

Law Enforcement Center Contracts and Costs: Status on June 20, 2013

| Trade Contract | Signed Contract on File | Description | Contractor | Low Bid Amount | C.O. # | Change Order Amount | Final Amount |
|--|-------------------------|-------------------------------------|---|--------------------|---|---------------------|--------------------|
| 1 | x | Site & Building Excavation, etc. | Action Excavation LLC | 71,000 | 1, 4 | 1,919 | 72,919 |
| 2 | x | Chain Link Fences & Gates | Pro-Line Fence | 8,245 | | | 8,245 |
| 3 | x | Site & Building Concrete | JM Concrete Inc. | 157,401 | | | 157,401 |
| 4 | | Unit Masonry | M.L. Masonry | 161,000 | | | 161,000 |
| 5 | x | Windows, storefront | Ard's Glass & Paint | 104,980 | | | 104,980 |
| 6 | x | Roof & flashing & metal siding | Smith Roofing & Siding | 209,470 | | | 209,470 |
| 7 | x | Plumbing | Mathews Plmg & Htg Inc. | 85,000 | 2 | -845 | 84,155 |
| 8 | x | HVAC, temp controls | Commercial Metal Works Inc | 196,000 | | | 196,000 |
| 9 | x | Electrical | Nelson Electric LLC | 264,700 | 3 | -46,020 | 218,680 |
| 10 | x | Structural Steel | Steel West Inc. | 47,000 | | | 47,000 |
| 11 | x | Steel doors & hardware | Architectural Building supply | 64,800 | | | 64,800 |
| 12 | x | Rough carpentry & framing | K2 Builders | 90,600 | | | 90,600 |
| 13 | | Finish carpentry | must re-bid (expected to be \$20-\$40K) | | | estimate: | 40,000 |
| 14 | x | Architectural Wood Casework, Meta | Idaho Falls Cabinet | 61,913 | | | 61,913 |
| 15 | | Building Insulation | United Subcontractors Inc. | 34,205 | will be re-bid w/diff. type of insulation | | 34,205 |
| 16 | x | Sectional Overhead Doors | BMC West | 3,560 | | | 3,560 |
| 17 | x | Wallboard, Plastering, Tile Ceiling | Standard Drywall Inc. | 110,025 | | | 110,025 |
| 18 | x | Ceramic Tile | Davis Tile Co. Inc. | 13,320 | | | 13,320 |
| 19 | x | Flooring, Tile & Flooring | Spectra Contract Flooring | 50,000 | | | 50,000 |
| 20 | changed | Paint & Vinyl Wall covering | Sharp's Professional Painting | 36,168 | | | 36,168 |
| 21 | x | Underground Landscaping | All American Yards Inc. | 28,382 | | | 28,382 |
| 22 | x | Wood Framing Materials | Idaho Pacific | 116,262 | | | 116,262 |
| 23 | x | Toilet Accessories | SBI Contracting Inc. | 5,495 | | | 5,495 |
| 24 | x | Lockers | SBI Contracting, Inc. | 1,925 | | | 1,925 |
| TOTALS | | | | \$1,921,451 | | -\$44,947 | \$1,916,504 |
| Trade Contracts + other Ormond expenses | | | | \$2,425,236 | | | 0 |
| Ormond Fee (includes ~\$5K for Jorg survey/matrl testing) | | | | 168,599 | | | 168,599 |
| Guaranteed Maximum Amount (GMA) | | | | \$2,593,835 | Total known costs included in GMA | | \$2,085,103 |
| NOT-IN-CONTRACT EXPENSES PAID TO DATE | | | | | | | |
| City of Driggs water hook-up fees | | | | | | | 3,780 |
| City of Driggs water meter, valve & install | | | | | | | 4,289 |
| City of Driggs building permit | | | | | | | 250 |
| SilverStar relocate aerial phone line & fiberoptic connection | | | | | | | 5,134 |
| Builders Risk Property Insurance | | | | | | | 2,626 |
| TOTAL PROJECT COSTS KNOWN TO DATE | | | | | | | \$2,101,182 |
| ESTIMATED NIC EXPENSES STILL TO BE PAID BY COUNTY BUILDING FUND | | | | | | | |
| Buxton Avenue water line | | | | | | | 15,000 |
| Courthouse/LEC fiberoptic (\$7,500 pd by ITD) | | | | | | | 22,500 |
| Generator modifications | | | | | | | 6,000 |
| Generator re-location and re-connection (???) | | | | | | | 5,000 |
| Additional payment will be requested by JHS Architects | | | | | | | 55,000 |
| Required art feature on corner | | | | | | | 5,000 |
| Relocate power line & bring 3-phase power to building | | | | | | | 18,000 |
| Antenna (estimated cost, assuming \$35K grants) | | | | | | | 65,000 |
| Moving Costs (per FY 2014 budget requests) | | | | | | | 93,000 |
| New Office furniture & equipment (per modified budget requests) | | | | | | | 31,000 |
| TOTAL KNOWN & ESTIMATED COSTS TO DATE | | | | | | | \$2,416,682 |



WK: 208-354-0245
CELL: 208-313-0245

**Teton County Engineer
MEMO**

150 Courthouse Drive
Driggs, ID 83422

July 5, 2013

TO: Board of County Commissioners
FROM: Jay T. Mazalewski, PE
SUBJECT: Public Works Update

The following items are for your review and discussion at the July 8, 2013 meeting.

PUBLIC HEARING CONTINUATION:

W2000S (South Twin Creek) Road Vacation (continuation for public hearing): Per the BoCC's direction the applicant has created separate plats vacating the section of improved road/Right-of-Way through the Cushman Property and dedicating a new Right-of-way following the route of the two track road. Please note that in my opinion this is a net financial loss to Teton County, as the county is exchanging an improved gravel road for an un-improved two-track earthen road. If the BoCC proceeds with this exchange, I recommend the county at a minimum should:

- a. Require the removal of the gate across the two track road
- b. Have the applicant pay for signage directing public to the legal access location
- c. Receive compensation for vacated section of road
- d. Require the ROW width to be 60 feet (currently 50' on the proposed plat)

Proposed Motion (based on BoCC comments):

Having found that the vacation of the section of W2000S (South Twin Creek Lane) identified on Twin Creek Lane Road Vacation Plat is in the public interest, that the identified section of W2000S road and right of way be vacated as public right of way and the property be assimilated into the bordering properties.

As part of this vacation the applicant shall:

Record a plat dedicating a 60' right-of-way to the public following the route proposed by the applicant, ensuring public access to the National Forest.

Pay for road signage and forest access signage for the relocated W2000S.

Remove the gate across the proposed ROW route.

Record the survey/plats, which shall be reviewed by the county survey reviewer,

Update all deeds that are affected by this vacation.

This vacation shall not be valid the above conditions are met.

DRAFT MINUTES OF DELIBERATION & Motion to Continue

Board Deliberation - 7:18 Commissioner Rinaldi stated that there does not appear to be a question of access or not, but rather where does the access lie. It would also appear that it was the County's mistake to place a public road on a private road and that the original road went the northern route and that has been acknowledged by the public testimony. Moving the road seems to be the right thing to do and if the State requires cattle guards, than the gates need to be replaced. At issue is what level of improvements, if any, is the County willing to commit and at what cost?

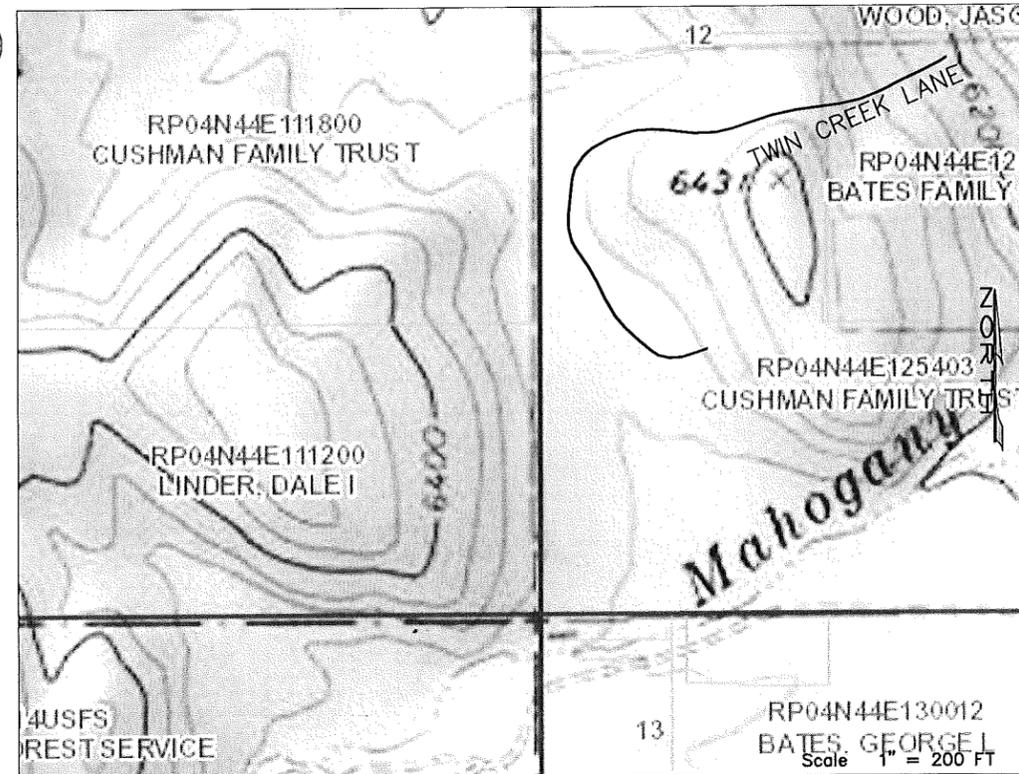
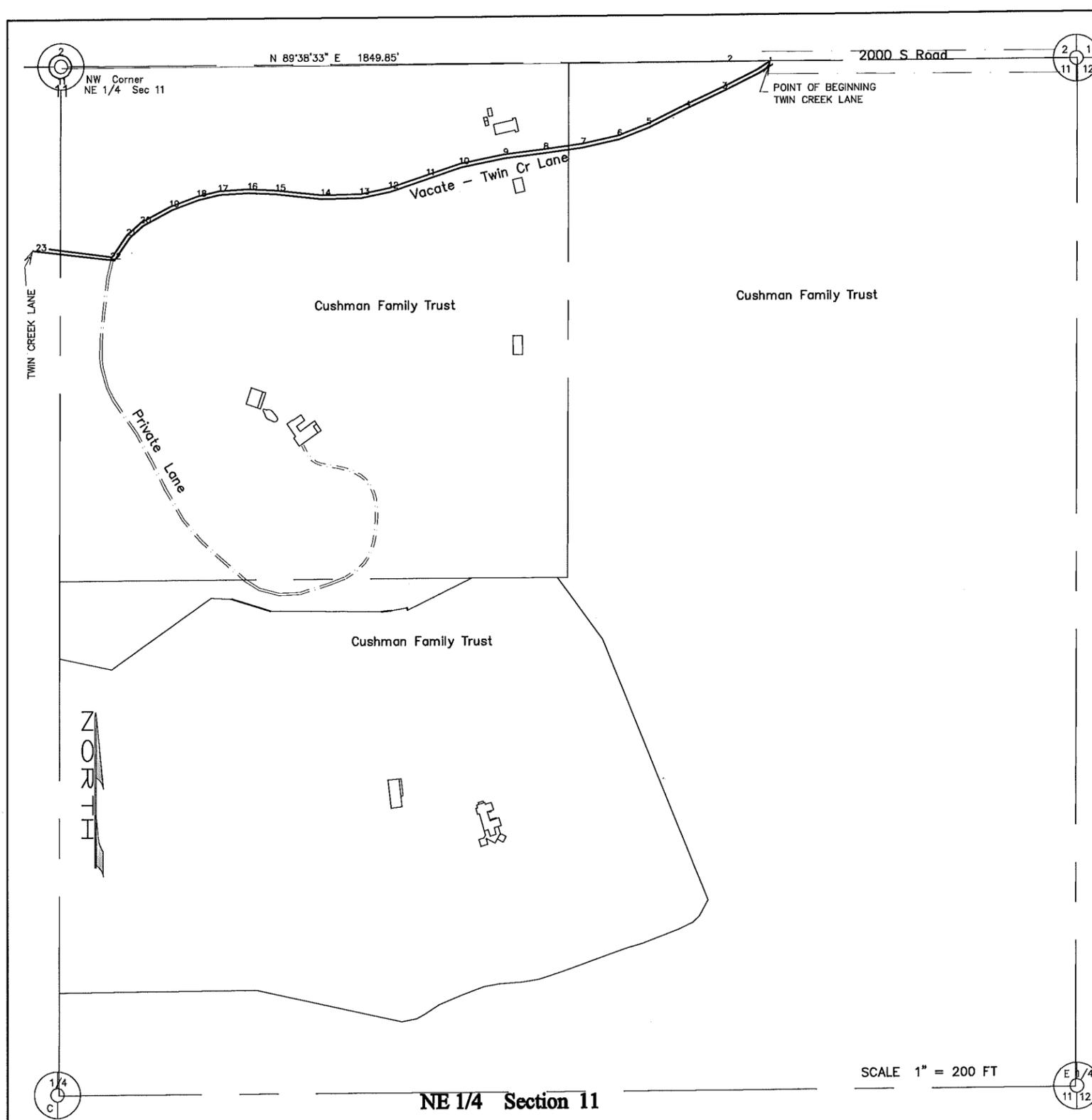
Commissioner Kunz agrees that the current private road needs to be vacated. The County needs to obtain the necessary dedicated right-of-way all the way from the county road to the forest boundary. Commissioner Kunz questions the reasoning behind a State mandated cattle guard on a public access and would like this investigated further. He is not in favor of any improvements at this time. Once roads counts are completed a determination can be made. If the road count does not rise to the level of priority necessary for improvements, it should stay as is.

