

DIVISION OF WASTE MANAGEMENT
AND RADIATION CONTROL
CLASS V SOLID WASTE LANDFILL PERMIT

Payson City Landfill

Pursuant to the provision of the Utah Solid and Hazardous Waste Act, Title 19, Chapter 6, Part 1, Utah Code Annotated (Utah Code Ann.) (the Act) and the Utah Solid Waste Permitting and Management Rules, R315-301 through 320 of the Utah Administrative Code adopted thereunder, a Permit is issued to:

Payson City,
as owner and operator, (Permittee),

to own, construct, and operate the Payson City Class V landfill located in the N ½ of the NE ¼ of Section 15, and part of the NW ¼ of Section 14, Township 9 South, Range 1 East, Salt Lake Base and Meridian, Utah County, Utah as shown in the permit application that was determined complete on March 8, 2017 (DSHW-2015-005874).

The Permittee is subject to the requirements of R315-301 through 320 of the Utah Administrative Code and the requirements set forth herein.

All references to R315-301 through 320 of the Utah Administrative Code are to regulations that are in effect on the date that this permit becomes effective.

This Permit shall become effective _____.

This Permit shall expire at midnight _____.

Closure Cost Revision Date: _____.

Signed this _____ day of _____, 2017.

Scott T. Anderson, Director
Utah Division of Waste Management and Radiation Control

FACILITY OWNER/OPERATOR INFORMATION

LANDFILL NAME: Payson City Landfill

OWNER NAME: Payson City Corporation

OWNER ADDRESS: 439 West Utah Avenue
Payson, Utah 84651

OWNER PHONE NO.: (801) 465-5235

OPERATOR NAME: same as owner

TYPE OF PERMIT: Class V Landfill

PERMIT NUMBER: 9703R1

LOCATION: Landfill site is located in Township 9 South, Range 1 East, Sections 14 and 15, SLMB; Utah County, Lat. 40° 02' 30''N, Long. 111° 48' 01''W

PERMIT HISTORY Permit renewal **insert date signed**

The term, "Permit," as used in this document is defined in R315-301-2(55) of the Utah Administrative Code. The term, "Director," as used throughout this permit, refers to the Director of the Division of Waste Management and Radiation Control.

Attachments to this permit are hereby incorporated into this Solid Waste Permit. All representation made in the attachments are part of this Permit and are enforceable under R315-301-5(2) of the Utah Administrative Code. Where differences in wording exist between this Permit and the attachments, the wording of this Permit supersedes that of the attachments.

Compliance with this Permit does not constitute a defense to actions brought under any other local, state, or federal laws. This Permit does not exempt the Permittee from obtaining any other local, state or federal approvals required for the facility operation.

The issuance of this Permit does not convey any property rights, other than the rights inherent in this Permit, in either real or personal property, or any exclusive privileges other than those inherent in this Permit. Nor does this Permit authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations, including zoning ordinances.

The provisions of this Permit are severable. If any provision of this Permit is held invalid for any reason, the remaining provisions shall remain in full force and effect. If the application of any provision of this Permit to any circumstance is held invalid, its application to other circumstances shall not be affected.

By this Permit, the Permittee is subject to the following conditions.

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PERMIT REQUIREMENTS

I. GENERAL COMPLIANCE RESPONSIBILITIES

I.A. General Operation

I.A.1. The Permittee shall operate the landfill in accordance with all applicable requirements of R315-301 through 320 of the Utah Administrative Code, for a Class V landfill, that are in effect as of the date of this Permit unless otherwise noted in this Permit. Any permit noncompliance or noncompliance with any applicable portions of Utah Code Ann. § 19-6-101 through 125 and applicable portions of R315-301 through 320 of the Utah Administrative Code constitutes a violation of the Permit or applicable statute or rule and is grounds for appropriate enforcement action, permit revocation, modification, or denial of a permit renewal application.

I.B. Acceptable Waste

I.B.1. This Permit is for the disposal of non-hazardous solid waste that may include:

I.B.1.a Municipal solid waste as defined by R315-301-2(47) of the Utah Administrative Code;

I.B.1.b Commercial waste as defined by R315-302-2(14) of the Utah Administrative Code;

I.B.1.c Industrial waste as defined by R315-302-2(35) of the Utah Administrative Code;

I.B.1.d Construction/demolition waste as defined by 19-6-102(4), Utah Code Annotated;

I.B.1.e Special waste as allowed by R315-315 of the Utah Administrative Code and authorized in section III-I of this Permit and limited by this section;

I.B.1.f Conditionally exempt small quantity generator hazardous waste as specified in R315-303-4(7)(a)(i)(B) of the Utah Administrative Code;

I.B.1.g PCB's as specified by R315-315-7(2) of the Utah Administrative Code.

I.B.2. The Permittee is authorized to receive for disposal regulated asbestos-containing material in compliance with R315-315-2 of the Utah Administrative Code.

I.C. Prohibited Waste

I.C.1. Disposal of the following wastes at the Payson City Landfill is prohibited:

I.C.1.a Hazardous waste as defined by R315-1 and R315-2 of the Utah Administrative Code except as allowed in permit condition I-B (Acceptable Waste) above;

I.C.1.b Containers larger than household size (five gallons) holding any liquid; non-containerized material containing free liquids; or any waste containing free liquids in containers larger than five gallons;

I.C.1.c PCB's as defined by R315-301-2 of the Utah Administrative Code, except as allowed in Section I-B (Acceptable Waste) of this Permit; and

- I.C.1.d Regulated asbestos-containing material.
- I.C.2. Any prohibited waste received and accepted for treatment, storage, or disposal at the facility shall constitute a violation of this Permit, of Utah Code Ann. § 19-6-101 through 125 and of R315-301 through 320 of the Utah Administrative Code.
- I.D. Inspections and Inspection Access
- I.D.1. The Permittee shall allow the Director or an authorized representative, or representatives from the Utah County Health Department, to enter at reasonable times and:
 - I.D.1.a Inspect the landfill or other premises, practices or operations regulated or required under the terms and conditions of this Permit or R315-301 through 320 of the Utah Administrative Code;
 - I.D.1.b Have access to and copy any records required to be kept under the terms and conditions of this Permit or R315-301 through 320 of the Utah Administrative Code;
 - I.D.1.c Inspect any loads of waste, treatment facilities or processes, pollution management facilities or processes, or control facilities or processes required under this Permit or regulated under R315-301 through 320 of the Utah Administrative Code; and
 - I.D.1.d Create a record of any inspection by photographic, video, electronic, or any other reasonable means.
- I.E. Noncompliance
- I.E.1. If monitoring, inspection, or testing indicates that any permit condition or any applicable rule under R315-301 through 320 of the Utah Administrative Code may be or is being violated, the Permittee shall promptly make corrections to the operation or other activities to bring the facility into compliance with all permit conditions or rules.
- I.E.2. In the event of noncompliance with any permit condition or violation of an applicable rule, the Permittee shall promptly take any action reasonably necessary to correct the noncompliance or violation and mitigate any risk to the human health or the environment. Actions may include eliminating the activity causing the noncompliance or violation and containment of any waste or contamination using barriers or access restrictions, placing of warning signs, or permanently closing areas of the facility.
- I.E.3. The Permittee shall:
 - I.E.3.a Document the noncompliance or violation in the daily operating record on the day the event occurred or the day it was discovered;
 - I.E.3.b Notify the Director by telephone within 24 hours, or the next business day following documentation of the event; and
 - I.E.3.c Provide written notice of the noncompliance or violation and a description of measures taken to protect human health and the environment within seven days after notification of the Director.

I.E.4. Within 30 days after documenting the event, the Permittee shall submit to the Director a written report describing the nature and extent of the noncompliance or violation and a complete description of all remedial measures taken or to be taken to protect human health and the environment and to eliminate the noncompliance or violation. Upon receipt and review of the assessment report, the Director may order the Permittee to perform additional appropriate remedial measures including development of a site remediation plan for approval by the Director.

I.E.5. In an enforcement action, the Permittee may not claim as a defense that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with R315-301 through 320 of the Utah Administrative Code and this Permit.

I.F. Revocation

I.F.1. This Permit is subject to revocation if the Permittee fails to comply with any condition of the Permit. The Director will notify the Permittee in writing prior to any proposed revocation action and such action shall be subject to all applicable hearing procedures established under R305-7 of the Utah Administrative Code and the Utah Administrative Procedures Act.

