

**SUBMITTAL TO THE BOARD OF SUPERVISORS  
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**



**ITEM**  
12.1  
(ID # 10869)

**MEETING DATE:**

Tuesday, September 24, 2019

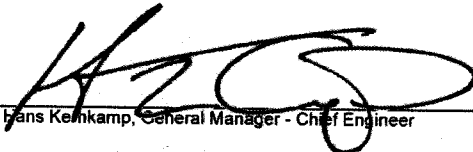
**FROM :** DEPARTMENT OF WASTE RESOURCES:

**SUBJECT:** DEPARTMENT OF WASTE RESOURCES: Contract Change Order No.1 for the Construction of Daily Cover Excavation and On-Call Site Improvements at Badlands and Lamb Canyon Sanitary Landfills, District 5 [\$921,740 –Department of Waste Resources Enterprise Funds] (Nothing Further Required under CEQA)

**RECOMMENDED MOTION:** That the Board of Supervisors:

1. Approve Contract Change Order No.1 (CCO No.1) in the amount of \$921,740 to the Contract with Road Builders Inc. (Contractor) for implementing the necessary storm damage repair work at Lamb Canyon Sanitary Landfill (LCL), and additional site maintenance and improvements at Badlands Sanitary Landfill (BSL) deemed necessary by the Department to enhance performance that was integrally related to the original project work, and authorize the Chairman of the Board to execute it on behalf of the County.

**ACTION:**Change Order, Policy


  
Frans Kemkamp, General Manager - Chief Engineer 9/9/2019

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**MINUTES OF THE BOARD OF SUPERVISORS**

On motion of Supervisor Hewitt, seconded by Supervisor Perez and duly carried by unanimous vote, IT WAS ORDERED that the above matter is approved as recommended.

**Ayes:** Jeffries, Spiegel, Washington, Perez and Hewitt  
**Nays:** None  
**Absent:** None  
**Date:** September 24, 2019  
**xc:** Waste

Kecia R. Harper  
Clerk of the Board  
By:   
Deputy

**SUBMITTAL TO THE BOARD OF SUPERVISORS COUNTY OF RIVERSIDE,  
STATE OF CALIFORNIA**

<b>FINANCIAL DATA</b>	<b>Current Fiscal Year:</b>	<b>Next Fiscal Year:</b>	<b>Total Cost:</b>	<b>Ongoing Cost</b>
<b>COST</b>	\$ 921,740	\$ 0	\$ 921,740	\$ 0
<b>NET COUNTY COST</b>	\$ 0	\$ 0	\$ 0	\$ 0
<b>SOURCE OF FUNDS:</b> Department of Waste Resources Enterprise Funds			<b>Budget Adjustment:</b>	No
			<b>For Fiscal Year:</b>	19/20

**C.E.O. RECOMMENDATION:** Approve

**BACKGROUND:**

**(Summary)**

On December 4, 2018 (Minute Order 12.2), the Board awarded Contractor the contract to excavate, haul, and stockpile daily cover material and to implement various site improvements at the Badlands and Lamb Canyon sanitary landfill sites. The duration of the project is one year. The total contract amount for this project is \$3,849,650.

**Summary of extra work at Lamb Canyon Landfill (LCL)**

During the month of February, LCL was subjected to several successive heavy rainstorms that caused damage throughout the landfill unit and several tension cracks to develop within the side slopes, benches, and top deck areas located east of an existing water quality basin at the south end of the site. The tension cracks extend a short distance into an adjacent property, and the Department has already obtained permission from the property owner to enter his property for implementing the necessary tension crack repairs.

A state of emergency was proclaimed for the February 13-15, 2019, rain event by the Federal Emergency Management Agency (FEMA) and the California Governor's Office of Emergency Services (Cal OES). As a result, the Riverside County Emergency Management Department (EMD) has been coordinating with all impacted County Departments, including our Department, to seek financial assistance from FEMA and Cal OES for costs incurred as a result of this major disaster event.

Some emergency repair work (such as repairing a waste-water collection basin, downdrain, landfill side slopes, earthen diversion berms, and re-grading wet-weather disposal area) deemed to be a necessary and integral part of the project work was completed by the Contractor within a few weeks following the subject heavy rain event in order to prevent further damage and to maintain regulatory compliance.

Immediately following the February rainstorms, Department engineering staff observed several tension cracks developed on slopes, benches, and top deck of the impacted area. The Department retained the services of a geotechnical consultant to conduct a field assessment of the tension cracks and to develop a repair work plan to be implemented by the Contractor.

**SUBMITTAL TO THE BOARD OF SUPERVISORS COUNTY OF RIVERSIDE,  
STATE OF CALIFORNIA**

The main work items to be implemented by the Contractor as part of this repair work plan will include the following: excavation of fractured bedrock material and replacement with engineered fill on slopes, benches, top deck, and toe-buttress to stabilize the slope; installation of geogrid reinforcement within the engineered fill layers; construction of grouted rip-rap slope protection; replacement of damaged sections of the existing drainage structures; and application of processed greenwaste for erosion control. This work is detailed in CCO No.1 (Attachment A), which was negotiated and agreed upon by Department engineering staff and the Contractor. Department engineering staff and geotechnical consultant believe this repair work must be completed prior to the upcoming rainy season in order to prevent potential slope failure. All this work has been deemed as necessary and an integral part of the project. Also, it was determined that competitive bidding would not produce an advantage and is impractical for the Contractor to complete the work of the project without this emergency repair work and site maintenance work.

The cost to implement this repair work at the LCL is estimated to be \$571,740.

Summary of extra work at Badlands Sanitary Landfill (BSL)

During the month of February, the BSL also experienced several successive heavy rainstorms requiring emergency site maintenance and improvements to be implemented prior, during and immediately following the rainstorms in order for the BSL to continue wet weather operations. These emergency site maintenance improvements, deemed to be a necessary and integral part of the project work, consisted of the construction of a wet-weather disposal pad and construction of wet-weather access roads. This work was completed during the months of January and February 2019 and was implemented on a "Time and Material" basis in accordance with the Contract Documents.

In order to complete the construction of site maintenance improvements needed at BSL for the upcoming rain season and to maintain compliance with the California Industrial General Permit (IGP) for storm water discharges, the Department is requesting additional funds to construct necessary site improvements. These site improvements consist of: Fabrication and installation of a vertical drop inlet, construction of reinforced shotcrete downdrains, construction of aggregate base access roads, construction of a new wet-weather disposal pad, construction of asphalt concrete roads and hardscaped parking areas, repair of leaking pipes which connect the leachate storage tanks. As estimated in CCO No. 1, the projected cost to implement these site improvements is approximately \$195,000.

In addition, as part of the Badlands Wastewater Management Plan, the Department diverts the majority of surface storm water runoff within the refuse footprint into a percolation basin located downstream of the active disposal pad. The Regional Water Quality Control Board recently informed the Department that surface storm water emanating from finished covered refuse slopes may need to be diverted away from the percolation basin at BSL. Diverting surface storm water from approximately 40 acres of finished slopes will require significant drainage

**SUBMITTAL TO THE BOARD OF SUPERVISORS COUNTY OF RIVERSIDE,  
STATE OF CALIFORNIA**

improvements. Therefore, the Department is requesting \$155,000 in funds, previously used for emergency wet weather construction, to allocate for potential drainage improvements if necessitated by the Water Board.

The cost to implement this repair and additional work at the BSL is estimated to be \$350,000.

All this work has been deemed as necessary and an integral part of the project. Also, it was determined that competitive bidding would not produce an advantage and is impractical for the Contractor to complete the work of the project without this emergency repair work and site maintenance work. The total combined cost for this CCO No. 1 amounts to \$921,740, which will increase the original contract amount from \$3,849,650 to \$4,771,390.

**Prev. Agn. Ref.:** M.O. 12.4 of 9/25/18 (approval of contract documents)  
M.O. 12.2 of 12/4/18 (contract award)

**California Environmental Quality Act (CEQA) Findings**

On September 25, 2018, the Board of Supervisors approved contract documents for the Construction of Daily Cover Excavation and On-Call Site Improvements at the Badlands and Lamb Canyon Landfills. As such, a Notice of Exemption (NOE) was filed, identifying that the Project was exempt from CEQA pursuant to the State CEQA Guidelines Section 15061(b)(3) (General Rule for Exemption), and categorically exempt from CEQA pursuant to Section 15301 Existing Facilities and Section 15304 Minor Alterations of Land. The 35-day statute of limitations for review and comment has expired, with no comments or challenges to the NOE received. On December 4, 2018, the Board awarded the contract to Contractor, upon which the site improvements and daily cover activities began. Since the proposed motion in this Form-11 simply involves a change order to an existing contract to continue work already assessed under the NOE, nothing further is required under CEQA.

**Impact on Residents and Businesses**

The impacted area due to heavy rainstorms must be repaired and preventative measures must be put in place prior to the upcoming rainy season to ensure the safe operation of the landfill and compliance with the applicable regulations.

**SUPPLEMENTAL:**

**Additional Fiscal Information**

The final cost for the February storm damage repair work will be determined based on combination of contract unit prices and force account (Time and Material - T&M). T&M will be tracked and agreed upon at the end of each work day by the Department engineering staff and the Contractor. All equipment rates will be in accordance with those published by Caltrans "Labor Surcharge and Equipment Rental Rates". All labor rates will be obtained from the California Prevailing Wage determination by the Director of Industrial Relations for a number of localities including Riverside County.

**SUBMITTAL TO THE BOARD OF SUPERVISORS COUNTY OF RIVERSIDE,  
STATE OF CALIFORNIA**

Budget for this additional work will be provided from Fund 40200, Department ID – 4500100000.

**Contract History and Price Reasonableness**

The final cost for the February storm damage repair work will be determined based on combination of contract unit prices and force account (Time and Material) as described in the Contract Documents. This ensures that the total final cost is fair and reasonable.

**ATTACHMENTS:**

ATTACHMENT A - Contract Change Order No.1

  
\_\_\_\_\_  
Jason Farin, Senior Management Analyst 9/18/2019

RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES

Project: Lamb Canyon and Badlands Landfill – Daily Cover Excavation and Sheet 1 of 11

On-Call Site Improvements

**CONTRACT CHANGE ORDER NO. 1**

To: **Road Builders, Inc.**, Contractor, you are hereby directed to make the herein described changes from the plans and specifications or to do the following described work not included in the plans and specifications.

**NOTE: THIS CHANGE ORDER IS NOT EFFECTIVE UNTIL APPROVED BY THE GENERAL MANAGER-CHIEF ENGINEER OF THE DEPARTMENT OF WASTE RESOURCES AND THE BOARD OF SUPERVISORS OF RIVERSIDE COUNTY.**

Description of work to be done, estimate of quantities, and prices to be paid. Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. Change requested by Riverside County:

**Lamb Canyon Landfill:**

Due to several heavy rainstorms occurred at the Lamb Canyon Sanitary landfill (LCL) during the month of February, various emergency repairs had to be implemented immediately following the rainstorms. Riverside County Department of Waste Resources (Department) issued Work Order #LC-2 (refer to Attachment No.1) to Road Builders, Inc. (Contractor) to implement the following emergency repair work:

- 1) Repair wastewater percolation basin.
- 2) Remove and replace damaged metal flume downdrain with temporary plastic downdrain.
- 3) Repair eroded landfill side slopes.
- 4) Repair damaged earthen diversion berms.
- 5) Remove windblown litter from slopes.
- 6) Haul daily cover material to stockpiles.
- 7) Apply additional landfill daily cover material and re-grade wet weather pad.
- 8) Temporarily repair tension cracks located at the top deck area located east of the water quality basin.

This work was completed during the period of February to May 2019 and was implemented on a "Time and Material" basis in accordance with the Contract Documents, Technical Provisions, Section 15 – "Authorized Time & Material Work" and paid for under Bid Item No. 24. The total final cost to implement these emergency repair work items amounted to \$71,927.31, which was paid to the Contractor under Progress Payment #3, #4, and #6.

Cost: Decrease - \$ 0 or Increase \$ 921,740.00

By reason of this order the time of completion will be adjusted as follows: Add Thirty (30) workdays

Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

General Manager-Chief Engineer  
Department of Waste Resources

Chairman, Board of Supervisors

Date: \_\_\_\_\_

We, the undersigned Contractor, have given careful consideration to the change proposed and hereby agree, if this proposal is approved, that we will provide all equipment, furnish all materials, except as may be otherwise noted above, and perform all services necessary for the work above specified, and will accept as full payment therefore the prices shown above.