Prosecutor Spitzer commented that the County's actions would be to vacate the private road in exchange for a dedicated right-of-way of the historical track from the existing county road to the USFS boundary. A dedicated ROW does not require maintenance. Mr. Mazalewski stated that a dedication requires a 60 foot ROW and he would ask that the Board request a full 60 feet.

Mr. Moulton commented that it appeared everyone was in agreement to vacate the private portion of W2000S and move the county road to the northern track and fix the clerical errors. He would like to avoid another hearing.

Prosecutor Spitzer recommended continuing the hearing so that the applicant and staff could work out the location of the new-old road. Mr. Moulton said he was fine with the historical northern route. Prosecutor Spitzer and staff agreed that the hearing should be continued to allow a survey of the northern track to be completed, along with the legal description of the proposed access and the language for the dedication of the ROW to the County, along with a revised plat indicating all changes. When the Board makes their motion all parties will be clear on the location and ownership from point A off County road W 2000 S to point B for public access to the USFS boundary.

- **MOTION.** 7:26pm Commissioner Rinaldi moved to continue the hearing to July 8th, at which time the applicant will present the Board with the required survey and plat documents, legal descriptions and dedicated right-of-way to the USFS and the legal description for the portion of road to be vacated. Commissioner Park seconded the motion which passed unanimously.



VICINITY MAP N 1/2 Sec 11, T4 N, R 44 E

VACATION DESCRIPTION OF TWIN CREEK LANE

TWIN CREEK LANE CENTERLINE DESCRIPTION
(TAKEN FROM RECORD OF SURVEY 128113)

COMMENCING AT THE NORTHWEST CORNER OF THE NE1/4 OF SECTION 11, TOWNSHIP 4 NORTH, RANGE 44 EAST, B.M., TETON COUNTY, IDAHO
 THENCE N 89°38'33" E, ALONG THE NORTH LINE OF SAID NE1/4, A DISTANCE OF 1849.85 FEET TO THE TRUE POINT OF BEGINNING OF THIS CENTERLINE DESCRIPTION.
 1 THENCE S 56°57'21" W 38.86 FEET; THENCE S 63°51'12" W 96.98 FEET;
 THENCE S 64°47'10" W 109.29 FEET; THENCE S 63°48'43" W 113.52 FEET;
 5 THENCE S 68°46'25" W 81.32 FEET; THENCE S 77°28'09" W 97.76 FEET;
 THENCE S 82°09'17" W 98.26 FEET; THENCE S 82°45'22" W 104.68 FEET;
 9 THENCE S 78°14'43" W 115.85 FEET; THENCE S 71°29'58" W 90.12 FEET;
 THENCE S 71°20'55" W 104.09 FEET; THENCE S 78°03'33" W 76.93 FEET;
 13 THENCE S 88°41'52" W 101.57 FEET; THENCE N 83°58'24" W 119.16 FEET;
 THENCE N 86°48'57" W 72.95 FEET; THENCE S 86°02'12" W 77.01 FEET;
 17 THENCE S 77°01'57" W 57.39 FEET; THENCE S 69°32'07" W 75.90 FEET;
 THENCE S 61°45'21" W 86.87 FEET; THENCE S 48°38'25" W 48.14 FEET;
 21 THENCE S 34°17'58" W 70.00 FEET; THENCE N 83°51'30" W 250.00 FEET
 23 TO THE END OF VACATED ROAD AND THE JUNCTION WITH DEDICATE ROAD BASEMENT TO THE PUBLIC.

NOT FINAL

RECORDER'S CERTIFICATE

| LEGEND | |
|--------|-------------------------------|
| | SECTION CORNER |
| | BUILDING SITE |
| | CUSHMAN FAMILY TRUST Property |
| | PROPERTY BOUNDARY SURVEYED |
| | ROAD TO BE VACATED |
| | SECTIONAL CONTROL LINE |
| | SECTIONAL BREAKDOWN LINE |

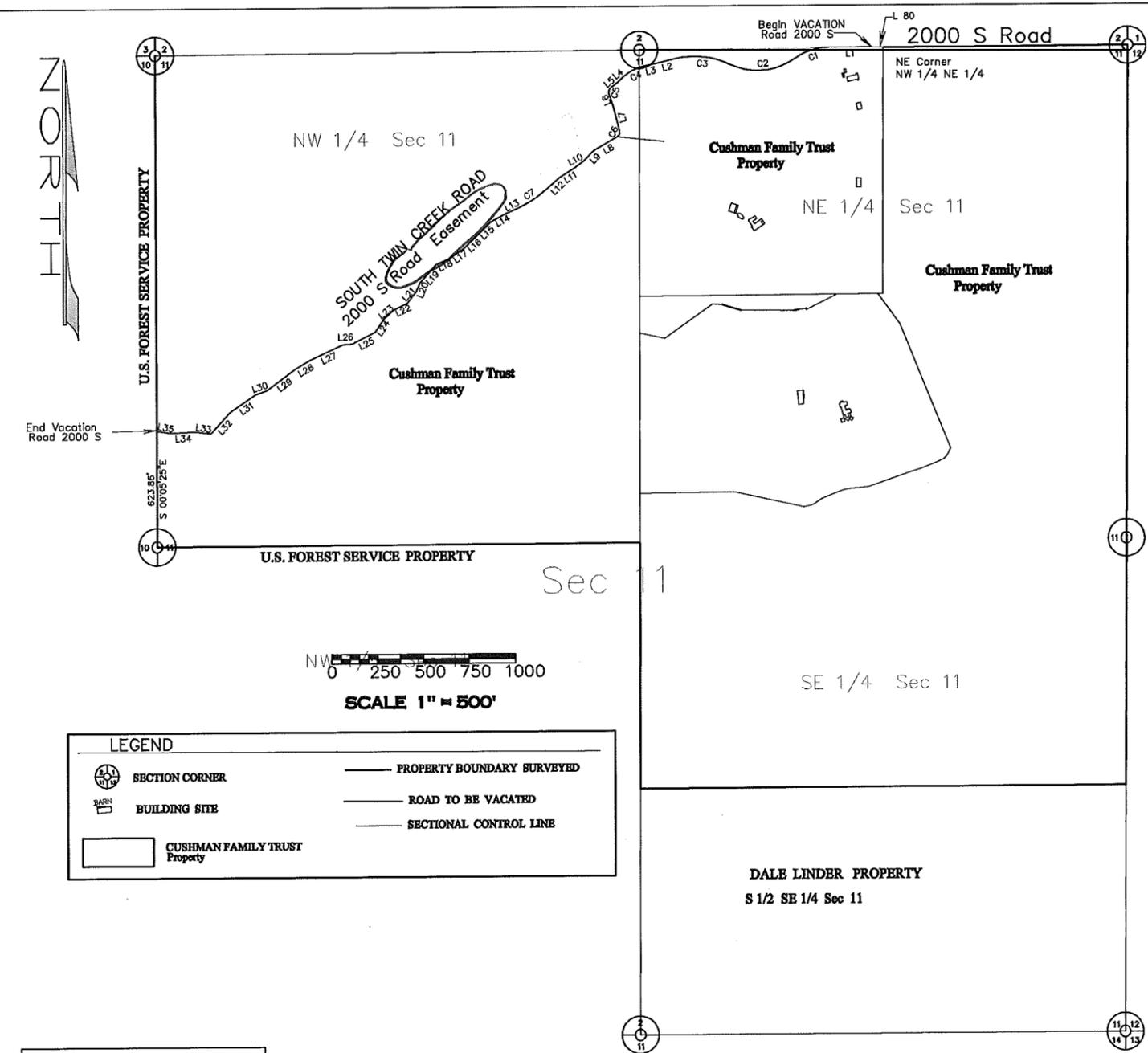
SURVEYOR'S CERTIFICATE
 I, ARNOLD W. WOOLSTENHULME, BEING A REGISTERED LAND SURVEYOR / ENGINEER (IDAHO # 2860) DO HEREBY CERTIFY THAT I DID CAUSE THE SURVEY OF THE ROADS IN SECTIONS 2, 3, & 11, AS SHOWN HEREIN, PLATTED AND DESCRIBED FROM SURVEY UNDER MY DIRECTION AND SUPERVISION.

Twin Creek Lane Road Vacation
RECORD of ROAD VACATION PLAT
 Part of Section 11, Twp. 4 N., Rng. 44 E., B.M.,

| | |
|--|---|
| John Cushman Cushman Family Trust 6440 West 2000 South Driggs, ID 83422 (208) 354-3130 | AW ENGINEERING VICTOR, IDAHO 83455 |
|--|---|

proj 2012-112 /Twin Cr

NORTH



SCALE 1" = 500'

LEGEND

- SECTION CORNER
- BUILDING SITE
- CUSHMAN FAMILY TRUST Property
- PROPERTY BOUNDARY SURVEYED
- ROAD TO BE VACATED
- SECTIONAL CONTROL LINE

ROAD 2000 S

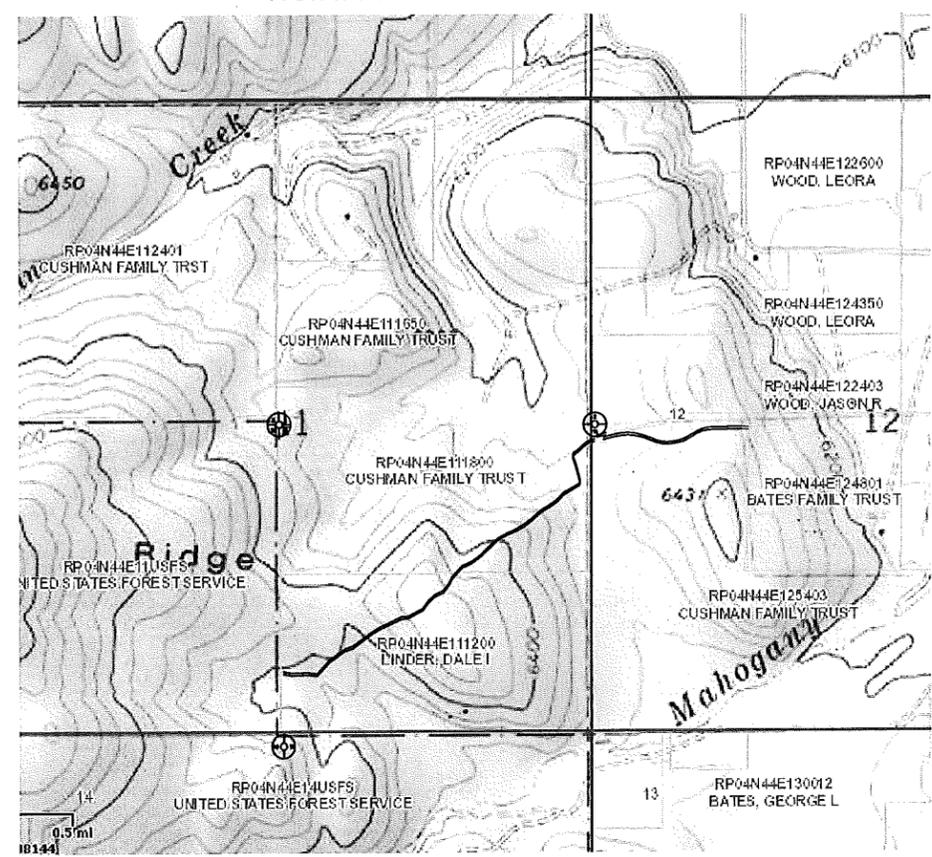
| LINE | BEARING | DISTANCE |
|------|--------------|----------|
| L 80 | S 87°27'46"E | 58.67' |
| L 1 | S 89°41'46"W | 243.00' |
| L 2 | S 76°17'53"W | 101.33' |
| L 3 | S 76°07'09"W | 81.00' |
| L 4 | S 47°23'58"W | 55.44' |
| L 5 | S 51°29'40"W | 50.02' |
| L 6 | S 19°48'46"E | 67.89' |
| L 7 | S 14°31'24"E | 144.65' |
| L 8 | S 59°43'00"W | 150.00' |
| L 9 | S 43°50'00"W | 74.00' |
| L 10 | S 54°10'00"W | 68.00' |
| L 11 | S 58°25'21"W | 92.17' |
| L 12 | S 48°08'48"W | 109.29' |
| L 13 | S 66°04'30"W | 77.00' |
| L 14 | S 62°00'00"W | 100.00' |
| L 15 | S 45°40'00"W | 95.00' |
| L 16 | S 46°10'00"W | 106.00' |
| L 17 | S 55°00'00"W | 93.00' |
| L 18 | S 66°00'00"W | 86.00' |
| L 19 | S 42°00'00"W | 134.00' |
| L 20 | S 23°20'00"W | 52.00' |
| L 21 | S 38°00'00"W | 77.00' |
| L 22 | S 65°00'00"W | 80.00' |
| L 23 | S 48°40'00"W | 75.00' |
| L 24 | S 34°45'00"W | 85.00' |
| L 25 | S 63°00'00"W | 140.00' |
| L 26 | S 86°05'00"W | 54.00' |
| L 27 | S 65°05'00"W | 195.00' |
| L 28 | S 59°30'00"W | 95.00' |
| L 29 | S 53°25'00"W | 190.00' |
| L 30 | S 70°40'00"W | 65.00' |
| L 31 | S 55°25'00"W | 170.00' |
| L 32 | S 42°15'00"W | 150.00' |
| L 33 | S 83°45'00"W | 80.00' |
| L 34 | S 88°15'00"W | 142.00' |
| L 35 | N 81°05'00"W | 74.41' |

ROAD 2000 S

| CURVE | DELTA ANGLE | RADIUS | ARC | TANGENT | CHORD | CHORD BEARING |
|-------|-------------|---------|---------|---------|---------|---------------|
| C 1 | 35°11'52" | 300.00' | 184.29' | 95.16' | 181.41' | S 72°05'50"W |
| C 2 | 61°04'48" | 354.89' | 378.33' | 209.38' | 360.67' | S 85°02'18"W |
| C 3 | 39°16'52" | 446.40' | 306.04' | 159.31' | 300.09' | N 84°03'44"W |
| C 4 | 30°43'11" | 200.00' | 107.23' | 54.94' | 105.95' | S 62°45'34"W |
| C 5 | 71°18'26" | 25.00' | 31.11' | 17.93' | 29.14' | S 15°50'27"W |
| C 6 | 74°14'31" | 25.00' | 32.39' | 18.92' | 30.17' | S 22°35'52"W |
| C 7 | 17°55'43" | 500.00' | 156.46' | 78.87' | 155.82' | S 57°06'39"W |

SURVEYOR'S CERTIFICATE
 I, ARNOLD W. WOOLSTENHULME, BEING A REGISTERED LAND SURVEYOR / ENGINEER (IDAHO # 2860) DO HEREBY CERTIFY THAT I DID CAUSE THE SURVEY OF THE ROADS IN SECTIONS 2, 3, & 11, AS SHOWN HEREIN, PLATTED AND DESCRIBED FROM SURVEY UNDER MY DIRECTION AND SUPERVISION.