I.G. Attachment Incorporation

I.G.1. Attachments to this Permit are incorporated by reference into this Permit and are enforceable conditions of this Permit, as are documents incorporated by reference into the attachments. Language in this Permit supersedes any conflicting language in the attachments or documents incorporated into the attachments.

II. DESIGN AND CONSTRUCTION

II.A. Design and Construction

II.A.1. The Permittee shall construct any landfill cell, sub-cell, run-on diversion system, runoff containment system, waste treatment facility, leachate handling system, or final cover in accordance with the design submitted in accordance with R315-301 thru 320 of the Utah Administrative Code and Attachment 1.

II.A.2. If ground water is encountered during excavation of the landfill, the Director shall be notified immediately, and the Permittee shall develop and submit an alternative construction design for approval.

II.A.3. The Permittee shall notify the Director upon completion of construction of any landfill cell, sub-cell, engineered control system, or any feature where Director's approval is required. No landfill cell or engineered control system may be used until as-built documents are submitted and construction is approved by the Director.

- II.A.4. The Permittee shall notify the Director of any proposed incremental closure, placement of any part of the final cover, or placement of the full final cover. Design approval shall be received from the Director and this permit modified prior to construction. The design shall be accompanied by a Construction Quality Control and Construction Quality Assurance (CQC/CQA) Plan, for each construction season where incremental or final closure is performed.
- II.A.5. A qualified party, independent of the owner and the construction contractor, shall perform the quality assurance function on cover components and other testing as required by the approved CQC/CQA Plan. The results shall be submitted as part of the as-built drawings to the Director.
- II.A.6. All engineering drawings submitted to the Director shall be stamped and approved by a professional engineer with a current registration in Utah.
- II.B. Run-On Control
- II.B.1. The Permittee shall construct drainage channels and diversions as specified in the Permit Application and shall maintain them at all times to effectively prevent runoff from the surrounding area from entering the landfill.

III. III.LANDFILL OPERATION

III.A. Operations Plan

- III.A.1. The Permittee shall keep the Operations Plan included in Attachment 2 on site at the landfill or at the location designated in section III.K.1 of this Permit. The Permittee shall operate the landfill in accordance with the operations plan. If necessary, the Permittee may modify the Operations Plan, provided that the modification meets all of the requirements of R315-301 through 320 of the Utah Administrative Code, is as protective of human health and the environment as the Operations Plan approved as part of this Permit, and is approved by the Director as a permit modification under R315-311-2(1) of the Utah Administrative Code. The Permittee shall note any modification to the Operations Plan in the daily operating record.
- III.A.2. The Permittee shall submit any modification to the Operations Plan to the Director for approval.

III.B. Security

- III.B.1. The Permittee shall operate the Landfill so that unauthorized entry to the facility is restricted. The Permittee shall:
 - III.B.1.a Lock all facility gates and other access routes during the time the landfill is closed.
 - III.B.1.b Have at least one person employed by the Permittee at the landfill during all hours that the landfill is open.
- III.B.2. Construct all fencing and any other access controls as shown in Attachment 1 to prevent access by persons or livestock by other routes.

III.C. Training

III.C.1. The Permittee shall provide training for on-site personnel in landfill operation, including waste load inspection, hazardous waste identification, and personal safety and protection.

III.D. Burning of Waste

III.D.1. Intentional burning of solid waste is prohibited and is a violation of R315-303-4(2)(b) of the Utah Administrative Code.

III.D.2. The Permittee shall extinguish all accidental fires as soon as reasonably possible.

III.E. Daily Cover

III.E.1. The Permittee shall completely cover the solid waste received at the landfill at the end of each working day with a minimum of six inches of earthen material.

III.E.2. The Permittee may use an alternative daily cover material when the material and the application of the alternative daily cover meets the requirements of R315-303-4(4)(b) through (e) of the Utah Administrative Code.

III.F. Ground Water Monitoring

III.F.1. The Permittee shall monitor the ground water underlying the landfill in accordance with the Ground Water Monitoring Plan contained in Appendix J of the permit application. If necessary, the Permittee may modify the Ground Water Monitoring Plan and the Ground Water Monitoring Quality Assurance/Quality Control Plan, provided that the modification meets all of the requirements of R315-301 through 320 of the Utah Administrative Code and is as protective of human health and the environment as that approved in Attachment 2, and is approved by the Director as a minor modification under R315-311-2(1)(a) of the Utah Administrative Code. The Permittee shall note in the daily operating record any modification to the Ground Water Monitoring Plan and the Ground Water Monitoring Quality Assurance/Quality Control Plan.

III.G. Gas Monitoring

III.G.1. The Permittee shall monitor explosive gases at the landfill in accordance with the Gas Monitoring Plan contained in Attachment 2 and shall otherwise meet the requirements of R315-303-3(5) of the Utah Administrative Code. If necessary, the Permittee may modify the Gas Monitoring Plan, provided that the modification meets all of the requirements of R315-301 through 320 of the Utah Administrative Code and is as protective of human health and the environment as that approved in Attachment 2, and is approved by the Director as a minor modification under R315-311-2(1) of the Utah Administrative Code. The Permittee shall note any modification to the Gas Monitoring Plan in the daily operating record.

III.G.2. If the concentrations of explosive gases at any of the facility structures, at the property boundary, or beyond the property boundary ever exceed the standards set in R315-303-2(2)(a) of the Utah Administrative Code, the Permittee shall:

- III.G.2.a Immediately take all necessary steps to ensure protection of human health and notify the Director;
- III.G.2.b Within seven days of detection, place in the daily operating record the explosive gas levels detected and a description of the immediate steps taken to protect human health;
- III.G.2.c Implement a remediation plan that meets the requirements of R315-303-3(5)(b) of the Utah Administrative Code; and
- III.G.2.d Submit the plan to, and receive approval from, the Director prior to implementation.

III.H. Waste Inspections

- III.H.1. The Permittee shall visually inspect incoming waste loads to verify that no wastes other than those allowed by this permit are disposed in the landfill. The Permittee shall conduct a complete waste inspection at a minimum frequency of 1% of incoming loads. The Permittee shall select the loads to be inspected on a random basis.
- III.H.2. The Permittee shall inspect all loads suspected or known to have one or more containers capable of holding more than five gallons of liquid to ensure that each container is empty.
- III.H.3. The Permittee shall inspect all loads that the Permittee suspects may contain a waste not allowed for disposal at the landfill.
- III.H.4. The Permittee shall conduct complete random inspections as follows:
 - III.H.4.a The Permittee shall conduct the random waste inspection at the working face or an area designated by the Permittee.
 - III.H.4.b The Permittee shall direct that loads subjected to complete inspection be unloaded at the designated area;
 - III.H.4.c Loads shall be spread by equipment or by hand tools;
 - III.H.4.d Personnel trained in hazardous waste recognition and recognition of other unacceptable waste shall conduct a visual inspection of the waste; and
 - III.H.4.e The personnel conducting the inspection shall record the results of the inspection on a waste inspection form as found in Attachment 2. The Permittee shall place the form in the daily operating record at the end of the operating day.
 - III.H.4.f The Permittee or the waste transporter shall properly dispose of any waste found that is not acceptable at the facility at an approved disposal site for the waste type and handle the waste according to the rules covering the waste type.

III.I. Disposal of Special Wastes

III.I.1. If a load of incinerator ash is accepted for disposal, the Permittee shall transport it to the place of disposal in such a manner as to prevent leakage or the release of fugitive dust. The Permittee shall completely cover the ash with a minimum of six inches of material, or the Permittee shall use other methods or material, if necessary, to control fugitive dust. The Permittee may use ash for daily cover when its use does not create a human health or environmental hazard.

III.I.2. The Permittee may dispose of animal carcasses in the landfill working face and shall cover them with other solid waste or earth by the end of the operating day in which the carcasses are received. Alternatively, the Permittee may dispose of animal carcasses in a special trench or pit prepared for the acceptance of dead animals. If a special trench is used, the Permittee shall cover animals placed in the trench with six inches of earth by the end of each operating day.

III.I.3. Barrels containing asbestos shall not be crushed or broken by heavy equipment while spreading or compacting waste or applying cover during operation of the landfill.