Accepted: \_\_\_\_\_ Date: \_\_\_\_\_ Contractor: \_\_\_\_\_  
By: \_\_\_\_\_ Title: \_\_\_\_\_

If the Contractor does not sign acceptance of this order, his attention is directed to the requirements of the specifications as to the proceeding with the ordered work and filing a written protest within the time therein specified.

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RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES

Project: Lamb Canyon and Badlands Landfill – Daily Cover Excavation and Sheet 2 of 11  
On-Call Site Improvements

CONTRACT CHANGE ORDER NO. 1

To: Road Builders, Inc., Contractor, you are hereby directed to make the herein described changes from the plans and specifications or to do the following described work not included in the plans and specifications.

NOTE: THIS CHANGE ORDER IS NOT EFFECTIVE UNTIL APPROVED BY THE GENERAL MANAGER-CHIEF ENGINEER OF THE DEPARTMENT OF WASTE RESOURCES AND THE BOARD OF SUPERVISORS OF RIVERSIDE COUNTY.

Description of work to be done, estimate of quantities, and prices to be paid. Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. Change requested by Riverside County:

In addition to the above-listed repair work, the Department also requested the Contractor under Work Order #LC-2 to replace the temporary plastic downdrain (Item 2 above) with a 4” thick asphalt downdrain and inlet structure. The Contractor completed this work in April 2019 and was paid for under Contract Bid Item No. 8 “4” thick Asphalt Drainage Structures” for a total cost of \$12,812.69 (paid under Progress Payment #5).

The February heavy rainstorms also caused several tension cracks to develop within the side slopes, benches, and top deck areas located east of the water quality basin at the south end of the site (refer to Attachment No.2). Department retained the services of a geotechnical consultant who conducted field investigation of the impacted areas including tension cracks, and developed an initial emergency repair work plan. The Department requested Road Builders, Inc. (Contractor) to implement this emergency repair work under Work Order #LC-2 which consisted of backfilling and compaction of tension cracks and removal of accumulated debris in drainage channels within the area. Upon further field investigation and engineering assessment of the tension cracks within the area, the Department and Consultant have developed a final repair work plan to stabilize the impacted slopes. The Department is requesting the Contractor to implement the final repair work plan (refer to Attachment No.2). The implementation of all repair work will be observed, tested, and directed by Department and Consultant staff. The final repair work plan shall consist of the following work items (refer to Attachment No.2 for specific details):

- 1) Excavation, haul, and stockpile overburden soil material.

Cost: Decrease - \$ 0 or Increase \$ 921,740.00

By reason of this order the time of completion will be adjusted as follows: Add Thirty (30) workdays

Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

General Manager-Chief Engineer  
Department of Waste Resources

Chairman, Board of Supervisors

Date: \_\_\_\_\_

We, the undersigned Contractor, have given careful consideration to the change proposed and hereby agree, if this proposal is approved, that we will provide all equipment, furnish all materials, except as may be otherwise noted above, and perform all services necessary for the work above specified, and will accept as full payment therefore the prices shown above.

Accepted: \_\_\_\_\_ Date: \_\_\_\_\_ Contractor: \_\_\_\_\_

By: \_\_\_\_\_ Title: \_\_\_\_\_

If the Contractor does not sign acceptance of this order, his attention is directed to the requirements of the specifications as to the proceeding with the ordered work and filing a written protest within the time therein specified.

RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES

Project: Lamb Canyon and Badlands Landfill – Daily Cover Excavation and Sheet 3 of 11

On-Call Site Improvements

**CONTRACT CHANGE ORDER NO. 1**

To: Road Builders, Inc., Contractor, you are hereby directed to make the herein described changes from the plans and specifications or to do the following described work not included in the plans and specifications.

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Description of work to be done, estimate of quantities, and prices to be paid. Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. Change requested by Riverside County:

- 2) Over-excavate slopes, benches, top deck, and a 10'x10'x40' key-way structure along toe of slope.
- 3) Place engineered fill material at 95% relative compaction within the over-excavated areas.
- 4) Install geogrid reinforcement (provided by the Department) at approximately 4-ft vertical interval within the engineered fill layers.
- 5) Supply and install partially grouted 18"-24" diameter rip-rap stones for slope protection.
- 6) Saw-cut, remove, and replace damage sections of existing shotcrete drainage structures.
- 7) Saw-cut, remove, and replace damage sections of existing masonry walls.
- 8) Apply processed greenwaste on side slopes, benches, and top deck areas.

The Department and the Contractor agree that other site maintenance and/or improvements may be added to this repair work as deem necessary during construction. The Department and Contractor have also agreed that the measurement and compensation to the Contractor for implementing the tension crack repair work plan and any other authorized site maintenance or improvements would be determined based on the mutually agreed upon unit prices shown on Attachment No.3. The estimated total cost to implement the tension crack repair work plan is approximately \$487,000.00.

Cost: Decrease - \$ 0 or Increase \$ 921,740.00

By reason of this order the time of completion will be adjusted as follows: Add Thirty (30) workdays

Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

General Manager-Chief Engineer  
Department of Waste Resources

\_\_\_\_\_  
Chairman, Board of Supervisors

Date: \_\_\_\_\_

We, the undersigned Contractor, have given careful consideration to the change proposed and hereby agree, if this proposal is approved, that we will provide all equipment, furnish all materials, except as may be otherwise noted above, and perform all services necessary for the work above specified, and will accept as full payment therefore the prices shown above.

Accepted: \_\_\_\_\_ Date: \_\_\_\_\_ Contractor: \_\_\_\_\_

By: \_\_\_\_\_ Title: \_\_\_\_\_

If the Contractor does not sign acceptance of this order, his attention is directed to the requirements of the specifications as to the proceeding with the ordered work and filing a written protest within the time therein specified.



RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES

Project: Lamb Canyon and Badlands Landfill – Daily Cover Excavation and Sheet 4 of 11

On-Call Site Improvements

**CONTRACT CHANGE ORDER NO. 1**

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Description of work to be done, estimate of quantities, and prices to be paid. Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. Change requested by Riverside County:

**Badlands Landfill:**

Due to several heavy rainstorms occurring at the Badlands Sanitary Landfill (BSL) during the month of February, emergency site maintenance and improvements had to be implemented prior, during and immediately following the rainstorms in order for the BSL to continue wet weather operations. This work was completed during the months of January and February 2019 and was implemented on a "Time and Material" basis in accordance with the Contract Documents, Technical Provisions, Section 15 – "Authorized Time & Material Work" and paid for under Bid Item No. 24. The total final cost to implement these emergency repair work items at BSL amounted to \$154,790.53, which was paid to the Contractor under Progress Payment #3. In order to complete the construction of site maintenance improvements needed at BSL, the Department is requesting additional funds to construct the following:

- 1) Fabricate and Install a vertical grate drop inlet.
- 2) Construct reinforced shotcrete downdrains.
- 3) Construct an aggregate base access road.
- 4) Construct a Wet Weather Pad.
- 5) Install 4" thick Asphalt Concrete (A.C.) in the Engineering/Operations Parking Area.
- 6) Install 6" thick A.C. along the Main Customer Access Road near the Gate Fee Booth.
- 7) Repair piping and connections between Leachate Tanks #2 and #3.

Cost: Decrease - \$ 0 or Increase \$ 921,740.00

By reason of this order the time of completion will be adjusted as follows: **Add Thirty (30) workdays**

Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

General Manager-Chief Engineer  
Department of Waste Resources

\_\_\_\_\_  
Chairman, Board of Supervisors

Date: \_\_\_\_\_

We, the undersigned Contractor, have given careful consideration to the change proposed and hereby agree, if this proposal is approved, that we will provide all equipment, furnish all materials, except as may be otherwise noted above, and perform all services necessary for the work above specified, and will accept as full payment therefore the prices shown above.

Accepted: \_\_\_\_\_ Date: \_\_\_\_\_ Contractor: \_\_\_\_\_

By: \_\_\_\_\_ Title: \_\_\_\_\_

If the Contractor does not sign acceptance of this order, his attention is directed to the requirements of the specifications as to the proceeding with the ordered work and filing a written protest within the time therein specified.

RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES

Project: Lamb Canyon and Badlands Landfill - Daily Cover Excavation and Sheet 5 of 11

On-Call Site Improvements

**CONTRACT CHANGE ORDER NO. 1**

To: Road Builders, Inc., Contractor, you are hereby directed to make the herein described changes from the plans and specifications or to do the following described work not included in the plans and specifications.

**NOTE: THIS CHANGE ORDER IS NOT EFFECTIVE UNTIL APPROVED BY THE GENERAL MANAGER-CHIEF ENGINEER OF THE DEPARTMENT OF WASTE RESOURCES AND THE BOARD OF SUPERVISORS OF RIVERSIDE COUNTY.**

Description of work to be done, estimate of quantities, and prices to be paid. Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. Change requested by Riverside County:

The Scope of Work related to the construction items listed above shall be as follows:

- 1) Furnish and install a vertical grate drop inlet.
  - a. Contractor shall submit shop drawings of the vertical grate drop inlet for Department approval prior to fabrication. Contractor and Department shall verify dimensions for drop inlet out in the field prior to shop drawings being submitted.
  - b. Payment for the installation of the vertical grate drop inlet shall be on an "Authorized Time and Material" basis and will be computed in the manner described in Section 7.3 of the General Provisions in the Contract Documents, and the compensation thus provided shall be full payment to the Contractor related to the authorized time and material work. When submitting the Contractor T&M, the contractor shall also submit Subcontractor and Vendor invoices.
- 2) Construct reinforced shotcrete downdrains.
  - a. Submittals, materials and execution for the construction of the reinforced shotcrete downdrain shall be in accordance with Section 8 of the Contract Technical Provisions,
  - b. The Department estimates a volume of approximately 27 cubic yards to construct the reinforced shotcrete downdrain between the Wet Weather Pad and Bench 15 and a volume of approximately 63 cubic yards to construct the reinforced shotcrete downdrain along the Main Customer Access Road from the Metals Recycling Yard to Bench 13.
  - c. The measurement and payment of the final quantity for the reinforced shotcrete downdrain shall be in accordance with Section 8.6D of the Contract Technical

Cost: Decrease - \$ 0 or Increase \$ 921,740.00

By reason of this order the time of completion will be adjusted as follows: Add Thirty (30) workdays

Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

General Manager-Chief Engineer  
Department of Waste Resources

\_\_\_\_\_  
Chairman, Board of Supervisors

Date: \_\_\_\_\_

We, the undersigned Contractor, have given careful consideration to the change proposed and hereby agree, if this proposal is approved, that we will provide all equipment, furnish all materials, except as may be otherwise noted above, and perform all services necessary for the work above specified, and will accept as full payment therefore the prices shown above.

Accepted: \_\_\_\_\_ Date: \_\_\_\_\_ Contractor: \_\_\_\_\_  
By: \_\_\_\_\_ Title: \_\_\_\_\_

If the Contractor does not sign acceptance of this order, his attention is directed to the requirements of the specifications as to the proceeding with the ordered work and filing a written protest within the time therein specified.

RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES

Project: Lamb Canyon and Badlands Landfill - Daily Cover Excavation and Sheet 6 of 11  
On-Call Site Improvements

CONTRACT CHANGE ORDER NO. 1

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Description of work to be done, estimate of quantities, and prices to be paid. Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. Change requested by Riverside County:

Provisions. The total cubic yardage for payment shall be based on the submittal of concrete truck delivery tickets. Payment shall be made, after acceptance, at the contract unit price per cubic yards of \$800/c.y. for Optional Bid Item No. 21 as stated in the Construction Agreement.

- 3) Construct an aggregate base access road.
  - a. Submittals, materials and execution for the construction of an aggregate base access road shall be in accordance with Section 9 of the Contract Technical Provisions.
  - b. The proposed aggregate base access road is approximately 32,125 square feet consisting of an 8" thick 2-4" rock base layer, a 4" thick top layer consisting of Crushed Miscellaneous Base (CMB) and a 775' long drainage swale along the toe of slope consisting of 3-6" Rock. The approximate quantities for each type of rock are as follows:
    - i. 710 tons of CMB
    - ii. 1,200 tons of 2-4" Rock
    - iii. 350 tons of 3-6" Rock
  - c. The measurement and payment for aggregate base type shall be at the contract unit price per ton as stated in the Construction Agreement and in accordance with Section 9.5 of the Contract Technical Provisions. The total cubic tonnage shall be based on the submitted aggregate base truck delivery tickets.

