

Benson, C., and others. 2002. "Evaluation of Final Cover Performance: Field Data from the Alternative Cover Assessment Program (ACAP)." Proceedings, WM 2002 Conference, Tucson, AZ. February 24-28, 2002.

Cover 2 Information

- Cover Type:** Capillary Barrier Evapotranspiration
- Cover Number:** 2
- Design of Cover:** From surface downward: 6 inches of topsoil, 30 inches of moderately compacted silty clay, and 6 inches of sand
- Types of Vegetation:** Mixture of local warm and cool season grasses
- Cover Installation:** Topsoil and silty clay obtained from nearby borrow area. Soil lifts were compacted to 85% per standard proctor.
- Drainage Layer:** No
- Biointrusion Layer:** No
- Gas Collection Layer:** No
- Water Balance Model:** UNSAT-H
- Modeling Results:** Annual percolation over a 7-year period was estimated at 0.008 in/year. Annual percolation over a 7-year period for the RCRA cover was 0.0006 in/year.

1.74 x 10⁻⁷ cm/s

negligible

Performance Data Available: Yes

Summary and Description of Performance Data: The figure below shows the actual performance results for this cover during the period from October 2000 to July 2002. The percolation (infiltration) during the first year shown was 55 mm/yr, relative to precipitation of 600 mm/yr. The infiltration during the second year shown was negligible (10 months), relative to precipitation of 200 mm/yr. This figure was excerpted from the following source document, Alternative Cover Assessment Program, 2002 Annual Report, Desert Research Institute, available at <http://www.acap.dri.edu/>.

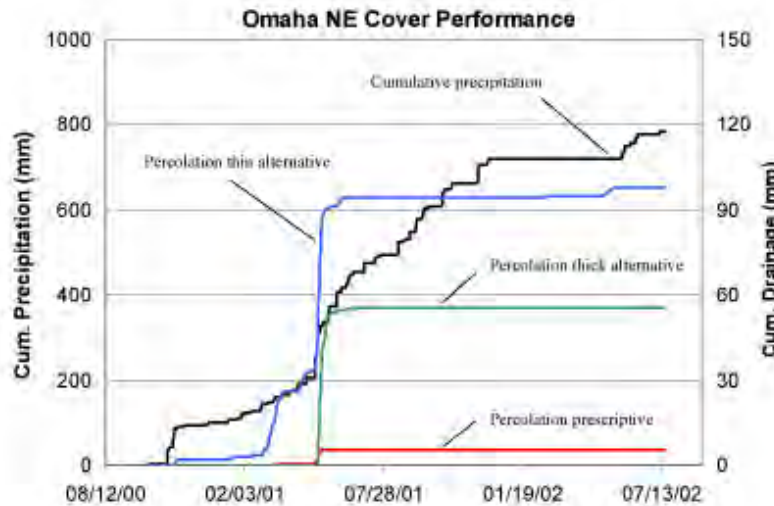


Figure 29. Cover performance at Omaha NE

Comments: Below the cover is a root barrier zone, a lightweight non-woven geotextile studded with nodules that slowly release trifluralin to inhibit and redirect root growth rather than killing it. The following items will require regulatory approval: 1) an equivalence criterion of 3.0 mm/yr or the flux recorded on a prescriptive test pad, whichever is greater; 2) a 2-year test period; 3) permission to irrigate with well water or leachate.

Reference(s) Bolen, M.M. and others. 2001. Alternative Cover Assessment Program: Phase II Report. University of Wisconsin-Madison. Geo Engineering Report 01-10. Madison, WI. September.

Personal communication between Danielle Gratton, Tetra Tech EM Inc., and Bill Albright, Desert Research Institute. February 14, 2002.

HDR Engineering, Inc., and Daniel B. Stephens & Associates. 2000. Alternative Cover Design Report for Waste Management of Nebraska, Inc., Douglas County Recycling and Disposal Facility, Bennington Nebraska. April.

Benson, C., and others. 2002. "Evaluation of Final Cover Performance: Field Data from the Alternative Cover Assessment Program (ACAP)." Proceedings, WM 2002 Conference, Tucson, AZ. February 24-28, 2002.

Point(s) of Contact _____

Primary Contact

Organization: Nebraska Department of Environmental Quality
Name: NDEQ Main Office
Address: 1200 "N" Street, Suite 400 PO Box 98922 Lincoln, Nebraska 68509
Phone: 402-471-2186
Fax: 402-471-2909
Email: NDEQ.moreinfo@Nebraska.gov
Web Address: www.deq.state.ne.us/

Secondary Contact

Organization: Waste Management Inc.
Name: Ken Mertl, District Manager
Address: 14320 North 216th Street, Bennington, NE 68007
Phone: 402-478-5196
Fax: 402-478-5150
Email: Kmertl@wm.com
Web Address: www.wm.com

[RETURN TO LIST](#)

[Top of Page](#)

http://clu-in.org/products/altcovers/usersearch/lf_details.cfm?Project_ID=45

Last updated on Friday, September 16, 2016

Alternative Landfill Cover Project Profiles Disclaimer

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APPENDIX J – ADJACENT PROPERTY OWNERS

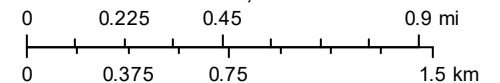


April 23, 2021

- Parcels
- Sections

DISCLAIMER: This map is not intended for conveyances, nor is it a legal survey. The information is presented on a best-efforts basis, and should not be relied upon for making financial, survey, legal or other commitments.

1:27,957



Sections

T	R	SEC	ORIG_FID
21	3E	16	364

Parcels

PID	OwnerName	PropertyAddress	OwnerAddress	LegalDesc
0004102.00	HAMERNIK, THOMAS M & CHARLES A & MICHAEL P HAMERNIK, TIC		C/O SHIRLEY J HAMERNIK P O BOX 326 CLARKSON NE 68629- 0326	16-21-3 E SW 16-21-3 MAPLE CREEK PRECINCT 160 ACRES LIFE ESTATE-SHIRLEY J HAMERNIK

Sections

T	R	SEC	ORIG_FID
21	3E	21	382

Parcels

PID	OwnerName	PropertyAddress	OwnerAddress	LegalDesc
0004129.00	DOERNEMANN, JARETT LEE & KATHLEEN A, JTWROS, ETAL	57270 825 RD HOWELLS	P O BOX 221 CLARKSON NE 68629	21-21-3 E NE 21-21-3 MAPLE CREEK PRECINCT 160 ACRES UND 1/2 INT=WELLS CREEK FARM,LLC

Sections

T	R	SEC	ORIG_FID
21	3E	21	382

Parcels

PID	OwnerName	PropertyAddress	OwnerAddress	LegalDesc
0004131.00	VRBICKY, THOMAS	57217 824 RD CLARKSON	57217 824 RD CLARKSON NE 68629-2970	21-21-3 E SW 21-21-3 MAPLE CREEK PRECINCT 160 ACRES

Sections

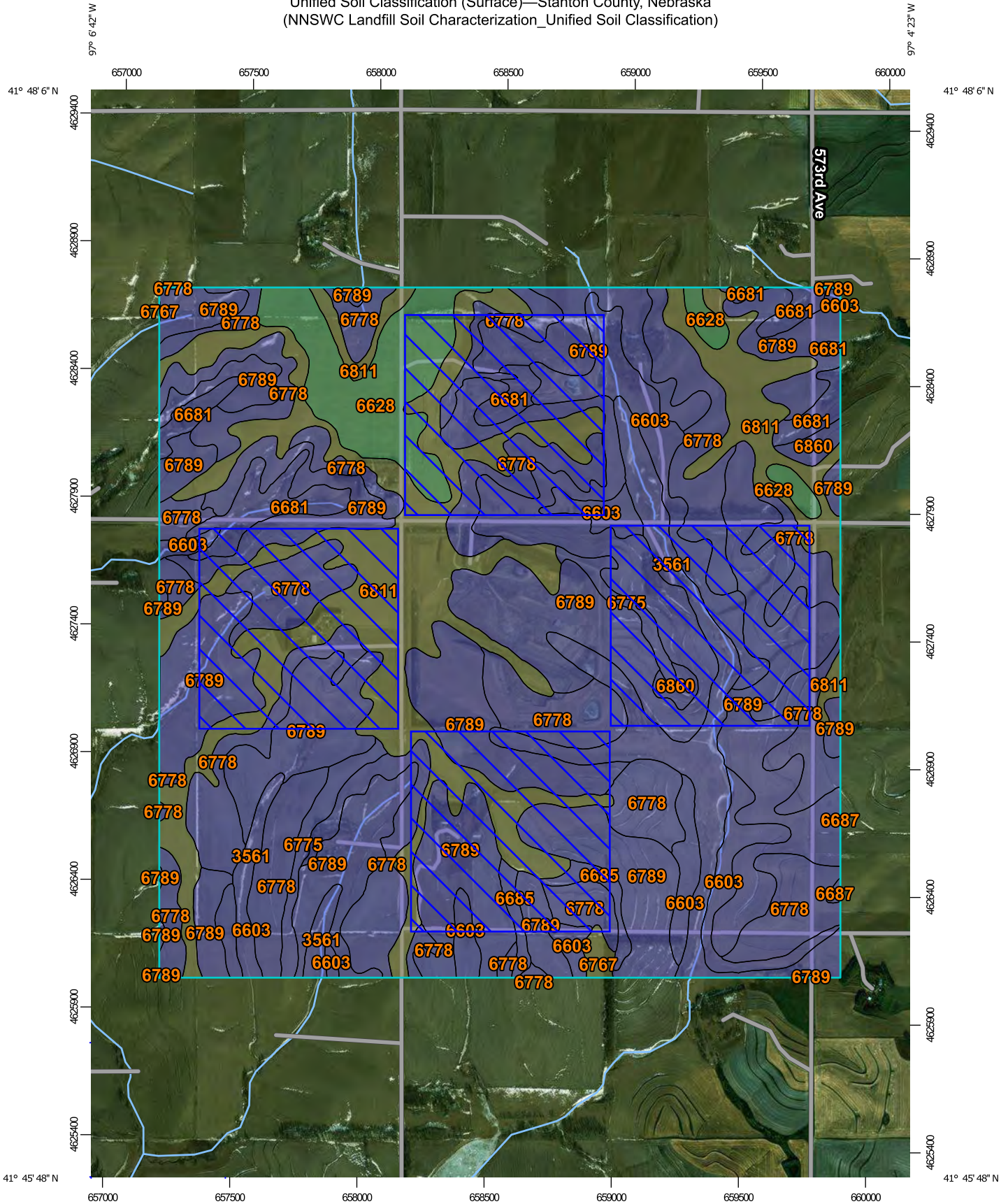
T	R	SEC	ORIG_FID
21	3E	20	383

Parcels

PID	OwnerName	PropertyAddress	OwnerAddress	LegalDesc
0004122.00	KING, AMBER L	82471 572 AVE CLARKSON	C/O MARY VRBICKY 82471 572 AVE CLARKSON NE 68629	20-21-3 E NE 20-21-3 MAPLE CREEK PRECINCT 160 ACRES LIFE ESTATE TO MARY P VRBICKY

APPENDIX K – NRCS SOILS MAP AND CLASSIFICATIONS

Unified Soil Classification (Surface)—Stanton County, Nebraska
(NNSWC Landfill Soil Characterization_Unified Soil Classification)



Map Scale: 1:20,700 if printed on A portrait (8.5" x 11") sheet.




Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 14N WGS84

Unified Soil Classification (Surface)—Stanton County, Nebraska
(NNSWC Landfill Soil Characterization_ Unified Soil Classification)

MAP LEGEND



















Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  CH
-  CL
-  CL-A (proposed)
-  CL-K (proposed)
-  CL-ML
-  CL-O (proposed)
-  CL-T (proposed)
-  GC
-  GC-GM
-  GM
-  GP
-  GP-GC
-  GP-GM
-  GW
-  GW-GC
-  GW-GM
-  MH
-  MH-A (proposed)
-  MH-K (proposed)
-  MH-O (proposed)
-  MH-T (proposed)
-  ML









































-  ML-A (proposed)
-  ML-K (proposed)
-  ML-O (proposed)
-  ML-T (proposed)
-  OH
-  OH-T (proposed)
-  OL
-  PT
-  SC
-  SC-SM
-  SM
-  SP
-  SP-SC
-  SP-SM
-  SW
-  SW-SC
-  SW-SM
-  Not rated or not available

Soil Rating Lines


-  CH
-  CL
-  CL-A (proposed)
-  CL-K (proposed)
-  CL-ML
-  CL-O (proposed)
-  CL-T (proposed)
-  GC
-  GC-GM
-  GM
-  GP
-  GP-GC
-  GP-GM
-  GW
-  GW-GC
-  GW-GM
-  MH
-  MH-A (proposed)
-  MH-K (proposed)
-  MH-O (proposed)
-  MH-T (proposed)
-  ML
-  ML-A (proposed)
-  ML-K (proposed)
-  ML-O (proposed)
-  ML-T (proposed)
-  OH
-  OH-T (proposed)
-  OL
-  PT
-  SC
-  SC-SM
-  SM

-  SP
-  SP-SC
-  SP-SM
-  SW
-  SW-SC
-  SW-SM
-  Not rated or not available

Soil Rating Points

-  CH
-  CL
-  CL-A (proposed)
-  CL-K (proposed)
-  CL-ML
-  CL-O (proposed)
-  CL-T (proposed)
-  GC
-  GC-GM
-  GM
-  GP
-  GP-GC
-  GP-GM
-  GW
-  GW-GC
-  GW-GM
-  MH
-  MH-A (proposed)
-  MH-K (proposed)
-  MH-O (proposed)
-  MH-T (proposed)
-  ML
-  ML-A (proposed)
-  ML-K (proposed)
-  ML-O (proposed)
-  ML-T (proposed)
-  OH
-  OH-T (proposed)
-  OL
-  PT
-  SC
-  SC-SM
-  SM
-  SP
-  SP-SC
-  SP-SM
-  SW
-  SW-SC
-  SW-SM
-  Not rated or not available






Water Features

 Streams and Canals

Transportation

 Rails

MAP INFORMATION

-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads
- Background**
-  Aerial Photography

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Stanton County, Nebraska
Survey Area Data: Version 20, Jun 10, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 19, 2015—Mar 8, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Unified Soil Classification (Surface)

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
3561	Hobbs silt loam, 0 to 2 percent slopes, occasionally flooded, cool	CL	105.7	5.9%
6603	Alcester silty clay loam, 2 to 6 percent slopes	CL	113.2	6.3%
6628	Belfore silty clay loam, 0 to 2 percent slopes	CH	86.1	4.8%
6681	Crofton silt loam, 17 to 30 percent slopes, eroded	CL	54.0	3.0%
6685	Crofton silt loam, 2 to 6 percent slopes, eroded	CL	12.8	0.7%
6687	Crofton silt loam, 6 to 11 percent slopes, eroded	CL	0.9	0.0%
6767	Nora silty clay loam, 6 to 11 percent slopes	MH	4.6	0.3%
6775	Nora-Crofton complex, 2 to 6 percent slopes, eroded	CL	23.1	1.3%
6778	Nora-Crofton complex, 6 to 11 percent slopes, eroded	CL	400.5	22.3%
6789	Crofton-Nora complex, 11 to 17 percent slopes, eroded	CL	680.9	37.9%
6811	Moody silty clay loam, 2 to 6 percent slopes	MH	302.4	16.8%
6860	Crofton silt loam, 8 to 17 percent slopes, eroded	CL	10.4	0.6%
Totals for Area of Interest			1,794.7	100.0%

Description

The Unified soil classification system classifies mineral and organic mineral soils for engineering purposes on the basis of particle-size characteristics, liquid limit, and plasticity index. It identifies three major soil divisions: (i) coarse-grained soils having less than 50 percent, by weight, particles smaller than 0.074 mm in diameter; (ii) fine-grained soils having 50 percent or more, by weight, particles smaller than 0.074 mm in diameter; and (iii) highly organic soils that demonstrate certain organic characteristics. These divisions are further subdivided into a total of 15 basic soil groups. The major soil divisions and basic soil groups are determined on the basis of estimated or measured values for grain-size distribution and Atterberg limits. ASTM D 2487 shows the criteria chart used for classifying soil in the Unified system and the 15 basic soil groups of the system and the plasticity chart for the Unified system.