III.J. Self Inspections

III.J.1. The Permittee shall inspect the facility to prevent malfunctions and deterioration, operator errors, and discharges that may cause or lead to the release of wastes or contaminated materials to the environment or create a threat to human health or the environment. The Permittee shall complete these general inspections no less than quarterly and shall cover the following areas: Waste placement, compaction, cover, fences and access controls, roads, run-on/run-off controls, final and intermediate cover, litter controls, and records. The Permittee shall place a record of the inspections in the daily operating record on the day of the inspection. The Permittee shall correct the problems identified in the inspections in a timely manner and document the corrective actions in the daily operating record.

III.K. Recordkeeping

III.K.1. The Permittee shall maintain and keep on file, at the Landfill gatehouse, a daily operating record and other general records of landfill operation as required by R315-302-2(3) of the Utah Administrative Code. The landfill operator, or other designated personnel, shall date and sign the daily operating record at the end of each operating day. Each record to be kept shall be signed and dated by the appropriate operator or personnel. The Daily operating record shall consist of the following two types of documents:

III.K.1.a Records related to the daily landfill operation or periodic events including:

III.K.1.a.(1) The number of loads of waste and the weights or estimates of weights or volume of waste received each day of operation and recorded at the end of each operating day;

III.K.1.a.(2) Major deviations from the approved plan of operation, recorded at the end of the operating day the deviation occurred;

III.K.1.a.(3) Results of monitoring required by this Permit, recorded in the daily operating record on the day of the event or the day the information is received;

III.K.1.a.(4) Records of all inspections conducted by the Permittee, results of the inspections, and corrective actions taken, recorded in the record on the day of the event.

III.K.1.b Records of a general nature including:

III.K.1.b.(1) A copy of this Permit, including all Attachments;

III.K.1.b.(2) Results of inspections conducted by representatives of the Director, and of representatives of the local Health Department, when forwarded to the Permittee;

III.K.1.b.(3) Closure and Post-closure care plans; and

III.K.1.b.(4) Records of employee training.

III.L. Reporting

III.L.1. The Permittee shall prepare and submit to the Director an Annual Report as required by R315-302-2(4) of the Utah Administrative Code. The Annual Report shall include: the period covered by the report, the annual quantity of waste received, an annual update of the financial assurance mechanism, a re-application for approval of the financial assurance mechanism, the results of gas monitoring, and all training programs completed.

III.M. Roads

III.M.1. The Permittee shall improve and maintain all access roads within the landfill boundary that are used for transporting waste to the landfill for disposal as necessary to assure safe and reliable all-weather access to the disposal area.

III.N. Litter Control

III.N.1. Litter resulting from operations of the landfill shall be minimized. In addition to the litter control plans found in Attachment 2, the Permittee shall implement the following procedures when high wind conditions are present:

III.N.1.a Reduce the size of the tipping face;

III.N.1.b Reduce the number of vehicles allowed to discharge at the tipping face at one time;

III.N.1.c Orient vehicles to reduce wind effects on unloading and waste compaction;

III.N.1.d Reconfigure tipping face to reduce wind effect;

III.N.1.e Use portable and permanent wind fencing as needed; and

III.N.1.f Should high winds present a situation that the windblown litter cannot be controlled, the Permittee shall cease operations of the landfill until the winds diminish.

IV. IV. CLOSURE REQUIREMENTS

IV.A. Closure

- IV.A.1. The Permittee shall install final cover of the landfill as shown in Attachment 3. The final cover shall meet, at a minimum, the standard design for closure as specified in the R315-303-3(4) of the Utah Administrative Code plus sufficient cover soil or equivalent material to protect the low permeability layer from the effects of frost, desiccation, and root penetration. The Permittee shall submit to the Director a quality assurance plan for construction of the final landfill cover, and approval of the plan shall be received from the Director prior to construction of any part of the final cover at the landfill. A qualified person not affiliated with the Permittee or the construction contractor shall perform permeability testing on recompacted clay placed as part of the final cover.
- IV.B. Title Recording
- IV.B.1. The Permittee shall meet the requirements of R315-302-2(6) of the Utah Administrative Code by recording a notice with the Utah County Recorder as part of the record of title that the property has been used as a landfill. The notice shall include waste disposal locations and types of waste disposed. The Permittee shall provide the Director a copy of the recorded notice.
- IV.C. Post-Closure Care
- IV.C.1. The Permittee shall perform post-closure care at the closed landfill in accordance with the Post-Closure Care Plan contained in Attachment 3. Post-closure care shall continue until all waste disposal sites at the landfill have stabilized and the finding of R315-302-3(7)(c) of the Utah Administrative Code is made.
- IV.D. Financial Assurance
- IV.D.1. To cover the costs of closure and post-closure care at the landfill, the Permittee shall keep in effect and active the currently approved financial assurance mechanism or another approved mechanism that meets the requirements of R315-309 of the Utah Administrative Code and is approved by the. The Permittee shall maintain the financial assurance mechanism to provide for the cost of closure at any stage or phase or any time during the life of the landfill or the permit life, whichever is shorter.
- IV.E. Financial Assurance Annual Update
- IV.E.1. The Permittee shall submit an annual revision of closure and post-closure costs for inflation and financial assurance funding as required by R315-309-2(2) of the Utah Administrative Code, to the Director as part of the annual report. The Permittee shall submit the information as required in R315-309-8 of the Utah Administrative Code and shall meet the qualifications for the "Local Government Financial Test" each year.
- IV.F. Closure Cost and Post-Closure Cost Revision
- IV.F.1. The Permittee shall submit a complete revision of the closure and post-closure cost estimates by the Closure Cost Revision Date listed on the signature page of this Permit and any time the facility is expanded, any time a new cell is constructed, or any time a cell is expanded.

V. ADMINISTRATIVE REQUIREMENTS

V.A. Permit Modification

V.A.1. Modifications to this Permit may be made upon application by the Permittee or by the Director following the procedures specified in R315-310-11-2 of the Utah Administrative Code. The Permittee shall be given written notice of any permit modification initiated by the Director.

V.B. Permit Transfer

V.B.1. This Permit may be transferred to a new permittee or new permittees by complying with the permit transfer provisions specified in R315-310-11 of the Utah Administrative Code.

V.C. Expansion

V.C.1. Any expansion of the current footprint designated in the description contained in Attachment 1, but within the property boundaries designated in Attachment 1, shall require submittal of plans and specifications to the Director. The plans and specifications shall be approved by the Director prior to construction.

V.C.2. Any expansion of the landfill facility beyond the property boundaries designated in the description contained in Attachment 1 shall require submittal of a new permit application in accordance with the requirements of R315-310 of the Utah Administrative Code.

V.C.3. Any addition to the acceptable wastes described in Section I-B shall meet the requirements for permit modification under R315-311-2 of the Utah Administrative Code. Acceptance for PCB bulk product waste under R315-315-7(3)(b) of the Utah Administrative Code can only be done after submittal of the required information to the Director and modification of Section I-C of this Permit.

V.D. Expiration

V.D.1. If the Permittee desires to continue operating this landfill after the expiration date of this Permit, the Permittee shall submit an application for permit renewal at least six months prior to the expiration date, as shown on the signature (cover) page of this Permit. If the Permittee timely submits a permit renewal application and the permit renewal is not complete by the expiration date, this Permit shall continue in force until renewal is completed or denied.