Cost: Decrease - \$ 0 or Increase \$ 921,740.00

By reason of this order the time of completion will be adjusted as follows: Add Thirty (30) workdays

Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

General Manager-Chief Engineer  
Department of Waste Resources

\_\_\_\_\_ Date: \_\_\_\_\_

Chairman, Board of Supervisors

We, the undersigned Contractor, have given careful consideration to the change proposed and hereby agree, if this proposal is approved, that we will provide all equipment, furnish all materials, except as may be otherwise noted above, and perform all services necessary for the work above specified, and will accept as full payment therefore the prices shown above.

Accepted: \_\_\_\_\_ Date: \_\_\_\_\_ Contractor: \_\_\_\_\_  
By: \_\_\_\_\_ Title: \_\_\_\_\_

If the Contractor does not sign acceptance of this order, his attention is directed to the requirements of the specifications as to the proceeding with the ordered work and filing a written protest within the time therein specified.

RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES

Project: Lamb Canyon and Badlands Landfill – Daily Cover Excavation and Sheet 7 of 11

On-Call Site Improvements

**CONTRACT CHANGE ORDER NO. 1**

To: Road Builders, Inc., Contractor, you are hereby directed to make the herein described changes from the plans and specifications or to do the following described work not included in the plans and specifications.

**NOTE: THIS CHANGE ORDER IS NOT EFFECTIVE UNTIL APPROVED BY THE GENERAL MANAGER-CHIEF ENGINEER OF THE DEPARTMENT OF WASTE RESOURCES AND THE BOARD OF SUPERVISORS OF RIVERSIDE COUNTY.**

Description of work to be done, estimate of quantities, and prices to be paid. Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. Change requested by Riverside County:

- i. Payment to Furnish and Install CMB shall be made, after acceptance, at the contract unit price per ton of \$17/ton for Optional Bid Item No. 10 as stated in the Construction Agreement.
  - ii. Payment to Furnish and Install 2-4" Rock shall be made, after acceptance, at the contract unit price per ton of \$17/ton for Optional Bid Item No. 13 as stated in the Construction Agreement.
  - iii. Payment to Furnish and Install 3-6" shall be made, after acceptance, at the contract unit price per ton of \$32/ton for Optional Bid Item No. 14 as stated in the Construction Agreement.
- 4) Construct a Wet Weather Pad.
- a. Submittals, materials and execution for the construction of a Wet Weather Pad shall be in accordance with Section 9 of the Contract Technical Provisions.
  - b. The proposed Wet Weather Pad is approximately 95,000 square feet consisting of a 6" thick 3-6" rock base layer, and a 6" thick top layer consisting of Crushed Miscellaneous Base CMB. The Department already possesses a 3-6" rock and CMB stockpile. Any additional aggregate base required to be furnished shall be the responsibility of the Department.
  - c. Payment for the construction of a Wet Weather Pad shall be on an "Authorized Time and Material" basis and will be computed in the manner described in Section 7.3 of the General Provisions in the Contract Documents, and the compensation thus provided shall

Cost: Decrease - \$ 0 or Increase \$ 921,740.00

By reason of this order the time of completion will be adjusted as follows: **Add Thirty (30) workdays**

Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

General Manager-Chief Engineer  
Department of Waste Resources

Chairman, Board of Supervisors

Date: \_\_\_\_\_

We, the undersigned Contractor, have given careful consideration to the change proposed and hereby agree, if this proposal is approved, that we will provide all equipment, furnish all materials, except as may be otherwise noted above, and perform all services necessary for the work above specified, and will accept as full payment therefore the prices shown above.

Accepted: \_\_\_\_\_ Date: \_\_\_\_\_ Contractor: \_\_\_\_\_  
By: \_\_\_\_\_ Title: \_\_\_\_\_

If the Contractor does not sign acceptance of this order, his attention is directed to the requirements of the specifications as to the proceeding with the ordered work and filing a written protest within the time therein specified.

RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES

Project: Lamb Canyon and Badlands Landfill – Daily Cover Excavation and Sheet 8 of 11  
On-Call Site Improvements

CONTRACT CHANGE ORDER NO. 1

To: Road Builders, Inc., Contractor, you are hereby directed to make the herein described changes from the plans and specifications or to do the following described work not included in the plans and specifications.

NOTE: THIS CHANGE ORDER IS NOT EFFECTIVE UNTIL APPROVED BY THE GENERAL MANAGER-CHIEF ENGINEER OF THE DEPARTMENT OF WASTE RESOURCES AND THE BOARD OF SUPERVISORS OF RIVERSIDE COUNTY.

Description of work to be done, estimate of quantities, and prices to be paid. Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. Change requested by Riverside County:

be full payment to the Contractor related to the authorized time and material work. When submitting the Contractor T&M, the contractor shall also submit Subcontractor and Vendor invoices.

- 5) Install 4" Thick A.C. in Engineering/Operations Parking Area.
  - a. Submittals, materials and execution for the installation of 4" thick A.C. in the Engineering/Operations Parking Area shall be in accordance to the applicable sections for roads in Section 7 of the Contract Technical Provisions.
  - b. The Department estimates a quantity of approximately 3,500 square feet to hardscape the remaining Engineering/Operations Parking Area with a 4" Thick section of A.C.
  - c. The measurement and payment to Install 4" Thick A.C. in the Engineering/Operations Parking Area shall be at the contract unit price per square foot as stated in the Construction Agreement and in accordance with Section 7.5A of the Contract Technical Provisions. The total quantity for payment shall be calculated based on the "true" area and to the nearest square foot utilizing digital terrain modeling method. Payment to Install 4" Thick A.C. shall be made, after acceptance, at the contract unit price per square foot of \$6.25/s.f. for Optional Bid Item No. 8 as stated in the Construction Agreement.
- 6) Install 6" thick A.C. along Main Customer Access Road near Gate Fee Booth.
  - a. Submittals, materials and execution for the installation of 6" thick A.C. along the Main Customer Access Road near the Gate Fee Booth shall be in accordance to the applicable sections for roads in Section 7 of the Contract Technical Provisions.

Cost: Decrease - \$ 0 or Increase \$ 921,740.00

By reason of this order the time of completion will be adjusted as follows: Add Thirty (30) workdays

Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

General Manager-Chief Engineer  
Department of Waste Resources

Chairman, Board of Supervisors

Date: \_\_\_\_\_

We, the undersigned Contractor, have given careful consideration to the change proposed and hereby agree, if this proposal is approved, that we will provide all equipment, furnish all materials, except as may be otherwise noted above, and perform all services necessary for the work above specified, and will accept as full payment therefore the prices shown above.

Accepted: \_\_\_\_\_ Date: \_\_\_\_\_ Contractor: \_\_\_\_\_

By: \_\_\_\_\_ Title: \_\_\_\_\_

If the Contractor does not sign acceptance of this order, his attention is directed to the requirements of the specifications as to the proceeding with the ordered work and filing a written protest within the time therein specified.

RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES

Project: Lamb Canyon and Badlands Landfill – Daily Cover Excavation and Sheet 9 of 11

On-Call Site Improvements

CONTRACT CHANGE ORDER NO. 1

To: Road Builders, Inc., Contractor, you are hereby directed to make the herein described changes from the plans and specifications or to do the following described work not included in the plans and specifications.

NOTE: THIS CHANGE ORDER IS NOT EFFECTIVE UNTIL APPROVED BY THE GENERAL MANAGER-CHIEF ENGINEER OF THE DEPARTMENT OF WASTE RESOURCES AND THE BOARD OF SUPERVISORS OF RIVERSIDE COUNTY.

Description of work to be done, estimate of quantities, and prices to be paid. Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. Change requested by Riverside County:

- b. Subgrade preparation and installation of A.C. along the Main Customer Access Road shall take place either after landfill public operating hours (4:30 pm) or on Sunday.
  - c. The Department estimates a quantity of approximately 755 square feet to install a 6" thick section of A.C. along the Main Customer Access Road.
  - d. Payment for the installation of the 6" thick section of A.C. along the Main Customer Access Road shall be on an "Authorized Time and Material" basis and will be computed in the manner described in Section 7.3 of the General Provisions in the Contract Documents, and the compensation thus provided shall be full payment to the Contractor related to the authorized time and material work. When submitting the Contractor T&M, the contractor shall also submit Subcontractor and Vendor invoices.
- 7) Repair piping and connections between Leachate Tanks #2 and #3.
- a. Submittals, materials and execution to repair piping and connections between Leachate Tanks #2 and #3 shall be in accordance to Section 15 "Authorized Time & Materials Work" of the Contract Technical Provisions.
  - b. Payment for the repair of piping and connections between Leachate Tanks #2 and #3 shall be on an "Authorized Time and Material" basis and will be computed in the manner described in Section 7.3 of the General Provisions in the Contract Documents, and the compensation thus provided shall be full payment to the Contractor related to the authorized time and material work. When submitting the Contractor T&M, the contractor shall also submit Subcontractor and Vendor invoices.

Cost: Decrease - \$ 0 or Increase \$ 921,740.00

By reason of this order the time of completion will be adjusted as follows: Add Thirty (30) workdays

Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

General Manager-Chief Engineer  
Department of Waste Resources

\_\_\_\_\_ Date: \_\_\_\_\_

Chairman, Board of Supervisors

We, the undersigned Contractor, have given careful consideration to the change proposed and hereby agree, if this proposal is approved, that we will provide all equipment, furnish all materials, except as may be otherwise noted above, and perform all services necessary for the work above specified, and will accept as full payment therefore the prices shown above.

Accepted: \_\_\_\_\_ Date: \_\_\_\_\_ Contractor: \_\_\_\_\_  
By: \_\_\_\_\_ Title: \_\_\_\_\_

If the Contractor does not sign acceptance of this order, his attention is directed to the requirements of the specifications as to the proceeding with the ordered work and filing a written protest within the time therein specified.

RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES

Project: Lamb Canyon and Badlands Landfill - Daily Cover Excavation and Sheet 10 of 11  
On-Call Site Improvements

CONTRACT CHANGE ORDER NO. 1

To: Road Builders, Inc., Contractor, you are hereby directed to make the herein described changes from the plans and specifications or to do the following described work not included in the plans and specifications.

NOTE: THIS CHANGE ORDER IS NOT EFFECTIVE UNTIL APPROVED BY THE GENERAL MANAGER-CHIEF ENGINEER OF THE DEPARTMENT OF WASTE RESOURCES AND THE BOARD OF SUPERVISORS OF RIVERSIDE COUNTY.

Description of work to be done, estimate of quantities, and prices to be paid. Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. Change requested by Riverside County:

As estimated in the Contract Change Order No.1 Cost Summary for BSL (Attachment No. 4) the estimated total cost to implement these site maintenance improvements is approximately \$195,000.00.

As a Class III Sanitary Landfill, BSL adheres to the California Industrial Permit for storm water administered by the State Water Resources Control Board (Waterboard). As part of the Badlands Wastewater Management Plan, the Department diverts the majority of surface storm water within the refuse footprint to a percolation basin downstream adjacent to the active disposal pad. The Waterboard recently informed the Department that surface storm water emanating from finished covered refuse slopes may need to be diverted away from the percolation basin at BSL. Diverting surface storm water from up to potentially 40 acres of finished slopes would require significant drainage improvements. Therefore, the Department is requesting \$155,000.00 in funds, previously used for emergency wet weather construction, to allocate for potential drainage improvements if required by the Waterboard.

The Department and the Contractor agree that other site maintenance and/or improvements may be added to this work at BSL as deemed necessary during construction. The Department and Contractor have also agreed that the measurement and compensation to the Contractor for implementing these site maintenance improvements and any other authorized site maintenance or improvements at BSL would be determined as set forth by the Construction Agreement.

Cost: Decrease - \$ 0 or Increase \$ 921,740.00

By reason of this order the time of completion will be adjusted as follows: Add Thirty (30) workdays

Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

General Manager-Chief Engineer  
Department of Waste Resources

Chairman, Board of Supervisors

Date: \_\_\_\_\_

We, the undersigned Contractor, have given careful consideration to the change proposed and hereby agree, if this proposal is approved, that we will provide all equipment, furnish all materials, except as may be otherwise noted above, and perform all services necessary for the work above specified, and will accept as full payment therefore the prices shown above.