VICINITY MAP



DEDICATED ROAD EASEMENT
 A 50 FOOT WIDE ROAD EASEMENT FOLLOWING AN EXISTING FOREST ACCESS ROAD WITH CENTERLINE DESCRIBED AS FOLLOWS:
 BEGINNING AT A POINT THAT IS N 87°27'46" W 58.67 FEET FROM THE NE CORNER OF THE NW 1/4NE 1/4 OF SECTION 11 OF TOWNSHIP 4 NORTH, RANGE 44 EAST, B.M., TETON COUNTY, IDAHO AND RUNNING;
 THENCE S 89°41'46" W 243.00 FEET;
 THENCE 184.29 FEET ALONG A 300 FOOT RADIUS CURVE TO THE LEFT WITH A CENTRAL ANGLE OF 35°11'52" AND A CHORD BEARING OF S 72°05'50" W;
 THENCE 378.33 FEET ALONG A 354.89 FOOT RADIUS CURVE TO THE RIGHT WITH A CENTRAL ANGLE OF 61°04'48" AND A CHORD BEARING OF S 85°02'18" W;
 THENCE 306.04 FEET ALONG A 446.40 FOOT RADIUS CURVE TO THE LEFT WITH A CENTRAL ANGLE OF 39°16'52" AND A CHORD BEARING OF N 84°03'44" W;
 THENCE S 76°17'53" W 101.33 FEET; THENCE S 78°07'09" W 81.00 FEET;
 THENCE 107.23 FEET ALONG A 200 FOOT RADIUS CURVE TO THE LEFT WITH A CENTRAL ANGLE OF 30°43'11" AND A CHORD BEARING OF S 62°45'34" W;
 THENCE S 47°23'58" W 55.44 FEET; THENCE S 51°29'40" W 50.02 FEET;
 THENCE 31.11 FEET ALONG A 25 FOOT RADIUS CURVE TO THE LEFT WITH A CENTRAL ANGLE OF 71°18'26" AND A CHORD BEARING OF S 15°50'27" W;
 THENCE S 19°48'46" E 67.89 FEET; THENCE S 14°31'24" E 144.65 FEET;
 THENCE 32.39 FEET ALONG A 25 FOOT RADIUS CURVE TO THE RIGHT WITH A CENTRAL ANGLE OF 74°14'31" AND A CHORD BEARING OF S 22°35'52" W;
 THENCE S 59°43'00" W 150.00 FEET; THENCE S 43°50'00" W 74.00;
 THENCE S 54°10'00" W 68.00 FEET; THENCE S 58°25'21" W 92.17 FEET;
 THENCE S 48°08'48" W 109.29 FEET;
 THENCE 156.46 FEET ALONG A 500 FOOT RADIUS CURVE TO THE RIGHT WITH A CENTRAL ANGLE OF 17°55'43" AND A CHORD BEARING OF S 57°06'39" W;
 THENCE S 66°04'30" W 77.00 FEET; THENCE S 62°00'00" W 100.00 FEET;
 THENCE S 45°40'00" W 95.00 FEET; THENCE S 46°10'00" W 106.00 FEET;
 THENCE S 55°00'00" W 93.00 FEET; THENCE S 66°00'00" W 86.00 FEET;
 THENCE S 42°00'00" W 134.00 FEET; THENCE S 23°20'00" W 52.00 FEET;
 THENCE S 36°00'00" W 77.00 FEET; THENCE S 65°00'00" W 80.00 FEET;
 THENCE S 48°40'00" W 75.00 FEET; THENCE S 34°45'00" W 85.00 FEET;
 THENCE S 63°00'00" W 140.00 FEET; THENCE S 86°05'00" W 54.00 FEET;
 THENCE S 65°05'00" W 195.00 FEET; THENCE S 59°30'00" W 95.00 FEET;
 THENCE S 53°25'00" W 190.00 FEET; THENCE S 70°40'00" W 65.00 FEET;
 THENCE S 42°15'00" W 150.00 FEET; THENCE N 83°45'00" W 80.00 FEET;
 THENCE S 88°15'00" W 142.00 FEET; THENCE N 81°05'00" W 74.41 FEET TO THE FOREST SERVICE PROPERTY LINE, BEING THE EAST LINE OF SECTION 10.

NOT FINAL

RECORDER'S CERTIFICATE

2000 South Twin Creek Road
RECORD OF EASEMENT DESCRIPTION
 Part of Section 11, Twp. 4N., Rng. 44 E., B.M.,

John Cushman
 Cushman Family Trust
 6440 West 2000 South
 Driggs, ID 83422
 (208) 354-5190

AW ENGINEERING
 VICTOR, IDAHO 83455

SOLID WASTE

1. See attached update from the SW Supervisor
2. Attached is the Forsgren Timeline & ET Cap Evaluation Report. I will be sending this report to DEQ on Monday. Forsgren will be available Monday if you have any questions.

ROAD & BRIDGE

2. R&B finished the S2000E gravel overlay with help from local contractors hauling gravel (funded by Special Rd Levy).
3. R&B and Mountain Valley Construction finishing the gravel stabilization project. We were able to apply MagChloride on 26.5 miles of roadway (funded by Special Rd Levy).
4. Owen PC has finished crushing ¾" gravel at the Driggs Gravel Pit and will be continuing to crush 2" minus rock and ½" rock chips (funded by Special Levy & R&B Budget)
5. The Asphalt Zipper is along N500W. Crews should begin hot patching the milled/recycled sections this week.
6. Ski Hill Road & Bates Road were striped last week.
7. R&B crew will be chip sealing E6000N, E7000N & N500W July 16-18.
8. I am waiting for the final rankings for the Darby/Fox/Badger Creek Bridge RFQ's.
9. Attached is the tentative road work schedule for 2013. This is the tentative schedule of work that was outlined for the BoCC on April 11. The locations and dates can also be found on the Teton County website: <http://gisserver1/flexviewers/roadprojectspublic/>

PUBLIC WORKS:

1. I am meeting with the Teton Valley Mobility Advisory Committee (TVMAC) on the 15th to discuss HWY 31 and future plans for the highway (included in this meeting is USFS, Driggs, Victor, WDOT).
2. I will present the LEC Communication Tower for approval to the Driggs P&Z on Weds.
3. I will be using vacation days on July 19, July 22 (Monday & Friday) and maybe Friday, August 2.



WK: 208-354-3443
CELL: 208-534-8710
svarela@co.teton.id.us
July 08, 2013

**Teton County
Solid Waste & Recycling
Memo**

Scale House: 1088 Cemetery Rd.
150 Courthouse Dr.
Driggs, ID 83422

TO: Board of County Commissioners

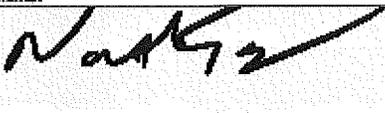
Subject: Solid Waste & Recycling update for your review and discussion at the July 08, 2013 meeting.

1. Eastern Idaho Public Health District inspection- On 06-27-2013 Nathan Taylor from EIPHD did a routine inspection of T.C.S.W. Overall the whole inspection went very well. Nathan was pleased with the operation of the transfer station. (See attached)
2. Animal Waste Composting Plan- We have finalized our animal composting plan and have forwarded it to Eastern Idaho Public Health District, Department of Agriculture and Department of Environmental Quality for their review and approval . Once these Departments approve of our plan we will implement the plan and begin animal composting.
3. Landfill Fencing Project- Randi Little Fencing is scheduled to start fencing at the end of July.

| | | | | |
|--|--------------------|------------------------|-----------------------------|------------------------|
| PURPOSE | | | | |
| Routine | | | | |
| Non-Municipal Solid Waste Tier II Inspection Report | | | | |
| Facility # | County Code | Inspection Date | Travel Time | Inspection Time |
| SW-4103 | Teton | Jun 27, 2013 | 60 | 30 |
| Facility Name | | | Operator Saul Varela | |
| TETON COUNTY MSW LANDFILL | | | | |
| Address 1098 Cemetery Road, Driggs ID 83422 | | | Follow-up Needed? No | |
| | | | Date | |

| Item | IDAPA SECTION | Violation | Correction Date | Violation Text |
|---|--|-----------|-----------------|----------------|
| Prohibited activities | | | | |
| 1 | Health care wastes | | | |
| 2 | Speculative accumulation | | | |
| 3 | Radioactive wastes | | | |
| 4 | Signs | | | |
| Waste types | | | | |
| Waste monitoring & measurement | | | | |
| 6 | Daily written log kept | | | |
| 7 | Plan for monitoring & handling receipt of unauthorized waste | | | |
| 8 | Characterization of wastes received | | | |
| 9 | Other measures included in operation plan | | | |
| 10 | Communications | | | |
| 11 | Fire prevention | | | |
| 12 | Access | | | |
| Scavenging & salvaging | | | | |
| Nuisance control | | | | |
| 14 | Shal not provide sustenance to rodents or insects | | | |
| 15 | Prevent or control vectors | | | |
| 16 | Operated to control malodorous gases | | | |
| 17 | Litter control | | | |
| Bird hazards to aircraft | | | | |
| Open burning and fires | | | | |
| 19 | No open burning conducted during an air pollution episode | | | |
| 20 | Infrequent burning of only approved waste types | | | |
| 21 | Open burning conducted pursuant to conditions set by DEQ or local fire authority | | | |
| 22 | Storm water run-on/off controls | | | |
| 23 | Operating plan | | | |
| 24 | Siting requirements | | | |
| 25 | Landfill operating req's | | | |
| 26 | Non-MSWLF facility specific operating requirements | | | |

Comments:



Inspected by Nathan Taylor



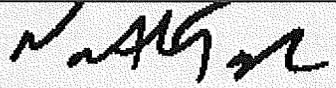
Received by Saul Varela

PURPOSE Non-Municipal Solid Waste Tier II Inspection Report

| | | | | |
|---|-----------------------------|--|--|------------------------------|
| Facility # SW-4104 | County Code Teton | Inspection Date Jun 27, 2013 | Travel time 30 | Inspection Time 30 |
| Facility Name TETON COUNTY TRANSFER STATION | | | Operator Saul Varela | |
| Address 1098 Cemetery Road, Driggs ID 83422 | | | Follow-up Needed? No Date | |

| Item | IDAPA SECTION | Violation | Correction Date | Violation Text |
|------|--|-----------|-----------------|----------------|
| | 58.01.06.012.03 | | | |
| | Prohibited activities | | | |
| 1 | Health care wastes | | | |
| 2 | Speculative accumulation | | | |
| 3 | Radioactive wastes | | | |
| 4 | Signs | | | |
| 5 | Waste types | | | |
| | Waste monitoring & measurement | | | |
| 6 | Daily written log kept | | | |
| 7 | Plan for monitoring & handling receipt of unauthorized waste | | | |
| 8 | Characterization of wastes received | | | |
| 9 | Other measures included in operation plan | | | |
| 10 | Communications | | | |
| 11 | Fire prevention | | | |
| 12 | Access | | | |
| 13 | Scavenging & salvaging | | | |
| | Nuisance control | | | |
| 14 | Shall not provide sustenance to rodents or insects | | | |
| 15 | Prevent or control vectors | | | |
| 16 | Operated to control malodorous gases | | | |
| 17 | Litter control | | | |
| 18 | Bird hazards to aircraft | | | |
| | Open burning and fires | | | |
| 19 | No open burning conducted during an air pollution episode | | | |
| 20 | Infrequent burning of only approved waste types | | | |
| 21 | Open burning conducted pursuant to conditions set by DEQ or local fire authority | | | |
| 22 | Storm water run-on/off controls | | | |
| 23 | Operating plan | | | |
| 24 | Siting requirements | | | |
| 25 | Landfill operating req's | | | |
| 26 | Non-MSWLF facility specific operating requirements | | | |

Comments:



Inspected by Nathan Taylor



Received by Saul Varela



July 1, 2013

Mr. Jay T. Mazalewski, P.E.
Teton County Engineer/Public Works Director
150 Courthouse Way
Driggs, ID 83422

RE: Comment Response for the Teton County Landfill ET Cap Evaluation – Existing Data Review and Cost/Benefit Assessment

Dear Mr. Mazalewski:

Forsgren Associates has received your comments regarding the *Teton County Landfill ET Cap Evaluation – Existing Data Review and Cost/Benefit Assessment* and is addressing your comments below.