The various groupings of this classification correlate in a general way with the engineering behavior of soils. This correlation provides a useful first step in any field or laboratory investigation for engineering purposes. It can serve to make some general interpretations relating to probable performance of the soil for engineering uses.

For each soil horizon in the database one or more Unified soil classifications may be listed. One is marked as the representative or most commonly occurring. The representative classification is shown here for the surface layer of the soil.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Layer Options (Horizon Aggregation Method): Surface Layer (Not applicable)

APPENDIX L – RNG FEASIBILITY EVALUATION

Memorandum



Date: 7/26/2021
To: Rob Mercer
From: Luke Rodig, PE
Subject: NNSWC Landfill Master Plan
RNG Feasibility Evaluation
Project No. 124922

1.0 Renewable Natural Gas Feasibility Evaluation

As part of the development of this Master Plan, the NNSWC requested that Burns & McDonnell perform a high level feasibility evaluation to determine if using landfill gas (LFG) to produce Renewable Natural Gas (RNG) could be an economically viable option in the future. The RNG would potentially be used for commercial purposes (sale to a gas utility for subsequent sale to their customer base as renewable natural gas), or as a transportation fuel as part of the United States Environmental Protection Agency's (EPA's) Renewable Fuel Standards (RFS) Program. Injection into a local utility pipeline was assumed to be required for both potential end markets. Upgrading LFG to RNG has potential to generate considerable revenue from multiple streams but will require investment in new infrastructure and ongoing operating costs, as described herein.

As a baseline, Burns & McDonnell assumed a LFG collection rate of 1,000 standard cubic feet per minute (scfm). For the Landfill, LFG collection at or above 1,000 scfm occurs in the year 2049 based on current projections of waste and LFG generation. For reference, the estimated LFG collection rate for 2021 is approximately 558 scfm.

Since this baseline scenario occurs approximately 30 years from the development of this Master Plan, it is important to acknowledge that valuations of RNG and associated incentives are dynamic in nature. Ten years ago, there were only a handful of RNG projects that were in operation and today there are over 160 projects in operation, with many more in various stages of development. We recommend that the NNSWC revisit this analysis in the next 3-5 years, given the dynamic nature of the RNG markets.

The overall analysis including capital costs, operations costs, and revenues have been developed assuming this project starts in 2021 with the assumption that there is 1,000 scfm available, as there is not a good way to accurately project what market conditions will look like in 2049.

1.1 Concept Plant Site and Pipeline

According to the National Pipeline Mapping System (NPMS), the nearest potential transmission pipeline tie-in location is estimated to be approximately 13.5 miles northwest of the Landfill in the city of Stanton, Nebraska. The plant would likely be located on the northwest corner of the site since that area has been allocated to a blower flare skid in the future. Further analysis regarding the best pipeline route and connection option will require discussions and negotiations with the natural gas pipeline company or companies. Preliminary routes will need to be

developed to minimize land acquisition, with installation occurring within previously established public right-of-ways to the extent practicable.

A virtual pipeline could also be evaluated as an option to transport the RNG. A virtual pipeline involves compressing or liquefying RNG into mobile containers which are then loaded onto transport trucks. The RNG is then transported to the nearest pipeline tie-in location and the RNG can be decompressed or gasified to necessary pipeline standards. This system could reduce capital costs but would increase operation costs because of the need for additional operators and specialized equipment.

1.2 Financial Analysis

The following sections summarize capital costs, annual operational costs, and the annual operating revenue, the primary components of a preliminary 10-year pro forma developed for the project. It should be noted that numerous assumptions and variables were used to develop the financial information presented herein. Given the early stage of the concept development, the financial analysis presented herein should be considered as a preliminary order of magnitude assessment.

1.3 Capital Costs

Estimated costs for a typical RNG processing equipment is based on recent quotations for similar sized projects. Burns & McDonnell's construction design-build estimators prepared opinions of probable construction costs for the new pipeline, other components of the system, and the balance of plant construction. Indirect costs were also applied as a percent of the construction costs as shown in Table 1 below. Due to several components of the system that could vary greatly depending on several factors that have yet to be determined, a low-end estimate and a high-end estimate are presented in Table 1. The low and high-cost values presented should not be viewed as a range but rather two distinct scenarios, both with a +/- 50% cost confidence, as typical for this level of project definition.

Table 1: Capital Cost Opinion

Capital Cost Opinion	Low	High
Biogas Upgrading System	\$2,295,000	\$2,295,000
Nitrogen Reduction Unit	\$1,000,000	\$3,250,000
De-Oxygenation Catalyst	\$500,000	\$995,000
Regenerative Thermal Oxidizer	\$195,000	\$195,000
Compressor Station, Meter Station & Pipeline	\$18,240,147	\$18,240,147
Balance of Plant	\$1,956,000	\$1,956,000
Estimated Construction Costs	\$24,186,147	\$26,931,147
Startup (2.5%)	\$604,654	\$673,279
Engineering (10%)	\$2,418,615	\$2,693,115
Construction Management (12%)	\$2,902,338	\$3,231,738
Contingency (10% Low, 30% High)	\$2,418,615	\$8,079,344
Total Capital Costs	\$32,530,368	\$41,608,622

*Capital costs assume a landfill gas collection and control system will be installed by 2049.

1.4 Operating Costs

Operating costs include plant labor, utilities, plant maintenance costs, pipeline tariff, and professional services. Operating costs have been estimated at just over \$1.1M in 2021 USD per year starting in year 2049 and increasing with inflation.

1.5 Operating Revenue

When compared to other end markets, the transportation fuel market currently generates the highest revenues associated with RNG. The operating revenues assume NNSWC would market the RNG for transportation fuel in the future. It should be noted that the current subsidies that are creating the renewable fuel market may not exist in their current form in the future, but there are likely to be incentives available for beneficial use of LFG.

The NNSWC’s estimated operating revenue for this project consists of three potential streams including the sale of the gas commodity itself to the natural gas pipeline owner, the sale of Renewable Identification Numbers (RINs) associated with the RNG (as part of the RFS program), and the state credits associated with the use of the RNG as a transportation fuel. In this evaluation, the RNG is assumed to be used as a transportation fuel in California with revenue realized through the California Low Carbon Fuel Standard (LCFS) Program. A brief background description of the RFS and LCFS programs are provided below:

- The Renewable Fuel Standard (RFS): The RFS is a federal program administered by the United States Environmental Protection Agency (EPA) that requires a certain volume of renewable fuel to replace or reduce the quantity of petroleum-based transportation fuel. EPA uses RINs to track renewable transportation fuels. The RIN is attached to the

physical gallon of renewable fuel as it is transferred to a fuel blender. Landfill gas is considered a cellulosic biofuel under this program.

- The California low-carbon fuel standard (LCFS): The LCFS is a program administered by the California Air Resources Board (CARB) to reduce greenhouse gas emissions in transportation fuels. Landfill gas produced at the facility qualifies as an eligible source provided it is used as a transportation fuel in California.

The projected annual revenue in year one of operation (assumed to be 2049) is estimated at \$5.5M and remains somewhat constant assuming no change in current market prices. A breakdown of the year one projected amount by revenue stream is given below.

- Sale of Gas: \$560K
- Sale of RINs: \$3.3M
- LCFS Credits: \$1.6M

1.7 Preliminary Pro Forma

Using the values described above projected over a 10-year period, Burns & McDonnell developed a simple economic model that allows consideration of various cost and price point variables. Tables 2 and 3 below show the net cash flow for the “Low” Capital Cost Scenario and the “High” Capital Cost Scenario, respectively with RIN and LCFS credit prices at approximately current rates. Tables 2 and 3 below show a simple payback matrix for the “Low” capital cost scenario and the “High” capital cost scenario, respectively. These tables are intended to demonstrate the degree of sensitivity of the project financial results to RIN values and LCFS credit values, key variables of the model. The maximum, minimum, median, and mean values indicated in the tables are based on the monthly prices over the last 2 years. Scenarios in which payback was not achieved in the 10-year duration of the model reflect a >10 value, indicating greater than 10 years.

Table 2: Simple Payback Matrix (“Low” Capital Cost Scenario)

*values shown are in years to payback

		LCFS Credit Values				
		\$206.00	\$190.00	\$196.50	\$196.66	\$0.00
RIN Values		2-Yr Max.	2-Yr Min.	2-Yr Median	2-Yr Mean	None
\$2.61	2-year Max.	4.2	4.3	4.2	4.2	5.3
\$0.65	2-year Min.	>10.0	>10.0	>10.0	>10.0	>10.0
\$1.34	2-year Median	7.3	7.5	7.4	7.4	>10.0
\$1.43	2-year Mean	6.9	7.1	7.0	7.0	>10.0
\$0.00	None	>10.0	>10.0	>10.0	>10.0	>10.0

Table 3: Simple Payback Matrix (“High” Capital Cost Scenario)

*values shown are in years to payback

		LCFS Credit Values				
		\$206.00	\$190.00	\$196.50	\$196.66	\$0.00
RIN Values		2-Yr Max.	2-Yr Min.	2-Yr Median	2-Yr Mean	None
\$2.61	2-year Max.	5.3	5.4	5.4	5.4	6.7
\$0.65	2-year Min.	>10.0	>10.0	>10.0	>10.0	>10.0
\$1.34	2-year Median	9.3	9.5	9.4	9.4	>10.0
\$1.43	2-year Mean	8.8	9.0	9.0	9.0	>10.0
\$0.00	None	>10.0	>10.0	>10.0	>10.0	>10.0

1.8 Summary and Recommendations

The preliminary pro forma indicated this project has potential to be financially beneficial for the NNSWC. In the “Low” capital cost scenario payback is possible in around 7.4 years and is under 10 years for the “High” scenario assuming there is a 1,000 scfm of LFG available. Based on current estimated LFG flow rate, the estimated project payback period is greater than 10 years.

The revenue stream estimates are also critical to the preliminary financial analysis. The RFS administrative decisions made by the EPA have a significant impact on RIN prices. Recent indications are that the RFS program will be extended for several years, however as with most financial markets, RIN price futures remain uncertain. The California LCFS credit prices have been on a steady incline over the last two years and although no indications point to changes for the program, credit prices are likewise susceptible to impact by government policy and market forces. Natural gas is a widely used commodity for which demand appears stable in the near term while supply and pricing are susceptible to variation in market conditions. Given the volatility of the RNG market, it is in the best interest of the NNSWC to re-evaluate the development of a RNG project in three to five years.

*Burns & McDonnell’s cost estimates, analyses, and recommendations presented in this study are based on our professional experience and judgment, as well as external sources and assumptions. The low and high cost values presented should not be viewed as a range but rather two distinct scenarios, both with a +/- 50% cost confidence as typical for this level of project definition. Burns & McDonnell does not guarantee that actual values or scenarios will not differ from those presented upon implementation. Further evaluation of certain information, assumptions, and scenarios is recommended.



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6909 S. Lyncrest Place, Suite 120
Sioux Falls, SD 57108
☎ 605-271-4097
www.burnsmcd.com

AGREEMENT

THIS AGREEMENT is made and entered into this _____ day of _____, 2023, by and between the Northeast Nebraska Solid Waste Coalition, hereinafter referred to as "COALITION" and Stanton County, Nebraska, hereinafter referred to as "COUNTY", WITNESSETH:

WHEREAS, the COALITION is a legal entity created by agreement pursuant to the Nebraska Interlocal Cooperation Act; and

WHEREAS, the COUNTY is a political subdivision of the State of Nebraska; and

WHEREAS, the COALITION is at the present time operating a landfill on real estate located in Stanton County which is described as the Northwest Quarter of Section 21, Township 21 North, Range 3 East of the 6th P.M., Stanton County, Nebraska; and

WHEREAS, the COALITION is desirous of amending the May 28, 1993 agreement with COUNTY to reflect current operation of the Coalition landfill.

NOW, THEREFORE, in consideration of the foregoing recitals, and the terms and conditions hereinafter set forth, the parties hereto agree as follows:

1. The May 28, 1993 agreement is replaced in its entirety by this agreement as of the effective date of this agreement.
2. COALITION agrees to require that all trucks transporting solid waste to the landfill site must utilize the road running from Highway 15 west to the entrance located on the north side of the landfill site both when loaded and when empty.
3. COALITION agrees to make Cash-in-Lieu of Tax payments to political subdivisions based upon the agricultural value of the property prior to the acquisition for and construction for the landfill. However, it is agreed that no Cash-in-Lieu of Tax payments shall be made to Stanton County or to any other political subdivision with which COALITION has an agreement for which compensation is being paid by the COALITION to a political subdivision for services being rendered to COALITION. In computing the amount of the Cash-in-Lieu payments provided for in this paragraph the valuation shall be adjusted annually so as to be consistent with other similar agricultural land the applicable tax rates shall be equal to the actual tax rate of each political subdivision to which a Cash-in-Lieu of Tax payment is being made. Payments provided for in this paragraph shall be payable in perpetuity by COALITION.
4. COALITION agrees to pay to COUNTY an annual host fee equal to \$.820819 for each ton of refuse deposited in said landfill or the sum of \$85,081.90 per year, whichever is greater. COALITION shall pay host fee to the COUNTY on a quarterly

basis based on the number of tons of waste deposited in the landfill in the previous quarter. A determination shall be made each calendar year as to whether there are additional monies owed to COUNTY so that the payments made for the calendar year total \$85,081.90. If additional payments are necessary, they should be made by COALITION to COUNTY as part of the next quarterly payment otherwise owed by COALITION to COUNTY. The parties agree that the host fee provided for herein shall be subject to an adjustment January 1, 2026 and every 5 years thereafter. The adjustment to the fee paid per ton or to the base fee provided for without regard to the amount of solid waste disposed of in the landfill shall be made in an amount equal to the sum of the changes in the Consumer Price Index as determined by the United States Department of Commerce for the 5 years since the last adjustment. The host fee provided herein shall be paid so long as the landfill located on the property described herein remains open and is accepting solid waste for disposal.