Attachments

Attachment 1 – Landfill Design and Construction Plans

Attachment 2 – Plan of Operation

Attachment 3 – Closure and Post-Closure Plans

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Attachment 1

Landfill Design and Construction Plans

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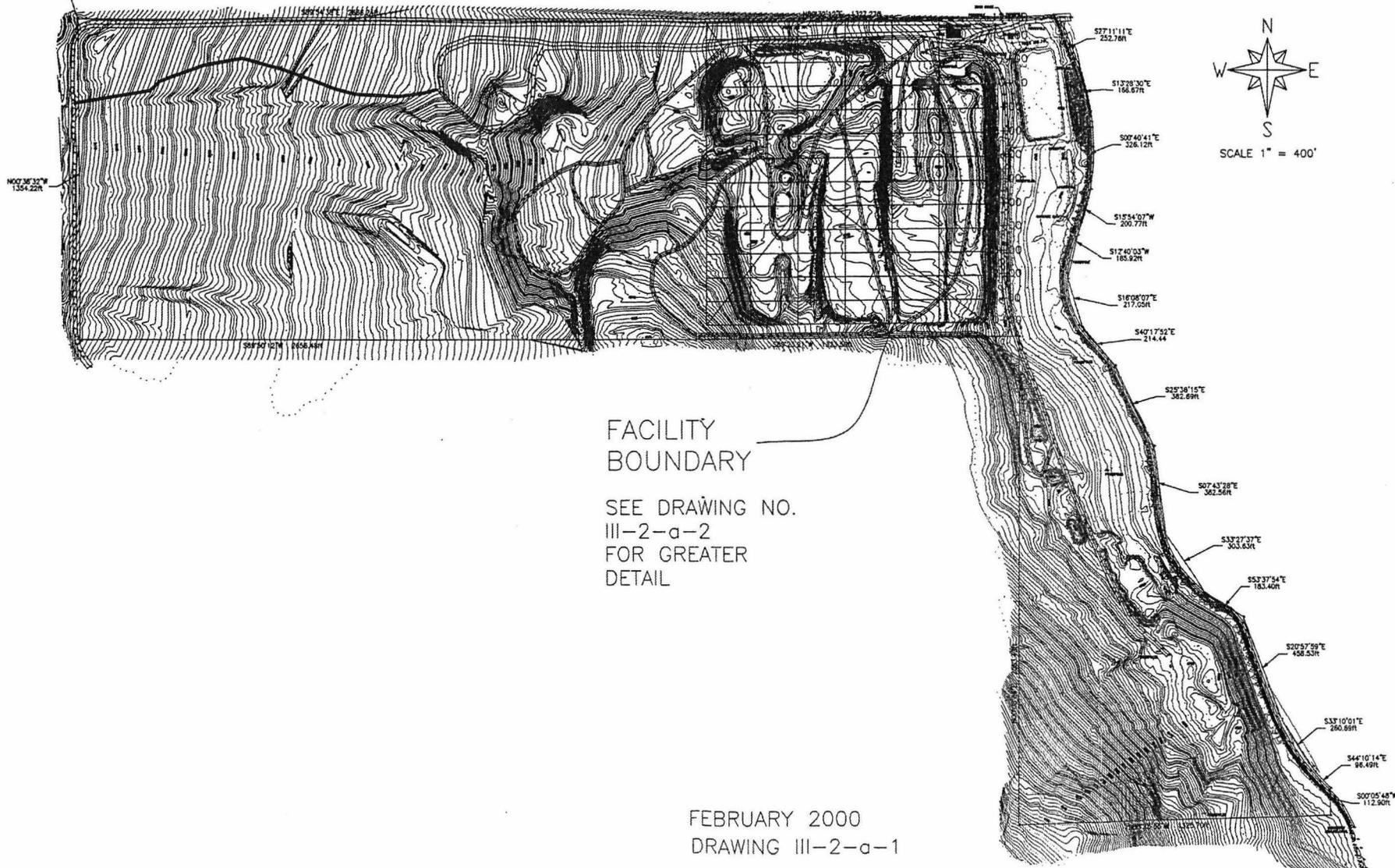
APPENDIX F

Topographic Maps

<u>Drawing No.</u>	<u>Drawing Description</u>
III-2-a-1	Topographic Map – Site Layout
III-2-a-2	Topographic Map –Monitoring Wells

PAYSON CITY CORPORATION CLASS V LANDFILL

NORTH 1/4 CORNER OF SECTION 15,
TOWNSHIP 9 SOUTH, RANGE 11 EAST
SALT LAKE BASE AND MERIDIAN



FACILITY
BOUNDARY

SEE DRAWING NO.
III-2-a-2
FOR GREATER
DETAIL

FEBRUARY 2000
DRAWING III-2-a-1

REVISION	DATE	BY	DESCRIPTION	DESIGN JHJ	DRAWN JHJ
				CHECKED	CHECKED
				SCALE 1"=200'	DATE 01/29/98
				F.S.H.D.	

PAYSON CITY
428 WEST UTAH AVE.
PAYSON, UTAH 84651
PHONE 462-3200

PAYSON CITY LANDFILL
TOPOGRAPHY MAP

SHEET 1
OF 1
DRAWING NO.

PAYSON LANDFILL TOPO

0 80 160 Feet

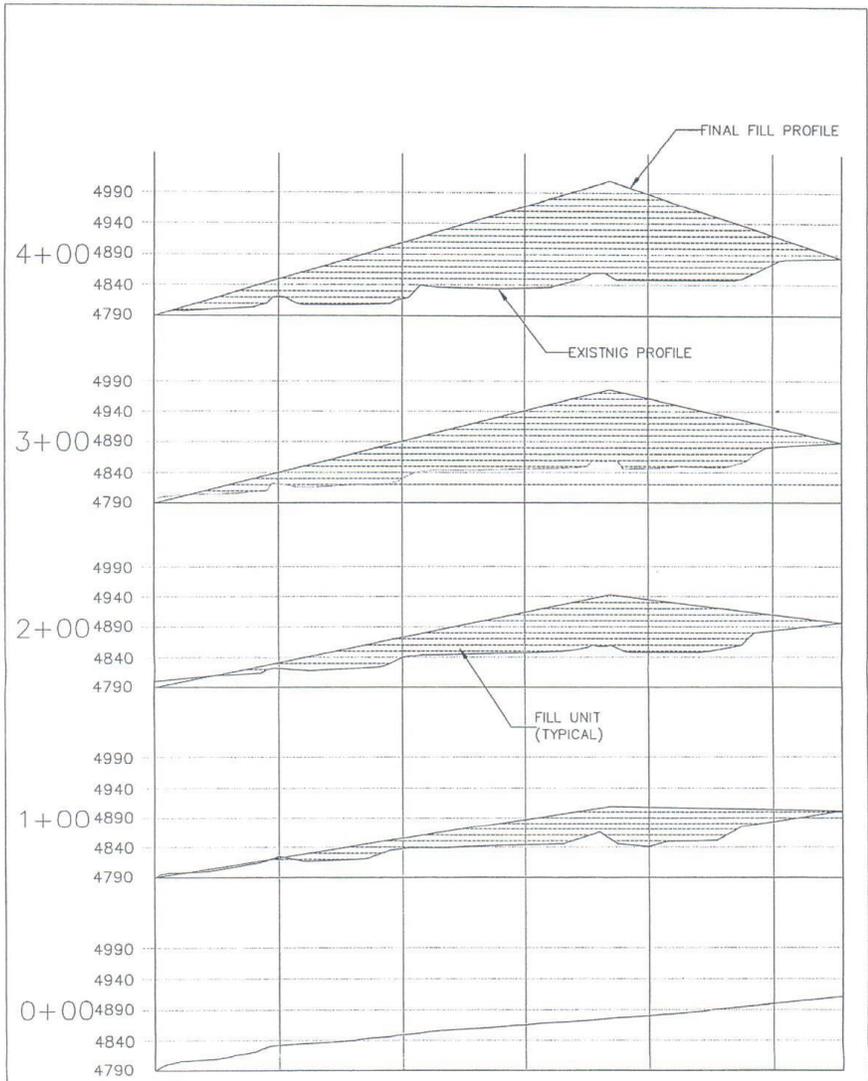
Leica
SURVEY DATE: Dec 2011
IMAGE DATE: Nov 2011



APPENDIX G

Plans and Specifications

<u>Drawing No.</u>	<u>Drawing</u>
III-3-b-1	Existing and final fill profiles, Stations 0 through 4
III-3-b-2	Existing and final fill profiles, Station 5 through 9
III-3-b-3	Existing and final fill profiles, Stations 10 through 12.7
III-3-b-4	Fill Unit and Element Details