Accepted: \_\_\_\_\_ Date: \_\_\_\_\_ Contractor: \_\_\_\_\_

By: \_\_\_\_\_ Title: \_\_\_\_\_

If the Contractor does not sign acceptance of this order, his attention is directed to the requirements of the specifications as to the proceeding with the ordered work and filing a written protest within the time therein specified.

RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES

Project: Lamb Canyon and Badlands Landfill – Daily Cover Excavation and Sheet 11 of 11

On-Call Site Improvements

CONTRACT CHANGE ORDER NO. 1

To: Road Builders, Inc., Contractor, you are hereby directed to make the herein described changes from the plans and specifications or to do the following described work not included in the plans and specifications.

NOTE: THIS CHANGE ORDER IS NOT EFFECTIVE UNTIL APPROVED BY THE GENERAL MANAGER-CHIEF ENGINEER OF THE DEPARTMENT OF WASTE RESOURCES AND THE BOARD OF SUPERVISORS OF RIVERSIDE COUNTY.

Description of work to be done, estimate of quantities, and prices to be paid. Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. Change requested by Riverside County:

This Contract Change Order is estimated to increase the total contract amount by \$921,740.00 (Refer to Attachments No. 3 and 4 for Cost Summary) and will increase the original contract amount from \$3,849,650.00 to \$4,771,390.00. All other terms and conditions of the Contract Documents shall remain unchanged.

Attachments:

- Attachment No.1 – Lamb Canyon Landfill – Work Order #LC-2
- Attachment No.2 – Lamb Canyon Landfill – Tension Crack Repair Work Plan
- Attachment No.3 – Lamb Canyon Landfill - Contract Change Order No.1 Cost Summary
- Attachment No. 4 – Badlands Landfill – Contract Change Order No. 1 Cost Summary

PD#240124v1 (word)  
PD#240125v1 (pdf)

Cost: Decrease - \$ 0 or Increase \$ 921,740.00

By reason of this order the time of completion will be adjusted as follows: Add Thirty (30) workdays

Submitted by: [Signature] Date: 9/10/2019

Approved by: [Signature] Date: 9/12/19  
 General Manager-Chief Engineer  
 Department of Waste Resources

[Signature] Date: 9/24/19  
 Chairman, Board of Supervisors  
**KEVIN JEFFRIES**

We, the undersigned Contractor, have given careful consideration to the change proposed and hereby agree, if this proposal is approved, that we will provide all equipment, furnish all materials, except as may be otherwise noted above, and perform all services necessary for the work above specified, and will accept as full payment therefore the prices shown above.

Accepted: 9.10.19 Date: 9.10.19 Contractor: Road Builders, Inc.  
By: [Signature] Title: President

If the Contractor does not sign acceptance of this order, his attention is directed to the requirements of the specifications as to the proceeding with the ordered work and filing a written protest within the time therein specified.

FORM APPROVED COUNTY COUNSEL  
 DATE 9-17-19  
 BY [Signature] GUNDEL  
 SYNTHIA M. GUNDEL  
 CLERK BY: [Signature]  
 DEPUTY



**Attachment No.1**  
**Lamb Canyon Landfill - Work Order #LC-2**

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April 11, 2019

**2018 Daily Cover Excavation and  
On-Call Site Improvements  
at the  
Badlands and Lamb Canyon Sanitary Landfill**

**Subject: Optional On-Call Work at the Lamb Canyon Landfill (Work Order # LC-2)**

On Thursday, February 14, 2019 Lamb Canyon Landfill (LCL) received over three inches of rain within a 24-hour period which caused significant storm damage throughout the site. The Riverside County Department of Waste Resources (Department) contacted Road Builders, Inc. (Contractor) via phone on Thursday afternoon to begin the repair work at LCL immediately. On Friday, February 15, 2019, Department staff met with the Contractor to evaluate all storm damage at LCL. Department staff verbally directed RBI to immediately implement the following emergency repair work at the site (refer to Attachment No.1 for photos of storm damage and Attachment No.2 for site map):

1. The wastewater percolation basin was at its maximum holding capacity; therefore, the Contractor used clean engineered fill material, obtained from the adjacent landfill access road, to increase the height of the basin's side walls to prevent the basin from overflowing.
2. Contractor removed the damaged flume sections along the landfill side slope and replaced it with a temporary plastic downdrain.
3. Contractor repaired eroded landfill side slopes using clean engineered fill material. Side slopes were compacted, tracked-walked, and processed greenwaste material was applied to prevent future erosion. Engineered fill material was obtained from the daily cover stockpile located northeast of the P2S4 disposal pad.
4. Contractor repaired the damaged portions of the earthen diversion berm and increased the height from 2-feet to 4-feet using clean compacted engineered fill material. Engineered fill material was obtained from the daily cover stockpile located northeast of the P2S4 disposal pad.
5. Contractor utilized laborers to pick-up litter along the landfill side slopes.
6. Contractor hauled material to the daily cover stockpile and landfill access road in order to replenish the material that was utilized for the above-mentioned emergency repair work.
7. Contractor applied additional landfill daily cover material and graded the wet weather pad.

This repair work was implemented on a "Time and Material" basis in accordance with the Contract Documents, Technical Provisions, Section 15 – "Authorized Time & Material Work" and paid for under Bid Item No. 24.

In addition to the above-listed emergency repair work, the Department has requested the Contractor to implement the following additional improvement work:

8. Replace the temporary plastic downdrain (item #2 above) with an 4"-thick asphalt downdrain and inlet structure in accordance with the Contract Documents, Technical

Provisions, Section 7; and Appendix D-1, Project Drawings for Lamb Canyon Landfill, Sheets 6 and 10. The asphalt downdrain and inlet structures shall be paid under Bid Item No. 8 – “4-inch Thick Asphalt Drainage Structures”.

9. After the February 2019 Rainstorms, Department staff noticed tension cracks have developed within the side slopes located east of the water quality basin at the south end of the site. The Department is requesting the Contractor to implement the repair work plan shown on Attachment No.2, which includes the following:
- Construction of 10'x10'x40' engineered fill keyway along the toe of slope,
  - Over-excavate designated portions of side slopes, backfill using engineered fill material at 95% relative compaction, and install geogrid reinforcement at approx. 4-ft vertical interval within the engineered fill layer, and
  - Supply and install 18"-24" diameter rip-rap stones for slope protection. The finished rip-rap stone face shall be partially grouted.

This repair work shall be implemented on a “Time and Material” basis in accordance with the Contract Documents, Technical Provisions, Section 15 – Authorized Time & Material Work and shall be paid for under Bid Item No. 24.

It has been determined that with the addition of Work Order # LC-2, and also future work orders, the final pay quantities for the above-mentioned work items stated in the Contract Agreement may exceed the 150% upper limit specified in the Contract Documents. Nevertheless, the Contractor has agreed to maintain the contract unit price stated in the Contract Agreement for any bid item that exceeds the 150% upper limit.

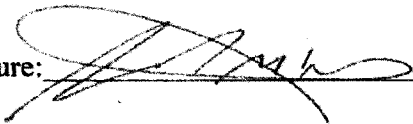
Attachment 1 – Photos of Storm Damage  
Attachment 2 – Work Order #LC-2 Site Map (11x17)

Riverside County Department  
of Waste Resources

Road Builders, Inc.

Name: Fouad Mina

Name: Sandra Augustine

Signature: 

Signature: 

Date: 4 / 11 / 2019

Date: 4.18.19

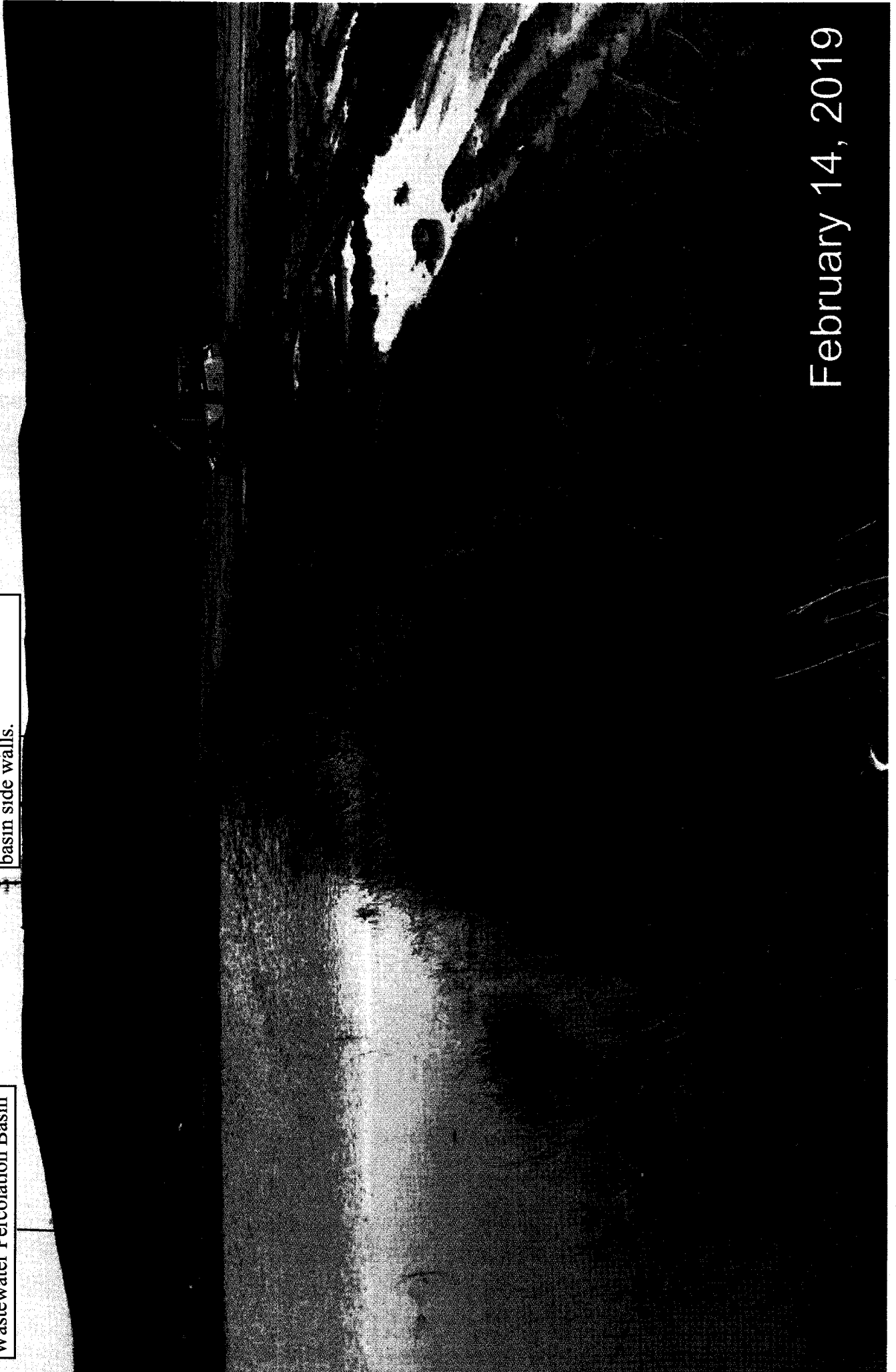
**Attachment 1 –  
Photos of Storm Damage**

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Repair Work Item No.1

Wastewater Percolation Basin

Contractor increased height of basin side walls.