5. COALITION will continue to allow for an additional voting member of the COALITION Board to be selected by the Stanton County Board of Commissioners with such member being a resident-owner of real property located in Maple Creek Township.

6. It is agreed that no solid waste shall be accepted for disposal in the landfill that has previously been deposited in an existing landfill.

7. It is agreed that all solid waste deposited in the landfill shall be generated in the jurisdiction of a member of COALITION or as otherwise authorized pursuant to COALITIONS's bylaws, resolutions, or interlocal agreement.

8. COALITION agrees that all members of the COALITION shall be located within Nebraska and within fifty-five (55) miles of the landfill site described herein. In the event the majority of the area of any county or municipality is located within fifty-five (55) miles of the landfill site, then the entire county or municipality shall be eligible for membership in COALITION. See Attachment "A" for the area eligible for COALITION membership.

IN WITNESS WHEREOF, the parties have executed the foregoing Agreement in duplicate the day and year first above written.

NORTHEAST NEBRASKA SOLID WASTE
COALITION, a Legal Entity Created by
Agreement Pursuant to the Nebraska Interlocal
Cooperation Act

By _____
Corey Granquist, Chairman

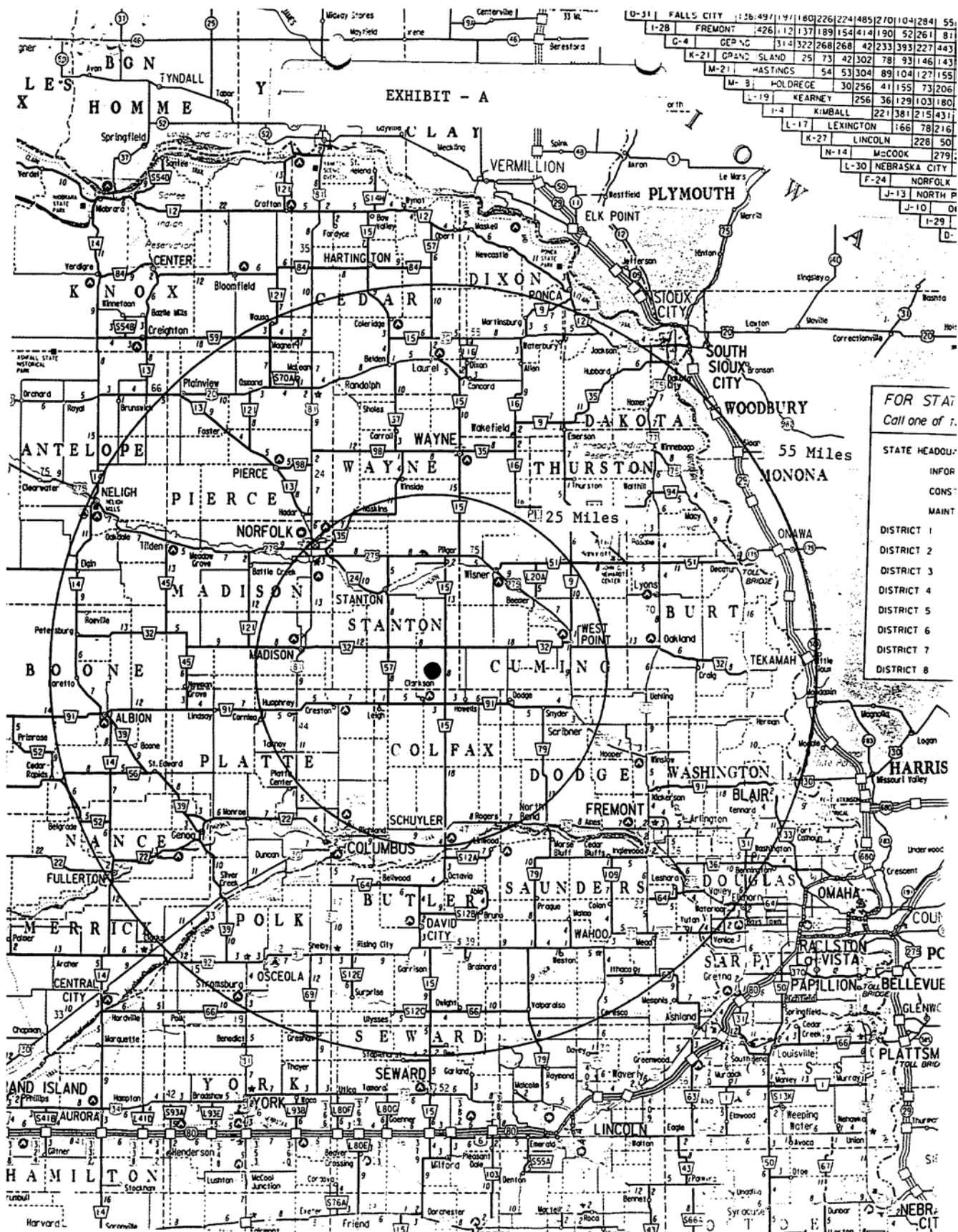
STANTON COUNTY, NEBRASKA, a
Political Subdivision of the State of Nebraska

ATTEST:

Chairman, County Board

County Clerk

(S E A L)



0-31	FALLS CITY	156	49	19	180	226	224	485	270	104	284	55
1-28	FREMONT	426	12	137	189	154	414	190	52	261	81	
C-4	GEORGETOWN	314	322	268	268	42	233	393	227	443		
K-21	GRAND ISLAND	25	73	42	302	78	93	146	143			
M-21	HASTINGS	54	53	304	89	104	127	155				
M-3	HOLDREGE	30	256	41	155	73	206					
L-19	KEARNEY	256	36	129	103	180						
I-4	KIMBALL	221	381	215	431							
L-17	LEXINGTON	166	78	216								
K-27	LINCOLN	166	78	216								
N-14	MACCOCK	279										
L-30	NEBRASKA CITY											
F-24	NORFOLK											
J-13	NORTH PLATTE											
J-10	OMAHA											
I-29	PLATTSBURGH											
D												

FOR STATE HEADQUARTERS
Call one of the following:

STATE HEADQUARTERS
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CONSULTATION
MAINTENANCE

DISTRICT 1
DISTRICT 2
DISTRICT 3
DISTRICT 4
DISTRICT 5
DISTRICT 6
DISTRICT 7
DISTRICT 8

AGREEMENT

THIS AGREEMENT is made and entered into this _____ day of _____, 1993/2023, by and between the Northeast Nebraska Solid Waste Coalition, hereinafter referred to as "COALITION" and Stanton County, Nebraska, hereinafter referred to as "COUNTY", WITNESSETH:

WHEREAS, the COALITION is a legal entity created by agreement pursuant to the Nebraska Interlocal Cooperation Act; and

WHEREAS, the COUNTY is a political subdivision of the State of Nebraska; and

WHEREAS, the COALITION is at the present time ~~conducting environmental tests on operating a landfill on~~ real estate located in Stanton County ~~in an effort to determine the environmental suitability of locating a landfill on property~~ which is described as the Northwest Quarter of Section 21, Township 21 North, Range 3 East of the 6th P.M., Stanton County, Nebraska; and

~~WHEREAS, in the event the environmental tests determine that the property described herein is suitable for construction of a landfill, then in that event it is anticipated that the COALITION will endeavor to obtain the requisite siting approval and permits so as to allow the construction and operation of a landfill on the described property; and~~

~~WHEREAS, in the event a landfill is actually located and operated on the subject property, it will be necessary for the landfill to be served by adequate roads and the parties hereto recognize that additional maintenance of said roads may become necessary by utilization of such landfill; and~~

WHEREAS, the COALITION is desirous of ~~entering into an amending the May 28, 1993 agreement with COUNTY to pay a "host fee" to COUNTY to compensate COUNTY for the additional expenditures associated with the ongoing maintenance of said roads; reflect current operation of the Coalition landfill.~~

NOW, THEREFORE, in consideration of the foregoing recitals, and the terms and conditions hereinafter set forth, the parties hereto agree as follows:

- ~~1. COALITION agrees to pay for the initial cost of upgrading the county road, bridges and culverts from Highway 15 west to a location entering the site from the county road located immediately north of the proposed landfill site. The COALITION will be responsible for the actual road, bridge and culvert construction and it is agreed that the upgrade of the road will initially include the creation of a rock surface. Subsequent to the completion of the upgrading of the road and continuing until the closure of the~~

~~landfill COALITION shall remain responsible for the cost of applying any additional rock that may become necessary. COUNTY shall be responsible for maintenance of the road and for applying gravel to the road that may become necessary following the completion of the upgrade of the road as provided for herein. The May 28, 1993 agreement is replaced in its entirety by this agreement as of the effective date of this agreement.~~

~~2. It is agreed that in the event of a severe blizzard that would require rental of specialized equipment or a snow blower not normally utilized by COUNTY for snow removal the cost of such rental would be borne by either COALITION or the operator of the landfill.~~

~~3.~~ 2. COALITION agrees to require that all trucks transporting solid waste to the landfill site must utilize the road running from Highway 15 west to the entrance located on the north side of the landfill site both when loaded and when empty.

43. COALITION agrees to make Cash-in-Lieu of Tax payments to political subdivisions based upon the agricultural value of the property prior to the acquisition for and construction for the landfill. However, it is agreed that no Cash-in-Lieu of Tax payments shall be made to Stanton County or to any other political subdivision with which COALITION has an agreement for which compensation is being paid by the COALITION to a political subdivision for services being rendered to COALITION. In computing the amount of the Cash-in-Lieu payments provided for in this paragraph the valuation shall be adjusted annually so as to be consistent with other similar agricultural land the applicable tax rates shall be equal to the actual tax rate of each political subdivision to which a Cash-in-Lieu of Tax payment is being made. Payments provided for in this paragraph shall be payable in perpetuity by COALITION.

54. COALITION agrees to pay to COUNTY ~~an annual host fee equal to fifty cents~~ ~~\$.820819~~ for each ton of refuse deposited in said landfill or the sum of ~~\$50,000.00~~ ~~85,081.90~~ per year, whichever is greater. COALITION shall pay host fee to the COUNTY on a quarterly basis based on the number of tons of waste deposited in the landfill in the previous quarter. A determination shall be made ~~on each calendar year following the effective date of this Agreement and on each anniversary date thereafter~~ as to whether there are additional monies owed to COUNTY so that the payments made ~~for the calendar year~~ total ~~\$50,000.00~~ ~~85,081.90~~. If additional payments are necessary, they should be made by COALITION to COUNTY as part of the next quarterly payment otherwise owed by COALITION to COUNTY. The parties agree that the host fee provided for herein shall be subject to an adjustment ~~January 1, 2026 and every 5 years thereafter~~. The adjustment to the fee paid per ton or to the base fee provided for without regard to the amount of solid waste disposed of in the landfill shall be made in an amount equal to the sum of the changes in the Consumer

Price Index as determined by the United States Department of Commerce for the ~~first 5 calendar years ending after the effective date of this Agreement. Subsequent adjustments shall be made every 5 years.~~ 5 years since the last adjustment. The host fee provided herein shall be paid so long as the landfill located on the property described herein remains open and is accepting solid waste for disposal.

~~65. COALITION agrees to take such steps as may be necessary to amend its Interlocal Agreement~~ will continue to allow for an additional voting member of the COALITION Board ~~of Commissioners~~ to be selected by the Stanton County Board of Commissioners with such member being a resident-owner of real property located in Maple Creek Township.

76. It is agreed that no solid waste shall be accepted for disposal in the landfill that has previously been deposited in an existing landfill.

~~8. It is agreed that all solid waste deposited in the landfill shall be generated in the jurisdiction of a member of COALITION except that it shall be permissible for solid waste to be disposed of in the COALITION landfill that is not generated in the jurisdiction of a member of COALITION if the solid waste is generated in the solid waste jurisdiction of a county or municipality, as defined in the Integrated Solid Waste Management Act, and said county or municipality has an ownership interest in a publicly owned and licensed solid waste landfill which has entered into an agreement with COALITION and has previously accepted solid waste generated in the solid waste jurisdiction of a member of COALITION. COALITION agrees that any agreement authorized by this paragraph shall limit the amount of solid waste generated in the jurisdiction of a county or city which is not a member of COALITION to an amount not to exceed the amount of solid waste generated in the jurisdiction of a COALITION member that has previously actually been deposited in a publicly owned solid waste landfill in which the county or municipality that is not a COALITION member has an ownership interest. COALITION agrees to take such steps as may be necessary to amend its Interlocal Agreement to allow for the performance of the provisions of this paragraph.~~

~~9.~~ 7. It is agreed that all solid waste deposited in the landfill shall be generated in the jurisdiction of a member of COALITION or as otherwise authorized pursuant to COALITION'S bylaws, resolutions, or interlocal agreement.

8. COALITION agrees that all members of the COALITION shall be located within Nebraska and within fifty-five (55) miles of the landfill site described herein. In the event the majority of the area of any county or municipality is located within fifty-five (55) miles of the landfill site, then the entire county or municipality shall be eligible for membership in COALITION. See Attachment "A" for the area eligible for COALITION membership.

~~10. It is agreed at the time the 5-year adjustments to the host fee to reflect changes in the Consumer Price Index as provided in paragraph 5 of this Agreement are made the parties shall discuss the feasibility of hard surfacing the county road from Highway 15 west to a location entering the site from the county road located immediately north of the proposed landfill site. Said discussions shall address the mutual interests of the parties in having the road hard surfaced and in the discussions the parties shall consider the present condition of the road, the ongoing maintenance costs of keeping the road maintained and the ability of COALITION to finance the costs of hard surfacing the road without incurring debt in such an amount as to require more than a nominal increase in gate fees in order to service the debt to finance the hard surfacing.~~

~~11. This Agreement shall become operative at such time as COALITION receives an Operational Permit for a landfill actually constructed and owned by COALITION on the subject property from the Nebraska Department of Environmental Quality except that the provision in paragraph 1 of this Agreement concerning the upgrading of the county road may be performed by COALITION contemporaneously with the construction of a landfill on the subject property and the provisions concerning the payment of a host fee as set forth in paragraph shall commence 6 months following the beginning of the construction of a landfill on the subject property.~~

IN WITNESS WHEREOF, the parties have executed the foregoing Agreement in duplicate the day and year first above written.