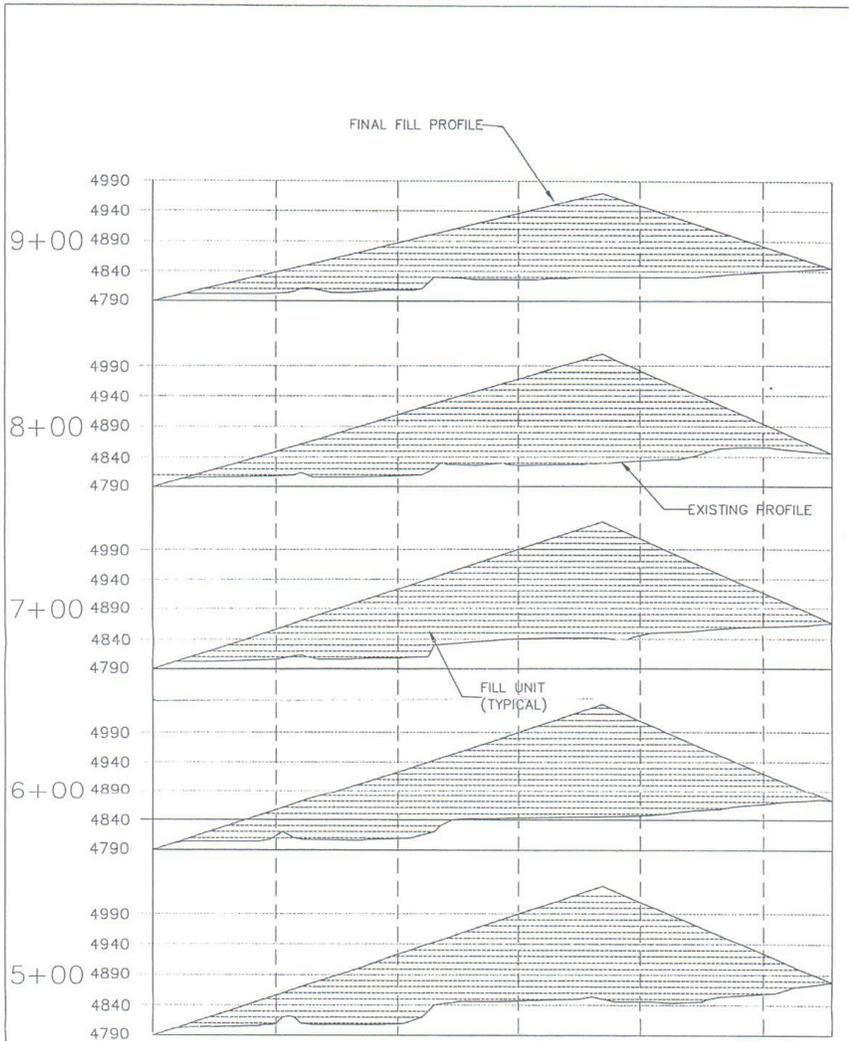


EXISTING AND FINAL FILL
 PROFILES AT 100' INTERVALS

PAYSON CITY
 CLASS V LANDFILL

SCALE: 1" = 150'

DRAWING NO. III-3-b-1 FEBRUARY 2000

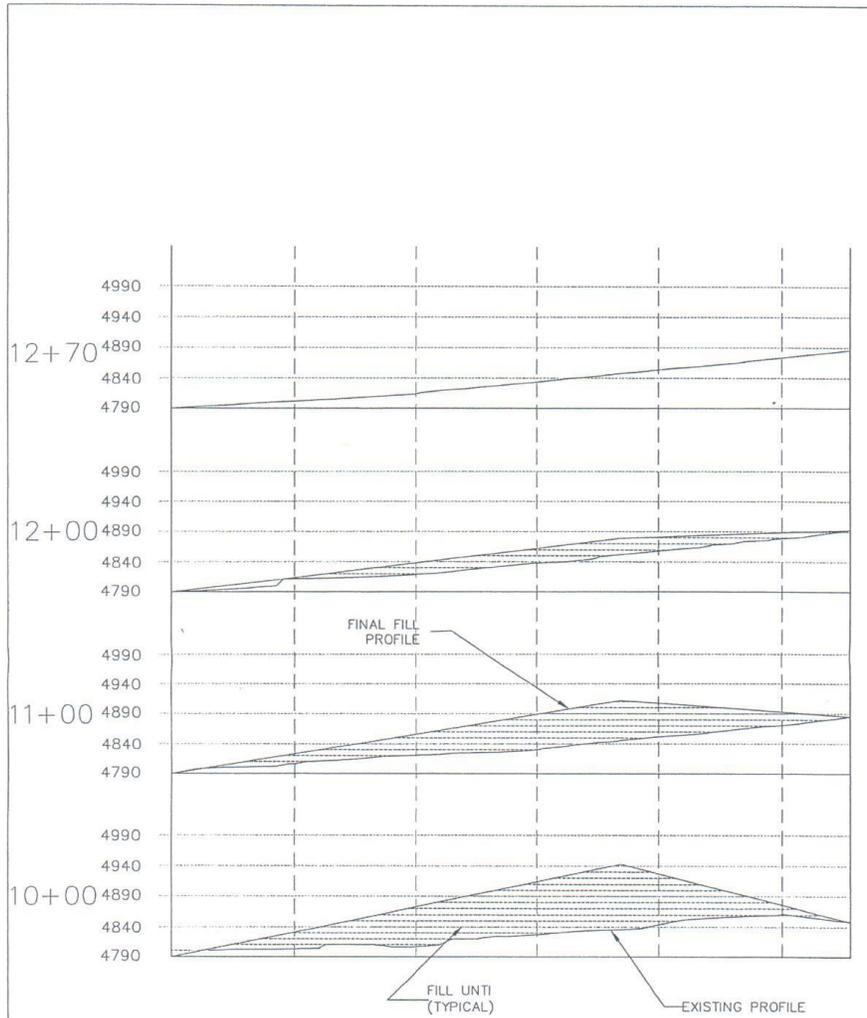


EXISTING AND FINAL FILL
 PROFILES AT 100' INTERVALS

PAYSON CITY
 CLASS V LANDFILL

SCALE: 1" = 150'

DRAWING NO. III-3-b-2 FEBRUARY 2000



EXISTING AND FINAL FILL
 PROFILES AT 100' INTERVALS

PAYSON CITY
 CLASS V LANDFILL

SCALE: 1" = 150'

DRAWING NO. III-3-b-3 FEBRUARY 2000

Payson City Class V Landfill
Permit Renewal Application March 2015

APPENDIX H

Design and Location of Run-on and Run-off Control Systems

Drawing No.

P-LF_ST

P-LF-EC

P-LF_BAS

P-LF_PIP

P-LF_DET

Drawing

Site Plan

Erosion Control

Retention Pond Plan & Profile

Pipe System Layout

Inlet Box Details

Storm Drain Calculations

Slope Stability Calculations

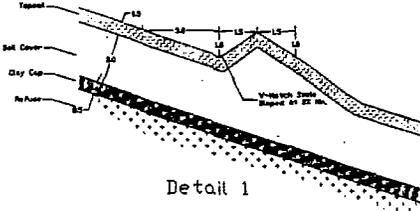
General Notes

No.	Revision/Issue	Date

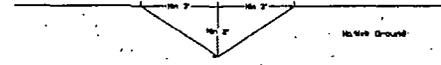
Project Name and Address
Payson City
 439 Utah Ave.
 Payson, Utah

Project Name and Address
 Payson City
 Class V Landfill
 Payson, Utah

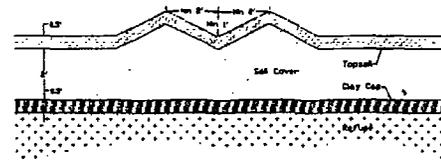
Sheet Class V Landfill	Sheet 1 of 1
Date 12/28/01	Drawing # P-LF-EC
Scale Not to Scale	