- 1) *Please check for grammatical, typographical, and spelling errors.*
 - a) Document was checked for grammatical, typographical, and spelling errors.
- 2) *Pg 2: Figure 1 is not referenced anywhere in the text. Is this figure necessary?*
 - a) Figure 1 was included in the report to illustrate the general design of an ET cap to provide clarification to a possible reader that is not familiar with landfill caps.
 - A reference to Figure 1 was added to the document in Section 1.1.
- 3) *Pg 2: How did you determine the average cover depth is 1.4 feet? This does not coincide with Table 1, please clarify.*
 - a) The reference to the average depth of 1.4 feet is for the Interim Cover that was placed during the landfill operations. This calculation was made using the Teton County Landfill – ET Cap Investigation Phase II Report prepared by Nelson Engineering, September 11, 2012. The Data is from Exhibit E – 2007 Test Hole Location and Depth Table. The calculations are the result of the “Depth to Bottom Final Cover” measurement subtracted from the “Depth to Top of Waste” measurement.
 - The paragraph on Pg. 2 was clarified; a new Table was added to the report to show the Interim Cover/Operational Soil cover depth calculations.
 - b) The data shown in the former Table 1 (now Table 2) is the Final Cover Depth as reported in the same exhibit as referenced above.
- 4) *Pg 3: Current cover depth figure is in Appendix C not B.*
 - a) Correction was made to the document as requested
- 5) *Are soil moisture retention curve necessary and will the data collect/analysis provide these?*

- a) The relationships between soil moisture and unsaturated flow parameters (i.e., soil suction and unsaturated hydraulic conductivity) as represented by the soil moisture retention curves are necessary for predicting water movement through the cap materials by computer modeling. The data collection and analysis in the current scope does not include this effort; it was shifted to the Additional Services Section during revisions to our agreement due to comments from DEQ regarding validating the existing ET cap. However, as described in the Additional Services, additional sampling of representative soils and subsequent laboratory testing will provide sufficient data to determine the moisture retention properties of representative soils.
- Added text to Section 2.2 of the report.
- 6) *If the 2007 boring logs are located, will this reduce the number of test pits required?*
- a) Yes, if the 2007 boring logs are located and sufficient information is available to determine the characteristics and variability of soils by location, then the scale of any further investigations could be reduced to primarily focus on collecting samples of representative soils.
- 7) Pg 5/6: Please clarify the reasons/goals of the testing, why do we need this.
- a) The reasons/goals for testing include the following:
- It is necessary to understand the full range of materials present in the cap and how the variation of materials will affect water infiltration, and therefore cap performance.
 - The current data does not provide a complete picture. The number and representativeness of tests (encompassing the various soil types present) is insufficient.
 - Specific soil properties (as described in Comment Response #5) must be determined to model the cap performance with appropriate computer simulations and attain reasonable confidence in the results.
 - Another goal of testing is to determine the extent that the existing cap can contribute to overall cover performance, and whether certain portions of the existing cap are less effective (and potentially need replacement) or if there are cover areas that are more effective and can be retained as part of the final solution.
- Added new Section 2.2.1 to report
- 8) *Remove Data Collection Cost from this report and send me an Additional Services Work Order with a not to exceed or is this already included in our contract?*
- a) Report was modified to state that the data collection/analysis as described is an additional service. Most of the scope for this data collection is found in the Additional Services Section of the agreement. However, for convenience and as requested, we have provided an amendment/work order specifically describing the services with an attendant fee.

- 9) Where is the decision point regarding the value of the existing cap? This should be identified in the timeline and the narrative (modeling?).
- a) The decision point regarding the value of the existing cap will occur after modeling is complete. At that time it will be known whether the entire cap or portions of the existing cap can be used as part of the final solution.
 - This decision point was added to the timeline as a milestone.
- 10) Pg 8: EOPC was done on 4 types of caps not three, list all four in the beginning of the paragraph.
- a) EOPC lists 3 types of caps with an extra category used to show the estimate for each additional foot of ET cap.
 - Clarified report by adding a column for ET and Capillary Break ET Cap type and reported a per foot cost in Table 7.
- 11) Table 6: Rename Cost Comparison Summary.
- a) Renamed Table 7 (previously Table 6) to “Liner EOPC Comparison Summary.”
- 12) Table 6: Remove double/dark line above subtitle D cap.
- a) Made correction as requested
- 13) Pg 9: Is Forsgren recommending we proceed with the additional investigation based on possible cost savings? If so, state it.
- a) If credit is received for cap materials that are currently in place, a considerable cost savings will be realized. Cost savings would result by minimizing the thickness of additional cover materials needed to achieve the required performance. Table 6 shows the cost per foot of cover thickness for various cover types, and it is evident that even a small reduction in the final cover thickness significantly reduces the total cost. For this reason, it is recommended that the County proceed with additional investigations of the existing cover.
 - Added recommendation to page 9.
- 14) Pg 9: Update Work Timeline section based on my previous timeline comments.
- a) Made change as requested.
- 15) Appendix B: Pg 13 does not match Table 5 on pg 7?
- a) Corrected the rounding in Table 5 to match up with the cost estimates located in Appendix B.
- 16) Appendix B: Remove pgs 13, 14, 15, 16 include separately.
- a) Made change as requested.
- 17) Appendix B: Estimates.....I notice 20% of the total cost is associated with engineering fees, after investigation. This seems very high to me, please justify and correlate this to the design timeline.

- a) The estimated cost for engineering services (including bidding and construction services) for this type of project can range from approximately 10% to 20+% of the construction cost, depending on the final scope of the design and construction management required by the County and DEQ for an approved design and quality assurance. Further, comparing the potential fee for soft costs as a percentage of the EOPC for construction costs is a simple method employed at a planning level to budget for potential soft costs, including engineering. As the Society of Cost Estimating Engineers recommends a range of -50% to +100% as appropriate for estimating project costs at the planning stage; we typically use 20% of the EOPC for construction to estimate those soft costs. For our region, our base fee is often lower than the budgeted value while in other regions of the country, this value is often exceeded. Forsgren understands that this cost will be determined at the scoping meeting with the County when the scope has been determined or better defined based on planning decisions that still need to be made. For this size of project, while the cost is most likely to decrease as a percentage of the construction estimate, we have found through past experience that estimates on the upper end of the scale are useful in this initial planning. In most cases, project budgets are easier to scale back as the scope is defined than to increase.

18) Pg 23: Include a legend for the slope analysis

- a) Legend added as requested.

19) Pg 24: Please clarify the depths, are these depth to trash or depths of each layer-what is the starting point?

- a) The depths shown in this exhibit are depths to the bottom final cover from the surface. Added description in title block of the exhibit.

20) Pg 25: Is this proposed grading? If so, please label.

- a) This is the proposed grading, enlarged the description of the exhibit in the title block.

21) We should discuss/map out the models to be used and information needed for these models.

- a) Please refer to the attached response.

Please review these comment responses. If you need additional information please do not hesitate to call me at (208) 356-9201 or send me an email at kharris@forsgren.com.

Respectfully,

Kevin Harris, P.E.
Forsgren Associates Inc.

cc: Ray Schwaller -Portage, Inc.

Attachments: Updated Report, Response to comment #21



Landfill Cover Computer Models and Data Requirements

There are several numerical models that have been used to predict the performance of landfill covers. Some of these models have been developed to specifically address landfill covers and others are general vadose zone models developed to address the movement of water through unsaturated soil conditions. Albright et al. (2002) compared the processes and attributes of 10 models for use in ET cover simulations. The computer models evaluated included EPIC, CREAMS, HELP, SOILCOVER, HYDRUS2D, UNSAT-H, SHAW, MUTIMED, LEACHM and TOUGH2. Three of these models, EPIC, CREAMS and HELP are mass balance models, while the remaining models are based on Richards' equation.

The Albright et al. (2002) study suggests that the Richards' equation based codes (HYDRUS-2D and UNSAT-H) were better able to capture the behavior of alternative earthen covers under both arid and humid conditions than the simple water balance codes (HELP and EPIC). Albright et al. (2002) state that "given the apparent limitations of water balance approach for alternative covers which function based upon natural (soil-plant-atmosphere continuum) processes in contrast to compartmental analysis, it was recommended that Richards' equation based codes be adapted for alternative landfill cover designs."

Albright et al. (2002) note that the largest difference in hydraulic property data requirements among the codes is based whether the code uses water balance or Richard's equation calculations. For both approaches, the two most important properties are the ability of the soil to store water, i.e., water retention curve, and the ability to transmit water, i.e., the hydraulic conductivity. Water balance models require parameters that characterize the water retention curve, such as field capacity, wilting point or 15-bar water content, and porosity or saturated water content. From these parameters, the drainable porosity (saturated water content minus field capacity) and available water holding capacity (field capacity minus wilting point) can be computed. In contrast, models which are based on Richards' equation require a function such as the van Genuchten or Brooks and Corey models to describe the water retention curve. Laboratory data required to determine these function include $\Theta(h)$ measurements and saturated hydraulic conductivity.

Albright et al. (2002) did not provide a recommended computer model for ET cover simulations. However, the authors did note that "UNSAT-H generally provided the most accurate predictions of drainage and was relatively fast computationally" and that "mechanistically, the code appeared to be superior to the other codes tested."

A specific computer model will be selected and justified during a later task, however, based on Albright et al. (2002) a model based on Richards' equation will be selected. The two most prominent models in this category include UNSAT-H and HYDRUS-2D.

General input data requirements for Richards' equation based models include:

- Soil texture
- Soil albedo
- Topography/slope
- Site elevation

- Initial Soil Temperature
- Saturated Water Content/Porosity
- Saturated hydraulic conductivity
- Initial water content/head
- Depth to aquifer
- Laboratory $\Theta(h)$ function parameters
- Potential transpiration
- Growing season length
- Leaf area index
- Root density
- Root depth
- Canopy albedo
- Meteorological data including:
 - Hourly precipitation
 - Potential evaporation
 - Relative humidity
 - Air temperature daily max/min
 - Daily solar radiation
 - Daily cloud cover
 - Daily wind speed
 - Latitude/longitude

References

Albright, W., G.Gee, G. Wilson, and M. Fayer. 2002. Alternative Cover Assessment Project Phase I Report, Publication No. 41183. Desert Research Institute, NV. 203 pp.

Fayer, M.J. and T.L. Jones, 1990. UNSAT-H: Unsaturated soil water and heat flow model. PNL-6779, Pacific Northwest Laboratory, Richland, Washington.

Teton County Landfill ET Cap Evaluation

Existing Data Review and Cost/Benefit Assessment

Introduction

This document describes and evaluates the existing Teton County Landfill evapotranspiration (ET) cap. Engineer's Opinion of Probable Cost (EOPC) evaluations are also included for the addition of soil to the current ET cap, a Capillary ET Cap, a RCRA Subtitle D cap, and additional data collection required to demonstrate a "value" of the existing ET cap. This information is to be used as a decision-making tool for Teton County to weigh the cost-benefit ratio of convincing the Idaho Department of Environmental Quality (DEQ) the existing ET cap has some intrinsic value and designing a rehabilitative addition to the existing ET cap versus accepting the assertion the existing ET cap has no value with the attendant conclusion that an entirely new cap will need to be designed and constructed over the top of the existing cap. In addition, an initial evaluation of the current drainage and grading of the landfill based on survey data supplied by Teton County was performed.

1.1 Background

The Teton County Landfill, owned by Teton County, Idaho, stopped accepting waste in 2007. An ET cap was designed and constructed using local materials (see Figure 1). Prior to final closure acceptance by DEQ, a leachate release was discovered in the spring of 2010. The source of the leachate is a perforated drain pipe which penetrates the cap and transfers leachate from within the landfill to a newly constructed leachate storage pond. On August 6, 2010, Teton County entered into a Voluntary Consent Order with DEQ to determine the source of the leachate and develop a solution to prevent additional leachate from leaving the landfill site.

Investigations completed in October of 2012 show that the leachate flows seasonally in the spring and the amount of leachate recovered appears to be in direct relation with the amount of precipitation (snow, snow melt, rain). Preliminary analysis of the ET Cap show that it is not functioning as designed and is probably allowing water to percolate through the cap. Preliminary cap remediation designs were submitted to DEQ, but did not receive final approval.

The County and DEQ determined that some additional effort was required to better understand the performance of the existing ET Cap before moving forward with one of the preliminary remediation designs and to satisfy the questions DEQ posed regarding the same preliminary remediation designs. Therefore, the County authorized Forsgren Associates (and subconsultant Portage, Inc.) to develop a corrective action plan which entails evaluating prior investigations of the cap material, validating the existing data, and identifying any data gaps that need to be addressed to demonstrate an intrinsic value of the current cap. The goal of this evaluation is to provide information needed to determine the best method for rehabilitating the ET Cap to meet the DEQ determined performance standard, or replacing it with a system that will prevent percolation into the waste material.

Existing Cap Evaluation

This section of the document describes and evaluates the existing Teton County Landfill evapotranspiration (ET) cap. A summary of existing data, the “value” of the data collected to date with respect to the efficacy of the ET cap, and data gaps needed to complete a modeling evaluation of the cap are presented herein. The probable costs for collecting additional data are estimated.

2.1 Summary of Data Collected to Date

The following summarizes what is currently known about the existing ET cap with respect to physical dimensions, density, and materials. The variability of each of these parameters is discussed in the following paragraphs. This information is derived from several sources including:

- DEQ Comment Letter on Teton County Landfill Closure Plan – dated August 1, 2007
- DEQ Comment Letter on Revised Teton County Landfill Closure Plan – dated November 19, 2007
- Cap Performance Monitoring Plan, Teton County Municipal Landfill – dated July 2008
- Landfill Closure Plan Record Drawings – November 13, 2008
- INL Technical Review of Teton County Landfill Monitoring Plan – dated April 2009
- Nelson Engineering, Phase I Landfill Closure Cap Performance Evaluation Letter – dated Nov. 18, 2011
- Nelson Engineering, Phase II ET Cap Investigation – dated October 3, 2012
- DEQ Comments for the Teton County Landfill, ET Cap Investigation, Phase II Report – dated November 13, 2012,

2.1.1 Physical Dimensions:

The final landfill cover encompasses 16.8 acres in area. Sixty-six (66) test borings were drilled into the final cap in 2007 and five (5) test pits were excavated in 2012. The exhibits showing the test boring locations are found in Appendix C. No test boring logs are available from the 2007 investigation, but the thickness of the final cover and interim cover/operations soil were reported.