NORTHEAST NEBRASKA SOLID WASTE
COALITION, a Legal Entity Created by
Agreement Pursuant to the Nebraska Interlocal
Cooperation Act

By _____
Robert Warner Corey Granquist,

Chairman

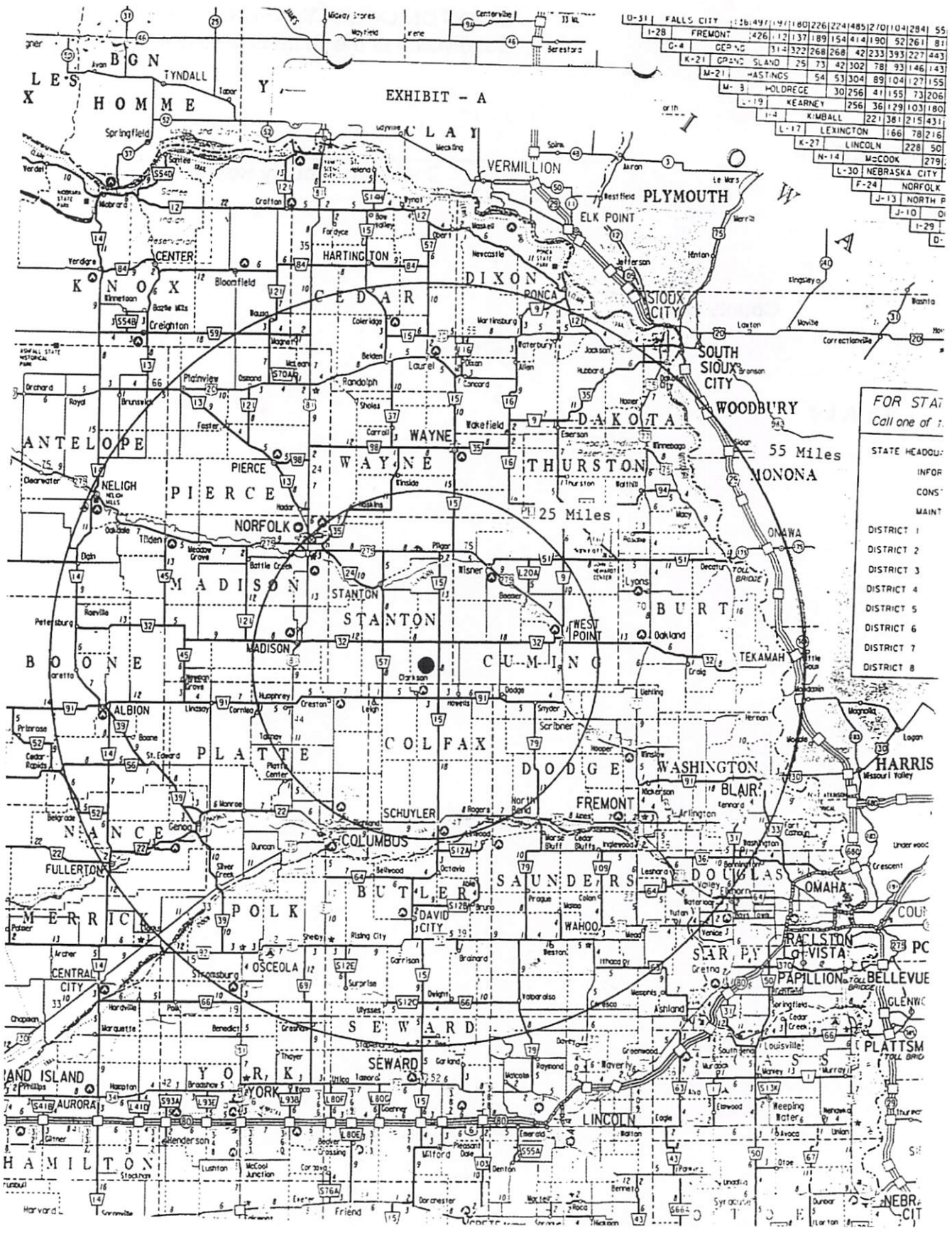
STANTON COUNTY, NEBRASKA, a Political
Subdivision of the State of Nebraska

ATTEST:

Chairman, County Board

County Clerk

(SEAL)



0-31	FALLS CITY	116	497	197	180	226	224	485	270	104	284	55
1-28	FREMONT	426	112	137	189	154	414	190	52	261	81	
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N-14	MACCOOK	279										
L-30	NEBRASKA CITY											
F-24	NORFOLK											
J-13	NORTH PLATTE											
J-10	O											
I-29	O											
O	O											

FOR STATE HEADQUARTERS
Call one of the following:

STATE HEADQUARTERS
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CONSTRUCTION
MAINTENANCE

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DISTRICT 2
DISTRICT 3
DISTRICT 4
DISTRICT 5
DISTRICT 6
DISTRICT 7
DISTRICT 8

**THIRD AMENDED AND RESTATED
INTERLOCAL
SOLID WASTE MANAGEMENT AGREEMENT
NORTHEAST NEBRASKA SOLID WASTE COALITION
ADOPTED _____, 2023**

THIS THIRD AMENDED AND RESTATED AGREEMENT (“Third Amended Agreement”) is made and entered into by and among the undersigned political subdivisions comprising the membership of the Northeast Nebraska Solid Waste Coalition (“Coalition”), listed on Exhibit "A" hereto, whose governing bodies approved, by resolution, this Amended Agreement on or before _____, 2023. It is the intent of the members of the Coalition that this Third Amended Agreement shall supersede all prior agreements.

WITNESSETH:

WHEREAS, the undersigned political subdivisions have previously affiliated as members of the Coalition and endeavor to ratify their membership in the Coalition;

WHEREAS, the members of the Coalition have found it necessary to amend the existing interlocal agreement to provide a mechanism for utilization in allowing additional political subdivisions to join the Coalition together with a need to amend certain provisions of the previously executed interlocal agreement;

WHEREAS, the members of the Coalition are desirous of having a single document which describes the amended agreement of the parties and therefore all prior iterations of the Interlocal Agreement of the Coalition are superseded by this Third Amended Agreement;

WHEREAS, the members of the Coalition for their common good are desirous of adopting this Third Amended Agreement pursuant to the Nebraska Interlocal Cooperation Act, Neb. Rev. Stat. §§13-801, *et seq.*, as the same may from time to time be amended (the “Act”), for the purpose of providing solid waste management to their respective constituencies by the means of building, maintaining, and operating a solid waste disposal facility (“Facility”); and

WHEREAS, the members of the Coalition are in agreement for their joint and mutual benefit and to avoid any unnecessary risks associated with or liability for environmental clean-up as a result of hazardous material contamination to ground water and/or other segments of the environment, as well as any post-closure risks or liability for the same, that any solid waste disposal facility or landfill created, built, and operated as provided herein shall accept only solid wastes from the parties hereto or as approved by the Board of Directors of the Coalition (“Board”), subject to the terms and conditions set forth herein and the By-Laws of the Coalition;

NOW, THEREFORE, in consideration of the foregoing recitals and the terms and conditions hereinafter set forth, the members of the Coalition being parties hereto agree as follows:

1. The purpose of the Coalition is to build, maintain, and operate a solid waste disposal, recycling, and education facility for the citizens who are constituents of the parties hereto, and for certain types of waste from non-parties. Parties who associate with the Coalition may withdraw from the Coalition as set forth in Paragraph 14 of this Third Amended Agreement, and in no event shall such withdrawing party be relieved of liabilities of the Coalition incurred prior to such withdrawing party's notice of withdrawal.

2. The parties hereto agree pursuant to the provisions of the Act, that the Coalition a separate body politic. The Coalition shall function as a local subdivision of government providing for solid waste management, recycling, and disposal, and as a nonprofit agency, which shall be empowered to make all financial and policy decisions affecting the purpose for which it is created.

3. Additional political subdivisions or entities may seek to become parties to this Third Amended Agreement and added as members to the Coalition upon providing to the Chairperson of the Board a letter of application which shall be considered by the Board at the next regular or special Board meeting. The application must identify the total population served by such political subdivision or entity, including any other political subdivisions, entities, or unincorporated areas (hereafter, "Communities") which rely upon the applicant for disposal of solid waste, and identify which, if any, transfer station the applicant intends to utilize, and/or any private haulers that serve the applicant. Upon receiving the approval of two-thirds (2/3) of the Directors and upon the governing body of the political subdivision applying for membership authorizing the execution of this Third Amended Agreement by Resolution and upon the execution of this Third Amended Agreement, including any addendum, amendment or modification thereto, the political subdivision applying for membership shall become a member of the Coalition. Further, the parties agree to comply with the terms of the host Agreement for the Facility entered into with Stanton County dated November 4, 1993, as amended from time to time. Until such time as an applicant becomes a member, the applicant is subject to non-member rates, or denial of the use of the Facility.

4. The parties hereto are hereby authorized and encouraged to establish by separate Interlocal Agreement relationships with other parties hereto to provide for the most economically feasible location and development of their own transfer stations, including but not limited to the transfer station's capitalization, debt service, operation and maintenance, and related capital and operating reserve costs required to transport their waste to the solid waste disposal facility, whether by the political subdivision(s) involved, or through private haulers that serve the parties.

5. Subject to Paragraph 17, the Coalition shall continue in existence and operation for the active life of the Facility and post-closure; it is the intent of the parties that the Coalition shall terminate on or as soon as practicable after the post-closure timeframe established by the rules of the Nebraska Department of Environment and Energy ("NDEE"), or its successor agency.

6. The Coalition shall be governed by the Board, which shall be made up of representatives as set forth below. Each Director shall be appointed by Resolution of the applicable governing body, and each such applicable governing body may name an alternate person to act and vote in the absence of the governing body's named representative. The Coalition shall have, through the exercise of a majority vote of its Board, those responsibilities and powers set forth in the Act, as well as the power to issue bonds and notes pursuant to Neb. Rev. Stat. §13-808, *et. seq.*, and the power to enter into service agreements pursuant to Neb. Rev. Stat. §§13-2024.

(A) A single representative from each of the three (3) largest municipalities which are parties to this Third Amended Agreement;

(B) A single representative, which shall rotate annually, for all other members which are a party to this Third Amended Agreement excluding representatives in a) and c) of this Section.

(C) A representative from the township where the solid waste disposal facility is located, currently Maple Creek Township.

7. Powers and responsibilities of the Board shall include, but not be limited to the following:

(A) Set budgets and rates ("user fees") and to provide for a system of budgeting, accounting, auditing and reporting of all Coalition funds and transactions, for a depository, and for the bonding of employees and officials or the provision of equivalent insurance coverage provided by the Coalition;

(B) Establish solid waste disposal facility use rules and regulations for the Coalition facility, including those prohibiting various types of wastes;

(C) Establish goals and/or mandates regarding waste reduction, reuse, and recycling;

(D) Contract for the design, development, construction, operation, and maintenance of a publicly owned solid waste disposal facility with public or private entities as allowed by Nebraska law;

- (E) Manage and review solid waste disposal facility operations;
- (F) Organize efforts to keep the general public informed of desired solid waste facility operations and procedures, and making the public aware of potential problems and concerns;
- (G) Address questions and concerns of the general public;
- (H) Make application for any permits or licenses required by regulating agencies;
- (I) See that the solid waste disposal facility operating personnel are kept abreast of latest developments and concerns regarding the solid waste disposal facility;
- (J) Employ such personnel as are needed to carry out the objectives of the Coalition set forth herein, fix their compensation, benefits, enact personnel rules and regulations, and terminate their employment;
- (K) Adopt By-Laws regarding the organization and operation of the Coalition;
- (L) Make application for and receive grants related to the solid waste management purposes for which the Coalition was formed;
- (M) Borrow funds as necessary;
- (N) To contract with and compensate consultants for professional services including, but not limited to, architects, engineers, planners, lawyers, accountants, rate specialists, and others found necessary or useful and convenient to the stated purposes of the Coalition;
- (O) To sue and be sued;
- (P) To purchase, plan, develop, construct, equip, maintain, and improve facilities and systems for use in solid waste management and lease or acquire land in fee by gift, grant, purchase or condemnation, as necessary for the construction and operation of such a facility or system;
- (Q) To acquire, hold, use and dispose of the reserves derived from the operation of solid waste management facilities and systems and other moneys of the Coalition;

(R) To acquire, hold, use and dispose of other personal property for the purposes of the Coalition; and

(S) To make or cause to be made studies and surveys necessary or useful and convenient to carrying out the functions of the Coalition.

8. The Coalition shall be funded by the revenues derived from the rates ("user fees") set by the Board for solid waste disposed at Coalition facilities in accordance with the provisions set forth by the Board. **NO PROPERTY TAX SHALL BE LEVIED FOR ANY COST RELATED TO THE CREATION, BUILDING, OR OPERATION OF THE SOLID WASTE DISPOSAL FACILITY** provided, however, that (1) in the event that funds derived from "user fees" are insufficient to service debt of the Coalition, then and in that event the individual members of the Coalition shall be assessed (which assessment may be provided for in any service agreement with each such member) on a per-capita basis on the basis of the entire population served by the members of the Coalition as determined by the most recent decennial census which assessment shall be paid by revenues derived from local property taxes or other local revenue sources; and (2) in the event of a request from the Board for the members' assistance in meeting state or federal financial assurance requirements of Coalition for closure, post-closure care or for corrective action, then and in that event the members shall participate in the Local Government Financial Test, the Local Government Guarantee, a State-Approved Mechanism, or in any combination of these financial assurance mechanisms as requested by the Board, on a per-capita basis on the basis of the entire population of the members of the Coalition as determined by the most recent decennial census. The rates charged by the Coalition shall be uniform for all members for disposal costs at the gate of said facility based on the tonnage or volume of waste. Rates charged by the parties hereto to their constituents for collection and transfer to the solid waste disposal facility shall be the function and responsibility of each of the said parties hereto. The Coalition is hereby empowered and authorized to establish classes of user fees for the following:

- (A) Members that send qualifying waste directly to the Facility;
- (B) Member transfer stations that send waste to the Facility;
- (C) Non-member transfer stations that send waste to the Facility;
- (D) Non-transfer station and non-qualifying waste to Facility;
- (E) City of Clarkson;
- (F) Minimum charges;
- (G) Landfill Inspection Fee;

(H) Administrative Fee;

(H) Equipment Use Fee or special waste fee; and

(I) Non-typical waste

9. The parties hereto agree to:

(A) pass appropriate ordinances or resolutions requiring their citizens to manage their solid wastes in compliance with the policies of the Coalition, and require any Community served by such member to do the same;

(B) where legally required by law to do so, to require the disposal of said wastes only through a transfer station approved by Coalition; and

(C) incorporate the rates for solid waste disposal as set annually by the Coalition Board of Directors into any rate charged to their respective constituents and Communities served.