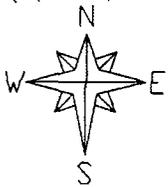
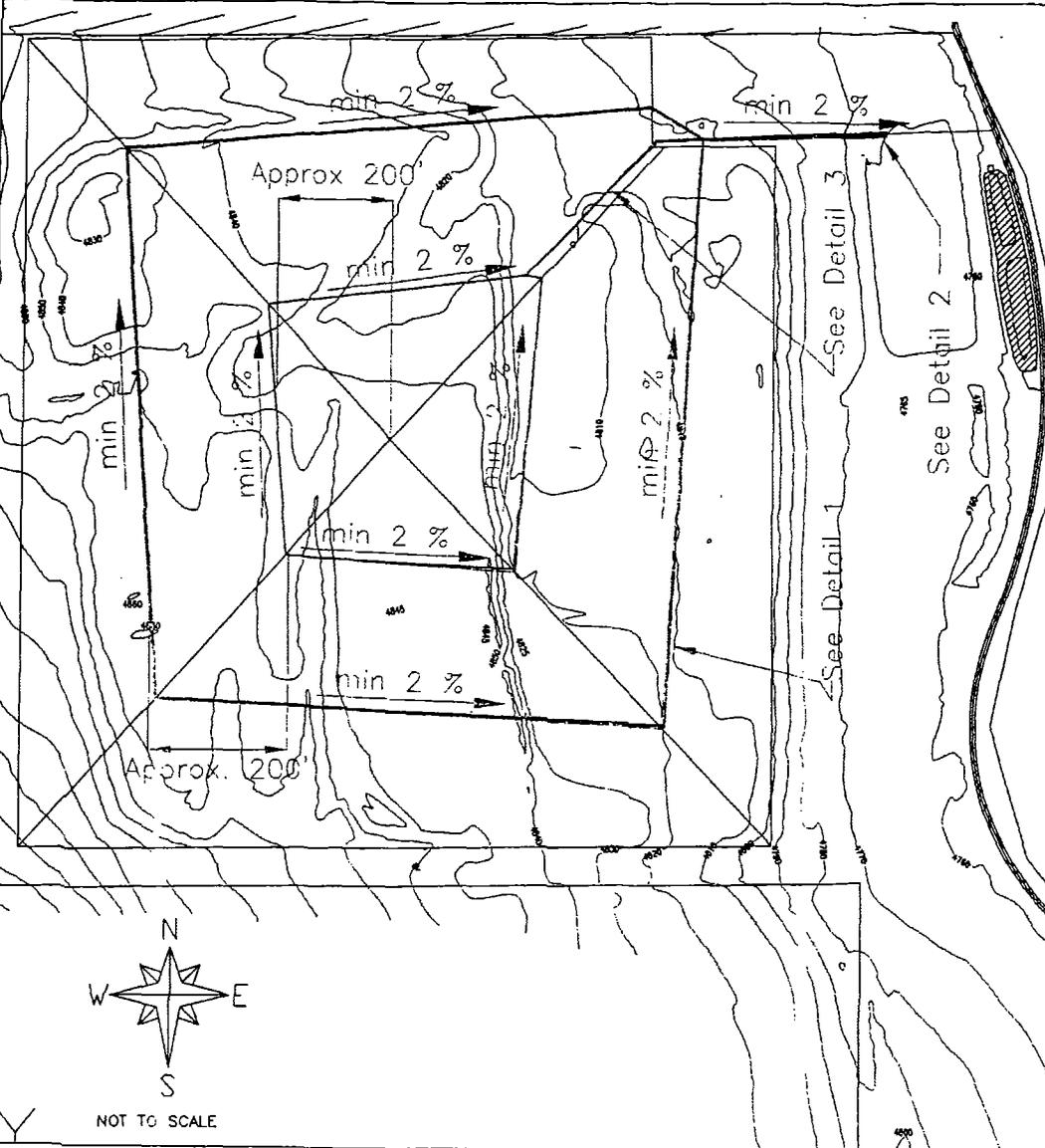
Detail 1
 Slope V-Notch Swale Detail



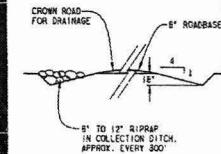
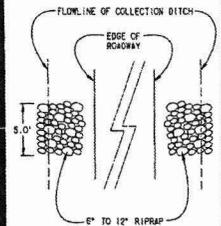
Detail 2



Detail 3
 Collector Ditch Details



NOT TO SCALE



ACCESS ROAD & COLLECTION DITCH
PLAN & PROFILE
SCALE = NONE

DRAWN	S.D.		
CHECKED	SOT		
DESIGNED	SJA		
SCALE	1" = 100'	REVISED	BY DATE

PERKINS-THURGOOD
CONSULTING ENGINEERS, INC.

PAYSON CITY CORPORATION
SANITARY LANDFILL
STORM DRAINAGE AND RETENTION POND

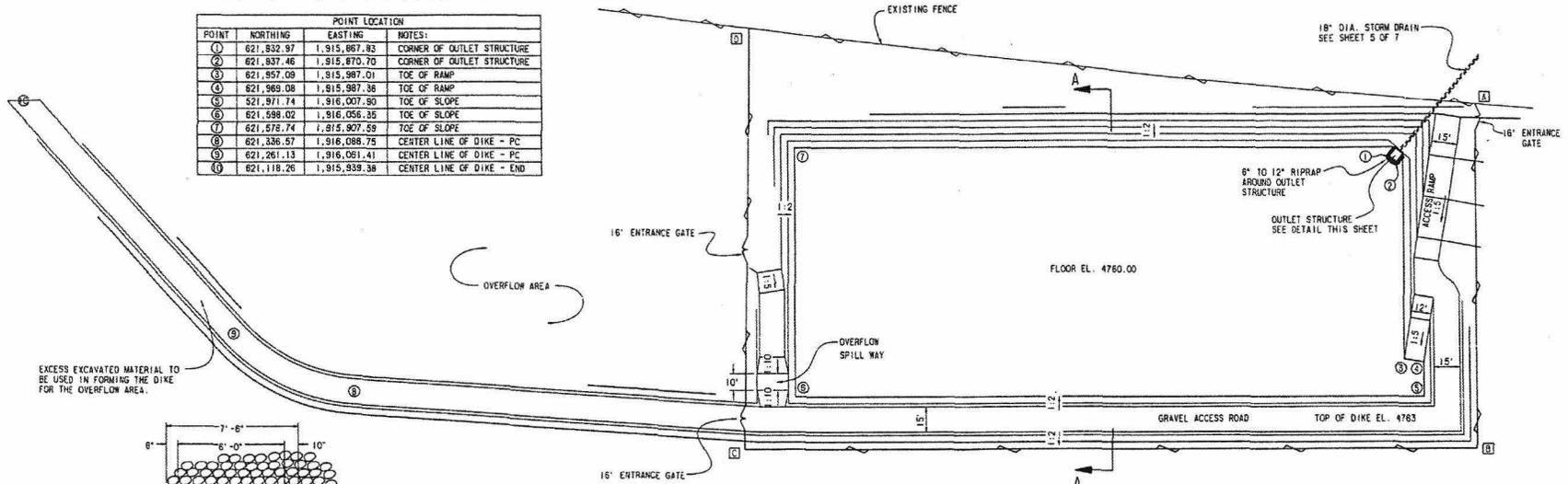
SITE PLAN

DRAWING # P-LF-517
PROJECT NO 8207
DATE AUG. 1999
SHEET NO 3 OF 7

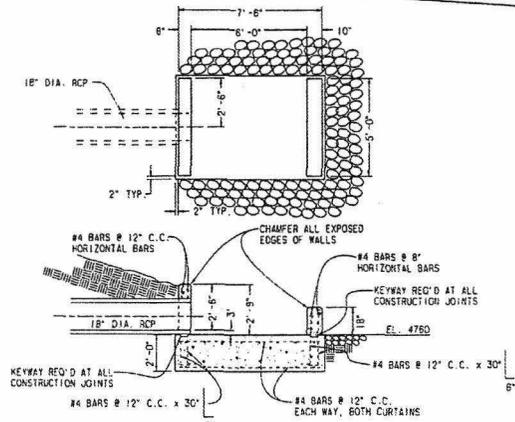
FENCE CORNER LOCATION		
POINT	NORTHING	EASTING
A	821,890.01	1,915,829.36
B	822,006.82	1,916,034.84
C	821,872.11	1,916,091.36
D	821,543.07	1,915,840.16

NOTE: ALL COORDINATES ARE BASED FROM THE NORTH 1/4 CORNER OF SECTION 15, T9S, R1E, SALT LAKE BASE AND MERIDIAN.

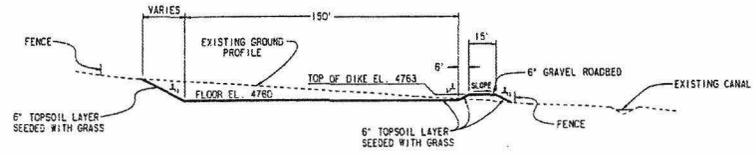
POINT LOCATION			
POINT	NORTHING	EASTING	NOTES:
①	821,832.97	1,915,867.83	CORNER OF OUTLET STRUCTURE
②	821,837.46	1,915,870.70	CORNER OF OUTLET STRUCTURE
③	821,957.09	1,915,987.01	TOE OF RAMP
④	821,969.08	1,915,987.36	TOE OF RAMP
⑤	821,971.74	1,916,007.90	TOE OF SLOPE
⑥	821,588.02	1,916,056.35	TOE OF SLOPE
⑦	821,578.74	1,915,907.59	TOE OF SLOPE
⑧	821,336.57	1,916,086.75	CENTER LINE OF DIKE - PC
⑨	821,261.13	1,916,061.41	CENTER LINE OF DIKE - PC
⑩	821,118.26	1,915,939.38	CENTER LINE OF DIKE - END



EXCESS EXCAVATED MATERIAL TO BE USED IN FORMING THE DIKE FOR THE OVERFLOW AREA.