From these investigations, the following information regarding the cap thickness is known. Data for the final cover materials are reported below, and most areas on the landfill surface include an additional cap thickness consisting of the interim cover/operations soil. The thickness of the interim cover/operations soil varies from 0 feet to 4.5 feet, with an average of 1.4 feet as shown in Table 1.

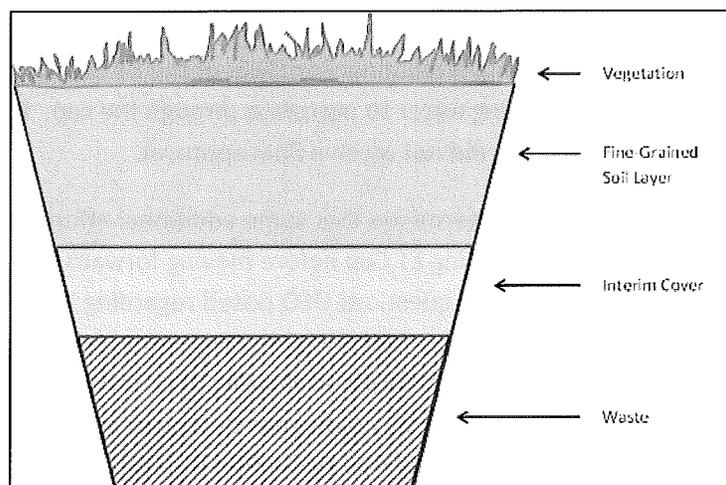


Figure 1. Monolithic ET Cover

Table 1. Summary of 2007 Interim Cover Calculations

| | |
|---|---|
| Number of Test Borings | 66 |
| Approximate Spacing Between Borings | 100 feet east-west and 150 feet north-south |
| Minimum Interim/Operations Cover Depth | 0 foot |
| Maximum Interim/Operations Cover Depth | 4.5 feet |
| Average Final Cover Depth | 1.4 feet |
| Standard Deviation from Average | 1.3 feet |

Note: Interim Cover/Operational Soils depth is calculated from the Teton County Landfill – ET Cap Investigation Phase II Report prepared by Nelson Engineering, September 11, 2012. The Data is from Exhibit E – 2007 Test Hole Location and Depth Table. The calculations are the result of the “Depth to Bottom Final Cover” measurement subtracted from the “Depth to Top of Waste” measurement

Table 2. Summary of 2007 Final Cover Measurements

| | |
|--|---|
| Number of Test Borings | 66 |
| Approximate Spacing Between Borings | 100 feet east-west and 150 feet north-south |
| Minimum Final Cover Depth* | 1.0 foot |
| Maximum Final Cover Depth | 6.0 feet |
| Average Final Cover Depth | 3.82 feet |
| Standard Deviation from Average | 0.96 feet |

*Based on tabulated raw data; prior to any corrective actions. Footnotes to the raw data tables indicate that areas having less than 3 feet of final cover had additional cover placed to meet the 3 feet of cover called for in the design.

Table 3. Summary of 2012 Final Cover Measurements

| | |
|--------------------------------------|--------------|
| Number of Test Pits | 5 |
| Locations/Areas Represented | 4 |
| Distance Between Tested Areas | 300-400 feet |
| Minimum Final Cover Depth | 1.5 feet |
| Maximum Final Cover Depth | 4.25 feet |

A figure showing the current cover depths is located in Appendix C.

2.1.2 Density:

In-place density and water content measurements were made with a nuclear density gauge (ASTM Method D6938) at various depths within the test pits.

Table 4. Summary of Final Cover Density Tests

| Test Depth Below Final Cover Surface (ft) | Number of Measurements | Max. Dry Density (pcf) | Min. Dry Density (pcf) | Average Dry Density (pcf) | Standard Deviation (pcf) |
|---|------------------------|------------------------|------------------------|---------------------------|--------------------------|
| 1.0 | 12 | 122.4 | 87.6 | 104.8 | 13.2 |
| 2.0 | 13 | 134.2 | 84.5 | 106.8 | 18.4 |
| 3.0 | 6 | 124.3 | 88.2 | 100.5 | 17.0 |
| 4.0 | 7 | 132.7 | 87.6 | 110.0 | 18.0 |
| 5.0 | 2 | 93.6 | 93.0 | 93.3 | 0.4 |

2.1.3 Materials:

The following describes the cap materials and variability.

The 2007 cap investigation identified the final cover depth and the depth to waste, inferring that the material between those depths consisted of interim cover/operations soil. Additionally, thirteen cover soil samples were analyzed for gradation (sieve analysis) and moisture content. The laboratory report data sheets indicate that the laboratory tests were conducted by Nelson Engineering. The format of the laboratory data for the sieve analysis and moisture content tests implies that typical engineering test methods were followed; however the specific test methods (i.e., ASTM or AASHTO) are not named in the report.

Five test pits representing four areas of the landfill cover were excavated in May of 2012. Specific material information generated from the 2012 investigation consists of the following:

- Five (5) test pit logs showing field descriptions and depths;
- Agronomic tests [U.S. Department of Agriculture (USDA) classification, available water holding capacity, field capacity, permanent wilting point] on one composite sample;
- Available water holding capacity and bulk density for six (6) test pit samples; and
- One saturated hydraulic conductivity (“permeability”) test on a composite sample.

The agronomic tests were performed by Western Laboratories, Inc. of Parma, Idaho, a laboratory that provides soil testing for agricultural purposes. The laboratory data sheets do not name the specific test methods (i.e., USDA or ASTM) that were followed. The saturated hydraulic conductivity test was performed by Tetra Tech, Inc. The specific test method is not named on the data sheet; however the data indicates that the method involved a constant head test in a flexible wall permeameter. That implies that ASTM D 5084 or a similar method was used.

The sieve analysis data from samples collected at the time of closure are summarized in the following table.

Table 5. Cover Material Sieve Analysis Data (2007)

| Location | % Gravel | % Sand | % Fines |
|--------------------|----------|--------|---------|
| B7 | 2 | 7 | 91 |
| B9 | 1 | 7 | 92 |
| C9 | 3 | 9 | 88 |
| D7 | 0 | 8 | 92 |
| E3 | 6 | 11 | 83 |
| E6 | 2 | 6 | 92 |
| E9 | 9 | 20 | 71 |
| G2 | 4 | 8 | 88 |
| G6 | 9 | 12 | 79 |
| G9 | 16 | 16 | 68 |
| H1 | 30 | 23 | 47 |
| H6 | 9 | 12 | 79 |
| I7 | 8 | 15 | 77 |
| Minimum Value | 0 | 6 | 47 |
| Maximum Value | 30 | 23 | 92 |
| Average | 7.6 | 11.8 | 80.5 |
| Standard Deviation | 8.1 | 5.3 | 12.9 |

The Phase II Report by Nelson Engineering (October 3, 2012) summarizes results from the agronomic and saturated hydraulic conductivity tests. With the exception of a single USDA classification test on one composite sample, no tests were performed to determine the amount of clay or characteristics (plasticity) of the fines.

2.2 Existing Data Summary, Conclusions, and Recommendations

As described in the previous section, there is a considerable amount of information collected to date with respect to the landfill final cover thickness, density, moisture content (at the time of sampling), and gradation of materials retained on a #200 U.S. standard sieve. There is some information pertaining to the cover material's agronomic and hydrologic properties.

The test pit logs and sieve analysis tests indicate that gravel is present in the cover soil, mostly in small uniformly distributed quantities but at higher percentages in two samples. The relationship between the percent gravel and the soil's hydrologic properties or ET cap performance has not been assessed at this time.

Very limited information is available with respect to the amount of clay in the soil. Also, no tests were performed to determine the plasticity of the fines (Atterberg limits per ASTM D4318), required for engineering classification (Unified Soil Classification System, USCS) of fine-grained soils. With the exception of one composite sample (showing 10% clay and USDA classification as loamy sand), there is insufficient information to classify the cover soils by either engineering (USCS) or agricultural (USDA) standards. Soil classification information provides a standard for: 1) defining areas within the cover that

have similar soil properties, 2) evaluating the variability of materials, and 3) identifying representative soil samples for testing purposes.

As reported by Nelson Engineering (December, 2012), a composite soil sample was tested for saturated hydraulic conductivity and agronomic properties. The sample was comprised of equal portions of material from Test Pits 451, 453, and 454. As such, the sample may represent certain average properties of the landfill cover, but provides no insight to variability in the cover materials that will affect the ET cap performance.

Appropriate models for evaluating the ET cap performance require input based on the unsaturated hydraulic conductivity characteristics of the soil and the surface flux (water introduced by precipitation, snowmelt, etc.). Hydrologic testing produces a soil moisture retention curve, relating unsaturated hydraulic conductivity to water content (as shown in the example below). At this time, no soil moisture retention curves have been developed for the Teton County Landfill ET cap materials. The relationships between soil moisture and unsaturated flow parameters (i.e., soil suction and unsaturated hydraulic conductivity) as represented by the soil moisture retention curves are necessary for predicting water movement through the cap materials by computer modeling.

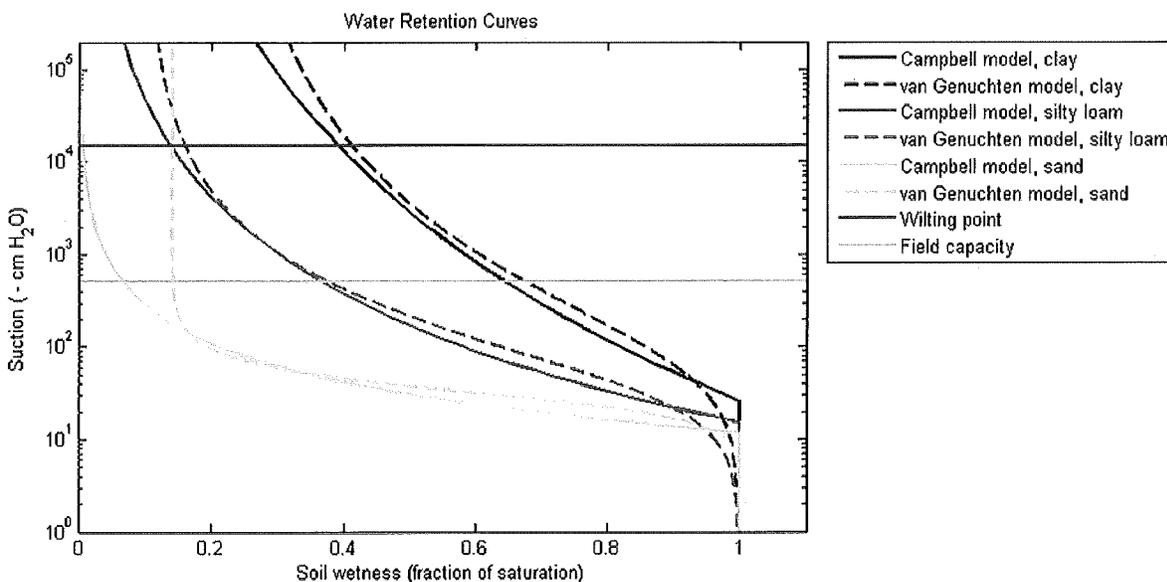


Figure 2. Example Soil Moisture Retention Curves

Based on the above discussions, there is currently insufficient data to fully assess the value of the existing soil cover materials with respect to performance of the ET cap. A tiered approach is recommended for collecting additional data for the cover materials. For statistical confidence, a minimum of thirty sample points will be used to gather initial data, upon which decisions for further testing will be made. Sampling points placed in an equilateral triangular distribution or similar will best represent the area of concern. An example layout of the initial sample points is provided in Appendix A.

The recommended approach for collecting additional data includes the following steps:

1. Excavate, backfill, and prepare a written log for an additional 30 or more test pits within the surface cover (to a depth of three feet).
2. Measure in-place density and moisture content.
3. Collect representative samples from all test pit locations.
4. Classify all soil samples per ASTM 2488 [Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)].
5. Submit a minimum of 8 representative samples (capturing the full range of variability in materials based on field identification) to the laboratory for classification purposes.
6. Upon receiving the initial laboratory test results, analyze the data to determine the range of materials that are represented.
7. Based upon the previous step, submit 4 or 5 representative samples to the laboratory for hydrologic testing.
8. Complete the analysis and written report as appropriate for the above steps.

The numbers of samples and selection of tests is estimated at this time, based on the known information and perceived variability in the cover materials. Decisions on the actual numbers of samples to be submitted for laboratory testing will be based on field observations and subsequent testing.

The additional data can be used to model the performance of the existing ET cap and support recommendations for design, including any additions or value gained from the existing landfill cover materials.

2.2.1 Data Collection Reasons/Goals

The reasons/goal for additional sampling and testing of the current cap can be summarized as follows:

- It is necessary to understand the full range of materials present in the cap and how the variation of materials will affect water infiltration, and therefore cap performance.
- The current data does not provide a complete picture. The number and representativeness of tests (encompassing the various soil types present) is insufficient.
- Specific soil properties must be determined to model the cap performance with appropriate computer simulations and attain reasonable confidence in the results.
- Another goal of testing is to determine the extent that the existing cap can contribute to overall cover performance, and whether certain portions of the existing cap are less effective (and potentially need replacement) or if there are cover areas that are more effective and can be retained as part of the final solution.

2.2.2 Data Collection Costs

The following table summarizes estimated costs for collecting additional data as described in the previous section.

Table 6. Estimated Costs for Additional Data Collection

| Component | Description | Cost Estimate |
|------------------------|---|-----------------|
| Field Investigation | Excavate test pits, log subsurface conditions and materials, measure in-place densities and moisture contents, and collect representative samples. | \$8,800* |
| Classification Tests | Perform laboratory tests on 8 to 10 samples, such as sieve analysis, Atterberg limits, USDA textural classification, specific gravity, and moisture content. | \$4,700 |
| Hydrologic Tests | Perform laboratory tests on 4 or 5 samples, including development of each moisture retention curve and associated hydrologic properties. | \$4,300 |
| Analysis and Reporting | Field classify and segregate samples, evaluate initial test results to determine further testing needs, submit samples to the appropriate laboratories, evaluate and report final test results. | \$8,000 |
| TOTAL ESTIMATE | | \$25,800 |

*Assumes Teton County will provide a backhoe and operator for excavating/backfilling test pits.