10. The Coalition shall set the standards of and for the solid waste it shall accept from transfer stations and at the solid waste disposal facility. Said standards shall be in compliance with applicable permits, rules and regulations of state and federal agencies with jurisdiction over the solid waste disposal facility.

11. The parties hereto agree that the solid waste disposal rates and classes shall be approved by the Board, and shall be calculated to fund capital, debt service, operating, closure, post-closure, financial assurance, reserve funds, self-funded insurance costs, and other costs which may arise from the operation, management, design, expansion, or replacement of the Facility.

12. Any party to this Third Amended Agreement which does not agree with the rates established by the Board which apply to such party shall be allowed to challenge the reasonableness of said rate at a meeting before the Board within thirty (30) days after the Board adopts annual rates as provided herein. The Board's decision as to such challenge shall be final.

13. The parties hereto further agree to comply with the Coalition's permits, and shall cooperate with the Coalition's efforts to obtain and maintain necessary permits for the solid waste facility. Transfer station operators shall be required to keep exacting records of the tonnage and volume of waste they initially receive, what is diverted, reused or recycled, what is excluded as hazardous material, what is excluded as

required by the Coalition, and the tonnage or volume approved for transfer to the solid waste disposal facility on not less than a monthly basis.

14. The parties hereto shall remain parties to this Third Amended Agreement, except as provided in Paragraph 1 of this Third Amended Agreement, for the duration of the amortization schedule of all revenue bond issues and until the required post-closure care and any required corrective action has been completed. In the event any party hereto desires to withdraw from this Third Amended Agreement, said party shall forfeit any future opportunities for self-insurance reimbursement from the funds established for this purpose, but shall remain responsible for any assessments or any financial assurance mechanism participation as requested, directed or agreed under the provisions this Third Amended Agreement. Any member seeking to withdraw from membership in the Coalition shall file with the Board a certified copy of the resolution of the member's governing body approving withdrawal. The withdrawal shall be effective upon such filing.

15. Any refund of post-closure self-funded insurance funds shall be redistributed to the parties hereto at the time of such refund on a per-capita basis (using the most recent decennial census) weighted by Coalition membership years.

16. Any party to this Third Amended Agreement shall have the right to conduct an inspection of the solid waste disposal facility with not less than one (1) day's advance written notice to the Chairperson of the Board.

17. The Coalition may be dissolved only by the adoption of resolutions approving such action by the governing body of each member, provided that the Coalition may not be dissolved until all outstanding bonds, notes, service agreements or other contractual or regulatory obligations and legal claims shall have been satisfied in full. Upon dissolution of the Coalition, each member shall become the owner of a fractional undivided interest in all remaining assets of the Coalition. Each member's undivided fractional interest in such assets shall be determined in accordance with that fraction which is produced, based upon the most recent decennial census, by dividing the population of each member by the entire population of all members of the Coalition.

18. The title to all property, personal or real, owned by the Coalition shall be held in the name of the Coalition. All conveyances of real property owned or held in the name of the Coalition shall be authorized by resolution of the Board and executed by the Chairperson or Vice Chairperson on behalf of the Coalition.

19. Each party to this Third Amended Agreement shall execute duplicate copies of this Third Amended Agreement and provide one executed copy to the Board. The parties agree that the separately executed copies of this Third Amended Agreement shall constitute the Interlocal Agreement of the Coalition, shall be given full

force and effect, and shall supersede all prior iterations of the Coalition's Interlocal Agreement.

20. Each member shall provide to the Coalition a certified copy of the resolution of the governing body of the member approving this Third Amended Agreement and a certified copy of the resolution appointing said members representative to the board of directors, said resolutions being effective upon their filing with the Coalition.

21. This Third Amended Agreement may be amended upon approving resolutions adopted by the governing bodies of sixty percent (60%) of the population based upon the most recent decennial census, of the members at the time of the proposed amendment. A certified copy of each approving resolution shall be submitted to and kept on file with the Board.

IN WITNESS WHEREOF, the parties hereto have executed the foregoing Third Amended Agreement in duplicate this ____ day of _____, 2023.

CITY OF BATTLE CREEK, NEBRASKA,
A Municipal Corporation,

Mayor

ATTEST:

City Clerk

(S E A L)

BURT COUNTY, NEBRASKA, A Political
Subdivision of the State of Nebraska

Chairman, County Board

ATTEST:

County Clerk

(S E A L)

CITY OF COLUMBUS, NEBRASKA,
A Municipal Corporation,

Mayor

ATTEST:

City Clerk

(S E A L)

VILLAGE OF CRAIG, NEBRASKA,
A Municipal Corporation,

ATTEST:

Chairperson

Village Clerk

(S E A L)

VILLAGE OF CRESTON, NEBRASKA,
A Municipal Corporation,

ATTEST:

Chairperson

Village Clerk

(S E A L)

DODGE COUNTY, NEBRASKA, A Political
Subdivision of the State of Nebraska

ATTEST:

Chairman, County Board

County Clerk

(S E A L)

VILLAGE OF DUNCAN, NEBRASKA,
A Municipal Corporation,

ATTEST:

Chairperson

Village Clerk

(S E A L)

CITY OF FREMONT, NEBRASKA,
A Municipal Corporation,

ATTEST:

Mayor

City Clerk

(S E A L)

CITY OF HOOPER, NEBRASKA,
A Municipal Corporation,

Mayor

ATTEST:

City Clerk

(S E A L)

VILLAGE OF HOSKINS, NEBRASKA,
A Municipal Corporation,

ATTEST:

Chairperson

Village Clerk

(S E A L)

VILLAGE OF INGLEWOOD, NEBRASKA,
A Municipal Corporation,

ATTEST:

Chairperson

Village Clerk

(S E A L)

CITY OF MADISON, NEBRASKA,
A Municipal Corporation,

ATTEST:

Mayor

City Clerk

(S E A L)

MADISON COUNTY, NEBRASKA, A Political
Subdivision of the State of Nebraska

ATTEST:

Chairman, County Board

County Clerk

(S E A L)

VILLAGE OF MEADOW GROVE, NEBRASKA,
A Municipal Corporation,

ATTEST:

Chairperson

Village Clerk

(S E A L)

VILLAGE OF NICKERSON, NEBRASKA,
A Municipal Corporation,

ATTEST:

Chairperson

Village Clerk

(S E A L)

CITY OF NORFOLK, NEBRASKA,
A Municipal Corporation,

ATTEST:

Josh Moenning, Mayor

Brianna Duerst, City Clerk

(S E A L)

Approved as to form: _____
Danielle Myers-Noelle, City Attorney

CITY OF OAKLAND, NEBRASKA,
A Municipal Corporation,

ATTEST:

Mayor

City Clerk

(S E A L)

VILLAGE OF PILGER, NEBRASKA,
A Municipal Corporation,

ATTEST:

Chairperson

Village Clerk

(S E A L)

PLATTE COUNTY, NEBRASKA, A Political
Subdivision of the State of Nebraska

ATTEST:

Chairman, County Board

County Clerk

(S E A L)

VILLAGE OF SILVER CREEK, NEBRASKA,
A Municipal Corporation,

ATTEST:

Chairperson

Village Clerk

(S E A L)

CITY OF STANTON, NEBRASKA,
A Municipal Corporation,

ATTEST:

Mayor

City Clerk

(S E A L)

STANTON COUNTY, NEBRASKA, A Political
Subdivision of the State of Nebraska

ATTEST:

Chairman, County Board

County Clerk

(S E A L)

VILLAGE OF UEHLING, NEBRASKA,
A Municipal Corporation,

Chairperson

ATTEST:

Village Clerk

(S E A L)

VILLAGE OF WINSLOW, NEBRASKA,
A Municipal Corporation,

ATTEST:

Chairperson

Village Clerk

(S E A L)

EXHIBIT "A"

MEMBERS OF THE
NORTHEAST NEBRASKA SOLID WASTE COALITION

- (1) City of Battle Creek, Nebraska
- (2) Burt County, Nebraska
- (3) City of Columbus, Nebraska
- (4) Village of Craig, Nebraska
- (5) Village of Creston, Nebraska
- (6) Dodge County, Nebraska
- (7) Village of Duncan, Nebraska
- (8) City of Fremont, Nebraska
- (9) City of Hooper, Nebraska
- (10) Village of Hoskins, Nebraska
- (11) Village of Inglewood, Nebraska
- (12) City of Madison, Nebraska
- (13) Madison County, Nebraska
- (14) Village of Meadow Grove, Nebraska
- (15) Village of Nickerson, Nebraska
- (16) City of Norfolk, Nebraska
- (17) City of Oakland, Nebraska
- (18) Village of Pilger, Nebraska
- (19) Platte County, Nebraska
- (20) Village of Silver Creek, Nebraska
- (21) City of Stanton, Nebraska
- (22) Stanton County, Nebraska
- (23) Village of Uehling, Nebraska
- (24) Village of Winslow, Nebraska

SECONDT ~~THIRD~~ **AMENDED AND RESTATED**
INTERLOCAL
SOLID WASTE MANAGEMENT AGREEMENT

_____**NORTHEAST NEBRASKA SOLID WASTE COALITION**
ADOPTED _____, 2023

THIS ~~THIRD~~ **AMENDED AND RESTATED** AGREEMENT ("Third Amended Agreement") is made and entered into by and among the undersigned political ~~subdivision and subdivisions~~ comprising the ~~other political subdivisions~~ membership of the Northeast Nebraska Solid Waste Coalition ("Coalition"), listed on Exhibit "A" hereto, whose governing bodies ~~approve~~ approved, by resolution, this Amended Agreement on or before ~~November 5, 1993.~~ _____, 2023. It is the intent of the members of the Coalition that this Third Amended Agreement shall supersede all prior agreements.

WITNESSETH:

WHEREAS, the undersigned political ~~subdivision~~ ~~has~~ ~~subdivisions~~ have previously affiliated ~~itself~~ as ~~a member~~ members of the "Northeast Nebraska Solid Waste Coalition", ~~hereinafter referred~~ and endeavor to as "NNSWC"; and ratify their membership in the Coalition;

WHEREAS, the members of the ~~NNSWC~~ Coalition have found it necessary to amend the existing interlocal agreement to provide a mechanism for utilization in allowing additional political subdivisions to join the ~~NNSWC~~ Coalition together with a need to amend certain provisions of the previously executed interlocal agreement;

WHEREAS, the members of the ~~NNSWC~~ Coalition are desirous of having a single document which describes the amended agreement of the parties and therefore ~~all prior iterations of the original~~ Interlocal Agreement ~~is of the Coalition~~ are superseded by this ~~Third~~ Amended Agreement;

WHEREAS, the members of the ~~NNSWC~~ Coalition for their common good are desirous of ~~entering into an~~ adopting this Third Amended Agreement pursuant to the Nebraska Interlocal Cooperation Act (~~§§, Neb. Rev. Stat. §§13-801 to 13-827 R.R.S. 1943 (R.S. Supp., 1991)), et seq.~~, as the same may from time to time be amended, (the "Act"), for the purpose of providing solid waste management to their respective constituencies by the means of ~~creating~~, building, maintaining, and operating a solid waste disposal facility, ~~more commonly referred to as a landfill~~; ("Facility"); and

WHEREAS, the members of the ~~NNSWC~~ Coalition are in agreement for their joint and mutual benefit and to avoid any unnecessary risks associated with or liability for

environmental clean-up as a result of hazardous material contamination to ground water and/or other segments of the environment, as well as any post-closure risks or liability for the same, that any solid waste disposal facility or landfill created, built, and operated as provided herein shall accept only solid wastes from the parties hereto or as approved by the ~~governing board~~Board of Directors of the ~~NNSWG Coalition~~ ("Board"), subject to the terms and conditions set forth herein; ~~and the By-Laws of the Coalition~~;

NOW, THEREFORE, in consideration of the foregoing recitals and the terms and conditions hereinafter set forth, the members of the ~~NNSWG~~Coalition being parties hereto agree as follows:

1.— The purpose of the Coalition is to build, maintain, and operate a solid waste disposal, recycling, and education facility for the citizens who are constituents of the parties hereto, and for certain types of waste from non-parties. Parties who associate with the Coalition may withdraw from the Coalition as set forth in Paragraph 14 of this Third Amended Agreement, and in no event shall such withdrawing party be relieved of liabilities of the Coalition incurred prior to such withdrawing party's notice of withdrawal.

2. The parties hereto agree pursuant to the provisions of the ~~Nebraska Interlocal Cooperation Act (§§13-801 to 13-827 R.R.S. 1943 (R.S. Supp., 1991)) as the same may from time to time be amended, to create a joint entity to be known as the "Northeast Nebraska Solid Waste Coalition", hereinafter referred to as "NNSWG" which shall constitute~~Act, that the Coalition a separate body politic. The ~~NNSWG~~Coalition shall function as a local subdivision of government providing for solid waste management, recycling, and disposal, and ~~functioning~~ as a nonprofit agency, which shall be empowered to make all financial and policy decisions affecting the purpose for which it is created.

3. Additional political subdivisions, or entities may seek to become parties to this ~~Third Amended~~ Agreement and added as members to the ~~NNSWG~~Coalition upon providing to ~~NNSWG~~the Chairperson of the Board a letter of application which shall be considered by the ~~NNSWG~~ Board of Directors at the next ~~NNSWG~~regular or special Board meeting ~~of the Board of Directors following the receipt of the~~. The application must identify the total population served by such political subdivision or entity, including any other political subdivisions, entities, or unincorporated areas (hereafter, "Communities") which rely upon the applicant for disposal of solid waste, and identify which, if any, transfer station the applicant intends to utilize, and/or any private haulers that serve the applicant. Upon receiving the approval of two-thirds (2/3) of the ~~Directors named to the Board of~~ Directors and upon the governing body of the political subdivision applying for membership authorizing the execution of this ~~Third Amended~~ Agreement by Resolution and upon the execution of this ~~Third Amended~~ Agreement,

including any addendum, amendment or modification thereto, the political subdivision applying for membership shall become a member of the NNSWC; provided, however, any political subdivision or entity desiring to become a party to this Agreement shall be located within and serve constituents located within the State of Nebraska. The parties hereto further agree and expressly understand that by becoming a party to this Agreement and a member of the NNSWC, any municipality, county, or other entity does not forgo or relinquish any of its rights to refuse to be the host municipality or host county for the solid waste disposal facility site. The parties agree that the host municipality or host county shall enter into a separate interlocal agreement with the NNSWC to be the host municipality or host county, which agreement shall specify the terms and conditions thereof to the mutual satisfaction of either the host municipality or host county and the NNSWC. The host agreement for a particular site with a host community or county may contain provisions that create further restrictions and agreements that are more restrictive than the provisions of this Agreement. The parties agree to comply with the terms of any such host Agreement and specifically agree to accept the terms of the host Agreement entered into with Stanton County dated November 4, 1993. Coalition. Further, the parties agree to comply with the terms of the host Agreement for the Facility entered into with Stanton County dated November 4, 1993, as amended from time to time. Until such time as an applicant becomes a member, the applicant is subject to non-member rates, or denial of the use of the Facility.