OUTLET STRUCTURE DETAIL
SCALE: 1" = 3'



RETENTION POND
CROSS SECTION A-A

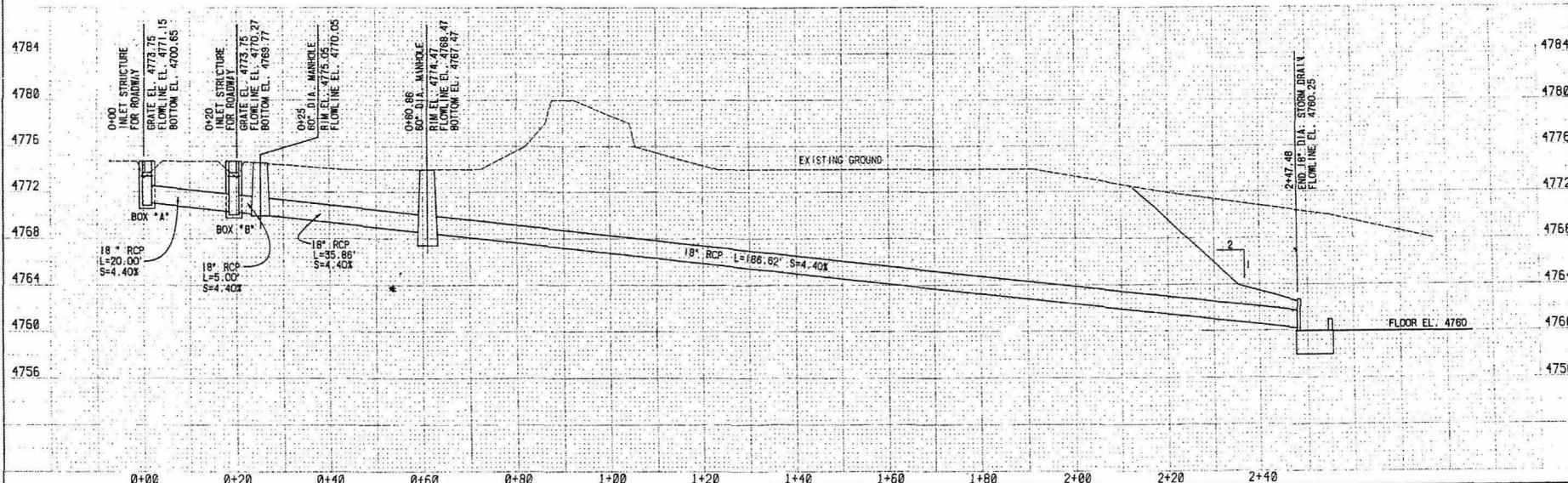
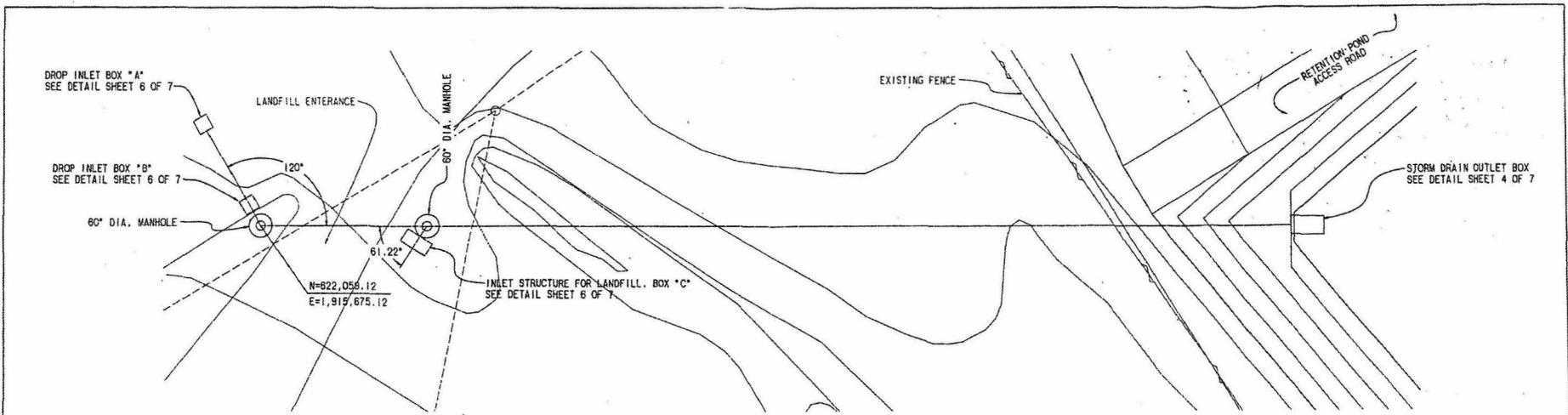
DRAWN	AJB		
CHECKED	BLH		
DESIGNED	BLH		
SCALE	1" = 30'	REVISIONS	BY DATE

PERKINS-THURGOOD
CONSULTING ENGINEERS INC.

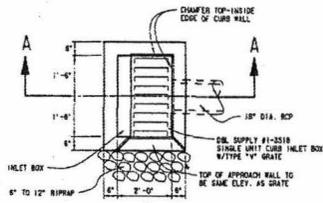
PAYSON CITY CORPORATION
SANITARY LANDFILL
STORM DRAINAGE AND RETENTION POND

RETENTION POND
PLAN & PROFILE

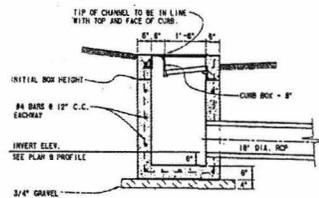
DRAWING #	P-LF-848
PROJECT NO.	92032
DATE	AUG. 1993
SHEET NO.	4 of 7



DRAWN: AUB CHECKED: BBT DESIGNED: BLH SCALE: HORIZ. 1" = 10' VERT. 1" = 1'	PERKINS-THURGOOD CONSULTING ENGINEERS, INC.	PAYSON CITY CORPORATION SANITARY LANDFILL STORM DRAINAGE AND RETENTION POND	PIPE SYSTEM LAYOUT DRAWING: P-LF-PIP PROJECT NO.: 82032 DATE: AUG. 1993 SHEET NO.: 5 OF 7
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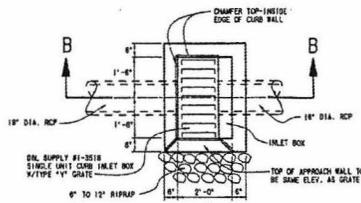


PLAN VIEW

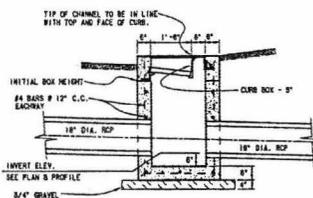


SECTION A-A

SINGLE UNIT
BOX "A" INLET DETAIL

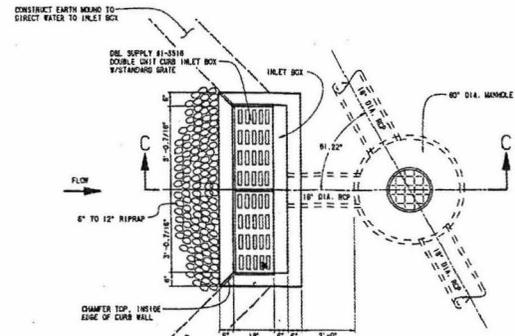


PLAN VIEW

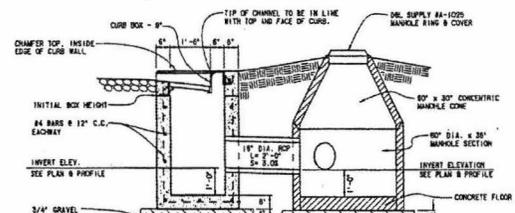


SECTION B-B

SINGLE UNIT
BOX "B" INLET DETAIL



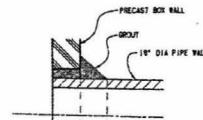
PLAN VIEW



SECTION C-C

DOUBLE UNIT
BOX "C" INLET DETAIL

NOTE:
PRECAST HOLES MAY BE USED FOR AN INLET BOX.
THE FOLLOWING SHALL APPLY...
1- MINIMUM HEIGHT 3'-0"
2- PRECAST HOLE DIAMETER TO BE 1" GREATER
THAN THE OUTSIDE DIAMETER OF PIPE.
3- CONCRETE PIPE - 20.5" HOLE DIA.
4- FOLLOWING INSTALLATION OF PIPE, COAT THE
ANGULAR SPACE BETWEEN THE PIPE AND THE BOX WALL
AND SPURT A 2" RISE FILLETDOLLER AROUND THE
PIPE ON THE OUTSIDE OF THE BOX.
SEE PRECAST HOLE DETAIL THIS SHEET.