Attached in Appendix B there is a quote and further information regarding hydrologic testing.

The data collection and analysis in the current scope of the County’s agreement with Forsgren Associates Inc. does not include this effort; it was shifted to the “Additional Services” section during revisions to the agreement due to comments from DEQ regarding validating the exiting ET cap. However, as described in this portion of the agreement, additional sampling of representative soils and subsequent laboratory testing will provide sufficient data to determine the moisture retention properties of representative soils. Most of the scope for this data collection is described in this section of the work agreement.

EOPC Comparison for Cap Replacement/Augmentation Forsgren

Engineer’s Opinion of Probable Cost (EOPC) evaluations were performed for three types of landfill cap options. Currently, the landfill has an ET liner that is approximately 3 feet thick across the site. Other options for landfill caps include a Capillary ET liner which is an ET liner overlying a courser-grained (lower) layer under unsaturated condition to capture any precipitation that percolates through the evapotranspiration layer. This Capillary ET liner would use the existing ET liner as the lower layer with the new construction of both a course-grained layer and a fine-grained soil layer.

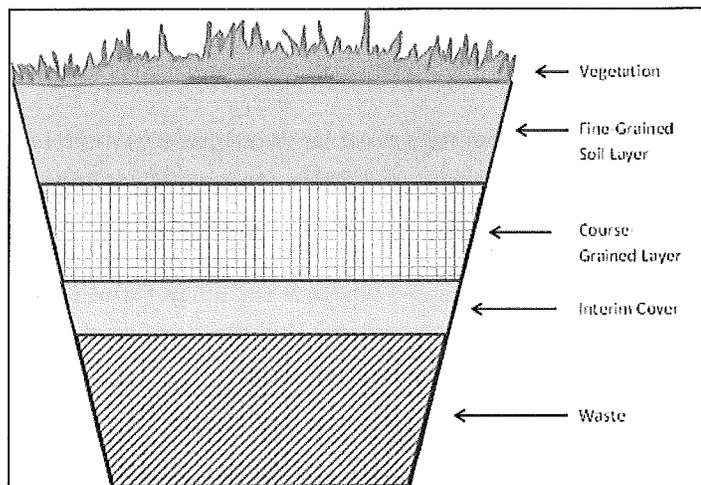


Figure 3. Capillary Barrier ET Cover

The final option is a RCRA Subtitle D liner that uses geotextiles and/or clay liners with a small hydraulic conductivity that eliminates precipitation from entering the waste. A summary of the costs for these liner types along with an ET cap and a Capillary Break ET cap based on the cost per foot of final cover material placed is summarized in the table below. Detailed EOPC's are in Appendix B. These estimates are based on transporting the soil from an area 15 miles from the landfill at a price of \$12 per cubic yard of soil.

Table 7. Liner EOPC Comparison Summary

|  | | ENGINEER'S OPINION OF PROBABLE COST | |
|---|--|-------------------------------------|--|
| | | COST SUMMARY | |
| Project No. | 01-13-0031 | | |
| Project: | Teton County Landfill Cap Rehabilitation | Date: 3-Jun-13 | |
| Client: | Teton County, Idaho | Prepared by: KLH | |
| ITEM | TOTAL (3 Foot Final Cover) | TOTAL (Per Foot of Final Cover) | |
| NEW 3-FOOT ET CAP | \$ 3,121,000 | \$ 1,091,000 | |
| CAPILLARY BREAK ET CAP | \$ 3,582,000 | \$ 1,597,000 | |
| SUBTITLE D CAP | \$ 4,128,000 | NA | |

As illustrated in the table above, the cost savings per foot of ET liner for this site is estimated at over \$1 million per foot of cover material. If more than 3 feet of additional soil is required to be placed above the existing liner to meet performance standards, a Capillary Break ET Cap would begin to make economic sense for the design. If more than 3.75 feet of additional fill is required, then a Subtitle D cap would meet the performance standards with similar costs as adding to the ET liner.

Based on these estimates, demonstrating an intrinsic value to the existing liner has the potential to provide significant cost savings to the County. Cost savings would result by minimizing the thickness of additional cover materials needed to achieve the required performance. Table 7 shows the cost per foot of cover thickness for various cover types, and it is evident that even a small reduction in the final cover thickness significantly reduces the total cost. For this reason, it is recommended that the County proceed with additional investigations of the existing cover.

Site Drainage and Grading

3.1 Existing Condition

The landfill cap was originally designed with slopes sufficient to allow snow melt and a portion of precipitation events to drain away from the ET cap. Current survey data shows areas where slopes are inadequate to allow this drainage to occur as illustrated in the Proposed Grading and Existing and Proposed Profiles Exhibits located in Appendix C. Inadequate slopes are defined as those less than 3%. Areas that allow ponding to occur contribute to percolation entering the waste. These areas are located

at the northeast and southeast corners of the landfill, and on top of the mound located near the center of the landfill.

3.2 Proposed Grading

In order to allow sufficient drainage across the landfill, a grading plan was developed that modifies these areas discussed above to slopes of at least 3%. The Proposed Grading and Existing and Proposed Profiles Exhibits located in Appendix C illustrate the grading required. The stockpile of soil material located adjacent to the landfill could be used to provide the fill for this proposed grading. Based on the topographical information that was provided by the County, approximately 21,025 cubic yards of fill material will be needed for this grading plan.

Work Timeline

A work timeline has been created and is included in Appendix D. This timeline assumes that additional data is collected from the cap material to determine if a “value” can be assigned to the existing ET cap. This schedule would allow for data to be collected during the summer and fall months of this year. Once the data is collected, reviewed, and modeled, design would occur during the winter months and be complete with agency review in March 2014. The project could then be bid and constructed during the summer months of 2014.

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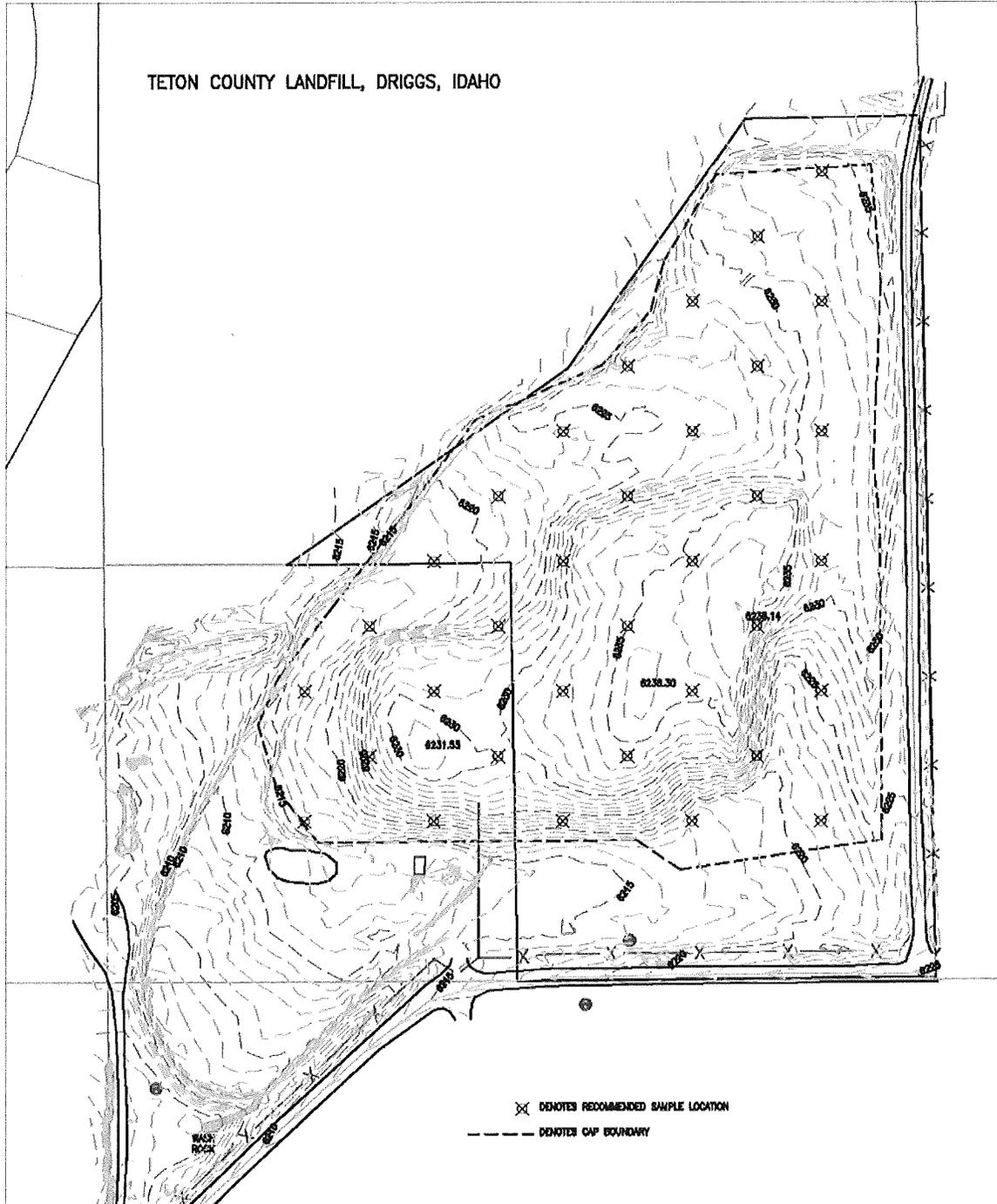
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Appendices

Appendix A

Recommended Sample Locations



RECOMMENDED SAMPLE LOCATIONS

Appendix B

Hydrologic Testing Quote and Supporting Information

Appendices\B\Appendix B.pdf

Document is attached

Engineer's Opinion's of Probably Cost (EOPC's)

| FORSGREN <i>Associates, Inc.</i> | | ENGINEER'S OPINION OF PROBABLE COST | | | | ET CAP |
|--|---|---|------|----------------|---------------------|--------|
| Project No. 01-13-0031 | | Project: Teton County Landfill Cap Rehabilitation | | Date: 3-Jun-13 | | |
| Client: Teton County, Idaho | | Prepared by: KLH | | | | |
| Line No. | UNIT PROCESS / ITEM DESCRIPTION | QUANTITY | UNIT | UNIT PRICE | Total Price | |
| CONSTRUCTION COSTS | | | | | | |
| 1 | Mobilization | 5 | % | | 102,355 | |
| 2 | ET Cap Soil (Includes 15 mile haul) | 96,800 | CY | \$18.67 | 1,807,256 | |
| 3 | ET Cap Soil Placement | 96,800 | CY | \$2.00 | 193,600 | |
| 4 | Monitoring Lysimeters | 5 | Each | \$3,250.00 | 16,250 | |
| 5 | Monitoring Wells | - | Each | 2,500 | 0 | |
| 6 | Revegetation | 20 | AC | 1,500 | 30,000 | |
| TOTAL CONSTRUCTION COSTS | | | | | | |
| SUBTOTAL CONSTRUCTION COST | | | | | \$ 2,149,461 | |
| Confidence Factor | | | | 85% | \$ 322,419 | |
| TOTAL CONSTRUCTION COST | | | | | \$ 2,471,880 | |
| Non Construction Costs | | | | | | |
| 1 | Design Services | | | 9% | \$ 222,469 | |
| 2 | Bid Services | | | 1% | \$ 24,719 | |
| 3 | Construction Observation/Inspection | | | 9% | \$ 222,469 | |
| 4 | Post Construction Services | | | 1% | \$ 24,719 | |
| SUBTOTAL OTHER PROJECT COSTS | | | | | \$ 494,376 | |
| OTHER PROJECT COSTS | | | | | | |
| 1 | PER/Facility Planning Study | | | | \$ - | |
| 2 | Water Sampling and Testing | | | | \$ - | |
| 3 | Pilot Testing | | | | \$ - | |
| 4 | Equipment Preselection Support | | | | \$ - | |
| 5 | Legal/Bonding & Audit | | | | \$ - | |
| 6 | Surveying | | | | \$ 6,000 | |
| 7 | Geotechnical Investigation | | | | \$ - | |
| 8 | Contract Administration and Funding Support | | | | \$ - | |
| SUBTOTAL OTHER PROJECT COSTS | | | | | \$ 6,000 | |
| PROJECT CONTINGENCY | | | | | | |
| Contingency on project costs | | | | 5% | \$ 148,613 | |
| TOTAL ENGINEER'S OPINION OF PROBABLE PROJECT COST (nearest \$1,000) | | | | | \$ 3,121,000 | |