~~_____2.~~

4. The NNSWC parties hereto are hereby authorized and encouraged to establish by separate Interlocal Agreement relationships with other parties hereto to provide for the most economically feasible location and development of their own transfer stations, including but not limited to the transfer station's capitalization, debt service, operation and maintenance, and related capital and operating reserve costs required to transport their waste to the solid waste disposal facility, whether by the political subdivision(s) involved, or through private haulers that serve the parties.

5. Subject to Paragraph 17, the Coalition shall continue in existence and operation for the active life of the solid waste disposal facility and for thirty (30) years Facility and post-closure, the total existence not to exceed sixty (60) years without amendment of this Agreement; it is the intent of the parties that the Coalition shall terminate on or as soon as practicable after the post-closure timeframe established by the rules of the Nebraska Department of Environment and Energy ("NDEE"), or its successor agency.

~~_____3.~~

6. The NNSWC Coalition shall be governed by the Board of Directors, which shall be made up of one representative representatives as set forth below. Each Director shall be appointed by Resolution of the applicable governing body of, and each of the parties to this Agreement and each party such applicable governing body may name an alternate member person to act and vote in the absence of the governing

body's named representative. ~~In the event that the NNSWC has selected a particular location for consideration in siting of a landfill or has an active operating landfill site or has a site that is in post-closure then there may be an additional Director or Directors representing the general location of the site being considered, site being operated or site in post-closure. The additional Director or Directors shall be selected pursuant to the terms of any existing host agreement or as otherwise authorized by the Board of Directors. The NNSWC The Coalition shall have, through the exercise of a majority vote of its Board of Directors, those responsibilities and powers set forth in the Nebraska Interlocal Cooperation Act (§§13-801 to 13-827 R.R.S. 1943 (R.S. Supp., 1991)), as the same may from time to time be amended Act, as well as the power to issue bonds and notes pursuant to Neb. Rev. Stat. §13-808 R.R.S. Neb. 1943, et. seq., and the power to enter into service agreements pursuant to Neb. Rev. Stat. §§13-2024 R.R.S. 1943 (R.R.S. Cumm. Supp. 1992). An executive committee of the Board of Directors shall be responsible for interim policy decisions, approval of reports of claims, and shall have such power, authority, and duties as the Board of Directors may from time to time delegate to it and shall be comprised of the following members:~~

~~(1~~

~~(A) A single representative from each county which is a party to this Agreement who shall represent the unincorporated population of such county;~~

~~————(2)—— A single representative from the of the three (3) largest municipalities which are parties to this Third Amended Agreement;~~

~~————(3)—— A single representative from the largest municipality in each county which is a party to this Agreement, if said municipality is not already one of the three (3) largest municipalities as set forth in subparagraph (2) above; and~~

~~————(4~~

~~(B) A single representative, which shall rotate annually, for all other municipalities within each county which is a party to this Agreement. Said municipalities shall meet prior to the annual budget meeting of the NNSWC and designate which municipality shall be the representative on the Executive Committee until the — next annual budget meeting members which are a party to this Third Amended Agreement excluding representatives in a) and c) of this Section.~~

~~————(5)—— If a municipality other than any of those set forth above shall be the host for~~

~~(C) A representative from the township where the solid waste disposal facility, a single representative from the host municipality shall be a permanent member of the executive committee of the Board of Directors.~~

~~4. The purpose of the NNSWC is to create, build, and operate a solid waste disposal facility, if economically feasible, for the citizens who are constituents of the parties hereto. Parties who associate with the NNSWC may withdraw from the NNSWC, without incurring any liability whatsoever as set forth in Paragraph 13 of this Agreement, if said withdrawal is made prior to the issuance of any bonded indebtedness issued by the NNSWC necessary to accomplish the purposes of this Agreement. Powers and responsibilities of the NNSWC shall include, but not be limited to the following: located, currently Maple Creek Township.~~

7. Powers and responsibilities of the Board shall include, but not be limited to the following:

(A) Set budgets and rates ("user fees") and to provide for a system of budgeting, accounting, auditing and reporting of all ~~NNSWC Coalition~~ funds and transactions, for a depository, and for the bonding of employees and officials ~~or the provision of equivalent insurance coverage provided by the Coalition;~~

(B) Establish solid waste disposal facility use rules and regulations for the ~~NNSWC Coalition~~ facility, including those prohibiting various types of wastes;

(C) Establish goals and/or mandates regarding waste reduction, reuse, and recycling;

(D) Contract for the design, development, ~~and construction, operation, and maintenance~~ of a publicly owned ~~and publicly operated~~ solid waste disposal facility, ~~and all such contracts shall be competitively bid with public or private entities as allowed by Nebraska law;~~

(E) Manage and review solid waste disposal facility operations;

(F) Organize efforts to keep the general public informed of desired solid waste facility operations and procedures, and making the public aware of potential problems and concerns;

(G) Address questions and concerns of the general public;

(H) Make application for any permits or licenses required by regulating agencies;

(I) See that the solid waste disposal facility operating personnel are kept abreast of latest developments and concerns regarding the solid waste disposal facility;

(J) Employ such personnel as are needed to carry out the objectives of the [NNSWCoalition set forth herein](#), fix their compensation, benefits, enact personnel rules and regulations, and terminate their employment;

(K) Adopt By-Laws ~~and standard operating procedures~~ regarding the organization and operation of the [NNSWCoalition](#);

(L) Make application for and receive grants related to the solid waste management purposes for which the [NNSWCoalition](#) was formed;

(M) Borrow funds as necessary;

(N) To contract with and compensate consultants for professional services including, but not limited to, architects, engineers, planners, lawyers, accountants, rate specialists, and others found necessary or useful and convenient to the stated purposes of the [NNSWCoalition](#);

(O) To sue and be sued;

(P) To purchase, plan, develop, construct, equip, maintain, and improve facilities and systems for use in solid waste management and lease or acquire land in fee by gift, grant, purchase or condemnation, as necessary for the construction and operation of such a facility or system;

(Q) To acquire, hold, use and dispose of the reserves derived from the operation of solid waste management facilities and systems and other moneys of the [NNSWCoalition](#);

(R) To acquire, hold, use and dispose of other personal property for the purposes of the [NNSWCoalition](#); and

(S) To make or cause to be made studies and surveys necessary or useful and convenient to carrying out the functions of the [NNSWCoalition](#).

~~5.~~

8. The [NNSWCoalition](#) shall be funded by the revenues derived from the rates ("user fees") set by the [NNSWG Board of Directors](#) for solid waste disposed ~~by and from the parties hereto and at Coalition facilities~~ in accordance with the provisions set forth by the Board. NO PROPERTY TAX SHALL BE LEVIED FOR ANY COST RELATED TO THE CREATION, BUILDING, OR OPERATION OF THE SOLID WASTE DISPOSAL FACILITY provided, however, that (1) in the event that funds derived from "user fees" are insufficient to service debt of the [NNSWCoalition](#), then and in that event the individual members of the [NNSWCoalition](#) shall be assessed (which

assessment may be provided for in any service agreement with each such member) on a per-capita basis on the basis of the entire population ~~of~~ served by the members of the ~~NNSW~~Coalition as determined by the most recent decennial census which assessment shall be paid by revenues derived from local property taxes or other local revenue sources; and (2) in the event of a request from the ~~NNSWG~~ Board ~~of~~ Directors for the members' assistance in meeting state or federal financial assurance requirements of ~~NNSWG~~Coalition for closure, post-closure care or for corrective action, then and in that event the members shall participate in the Local Government Financial Test, the Local Government Guarantee, a State-Approved Mechanism, or in any combination of these financial assurance mechanisms as requested by the ~~NNSWG~~ Board ~~of~~ Directors, on a per-capita basis on the basis of the entire population of the members of the ~~NNSWG~~Coalition as determined by the most recent decennial census. ~~The NNSWG, prior to approving its annual budget and setting of rates, shall conduct a "town hall" meeting annually in each one of the three (3) largest municipalities who are parties to this Agreement for the purpose of reviewing said budget and proposed rates.~~ The rates charged by the ~~NNSWG~~Coalition shall be uniform for all ~~municipalities and counties~~members for disposal costs at the gate of said facility based on the tonnage or volume of waste.- Rates charged by the parties hereto to their constituents for collection and transfer to the solid waste disposal facility shall be the function and responsibility of each of the said parties hereto. ~~The Coalition is hereby empowered and authorized to establish classes of user fees for the following:~~

~~_____6.~~

- (A) Members that send qualifying waste directly to the Facility;
- (B) Member transfer stations that send waste to the Facility;
- (C) Non-member transfer stations that send waste to the Facility;
- (D) Non-transfer station and non-qualifying waste to Facility;
- (E) City of Clarkson;
- (F) Minimum charges;
- (G) Landfill Inspection Fee;
- (H) Administrative Fee;
- (H) Equipment Use Fee or special waste fee; and
- (I) Non-typical waste

9. The parties hereto agree to: ~~(1~~

(A) pass appropriate ordinances or resolutions requiring their citizens to manage their solid wastes in compliance with the policies of the NNSWC; ~~(2Coalition, and require any Community served by such member to do the same;~~

(B) where legally ~~authorized~~required by law to do so, to require the disposal of said wastes only through a transfer station approved by NNSWC; ~~and (3) incorporate the rates for solid waste disposal as set annually by the NNSWC Board of Directors into any rate charged to their respective constituents.~~ Coalition; and

~~_____7.~~

(C) incorporate the rates for solid waste disposal as set annually by the Coalition Board of Directors into any rate charged to their respective constituents and Communities served.

10. The NNSWC Coalition shall set the standards of and for the solid waste it shall accept ~~both at the network off~~from transfer stations and at the solid waste disposal facility. Said standards shall be in compliance with ~~the applicable permits, rules and regulations as adopted by the United States Congress, Nebraska State Legislature, the Environmental Protection Agency (EPA), and/or the Nebraska Department of Environmental Quality (DEQ), as the same may from time to time be adopted or amended~~state and federal agencies with jurisdiction over the solid waste disposal facility.

~~_____8.~~

11. The parties hereto agree that the solid waste disposal rates and classes shall be approved ~~annually by the NNSWC Board of Directors, based on an engineering study from a qualified engineering firm by the Board,~~ and shall be calculated to fund all capital, debt service, operating, closure, post-closure, financial assurance, ~~and reserve funds,~~ self-funded insurance costs.

~~_____9. The parties hereto further agree to assure quality control at the solid waste disposal facility, that the transfer station(s) and hauling function(s) shall not be owned, and operated by the same entity, or different entities owned or controlled by the same person or persons, firm, partnership, or corporation, unless the specific party hereto shall have made adequate provisions for the inspection of the transfer station. Notwithstanding the previous provisions, nothing contained in this paragraph shall be deemed to prohibit any party hereto from providing both the hauling and transfer station functions itself. other costs which may arise from the operation, management, design, expansion, or replacement of the Facility.~~

~~_____10.~~

12. Any party to this ~~Third Amended~~ Agreement which does not agree with the rates established by the ~~NNSWC Board of Directors~~ which apply to such party shall be allowed to challenge the reasonableness of said rate ~~in the District Court of the county having jurisdiction over the aggrieved party~~ at a meeting before the Board within thirty (30) days after the ~~NNSWC Board of Directors~~ establishes its ~~adopts~~ annual rates as provided herein. The Board's decision as to such challenge shall be final.

~~11. The parties hereto are hereby authorized and encouraged to establish by separate Interlocal Agreement relationships with other parties hereto to provide for the most economically feasible location and development of their own transfer stations, including but not limited to the transfer station's capitalization, debt service, operation and maintenance, and related capital and operating reserve costs required to transport their waste to the solid waste disposal facility.~~

~~12. The parties hereto further agree to assure quality control and minimize potential exposure to ground water, other segments of the environment, and post-closure liability, that the solid waste disposal facility shall not accept any waste which has not been first routed through a transfer station approved by and operated in accordance with the criteria established by the NNSWC.~~

13. The parties hereto further agree to comply with the Coalition's permits, and shall cooperate with the Coalition's efforts to obtain and maintain necessary permits for the solid waste facility. Transfer station operators shall be required to keep exacting records of the tonnage and volume of waste they initially receive, what is diverted, reused or recycled, what is ~~sorted out~~ excluded as hazardous material, what is ~~sorted out~~ excluded as required by the ~~NNSWC Coalition~~, and the tonnage or volume approved for transfer to the solid waste disposal facility. ~~on not less than a monthly basis.~~

~~13.~~

14. The parties hereto shall remain parties to this ~~Third Amended~~ Agreement, except as provided in Paragraph 41 of this ~~Third Amended~~ Agreement, for the duration of the amortization schedule of all revenue bond issues and until the required post-closure care and any required corrective action has been completed. -In the event any party hereto desires to withdraw from this ~~Third Amended~~ Agreement, said party shall forfeit any future opportunities for self-insurance reimbursement from the funds established for this purpose, but shall remain responsible for any assessments or any financial assurance mechanism participation as requested, directed or agreed under the provisions ~~of Paragraph 5 of this~~ ~~Third Amended~~ Agreement. -Any member seeking to withdraw from membership in the ~~NNSWC Coalition~~ shall file ~~in with~~ the ~~office of the NNSWC Board~~ a certified copy of the resolution of the member's governing body approving withdrawal. - The withdrawal shall be effective upon such filing.

~~14.~~

15. Any refund of post-closure self-funded insurance funds shall be redistributed to the parties hereto ~~on~~ at the time of such refund on a per-capita basis of

~~their pro-rata share of (using the volume of waste delivered to the solid waste disposal facility on the basis of either a per ton or a per cubic yard of volume, which basis shall be determined most recent decennial census) weighted by the Board of Directors Coalition membership years.~~

~~15.~~

16. Any party to this Third Amended Agreement shall have the right to conduct an inspection of the solid waste disposal facility at any time with not less than one (1) day's advance written notice to the Chairperson of the Board.