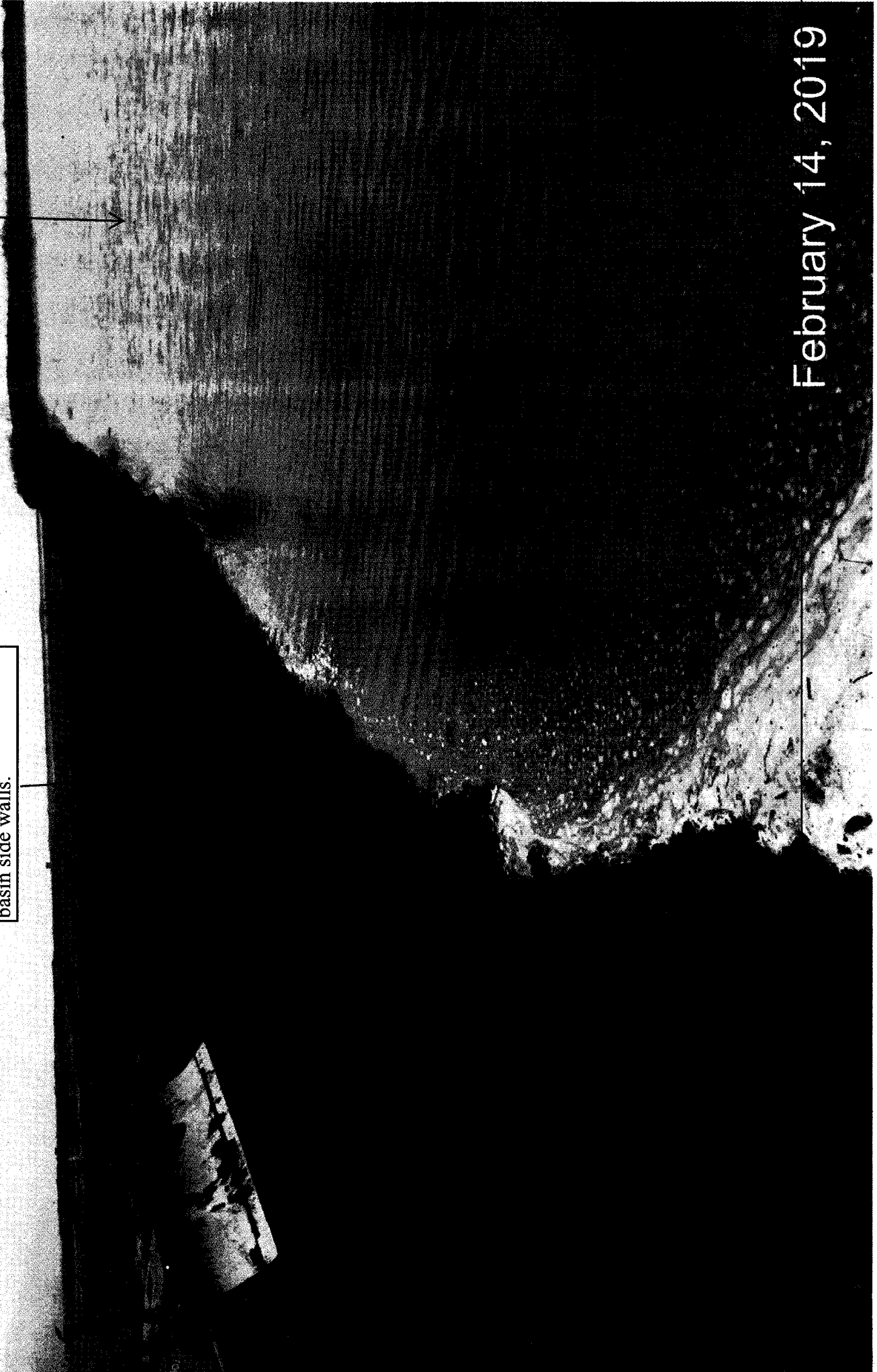


February 14, 2019

repair work item NO.1

Wastewater Percolation Basin

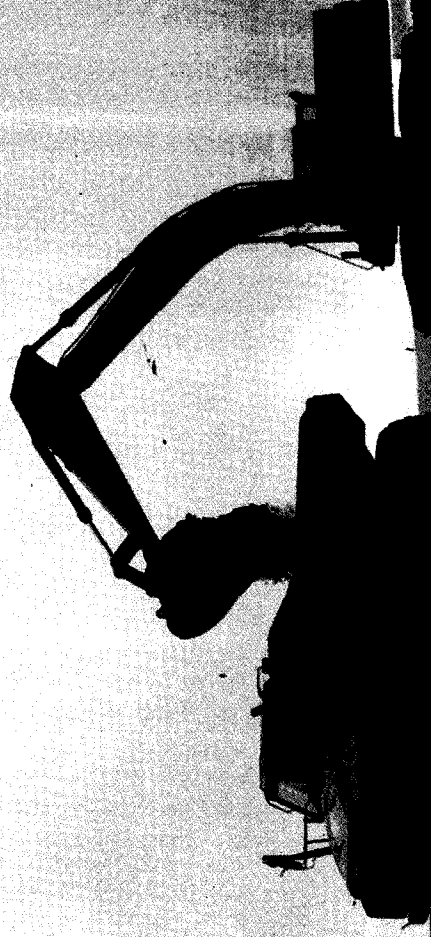
Contractor increased height of basin side walls.



February 14, 2019

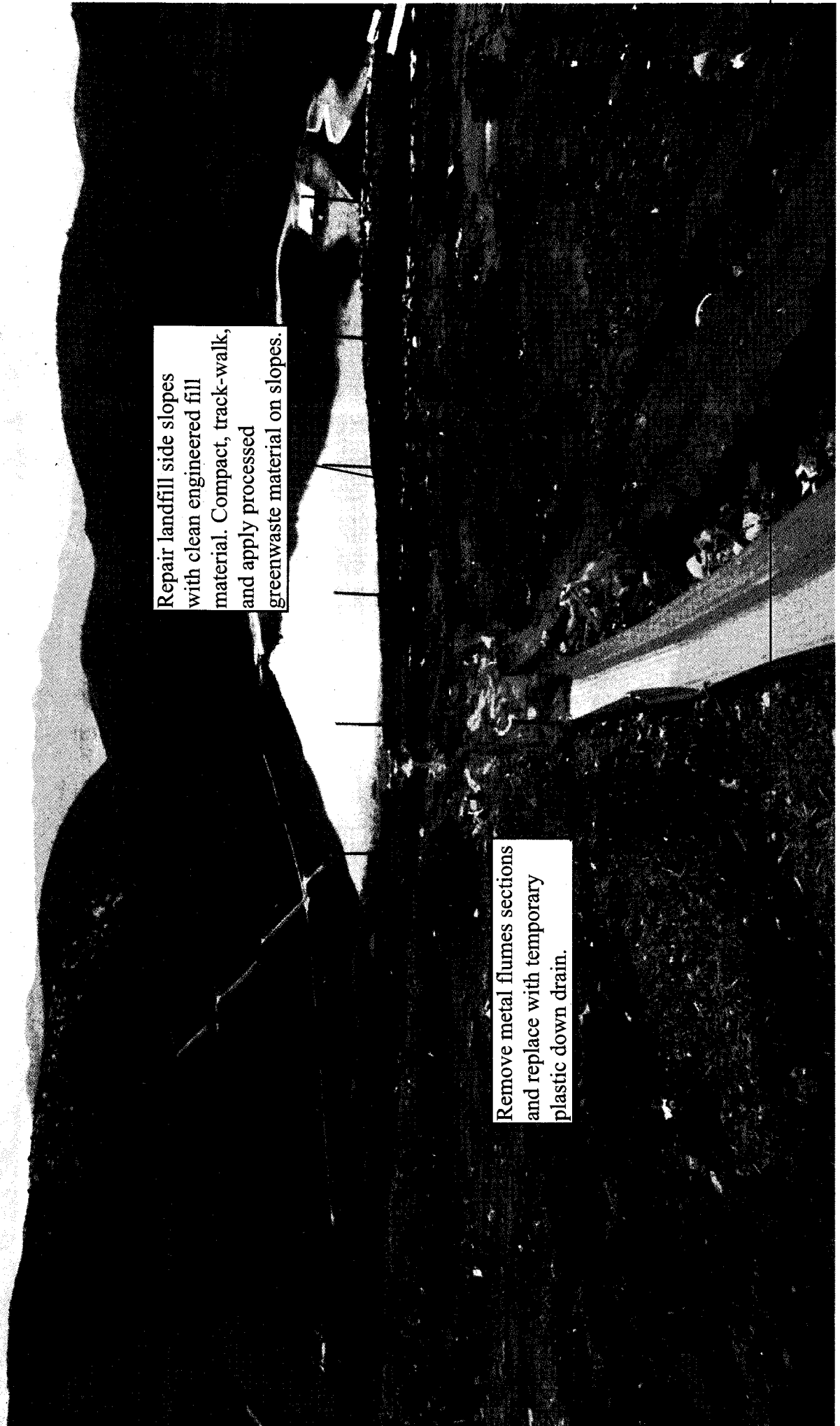


Repair Work Item No.1 & No.6



Material utilized to increase the height of the basin walls was obtained from the existing Landfill Access Road. Access road to be reconstructed by Contractor after emergency repair work is completed.

February 14, 2019



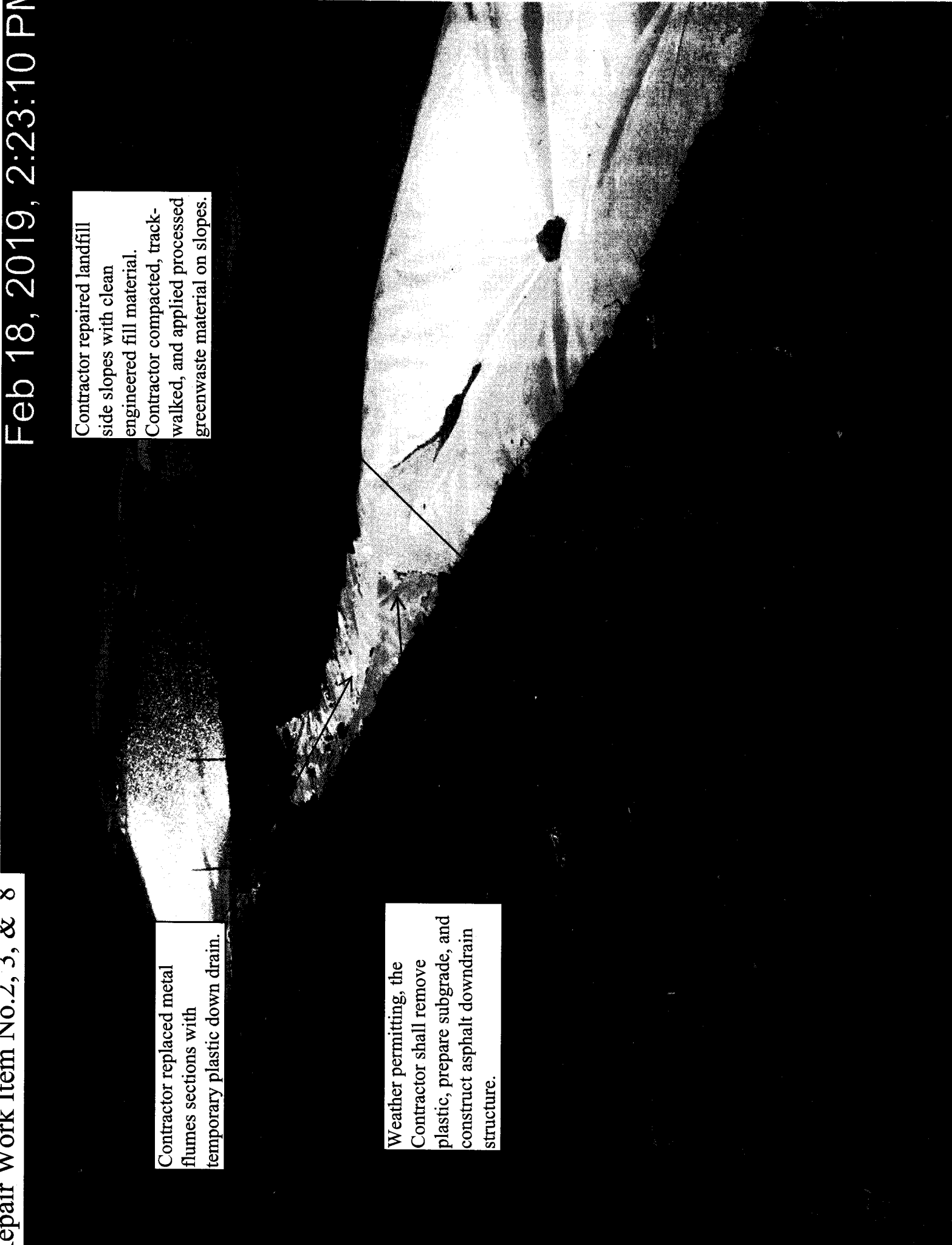
Repair landfill side slopes with clean engineered fill material. Compact, track-walk, and apply processed greenwaste material on slopes.

Remove metal flumes sections and replace with temporary plastic down drain.

Contractor replaced metal flumes sections with temporary plastic down drain.

Weather permitting, the Contractor shall remove plastic, prepare subgrade, and construct asphalt down drain structure.

Contractor repaired landfill side slopes with clean engineered fill material. Contractor compacted, tracked, walked, and applied processed greenwaste material on slopes.