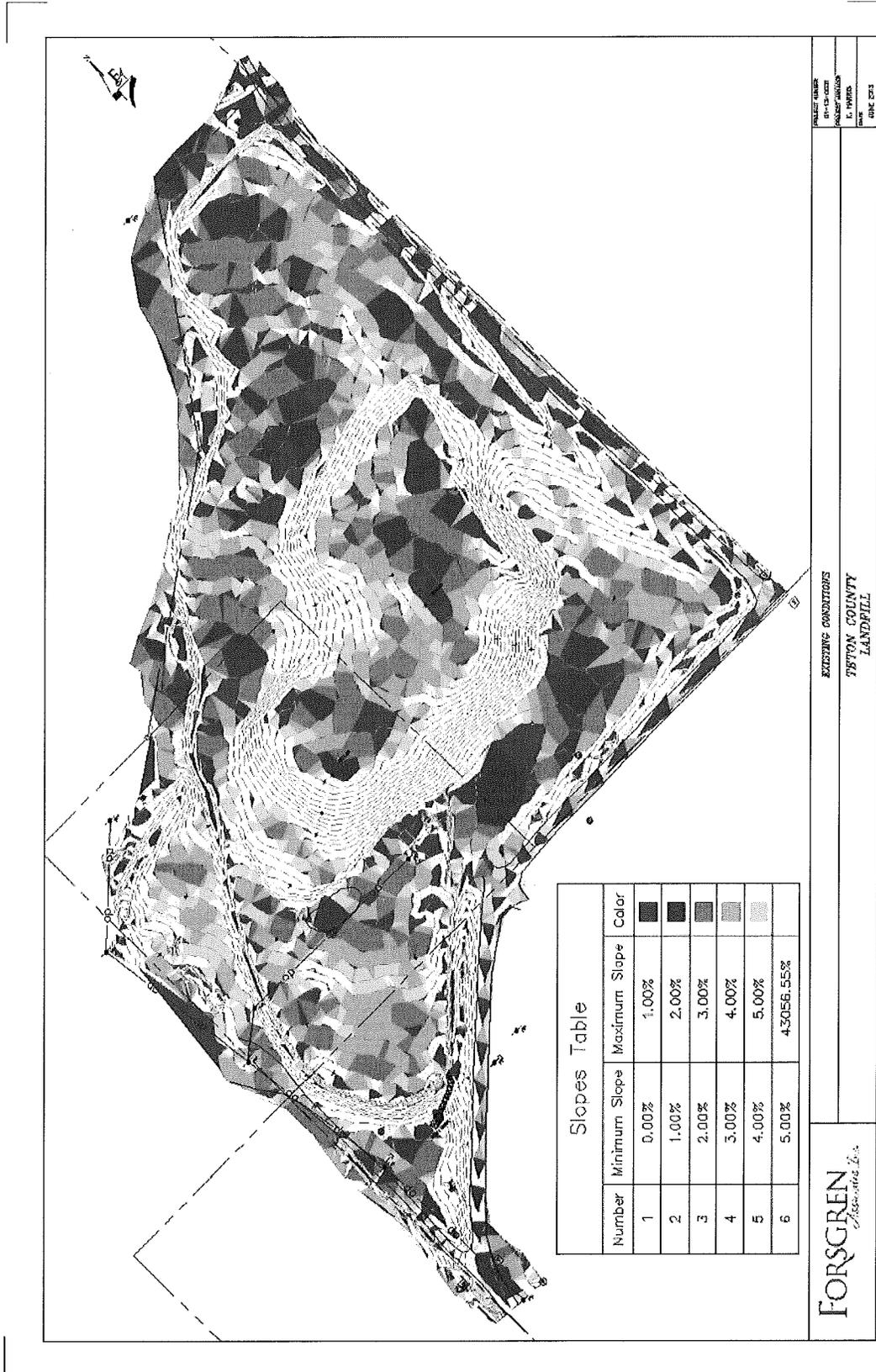
| FORSGREN <i>Associates Inc.</i> | | ENGINEER'S OPINION OF PROBABLE COST | | | CAPILLARY BREAK ET | |
|--|---|---|------|------------|---------------------|--|
| Project No. 01-13-0031 | | Project: Teton County Landfill Cap Rehabilitation | | | Date: 3-Jun-13 | |
| Client: Teton County, Idaho | | | | | Prepared by: KLH | |
| Line No. | UNIT PROCESS / ITEM DESCRIPTION | QUANTITY | UNIT | UNIT PRICE | Total Price | |
| CONSTRUCTION COSTS | | | | | | |
| 1 | Mobilization | 5 | % | | \$ 117,521 | |
| 2 | ET Cap Soil (includes 15 mile haul) | 96,800 | CY | \$18.67 | \$ 1,807,256 | |
| 3 | ET Cap Soil Placement | 96,800 | CY | \$2.00 | \$ 193,600 | |
| 4 | Monitoring Lysimeters | 5 | Each | \$3,250.00 | \$ 16,250 | |
| 5 | Monitoring Wells | - | Each | \$2,500.00 | \$ - | |
| 6 | Revegetation | 20 | AC | \$1,500.00 | \$ 30,000 | |
| 7 | Geotextile | 871,200 | SF | \$0.27 | \$ 235,224 | |
| 8 | Gravel | 16,133 | CY | \$4.22 | \$ 68,081 | |
| TOTAL CONSTRUCTION COSTS | | | | | | |
| | SUBTOTAL CONSTRUCTION COST | | | | \$ 2,467,932 | |
| | Confidence Factor | | | 85% | \$ 370,190 | |
| | TOTAL CONSTRUCTION COST | | | | \$ 2,838,122 | |
| Non Construction Costs | | | | | | |
| 1 | Design Services | | | 9% | \$ 255,431 | |
| 2 | Bid Services | | | 1% | \$ 28,381 | |
| 3 | Construction Observation/Inspection | | | 9% | \$ 255,431 | |
| 4 | Post Construction Services | | | 1% | \$ 28,381 | |
| | SUBTOTAL OTHER PROJECT COSTS | | | | \$ 567,624 | |
| OTHER PROJECT COSTS | | | | | | |
| 1 | PER/Facility Planning Study | | | | \$ - | |
| 2 | Water Sampling and Testing | | | | \$ - | |
| 3 | Pilot Testing | | | | \$ - | |
| 4 | Equipment Preselection Support | | | | \$ - | |
| 5 | Legal/Bonding & Audit | | | | \$ - | |
| 6 | Surveying | | | | \$ 6,000 | |
| 7 | Geotechnical Investigation | | | | \$ - | |
| 8 | Contract Administration and Funding Support | | | | \$ - | |
| | SUBTOTAL OTHER PROJECT COSTS | | | | \$ 6,000 | |
| PROJECT CONTINGENCY | | | | | | |
| | Contingency on project costs | | | 5% | \$ 170,587 | |
| TOTAL ENGINEER'S OPINION OF PROBABLE PROJECT COST (nearest \$1,000) | | | | | \$ 3,582,000 | |

| FORSGREN <i>Associates Inc.</i> | | ENGINEER'S OPINION OF PROBABLE COST | | | |
|--|---|-------------------------------------|------|------------------|---------------------|
| | | SUBTITLE D CAP | | | |
| Project No. 01-13-0031 | | | | Date: 3-Jun-13 | |
| Project: Teton County Landfill Cap Rehabilitation | | | | Prepared by: KLH | |
| Client: Teton County, Idaho | | | | | |
| Line No. | UNIT PROCESS / ITEM DESCRIPTION | QUANTITY | UNIT | UNIT PRICE | Total Price |
| CONSTRUCTION COSTS | | | | | |
| 1 | Mobilization | 5 | % | | 133,318 |
| 2 | Soil Cover 18" | 48,400 | CY | \$18.67 | 903,628 |
| 3 | Soil Placement | 48,400 | CY | \$1.50 | 72,600 |
| 4 | 40 Mil Textured LLDPE | 871,200 | SF | \$0.55 | 479,160 |
| 5 | Single Side 250 Mil Drainage Net | 871,200 | SF | \$0.55 | 479,160 |
| 6 | Geosynthetic Clay Liner (GCL) | 871,200 | SF | \$0.84 | 731,808 |
| 7 | Gas Vents | 5 | Each | \$3,000.00 | 15,000 |
| 8 | Revegetation | 20 | AC | 1,500 | 30,000 |
| TOTAL CONSTRUCTION COSTS | | | | | |
| SUBTOTAL CONSTRUCTION COST | | | | | \$ 2,844,674 |
| Confidence Factor | | | | 85% | \$ 426,701 |
| TOTAL CONSTRUCTION COST | | | | | \$ 3,271,375 |
| Non Construction Costs | | | | | |
| 1 | Design Services | | | 9% | \$ 294,424 |
| 2 | Bid Services | | | 1% | \$ 32,714 |
| 3 | Construction Observation/Inspection | | | 9% | \$ 294,424 |
| 4 | Post Construction Services | | | 1% | \$ 32,714 |
| SUBTOTAL OTHER PROJECT COSTS | | | | | \$ 654,275 |
| OTHER PROJECT COSTS | | | | | |
| 1 | PER/Facility Planning Study | | | | \$ - |
| 2 | Water Sampling and Testing | | | | \$ - |
| 3 | Pilot Testing | | | | \$ - |
| 4 | Equipment Preselection Support | | | | \$ - |
| 5 | Legal/Bonding & Audit | | | | \$ - |
| 6 | Surveying | | | | \$ 6,000 |
| 7 | Geotechnical Investigation | | | | \$ - |
| 8 | Contract Administration and Funding Support | | | | \$ - |
| SUBTOTAL OTHER PROJECT COSTS | | | | | \$ 6,000 |
| PROJECT CONTINGENCY | | | | | |
| Contingency on project costs | | | | 5% | \$ 196,582 |
| TOTAL ENGINEER'S OPINION OF PROBABLE PROJECT COST (nearest \$1,000) | | | | | \$ 4,128,000 |

| FORSGREN <i>Associates Inc.</i> | | ENGINEER'S OPINION OF PROBABLE COST | | | ET CAP PER FOOT | |
|--|---|-------------------------------------|------|------------|------------------|------------------|
| Project No. 01-13-0031 | | | | | Date: 3-Jun-13 | |
| Project: Teton County Landfill Cap Rehabilitation | | | | | Prepared by: KLH | |
| Client: Teton County, Idaho | | | | | | |
| Line No. | UNIT PROCESS / ITEM DESCRIPTION | QUANTITY | UNIT | UNIT PRICE | Total Price | |
| CONSTRUCTION COSTS | | | | | | |
| 1 | Mobilization | 5 | % | | 35,660 | |
| 2 | ET Cap Soil (includes 15 mile haul) | 32,267 | CY | \$18.67 | 602,425 | |
| 3 | ET Cap Soil Placement | 32,267 | CY | \$2.00 | 64,534 | |
| 4 | Monitoring Lysimeters | 5 | Each | \$3,250.00 | 16,250 | |
| 5 | Monitoring Wells | - | Each | 2,500 | 0 | |
| 6 | Revegetation | 20 | AC | 1,500 | 30,000 | |
| TOTAL CONSTRUCTION COSTS | | | | | | |
| SUBTOTAL CONSTRUCTION COST | | | | | \$ | 748,869 |
| Confidence Factor | | | | 85% | \$ | 112,330 |
| TOTAL CONSTRUCTION COST | | | | | \$ | 861,200 |
| Non Construction Costs | | | | | | |
| 1 | Design Services | | | 9% | \$ | 77,508 |
| 2 | Bid Services | | | 1% | \$ | 8,612 |
| 3 | Construction Observation/Inspection | | | 9% | \$ | 77,508 |
| 4 | Post Construction Services | | | 1% | \$ | 8,612 |
| SUBTOTAL OTHER PROJECT COSTS | | | | | \$ | 172,240 |
| OTHER PROJECT COSTS | | | | | | |
| 1 | PER/Facility Planning Study | | | | \$ | - |
| 2 | Water Sampling and Testing | | | | \$ | - |
| 3 | Pilot Testing | | | | \$ | - |
| 4 | Equipment Preselection Support | | | | \$ | - |
| 5 | Legal/Bonding & Audit | | | | \$ | - |
| 6 | Surveying | | | | \$ | 6,000 |
| 7 | Geotechnical Investigation | | | | \$ | - |
| 8 | Contract Administration and Funding Support | | | | \$ | - |
| SUBTOTAL OTHER PROJECT COSTS | | | | | \$ | 6,000 |
| PROJECT CONTINGENCY | | | | | | |
| Contingency on project costs | | | | 5% | \$ | 51,972 |
| TOTAL ENGINEER'S OPINION OF PROBABLE PROJECT COST (nearest \$1,000) | | | | | \$ | 1,091,000 |

| FORSGREN <i>Associates Inc.</i> | | ENGINEER'S OPINION OF PROBABLE COST | | | |
|--|---|-------------------------------------|------|------------------|---------------------|
| | | CAPILLARY BREAK ET | | | |
| Project No. 01-13-0031 | | | | Date: 3-Jun-13 | |
| Project: Teton County Landfill Cap Rehabilitation | | | | Prepared by: KLH | |
| Client: Teton County, Idaho | | | | | |
| Line No. | UNIT PROCESS / ITEM DESCRIPTION | QUANTITY | UNIT | UNIT PRICE | Total Price |
| CONSTRUCTION COSTS | | | | | |
| 1 | Mobilization | 8 | % | | \$ 81,321 |
| 2 | ET Cap Soil (includes 15 mile haul) | 32,267 | CY | \$18.67 | \$ 602,419 |
| 3 | ET Cap Soil Placement | 32,267 | CY | \$2.00 | \$ 64,533 |
| 4 | Monitoring Lysimeters | 5 | Each | \$3,250.00 | \$ 16,250 |
| 5 | Monitoring Wells | - | Each | \$2,500.00 | \$ - |
| 6 | Revegetation | 20 | AC | \$1,500.00 | \$ 30,000 |
| 7 | Geotextile | 871,200 | SF | \$0.27 | \$ 235,224 |
| 8 | Gravel | 16,133 | CY | \$4.22 | \$ 68,081 |
| TOTAL CONSTRUCTION COSTS | | | | | |
| SUBTOTAL CONSTRUCTION COST | | | | | \$ 1,097,828 |
| Confidence Factor | | | | 85% | \$ 164,674 |
| TOTAL CONSTRUCTION COST | | | | | \$ 1,262,502 |
| Non Construction Costs | | | | | |
| 1 | Design Services | | | 9% | \$ 113,625 |
| 2 | Bid Services | | | 1% | \$ 12,625 |
| 3 | Construction Observation/Inspection | | | 9% | \$ 113,625 |
| 4 | Post Construction Services | | | 1% | \$ 12,625 |
| SUBTOTAL OTHER PROJECT COSTS | | | | | \$ 252,500 |
| OTHER PROJECT COSTS | | | | | |
| 1 | PER/Facility Planning Study | | | | \$ - |
| 2 | Water Sampling and Testing | | | | \$ - |
| 3 | Pilot Testing | | | | \$ - |
| 4 | Equipment Preselection Support | | | | \$ - |
| 5 | Legal/Bonding & Audit | | | | \$ - |
| 6 | Surveying | | | | \$ 6,000 |
| 7 | Geotechnical Investigation | | | | \$ - |
| 8 | Contract Administration and Funding Support | | | | \$ - |
| SUBTOTAL OTHER PROJECT COSTS | | | | | \$ 6,000 |
| PROJECT CONTINGENCY | | | | | |
| Contingency on project costs | | | | 5% | \$ 76,050 |
| TOTAL ENGINEER'S OPINION OF PROBABLE PROJECT COST (nearest \$1,000) | | | | | \$ 1,597,000 |