~~16. The parties hereto further agree that the host municipality, host county, or any municipality or coalition of municipalities comprising ten percent (10%) of the total population of the NNSWC as determined by the latest decennial census, shall have the right of veto over any policy decisions established by the other parties to this Agreement. Such vetoes can be over-ridden by super-majority of the parties to this Agreement comprising two-thirds (2/3) of the population of the entire NNSWC as determined by the last decennial census. Nothing contained in this paragraph shall in any way prohibit any party to this Agreement from exercising any remedy available to it in law or in equity. No veto under this paragraph 16 shall be effective unless exercised in writing within fifteen (15) days of the adoption of the policy or measure vetoed. No override of a veto shall be effective unless the vote the parties providing for such override occurs within thirty (30) days after the NNSWC has received notice of such veto.~~

~~17. The NNSWC~~

17. The Coalition may be dissolved only by the adoption of resolutions approving such action by the governing body of each member, provided that the NNSWC Coalition may not be dissolved until all outstanding bonds, notes, service agreements or other contractual or regulatory obligations and legal claims shall have been satisfied in full. Upon dissolution of the NNSWC Coalition, each member shall become the owner of a fractional undivided interest in all remaining assets of the NNSWC Coalition. Each member's undivided fractional interest in such assets shall be determined in accordance with that fraction which is produced, based upon the most recent decennial census, by dividing the population of each member by the entire population of all members of the NNSWC Coalition.

~~18. The title to all property, personal or real, owned by the NNSWC Coalition shall be held in the name of the NNSWC Coalition. All conveyances of real property owned or held in the name of the NNSWC. All conveyances of real property owned or~~

~~held in the name of the NNSWCCoalition~~ shall be authorized by resolution of the Board and executed by the Chairperson or Vice Chairperson on behalf of the ~~NNSWCCoalition~~.

19.— Each party to this ~~Third Amended~~ Agreement shall execute duplicate copies of this ~~Third Amended~~ Agreement and provide one executed copy to the ~~NNSWC Board~~. The parties agree that the separately executed copies of this ~~Third Amended~~ Agreement ~~which~~ shall constitute the ~~Amended~~ Interlocal Agreement of the ~~NNSWCCoalition~~, shall be given full force and effect, and shall supersede all prior iterations of the Coalition's Interlocal Agreement.

20.— Each member shall provide to the ~~NNSWCCoalition~~ a certified copy of the resolution of the governing body of the member approving this ~~Third Amended~~ Agreement and a certified copy of the resolution appointing said members representative to the board of directors, said resolutions being effective upon their filing with the ~~NNSWCCoalition~~.

21.— This ~~Third Amended~~ Agreement may be amended upon approving resolutions adopted by the governing ~~bodybodies~~ of ~~each member~~, ~~sixty percent (60%) of the population based upon the most recent decennial census, of the members at the time of the proposed amendment~~. A certified copy of each approving resolution shall be submitted to and kept on file ~~atwith~~ the ~~NNSWC office~~ ~~Board~~.

IN WITNESS WHEREOF, the parties hereto have executed the foregoing ~~Third Amended~~ Agreement in duplicate this _____ day of _____, 2023.

CITY OF BATTLE CREEK, NEBRASKA,
A Municipal Corporation,

Mayor

ATTEST:

City Clerk

(S E A L)

BURT COUNTY, NEBRASKA, aA Political
Subdivision of the State of Nebraska

ATTEST: _____

Chairman, County Board

ATTEST:

County Clerk

(S E A L)

CITY OF COLUMBUS, NEBRASKA,
A Municipal Corporation,

Mayor

ATTEST:

City Clerk

(S E A L)

VILLAGE OF CRAIG, NEBRASKA, a Municipal Corporation,
A Municipal Corporation,

ATTEST:

Chairperson

Village Clerk

(S E A L)

VILLAGE OF CRESTON, NEBRASKA,
A Municipal Corporation,

ATTEST:

Chairperson

Village Clerk

(S E A L)

DODGE COUNTY, NEBRASKA, aA Political
Subdivision of the State of Nebraska

ATTEST:

Chairman, County Board

County Clerk

(S E A L)

VILLAGE OF DUNCAN, NEBRASKA,
A Municipal Corporation,

ATTEST:

Chairperson

Village Clerk

(S E A L)

CITY OF FREMONT, NEBRASKA,
A Municipal Corporation,

ATTEST:

Mayor

City Clerk

(S E A L)

CITY OF HOOPER, NEBRASKA,
A Municipal Corporation,

| ATTEST:

Mayor

| ATTEST:

City Clerk

(S E A L)

VILLAGE OF HOSKINS, NEBRASKA,
A Municipal Corporation,

ATTEST:

Chairperson

Village Clerk

(S E A L)

VILLAGE OF INGLEWOOD, NEBRASKA,
A Municipal Corporation,

ATTEST:

Chairperson

Village Clerk

(S E A L)

CITY OF MADISON, NEBRASKA,
A Municipal Corporation,

ATTEST:

Mayor

City Clerk

(S E A L)

MADISON COUNTY, NEBRASKA, aA Political
Subdivision of the State of Nebraska

ATTEST:

Chairman, County Board

County Clerk

(S E A L)

VILLAGE OF MEADOW GROVE, NEBRASKA,
A Municipal Corporation,

ATTEST:

Chairperson

Village Clerk

(S E A L)

VILLAGE OF NICKERSON, NEBRASKA,
A Municipal Corporation,

ATTEST:

Chairperson

Village Clerk

(S E A L)

CITY OF NORFOLK, NEBRASKA,
A Municipal Corporation,

ATTEST:

Josh Moenning, Mayor

Brianna Duerst, City Clerk

(S E A L)

Approved as to form:

Danielle Myers-Noelle, City Attorney

CITY OF OAKLAND, NEBRASKA,
A Municipal Corporation,

ATTEST:

Mayor

City Clerk

(S E A L)

VILLAGE OF PILGER, NEBRASKA,
A Municipal Corporation,

ATTEST:

Chairperson

Village Clerk

(S E A L)

PLATTE COUNTY, NEBRASKA, A Political
Subdivision of the State of Nebraska

ATTEST:

Chairman, County Board

County Clerk

(S E A L)

VILLAGE OF SILVER CREEK, NEBRASKA,
A Municipal Corporation,

ATTEST:

Chairperson

Village Clerk

(S E A L)

CITY OF STANTON, NEBRASKA,
A Municipal Corporation,

ATTEST:

Mayor

City Clerk

(S E A L)

STANTON COUNTY, NEBRASKA, a Political
Subdivision of the State of Nebraska

ATTEST:

Chairman, County Board

County Clerk

(S E A L)

VILLAGE OF UEHLING, NEBRASKA,
A Municipal Corporation,

ATTEST: _____

Chairperson

ATTEST:

Village Clerk

(S E A L)

VILLAGE OF WINSLOW, NEBRASKA,
A Municipal Corporation,

ATTEST:

Chairperson

Village Clerk

(S E A L)

EXHIBIT "A"

MEMBERS OF THE
NORTHEAST NEBRASKA SOLID WASTE COALITION

- (1) City of Battle Creek, Nebraska
- (2) Burt County, Nebraska
- ~~(3)~~(3) City of Columbus, Nebraska
- (4) Village of Craig, Nebraska
- ~~(4)~~(5) Village of Creston, Nebraska
- (6) Dodge County, Nebraska
- ~~(5)~~(7) Village of Duncan, Nebraska
- (8) City of Fremont, Nebraska
- ~~(6)~~(9) City of Hooper, Nebraska
- ~~(7)~~(10) Village of Hoskins, Nebraska
- ~~(8)~~(11) Village of Inglewood, Nebraska
- ~~(9)~~(12) City of Madison, Nebraska
- ~~(10)~~(13) Madison County, Nebraska
- ~~(11)~~(14) Village of Meadow Grove, Nebraska
- ~~(12)~~(15) Village of Nickerson, Nebraska
- (16) City of Norfolk, Nebraska
- ~~(13)~~(17) City of Oakland, Nebraska
- ~~(14)~~(18) Village of Pilger, Nebraska

(15)(19) Platte County, Nebraska

(20) Village of Silver Creek, Nebraska

(21) City of Stanton, Nebraska

(16)(22) Stanton County, Nebraska

(17)(23) Village of Uehling, Nebraska

——(24) Village of Winslow, Nebraska

~~EXHIBIT "A"~~

AMENDED AND RESTATED BYLAWS OF
NORTHEAST NEBRASKA SOLID WASTE COALITION
ADOPTED BY RESOLUTION OF THE BOARD ON _____, 2023

ARTICLE I
Membership

Section 1: All applications for membership in the Northeast Nebraska Solid Waste Coalition ("Coalition") shall be received by the Secretary of the Board of Directors ("Board"), and accepted by the Board subject to the provisions set forth in the Interlocal Solid Waste Management Agreement ("Agreement"), as amended from time to time.

ARTICLE II
BOARD OF DIRECTORS

Section 1: The business of the Coalition shall be conducted by the Board, which shall have the powers and duties vested in it by law and the Agreement. The Board shall be made up of the following members of the Coalition:

- a) A representative from each of the three (3) largest municipalities;
- b) A single representative which shall rotate annually, for all other members excluding representatives in a) and c) of this Section.
- c) A representative from the township where the solid waste disposal facility is located, currently Maple Creek Township.

Directors referred to in a) above shall be appointed by resolution of the local subdivision of the government which they represent. Said subdivision may name an alternate member to act and vote in the absence of the political subdivision's named representative. Each Director shall serve at the pleasure of the subdivision of government which is responsible for the appointment.

The Director referred to in b) above shall be selected as provided for in Article IV Section 1.

The Director referred to in c) above shall be selected by the Stanton County Board of Commissioners as provided for in the Host Agreement with Stanton County.

Section 2: The Board shall elect from their membership a chairperson and a vice chairperson. A secretary and a treasurer shall be selected by the Board. The secretary and treasurer so selected shall be a member of the Board or an elected official or employee of a political subdivision which is a member of the Coalition. Such officer shall serve so long as he or she remains a Director or an elected official or employee of a political subdivision which is a member of the Coalition or until his or her successor in office is chosen, whichever shall occur first.

Section 3: A quorum of the Board shall be constituted when sixty percent (60%) of the combined population of all of the Coalition members are represented by Directors in attendance. The determination of whether the requirement for a quorum has been met shall be based on the respective populations for the various Coalition members as determined from data compiled for the most recent final decennial census and excluding from the census for each member of the Coalition which is a county the population of each city or village within such county.

Section 4: From time to time, the Board may appoint committees. Such committees shall have such power, authority, and duties as the Board may from time to time delegate.

Section 5: The Coalition shall normally pay claims semi-monthly. At least one week before claims are paid, the Treasurer shall email all Board members a list of claims to be paid. If a Board member requests a claim not be paid, the claim will be placed on the agenda for the next Board meeting for consideration by the entire Board.

If in the Treasurer's opinion a claim must be made outside of the normal semi-monthly claims process, the Treasurer shall email all Board members as soon as practicable of the need to pay the claim and allow as much time as possible before payment, in order for any Board member to object to payment of the claim. If a Board member requests the claim not be paid, the claim will be placed on the agenda for the next Board meeting for consideration by the entire Board.

ARTICLE III DUTIES OF OFFICERS

Section 1: The Chairperson shall ordinarily preside at meetings of the Board.

Section 2: The Chairperson may establish standing or temporary committees, assign their duties, and appoint any member of the Coalition to sit on such committees. The Committees shall exist at the pleasure of and shall report as required to the Chairperson.

Section 3: The Chairperson shall carry out the policy and program of the Coalition as directed by the Board.

Section 4: The Vice Chairperson shall substitute for the chairperson in his or her absence and in such case may exercise the powers of the Chairperson with regard to calling meetings.

Section 5: The Secretary shall be responsible for recording the vote at the meetings of the Board and preparing minutes of meetings.

Section 6: The Treasurer shall have custody of all monies belonging to the Coalition. He or she shall keep complete accounts and shall present written financial statements at each Board and annual member meeting. Such financial statements shall include a general ledger showing all claims paid. He or she shall be bonded or carry equivalent insurance coverage provided by the Coalition. Expenditures shall be made only by the Treasurer as specified in Article II Section 5 of these bylaws. The Treasurer shall have all monies belonging to the Coalition either deposited in a bank depository designated by the Board or invested as authorized by the Board. The Treasurer shall be responsible for the Coalition's compliance with submission of budget statements in accordance with Nebraska Revised Statutes section 13-2025.01.

Section 7: In case of the absence of any officer or for any other reason that the Board may deem sufficient, the Board may delegate, for the time being, the powers or duties of such officer to any other officer or to any director.

ARTICLE IV MEETINGS

Section 1: The annual meeting of the members of the Coalition shall be held at a time to be determined by the Board. Notice of the annual meeting shall state the time and place thereof, shall be given to each member's representative, by mail or electronic mail at least seven (7) days before the meeting, and shall comply with the requirements set forth in the Nebraska Open Meetings Act, Neb. Rev. Stat. §§ 84-1407, *et. seq.* ("Act"), as applicable. Each member's representative shall be appointed by resolution of the local subdivision of the government, which they represent. Such subdivision may name an alternate member to act and vote in the absence of the political subdivision's named member representative. For items requiring a vote of the members of the Coalition, each member of the Coalition shall have one vote.

The primary purpose of the annual member meeting shall be to select the rotating Board member. Any member representative can nominate a candidate (including themselves) for the rotating Board member, excluding Board members referred to in Article II Section 1 a) and c). If no representative nominations are received, the rotating Board member position will remain vacant until the next annual member meeting.

Section 2: The location of meetings of the Board shall rotate between the three largest municipalities in the Coalition or be held at such other location as designated by the Board, or electronically in accordance with applicable law.

Section 3: The Chairperson may call a meeting of the Board at his or her discretion. A meeting of the Board must be called by the Chairperson upon written request of 4 or more Directors. Notice of every meeting, stating the time and place thereof, shall be given to each Director personally, by mail or electronic mail, at least

two (2) days before the meeting, and shall also comply with the requirements set forth in the Act, as applicable.

Section 4: The order of business at meetings of the Board shall be as follows:

1. Call to order.
2. Inform the public of the location of the Open Meetings Act.
2. Recording of members present.
3. Approval of minutes of last meeting.
4. Reports of Board, Officers, and Committees.
5. Unfinished business.
6. New business.
7. Miscellaneous business and discussions.
8. Adjournment.

Section 5: At each meeting of the Board, every Director shall be entitled to vote in person and shall have one vote.