Repair Work Item NO.2

Repair landfill side slopes with clean engineered fill material. Compact, track-walk, and apply processed greenwaste material on slopes.



Repair landfill side slopes with clean engineered fill material. Compact, track-walk, and apply processed greenwaste material on slopes.

Material utilized for side slope and earthen berm repair was obtained from existing Daily Cover Stockpile. Stockpile to be replenished by Contractor after emergency repair work is completed.

Repair damage earthen diversion berm and increase the height of berm to 4'. Final berm shall be compacted and tracked-walked.

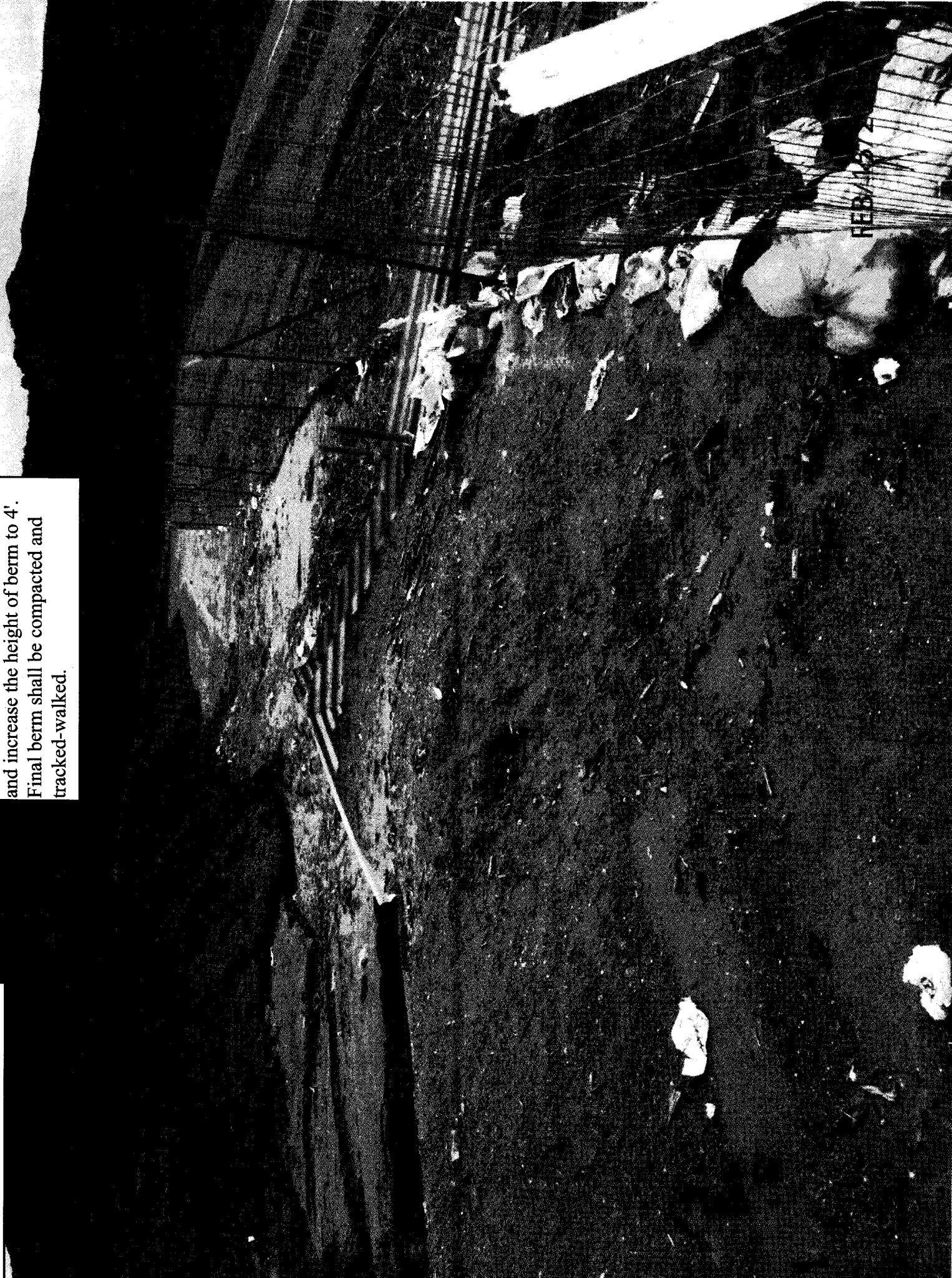


Contractor repaired landfill side slopes with clean engineered fill material. Contractor compacted and track-walked slope.



## Repair Work Item No.4

Repair damage earthen diversion berm and increase the height of berm to 4'. Final berm shall be compacted and tracked-walked.





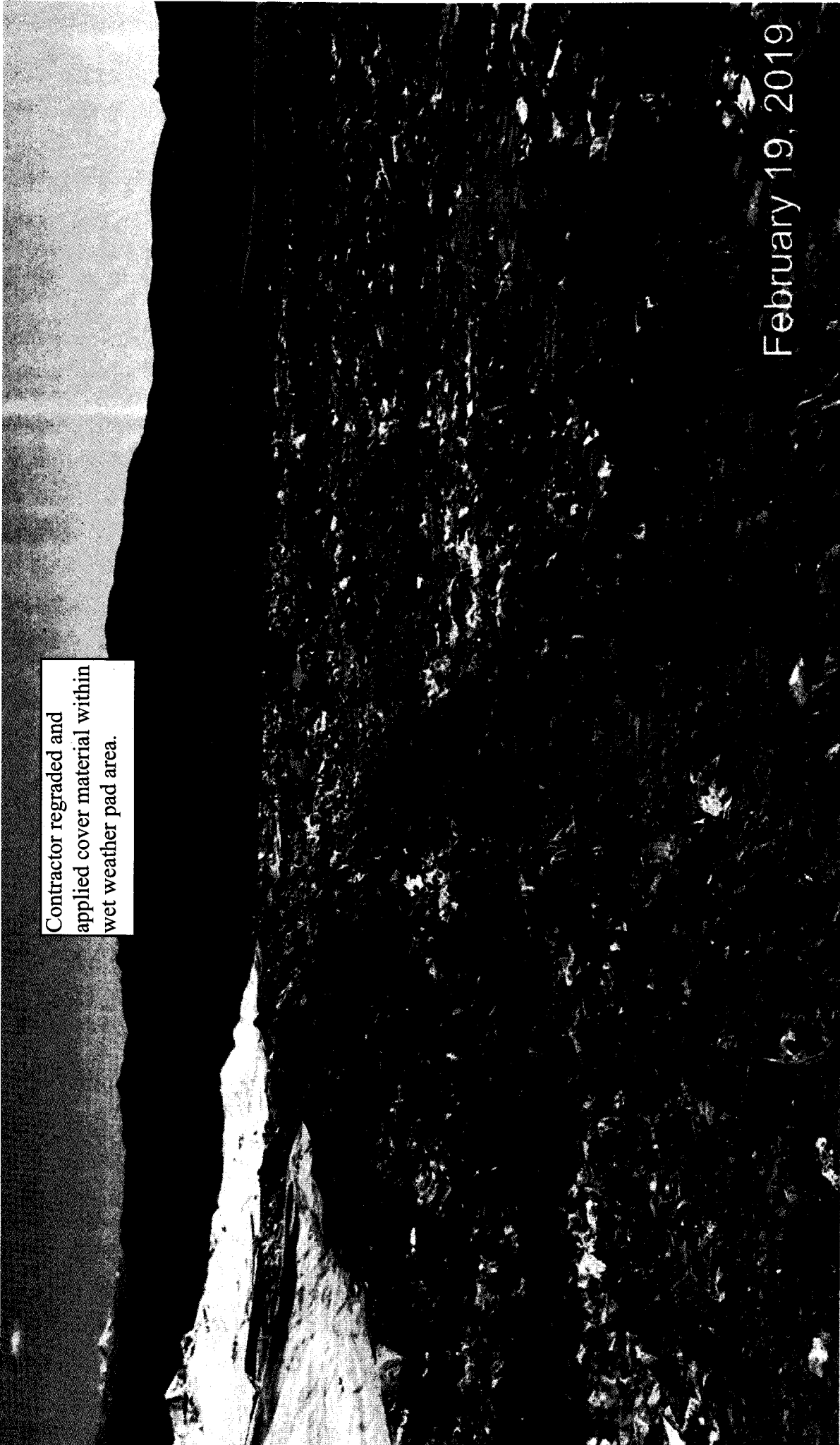
Contractor's laborers picked-up and disposed of litter.



Repair Work Item No.7

Contractor regraded and applied cover material within wet weather pad area.

February 19, 2019



# Repair Work Item No.9

- b) Over-excavate side slope and replace with engineered fill compacted at 95% R.C.
- b) Install geogrid reinforcement at ~ 4-ft vertical interval within the engineered fill layer.
- c) Place partially grouted rip-rap.

Side Slope Erosion

a) Construct 10'x10'x40' Keyway

Reinforced Concrete Impact Basin (Protect in Place)



**Attachment 2 –  
Work Order #LC-2  
Drawings (11x17)**

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**Work Item No. 7**  
Spread aggregate material to establish a new disposal pad

**Work Item No. 7**  
Recover and regrade wet weather pad

**Work Item No. 6**  
Finish material removed from access road with material from south soil stockpile

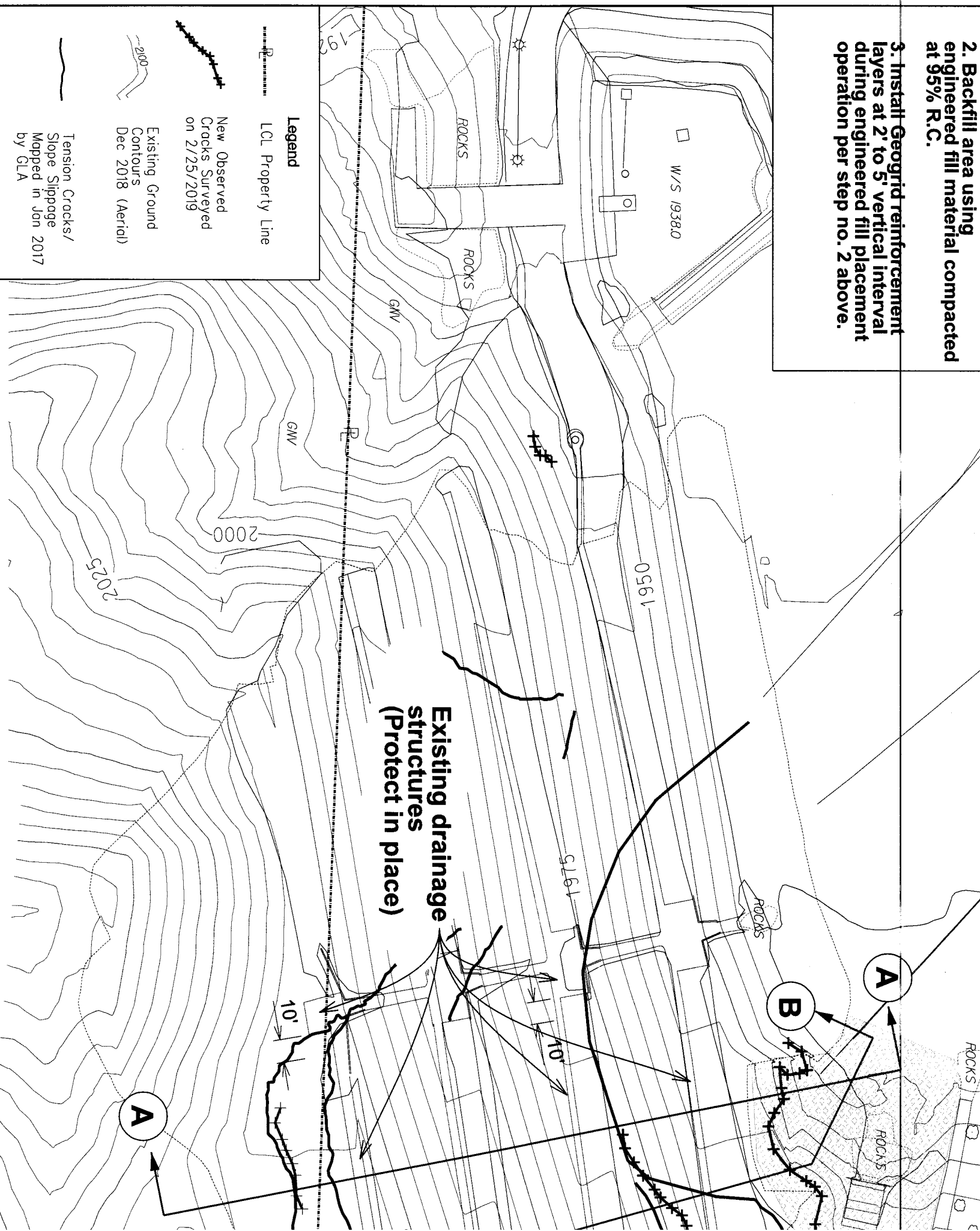
**South Soil Stockpile**

**Work Item No. 3**  
Repair eroded landfill side slopes

**Work Item**  
Increase basin's side



- 2. Backfill area using engineered fill material compacted at 95% R.C.
- 3. Install Geogrid reinforcement layers at 2' to 5' vertical interval during engineered fill placement operation per step no. 2 above.