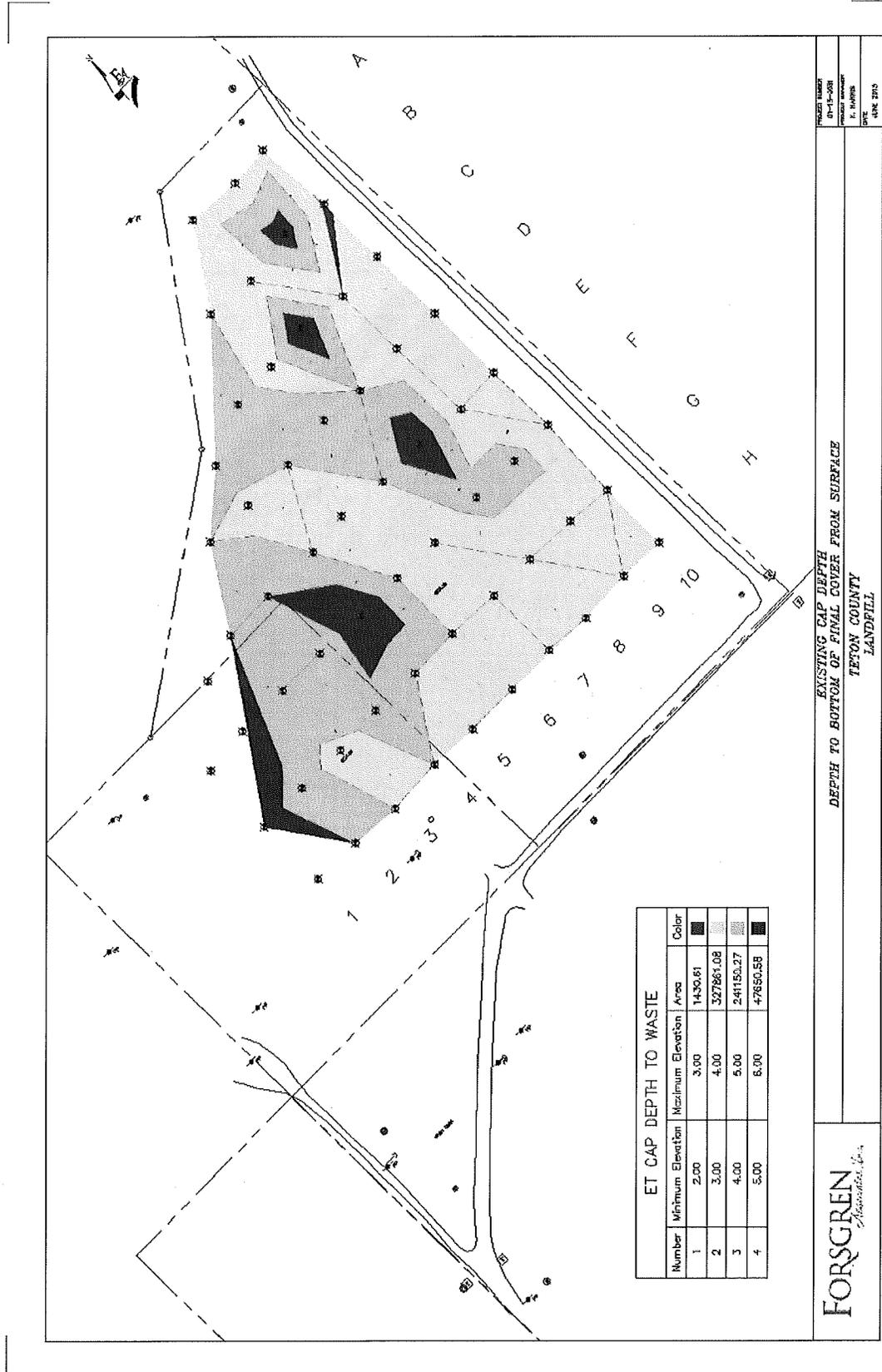
Site Topography Exhibit



EXISTING CONDITIONS
 TETON COUNTY
 LANDFILL

PROJECT NUMBER: 01-13-0031
 DATE: 01/13/13
 DRAWN BY: E. HARRIS
 CHECKED BY: J. HARRIS

Existing Cover Exhibit

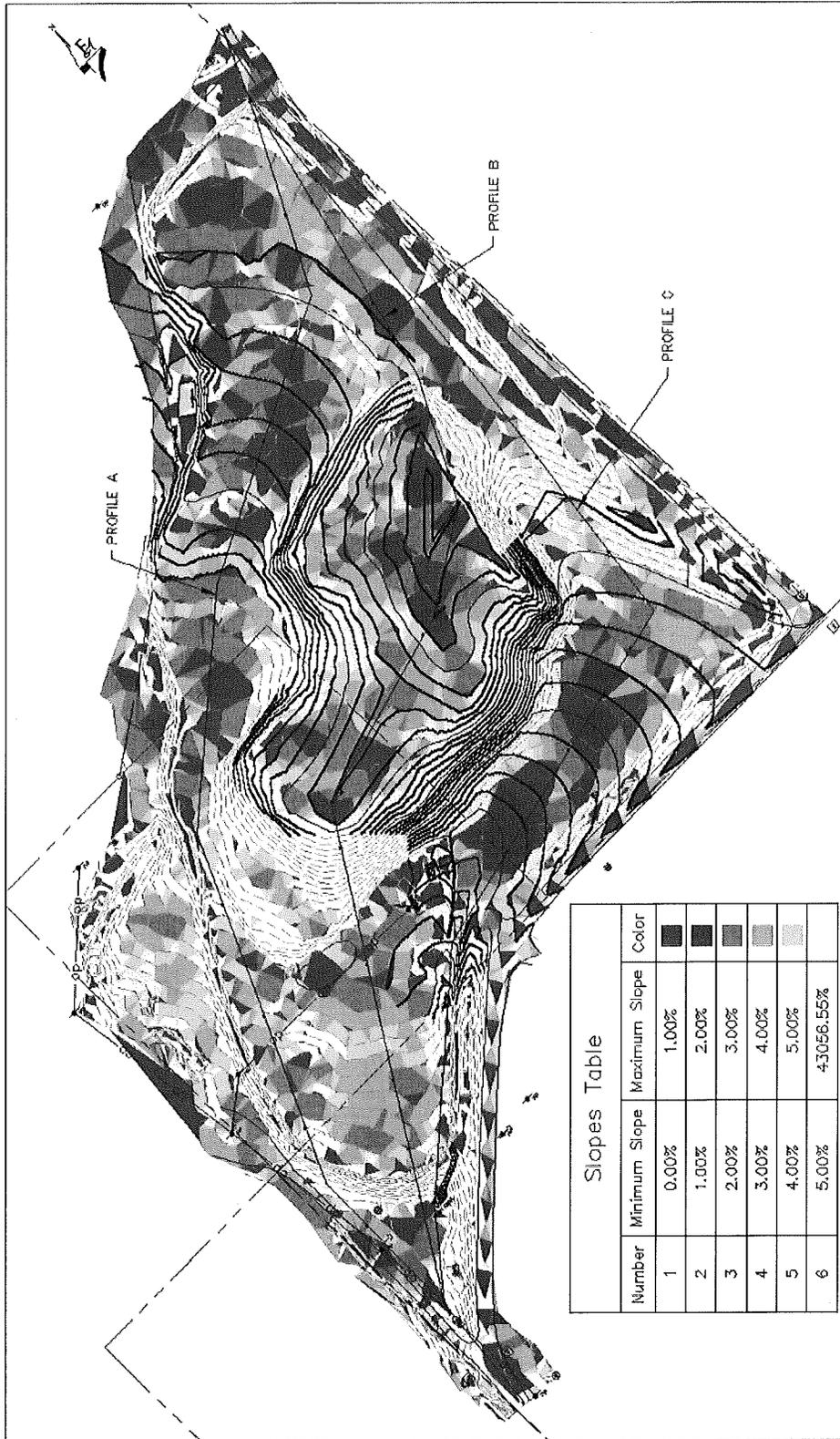


PROJECT NUMBER: 01-13-0031
 DATE: 01-13-2013
 BY: K. HARRIS
 DATE: APR 27/10

EXISTING CAP DEPTH
 DEPTH TO BOTTOM OF FINAL COVER FROM SURFACE
 TETON COUNTY
 LANDFILL

FORSGREN
Associates, Inc.

Drainage and Grading Exhibit



Slopes Table

| Number | Minimum Slope | Maximum Slope | Color |
|--------|---------------|---------------|-------|
| 1 | 0.00% | 1.00% | |
| 2 | 1.00% | 2.00% | |
| 3 | 2.00% | 3.00% | |
| 4 | 3.00% | 4.00% | |
| 5 | 4.00% | 5.00% | |
| 6 | 5.00% | 43056.55% | |

**PROPOSED
GRADING**

TETON COUNTY
LANDFILL

PROJECT NUMBER
01-13-0031

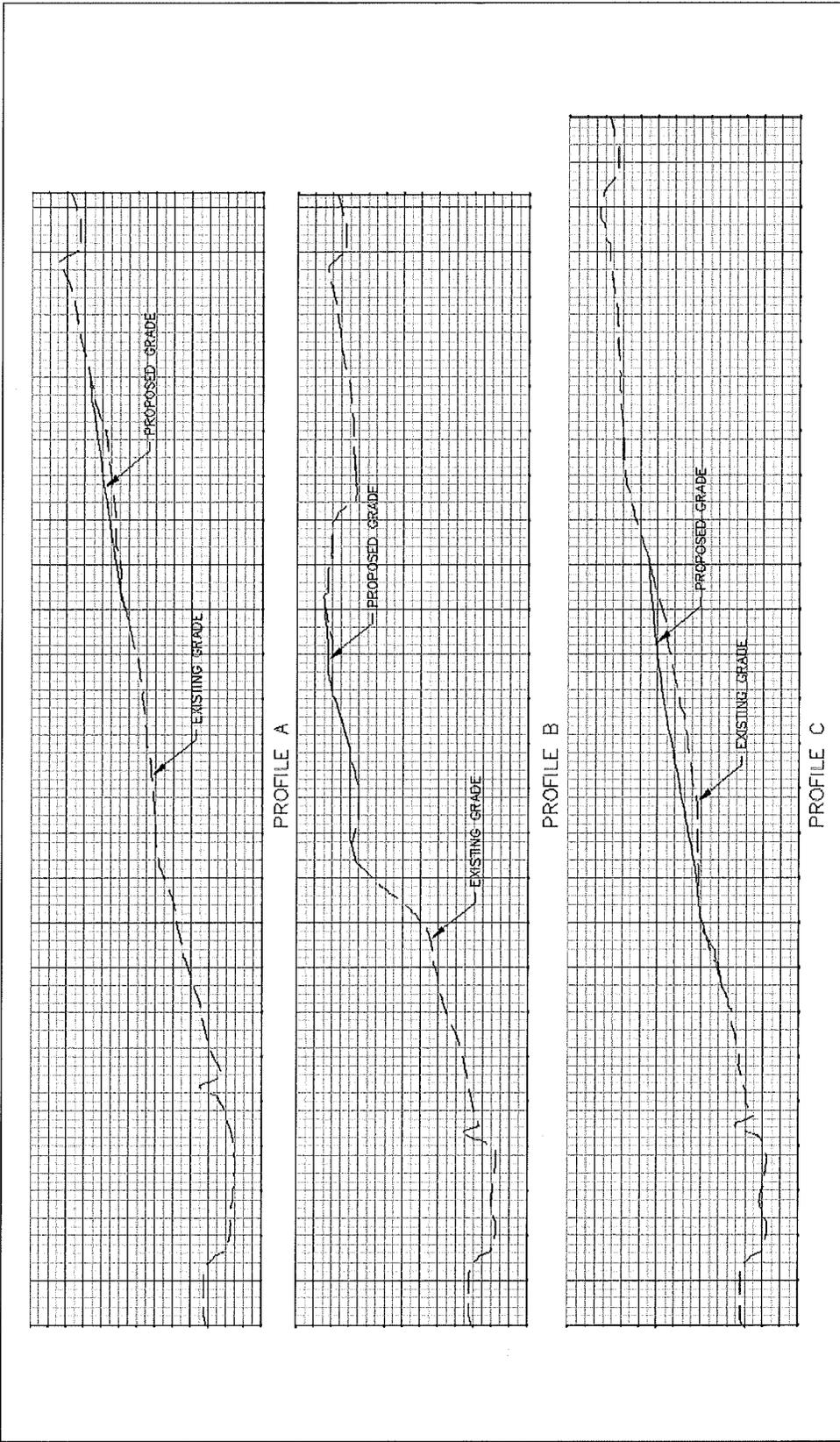
PROJECT NUMBER
16-100005

DATE
JUNE 2013

FORSGREN

Associates, Inc.

PORTAGE



| | | |
|---|--|---|
| <p>FORSGREN <i>Associates, Inc.</i></p> | <p>EXISTING AND PROPOSED PROFILES TETON COUNTY LANDFILL</p> | <p>PROJECT NUMBER: 01-13-0031 PROJECT LOCATION: K. HARRIS DATE: JUNE 2013</p> |
| | <p style="text-align: center;">EXISTING AND PROPOSED PROFILES TETON COUNTY LANDFILL</p> | |

Appendix D

Timeline