Section 6: Committees shall hold meetings at a time and place to be determined by such committee or as deemed necessary by the Board. Notice of every meeting, stating the time and place thereof, shall be given to each member of such Committee personally, by mail or electronic mail at least one (1) day before such meeting, and shall comply with the requirements set forth in the Act, as applicable. A majority of a Committee shall constitute a quorum for transacting business. All actions of a Committee shall require the favorable vote of a majority in attendance at a meeting for which a quorum is present.

ARTICLE V FISCAL YEAR

Section 1: The fiscal year of the Coalition shall end on September 30.

ARTICLE VI AMENDMENT

Section 1: The Bylaws of the Coalition may be amended by resolution of the Board.

AMENDED AND RESTATED BYLAWS OF
NORTHEAST NEBRASKA SOLID WASTE COALITION
ADOPTED BY RESOLUTION OF THE BOARD ON _____, 2023

ARTICLE I

MEMBERSHIP

Membership

Section 1:— All applications for membership in the Northeast Nebraska Solid Waste Coalition (“Coalition”) shall be received by the Secretary of the Board of Directors (“Board”), and accepted by the Clerk/Secretary/Board subject to the provisions set forth in the Interlocal Solid Waste Management Agreement, (“Agreement”), as amended from time to time.

ARTICLE II

BOARD OF DIRECTORS

Section 1: The business of the Coalition shall be conducted, by the Board of Directors, which shall have the powers and duties vested in it by law and the Interlocal Solid Waste Management Agreement. The Board of Directors shall be made up of the following members of the Coalition:

- a) A representative from each political subdivision of the three (3) largest municipalities;
- b) A single representative which are parties to the Interlocal Solid Waste Management Agreements shall rotate annually, for all other members excluding representatives in a) and who has been appointed by his or her County Board, City Council, or Village Board or as provided in the host agreement or as otherwise authorized by the Board c) of this Section.
- c) A representative from the township where the solid waste disposal facility is located, currently Maple Creek Township.

Directors. All members of the Board of Directors referred to in a) above shall be appointed by resolution of the local subdivision of the government which they represent or which is authorized to appoint said board member. Said subdivision may name an alternate member to act and vote in the absence of the political subdivision's subdivision's named representative. Each board member/Director shall serve at the pleasure of the subdivision of government which is responsible for the appointment.

~~Section 2:—~~The Director referred to in b) above shall be selected as provided for in Article IV Section 1.

The Director referred to in c) above shall be selected by the Stanton County Board of ~~Directors~~Commissioners as provided for in the Host Agreement with Stanton County.

~~Section 2:~~ The Board shall elect from their membership, a chairperson, and a vice chairperson. A ~~clerk/~~secretary and a treasurer shall be selected by the Board. The ~~clerk/~~secretary ~~or~~and treasurer so selected shall be a member of the Board of ~~Directors~~ or an elected official or employee of a political subdivision which is a member of the Coalition. ~~Such officer shall serve so long as he or she remains a member of the Board of Directors~~Director or an elected official or employee of a political subdivision which is a member of the Coalition or until his or her successor in office is ~~chosen~~chosen, whichever shall occur first.

~~Section 3:~~ A quorum of the Board ~~of Directors~~ shall be constituted when sixty percent (60%) of the combined population of all of the Coalition members are represented by Directors in attendance. ~~The determination of whether the requirement for a quorum has been met shall be based on the respective populations for the various Coalition members as determined from data compiled for the most recent final decennial census and excluding from the census for each member of the Coalition which is a county the population of each city or village within such county.~~

~~Section 4:~~ ~~An Executive Committee shall be created to be responsible for interim policy decisions, approval of reports of claims, and~~From time to time, the Board may appoint committees. Such committees shall have such power, authority, and duties as the Board of ~~Directors~~ may from time to time delegate ~~to it.~~~~Said committee shall be comprised of the following Directors:~~

- ~~a) A single Director from each county who shall represent the unincorporated population of such.~~
- ~~b) A single Director from each of the three (3) largest municipalities.~~
- ~~c) A single Director from the largest municipality in each if said municipality is not already one of the three (3) largest municipalities.~~
- ~~d) A single Director which shall rotate annually, for all other municipalities within each county. Said municipalities shall meet prior to the annual budget meeting of the NNSWC and designate which municipality shall have a Director on the Executive Committee until the next annual budget meeting.~~

- e) ~~If a municipality other than any of those set forth above shall be the host for the solid waste disposal facility, a single Director from the host municipality shall be a permanent member of the executive committee of the Board of Directors.~~
- f) ~~All actions undertaken by the executive committee shall be reported to the entire Board of Directors at the next regular or special meeting of the Board of Directors following the executive committee action.~~

~~Section 5: Management Advisory Committee—The Board of Directors at its discretion may create a Management Advisory Committee. Said committee shall be comprised of one staff member of each of the affiliated local subdivisions, to assist in preparation of all staff work and meeting agendas for Board meetings and Executive Committee meetings of the Northeast Nebraska Solid Waste Coalition.~~

~~Section 6: A Finance Committee is hereby created by the Board of Directors. Said committee shall have the power to authorize or approve the payment of claims and shall have such other powers and duties as the Board of Directors may from time to time delegate to it. All payments authorized or approved by the Finance Committee shall be ratified at the next regular or special meeting of the Board of Directors. The Finance Committee shall be made up of the Chairperson and Vice Chairperson of the Coalition and a director named by the Chairperson which director shall serve on the Finance Committee for the duration of the term of this Chairperson.~~

~~Section 5: The Coalition shall normally pay claims semi-monthly. At least one week before claims are paid, the Treasurer shall email all Board members a list of claims to be paid. If a Board member requests a claim not be paid, the claim will be placed on the agenda for the next Board meeting for consideration by the entire Board.~~

~~If in the Treasurer's opinion a claim must be made outside of the normal semi-monthly claims process, the Treasurer shall email all Board members as soon as practicable of the need to pay the claim and allow as much time as possible before payment, in order for any Board member to object to payment of the claim. If a Board member requests the claim not be paid, the claim will be placed on the agenda for the next Board meeting for consideration by the entire Board.~~

ARTICLE III

DUTIES OF OFFICERS AND EXECUTIVE COMMITTEE

Section 1: The Chairperson shall ordinarily preside at meetings of the Board of Directors.

Section 2: The Chairperson may establish standing or temporary committees, assign their duties, and appoint any member of the Coalition to sit on such committees. The Committees shall exist at the pleasure of and shall report as required to the chairperson/Chairperson.

Section 3: The Chairperson shall carry out the policy and program of the Coalition as directed by the Board of Directors.

Section 4: The Vice Chairperson shall substitute for the chairperson in his or her absence and in such case may exercise the powers of the Chairperson with regard to calling meetings.

Section 5: The Clerk/Secretary shall be responsible for recording the vote at the meetings of the Board of Directors and preparing minutes of Board of Directors' meetings.

Section 6: The Treasurer shall have custody of all monies belonging to the Coalition. He or she shall keep complete accounts and shall present a written financial statements at each Board and annual member meeting. Such financial statements shall include a general ledger showing all claims paid. He or she shall be bonded or carry equivalent insurance coverage provided by the Coalition. Expenditures shall be made only by the Treasurer upon specific or general authorization of the Board of Directors, as specified in Article II Section 5 of these bylaws. The Treasurer shall have all monies belonging to the Coalition either deposited in a bank depository designated by the Coalition Board or invested as authorized by the Coalition Board. The Treasurer shall be responsible for the Coalition's compliance with submission of budget statements in accordance with Nebraska Revised Statutes section 13-2025.01.

Section 7: In case of the absence of any officer or for any other reason that the Board of Directors may deem sufficient, the Board may delegate, for the time being, the powers or duties of such officer to any other officer or to any director.

ARTICLE IV

MEETINGS

Section 1: The annual meeting of the members of the Coalition shall be held at a time to be determined by the Board. Notice of the annual meeting shall state the time and place thereof, shall be given to each member's representative, by mail or electronic mail at least seven (7) days before the meeting, and shall comply with the

requirements set forth in the Nebraska Open Meetings Act, Neb. Rev. Stat. §§ 84-1407, *et. seq.* ("Act"), as applicable. Each member's representative shall be appointed by resolution of the local subdivision of the government, which they represent. Such subdivision may name an alternate member to act and vote in the absence of the political subdivision's named member representative. For items requiring a vote of the members of the Coalition, each member of the Coalition shall have one vote.

The primary purpose of the annual member meeting shall be to select the rotating Board member. Any member representative can nominate a candidate (including themselves) for the rotating Board member, excluding Board members referred to in Article II Section 1 a) and c). If no representative nominations are received, the rotating Board member position will remain vacant until the next annual member meeting. ~~Section 1: —The annual meeting of the membership shall be held at a time to be determined by the Board of Directors.~~

Section 2: ~~All~~The location of meetings of the ~~Coalition's~~ Board of Directors shall rotate between the three largest municipalities in the Coalition or be held at ~~the Norfolk City Council Chambers, 309 Madison Avenue, Norfolk, Nebraska, or at~~ such other location as designated by the Board of Directors, or electronically in accordance with applicable law.

Section 3: The ~~chairperson~~Chairperson may call a meeting of the Board of ~~Directors~~ at ~~this~~his or her discretion. A meeting of the Board of ~~Directors~~ must be called by the Chairperson upon written request of 4 or more ~~directors~~Directors. Notice of every meeting, stating the time and place thereof, shall be given to each ~~director~~Director personally, by ~~telephone, by telegram or by mail or electronic mail~~, at least two (2) days before the meeting, and shall also comply with the requirements set forth in the Act, as applicable.

Section 4: The order of business at meetings of the ~~Boards of~~ DirectorsBoard shall be as follows:

- | | | |
|---------------|----|--|
| 1. | 1. | Call to order. |
| 2. | 2. | Inform the public of the location of the Open Meetings Act. |
| 2. | 2. | Recording of members present. |
| 3. | 3. | Approval of minutes of last meeting. |
| 4. | 4. | Reports of Board of Directors , Officers, and Committees. |
| 5. | 5. | Unfinished business. |
| 6. | 6. | New business. |
| 7. | 7. | Miscellaneous business and discussions. |
| 8. | 8. | Adjournment. |

Section 5: At each meeting of ~~Coalition member~~the Board, every ~~member~~Director shall be entitled to vote in person and shall have one vote.

Section 6: ~~The Executive Committee~~Committees shall hold ~~regular monthly~~ meetings at a time and place to be determined by ~~written policy to be adopted by~~ such committee. ~~Special meetings of the Executive Committee may be called by the Chairperson of the Board of Directors, if he or she is also a member of the Executive Committee, or by any two members of the Executive Committee. or as deemed necessary by the Board.~~ Notice of every meeting, stating the time and place thereof, shall be given to each member of ~~the Executive~~such Committee personally, by ~~telephone, by facsimile transmission, by telegram or by mail or electronic~~ mail at least one (1) day before ~~any such meeting, and shall comply with the requirements set forth in the Act, as applicable. meeting.~~ A majority of ~~the Executive~~a Committee shall constitute a quorum for transacting business. All actions of ~~the Executive~~a Committee shall require the favorable vote of a majority in attendance at a meeting for which a quorum is present.

ARTICLE V

FISCAL YEAR

Section 1: The fiscal year of the Coalition shall end on September 30.

ARTICLE VI

AMENDMENT

Section 1: The Bylaws of the Coalition may be amended by resolution of the Board ~~of Directors of the Northeast Nebraska Solid Waste Coalition.~~

Submitted:

Chairperson, Board of Directors

Certified Adopted on

_____, 2005

NNSWC Secretary.

RESOLUTION NO. 2023 - _____

WHEREAS, the Northeast Nebraska Solid Waste Coalition, hereinafter referred to as "Coalition", is an Agency created pursuant to the Nebraska Interlocal Cooperation Act; and

WHEREAS, a majority of the Board of Directors of the Coalition, acting pursuant to that certain Third Amended and Restated Interlocal Solid Waste Management Agreement ("Agreement") dated _____, desire to adopt the resolutions set forth herein and declare them to be in full force and effect; and

WHEREAS, the Coalition Board complied with the Open Meetings Act, Neb. Rev. Stat. §§ 84-1407 *et. seq.* and the Agreement, by providing advance notice of its intent to adopt rates for various classes of users of the Facility, as that term is defined in the Agreement.

NOW THEREFORE, in consideration of the foregoing recitals, the Board of Directors of the Northeast Nebraska Solid Waste Coalition hereby adopts the following Resolutions:

BE IT RESOLVED by the Board of the Northeast Nebraska Solid Waste Coalition, that the Directors approve and authorize the rates and classes in the attached Exhibit "A", pursuant to their authority in Section 8 of the Agreement, for the Coalition members and non-members who wish to utilize the Facility.

BE IT FURTHER RESOLVED, that the rates and classes in the attached Exhibit "A" are effective on and after _____, 2023, subject to adjustments by the Board from time to time.

PASSED AND APPROVED this ____ day of _____, 2023.

ATTEST:

Coalition Secretary

Chairman

(SEAL)

Approved as to form: _____
Coalition Attorney

EXHIBIT "A"

<p>Member rate for "qualifying waste" direct to landfill.</p> <p>Qualifying waste is waste not compatible with transfer station operations as determined by the site manager.</p>	<p>\$24/ton plus inspection fee</p>
<p>Member transfer stations to landfill.</p> <p>A member transfer station is a transfer station owned by a member, or a transfer station approved by the Coalition that is located in the jurisdiction of a Coalition member.</p>	<p>\$24/ton</p>
<p>Non-member transfer station to landfill.</p>	<p>\$79/ton plus inspection fee</p>
<p>Non-transfer station and non-qualifying waste to landfill</p>	<p>\$79/ton plus inspection fee</p>
<p>City of Clarkson "good neighbor" MSW direct to landfill</p>	<p>\$24/ton plus inspection fee</p>
<p>Minimum charge</p>	<p>Fee for one ton of applicable waste plus any applicable inspection or administrative fee</p>
<p>Landfill Inspection Fee</p> <p>Charged to all loads not going through Member transfer station.</p>	<p>\$8 per load</p>
<p>Administrative Fee</p> <p>The landfill operator charges the Coalition for equipment used to assist with difficult to unload waste. The landfill operator also charges the Coalition on a tonnage basis to handle special waste. The Coalition passes these charges on to landfill customers plus an administrative fee to cover Coalition billing and collection cost.</p>	<p>\$2/ton for special waste</p> <p>\$2 for each equipment use fee</p>
<p>Equipment Use Fee or special waste fee</p>	<p>Amount the landfill operator charges the Coalition plus the Coalition's Administrative Fee</p>

<p>Non-Typical Waste</p> <p>Any non-typical waste load may be subject to rejection as determined by Site Manager.</p>	<p>Fee based on airspace usage as estimated by the Site Manager</p>
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