Tension Cracks/  
Slope Slippage  
Mapped in Jan 2017  
by GLA

Existing Ground  
Contours  
Dec 2018 (Aerial)

New Observed  
Cracks Surveyed  
on 2/25/2019

LCL Property Line

Legend

**Existing drainage  
structures  
(Protect in place)**

A

B

A

10'

10'

W/S 19380

ROCKS

ROCKS

GMV

GMV

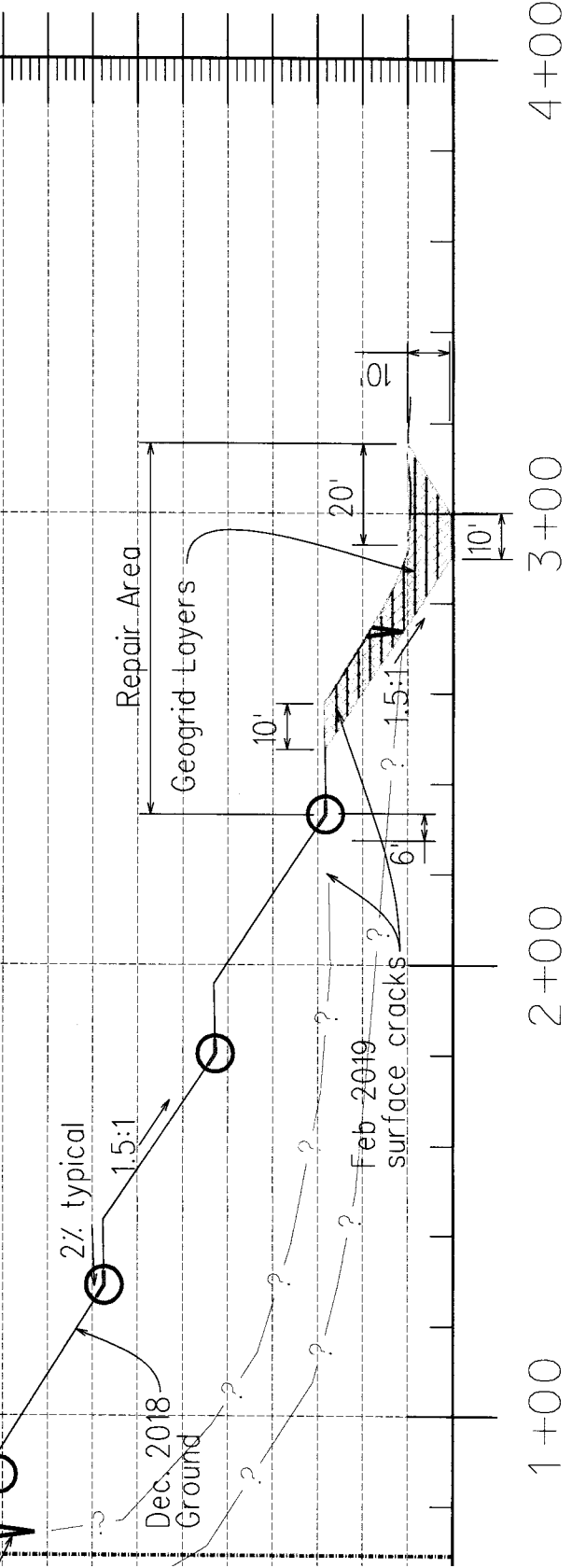
1950

2000

2025

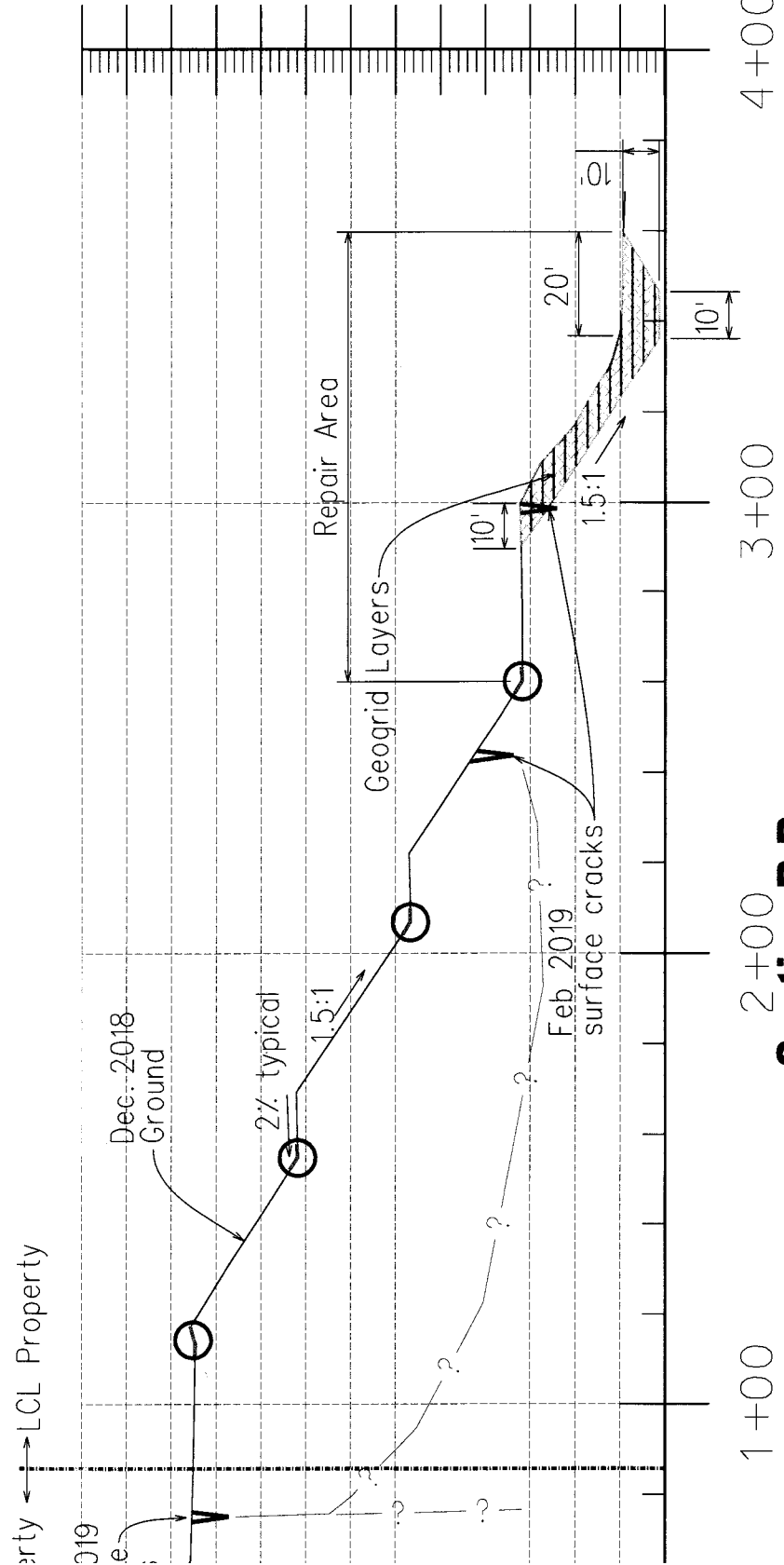
1920

2030  
2020  
2010  
2000  
1990  
1980  
1970  
1960  
1950  
1940  
1930



**Section A-A**

2060  
2050  
2040  
2030  
2020  
2010  
2000  
1990  
1980  
1970  
1960  
1950  
1940  
1930



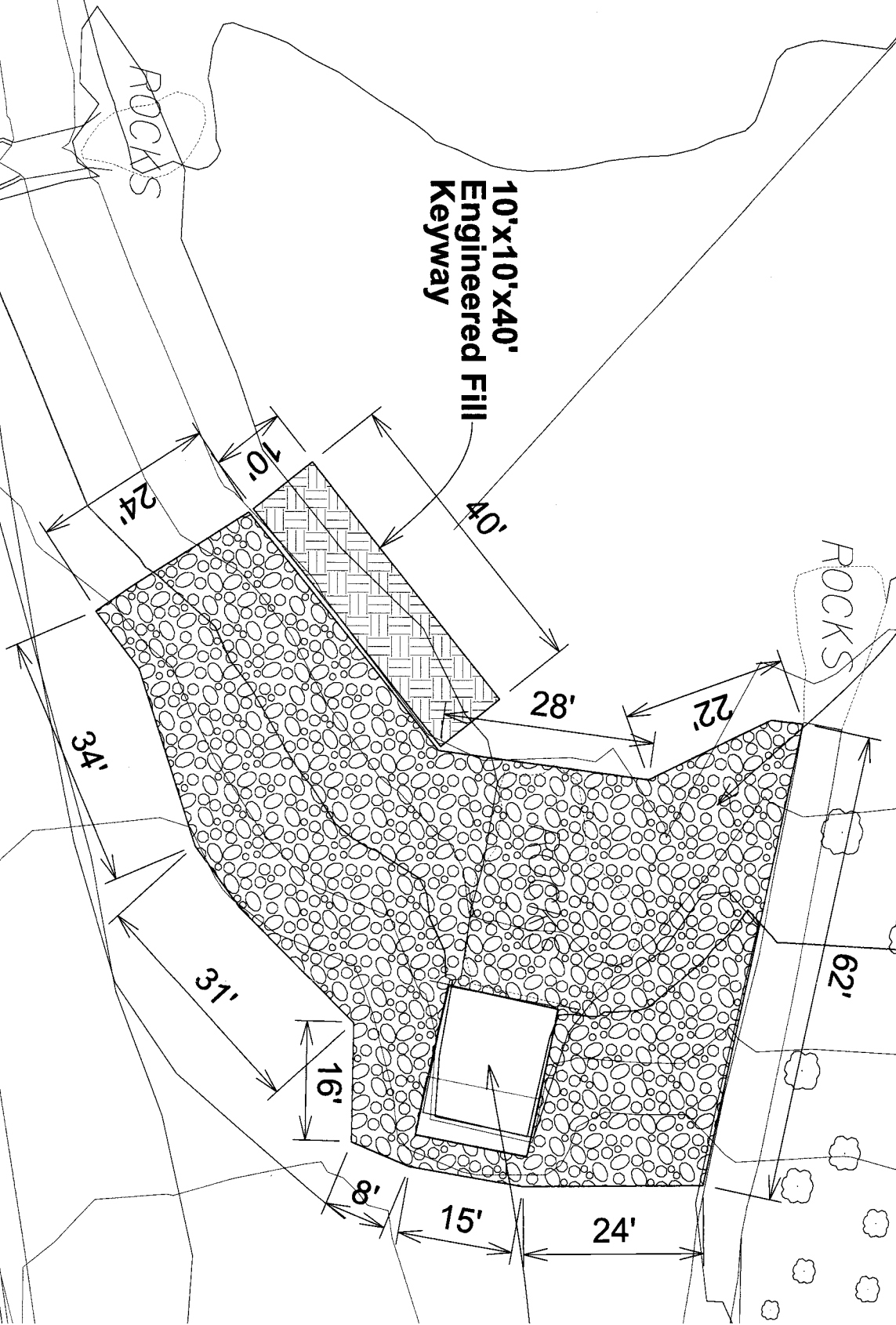
**Section B-B**

Partial  
Grouted  
Rip-rap

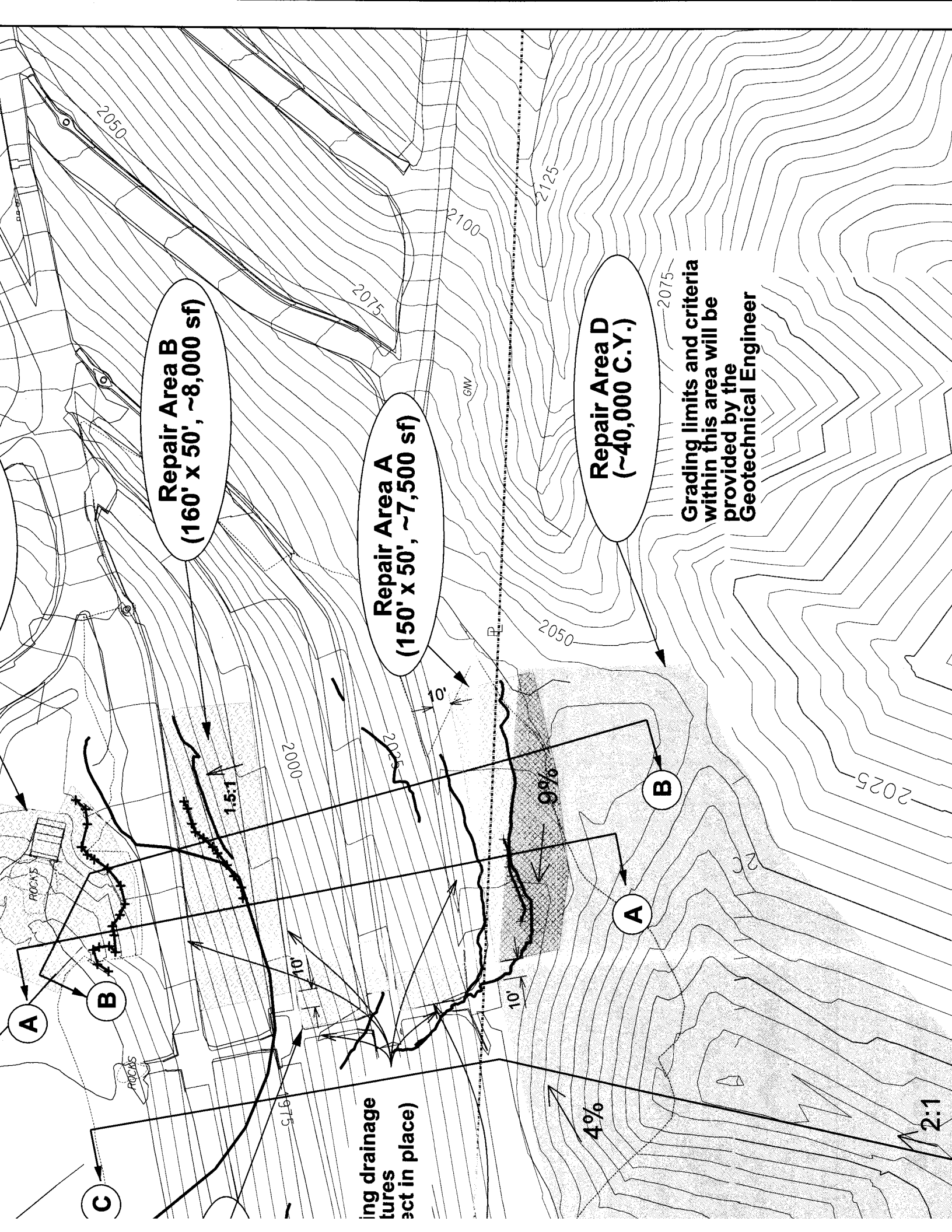
ROCKS

10'x10'x40'  
Engineered Fill  
Keyway

ROCKS







**Repair Area B**  
(160' x 50', ~8,000 sf)

**Repair Area A**  
(150' x 50', ~7,500 sf)

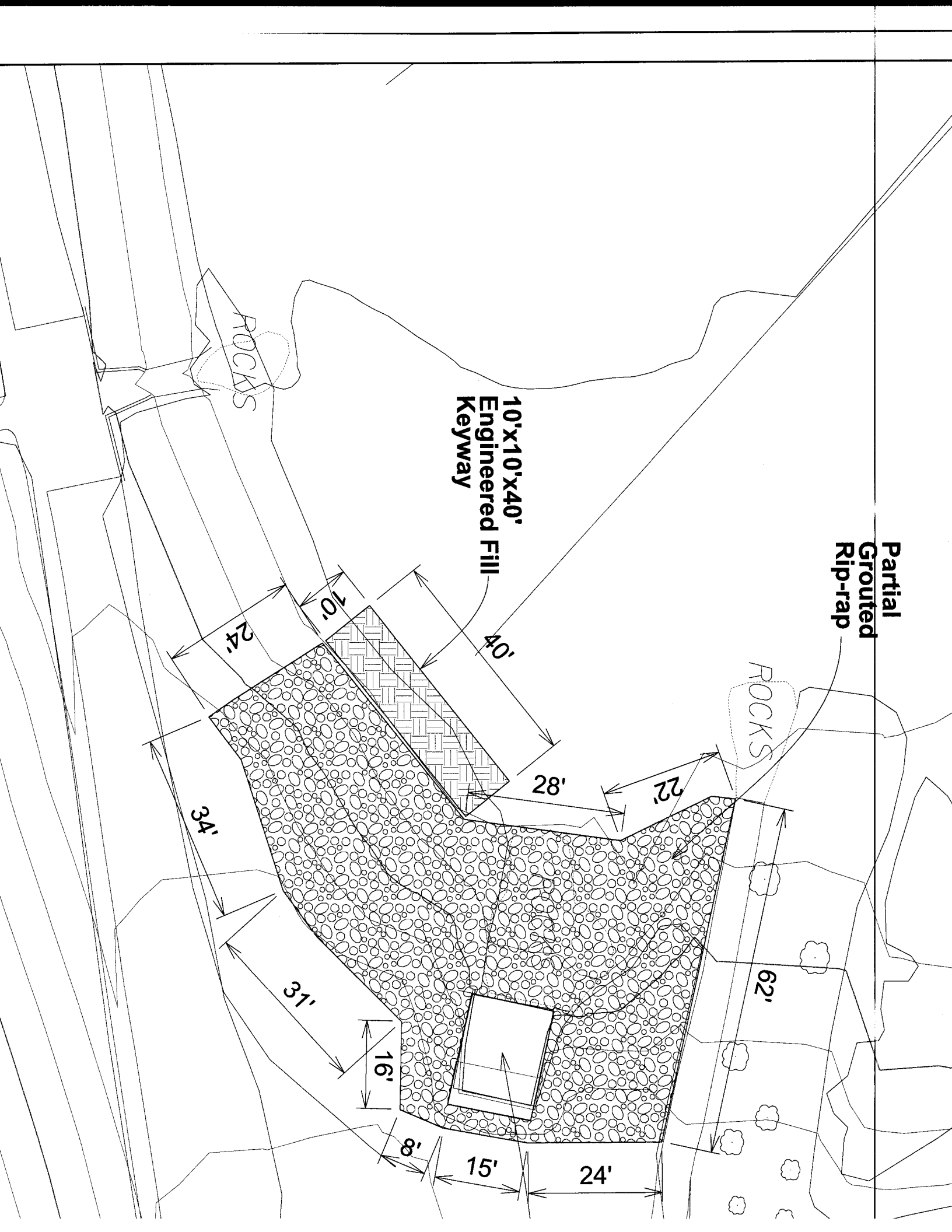
**Repair Area D**  
(~40,000 C.Y.)

**Grading limits and criteria within this area will be provided by the Geotechnical Engineer**

Existing drainage structures (in place)

4%

2:1



**Partial  
Grouded  
Rip-rap**

**10'x10'x40'  
Engineered Fill  
Keyway**

ROCKS

ROCKS

10'

40'

28'

22'

62'

24'

15'

8'

16'

31'

34'

24'

**Attachment No.3**  
**Contract Change Order No.1 Cost Summary**  
**For**  
**Lamb Canyon Landfill**

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Riverside County Department of Waste Resources  
 Daily Cover Excavation and On-Call Site Improvements  
 Contract Change Order No.1  
 Lamb Canyon Sanitary Landfill Cost Summary

**Emergency Repair Work Completed in February-May 2019 on Time & Material (Contract Bid Item No.24)**

Work Item No.	Description of Work	Actual Cost
1	Wastewater Percolation Basin Repair	
2	Removed and Replaced Damaged Flume Downdrain Sections	
3	Repaired Eroded Landfill Side Slopes	
4	Repaired Damaged Portions of Earthen Diversion Berms	
5	Removed Wind-blown Litter	
6	Replenished Daily Cover Stockpile	
7	Applied Daily Cover Material and Graded Wet Weather Pad	
8	Temporarily repair tension cracks	
		<b>\$ 71,927.31</b>

**Emergency Repair Work Completed in April 2019 (Contract Bid Item No.8)**

Bid Item No.	Description of Work	Unit	Quantity	Unit Price	Actual Cost
8	4' Thick Asphalt Drainage Structure	SF	2,050	\$ 6.25	\$ 12,812.69

**Tension Crack Repair Work Plan (Engineer's Cost Estimate)**

Work Item No.	Description of Work	Unit	Quantity	Unit Price	Estimated Cost
1	Excavation, Haul & Stockpile	CY	40,000	\$ 5.25	\$ 210,000.00
2	Over-Excavation (slopes, benches, top deck, key-way)	CY	8,500	\$ 8.00	\$ 68,000.00
3	Engineered Fill within the Over-Excavation Area at 95% R.C.	CY	8,500	\$ 7.00	\$ 59,500.00
4	Install Geogrid Reinforcement	SF	33,400	\$ 0.24	\$ 8,016.00
5	Furnish and Install Partially Grouted Rip Rap Slope Protection	SF	6,900	\$ 11.02	\$ 76,038.00
6	Saw-Cut, Remove, and Replace Damaged Sections of Existing Shotcrete Drainage Channels	SF	2,100	\$ 18.65	\$ 39,165.00
7	Saw-Cut, Remove and Replace Damaged Sections of Existing Masonry Walls	LF	50.00	\$ 165.00	\$ 8,250.00
8	Apply processed greenwaste on side slopes, benches, and top deck areas	SF	15,500.00	\$ 0.15	\$ 2,325.00
9	Time & material for unforeseen repair work	LS	1.00	\$ 15,000.00	\$ 15,000.00
				<b>Estimated Cost for Tension Crack Repair:</b>	<b>\$ 487,000.00</b>

<b>Total Estimated Cost for all February Rainstorm Repair Work at Lamb Canyon Landfill:</b>	<b>\$ 571,740.00</b>
---	----------------------

**Attachment No.4**  
**Contract Change Order No.1 Cost Summary**  
**for**  
**Badlands Landfill**

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**Badlands Landfill Contract Change Order No. 1 Cost Estimate Summary**

<b>Construction Item #</b>	<b>Construction Item</b>	<b>Location</b>	<b>Unit of Measurement</b>	<b>Quantity</b>	<b>Contract Unit Price (\$)</b>	<b>Estimated Cost (\$)</b>
1	Fabricate and Install vertical grate drop inlet	Western Drop Inlet	T&M	1	N/A	\$7,760.00
2	Construct reinforced shotcrete downdrains	Wet Weather Pad to Bench 15	C.Y.	27	800.00	\$72,000.00
		Along Main Customer Access Road		63		
3	Construct an aggregate base access road	Southside Access Road to Active Pad	S.F.	32,125	N/A	\$43,670.00
3a	CMB Layer		Ton	710	17.00	
3b	2-4" Rock Layer		Ton	1,200	17.00	
3c	3-6" Rock Swale		Ton	350	32.00	
4	Construct a Wet Weather Pad	Top Deck	T&M	N/A	N/A	\$25,000.00
5	Install 4" Thick A.C.	Eng/Ops Office	S.F.	3,500	6.25	\$21,875.00
6	Intall 6" Thick A.C.	Main Customer Access Road near Gate Fee Both	T&M	N/A	N/A	\$15,000.00
7	Repair piping and connections between Leachate Tanks #2 and #3	Leachate Tank Farm	T&M	N/A	N/A	\$9,695.00
8	Authorized Time and Materials	N/A	T&M	N/A	N/A	\$155,000.00
<b>Total:</b>						<b>\$350,000.00</b>