PRECAST HOLE
DETAIL

SCALE = NONE

DRAWN	PLB		
CHECKED	BOY		
DESIGNED	BLM		
SCALE	1" = 2'-0"	REVISIONS	BY DATE

PERKINS-THURGOOD
CONSULTING ENGINEERS INC.

PAYSON CITY CORPORATION
SANITARY LANDFILL
STORM DRAINAGE AND RETENTION POND

INLET BOX DETAILS

DRAWING #	P-LF-DET
PROJECT NO.	82032
DATE	AUG. 1993
SHEET NO.	6 of 7

Attachment 2

Plan of Operation

DRAFT

description of the property. Deeds obtained from the County Recorder's office at Utah County indicated ownership of the property is with Payson City. (Copies of those deeds are also included in appendix A.)

1.4. Plan of Operation -

1.4.1. Schedule of Construction

The Payson City Class V landfill is an existing landfill. As discussed in paragraph 1, Payson City has owned the landfill property since 1951. The current regulations allow for filling the existing footprint only. Any lateral expansion is not allowed without application and approval of the F kxkukqp"qh"Y cuvg" O cpci go gpv"cpf "Tcf kvkqp"Eqpvtqn

Method

The landfill utilizes a "canyon fill" method with waste being deposited at the base of the lift and then pushed and compacted up the face of the lift by the bulldozer. The deposited waste is then covered with at least six inches of soil taken from the area on the up-hill side of the working face. This procedure is repeated until the level of the lift reaches 10 to 12 feet. A new lift is then started and the procedure repeated until the lift is full. Further discussion and drawings on the landfill plan is included in the technical data section of this application.

1.4.2. Solid Waste Handling Procedures

Hours of Operation

<u>Summer:</u>	1 April through 31 October Monday through Saturday, 8:00 am to 7:00 p.m.
<u>Winter:</u>	1 November through 31 March Monday through Saturday, 8:00 am to 5:00 p.m.

The landfill is closed on holidays.

Staff

Four full-time Payson City employees are on site when the landfill is open: two scale house operators and two bulldozer operators operate the landfill. One additional part-time employee is hired to help during the summer. The scale building operator is responsible for weighing the loads of waste received and logging it into the register. The bulldozer operator manages the waste area using the bulldozer to compact and cover the waste.

Daily Mode of Operation

Daily mode of operation is as follows: Operators arrive at the landfill site by 7:50 am and unlock the entrance gate. The scale building operator will unlock the

scale house and ensure that the scales are operating correctly. He will then log each load into the register and weigh it. After the trucks have been weighed and all information logged in the register, the operator directs the truck driver to the location of the working face where the waste is dumped.

Waste will be dumped at the working face of the cell area by each truck entering the landfill. The bulldozer operator will work from the base of the deposited waste and spread and compact the waste up the working face as much as possible. This process will continue throughout the day until the gate is closed at night. After the last load of the day has been received, the operator will finish compacting and then cover the deposited waste with a minimum of 6 inches of soil. Soil will be taken from the area on the uphill side of the working face and spread over the deposited waste.

Asbestos Disposal

The landfill has a permitted disposal area for asbestos waste that is generated by an automobile brake manufacturer located in Payson. These wastes are disposed of when scheduled by the manufacturer. When needed, the manufacturer will notify and arrange a delivery time that the wastes will arrive at the landfill. After the notification, the bulldozer operator will prepare the disposal area for deposit of the wastes, ensuring that adequate cover materials are available. The asbestos waste is shipped in sealed 55-gallon drums to the landfill. Upon arrival at the landfill, the load is weighed and the barrels are counted. The weight and barrel count information is written on the waste shipment record (WSR), and the landfill operator and the truck driver sign the record. The barrels are then placed in the designated cell and immediately covered with 6 inches of soil. The waste shipment records are filed for future reference.

1.4.3. Inspection Schedule

Groundwater Monitoring

A total of six (6) groundwater monitoring wells have been installed at landfill. Water levels in the wells indicate that the underground water gradient is very flat. Ground water elevation data have been interpreted to indicate a condition of radial flow beneath the landfill. Sampling is performed in accordance with the *Payson City Landfill Ground Water Monitoring Plan* (URS, 2003) and the Utah Solid and Hazardous Waste Permitting and Management Rule under Utah Administrative Code (UAC) R315-308. (See Appendix J for a copy of Ground Water Monitoring Plan).

Ground water samples are taken quarterly as described in the above mentioned plan and analyzed for constituents specified in UAC aR315-308-4 amd 40 CFR Part 258 Appendix II as required by UAC R315-308-2(12)(d)

Methane Monitoring

Samples will be taken using a hand held gas monitor on a quarterly basis, with the sampling schedule being the first business day nearest 1 January, 1 April, 1 July, and 1 October of each year. (See appendix C, page C-3, for methane sampling log sheet.) Measurements of methane levels are taken in the field with a portable methane meter. If monitoring results indicate that more frequent monitoring is needed, the frequency of sampling will be increased.

Inspections

Periodic self-inspection of the landfill will be conducted at least once a month. These inspections will be used to determine if operations at the landfill are conducted as planned and also to determine the condition of the various areas of the landfill to see if any maintenance is required. A sample inspection log sheet is located in appendix C, page C-4.

1.4.4. Operating Records

Accurate records are kept and used to document all transactions and activities at the landfill. These records are kept at the landfill site in the scale house, with a duplicate copy made and kept at the City offices.

Forms

A set of the forms used to compile the records of the landfill is contained in Appendix C. The following forms are used for record keeping purposes:

<u>Form</u>	<u>Page</u>
Pre-operation checklist for Bulldozer	C-1
Methane Sampling Log	C-3
Landfill Inspections	C-4
Landfill Maintenance	C-5
Operating Logbook	C-6
Asbestos Waste WSR	C-8
Waste Inspection	C-9

1.4.5. Ground Water Response Plan

Specific response to groundwater contamination will be determined if contamination is found. The plan will be developed working with a consultant who has expertise in addressing and correcting the specified contamination.

Fire

Comprehensive measures are taken at the landfill to prevent fires from starting. Firebreaks are constructed and maintained around the perimeter of the landfill to prevent an outside fire from spreading into the landfill. The working face of the landfill is kept small to prohibit a large amount of combustible materials being available to burn.

Fires that have occurred in the past have been a result of hot ashes placed in the waste and combustion has occurred. These fires will be extinguished by the bulldozer operator by separating the burning waste from the working face and then spreading it out and/or covering it with soil.

In the event that a fire should occur at the landfill that cannot be extinguished by the bulldozer operator, the Payson City fire department would be notified by the use of the telephone that is located in the scale house or one of the operator's cell phones. Once the fire department has been notified, the operators will assess the extent of the fire. If the fire endangers those who are present in the landfill depositing waste, they will be directed to cease any operation and exit the landfill in an orderly manner. If the fire is small and doesn't present a risk to those in the landfill, they will be allowed to finish unloading the waste and then leave the landfill. If the operators feel that it is safe to continue operations at the landfill during the fire, incoming loads will be directed to another cell away from the fire to deposit the waste.

The fire department will respond and assess the fire and extinguish it with proper methods. Depending on the assessment of the trained fire officials, proper protective clothing, including respiratory protection will be used. Due to landfilling procedures used, it is felt that all fires that would occur at the landfill can be extinguished by the Payson City fire department.

Explosions

The methane gas monitoring system will be used to analyze the amount of methane concentrations to help prevent explosions from methane gas. In the unlikely event of an explosion from unknown wastes, response will be handled similarly to the fires listed above.

Release of Explosive Gases

It is unlikely that explosive gases would be encountered at the landfill. In the event that they did occur, contingency procedures similar to those used for a fire would be followed.

Failure of a Run-off Containment System

Work has been completed to ensure that adequate run-off collection and storage systems have been installed at the landfill. The collection ditches and storage basin were oversized and constructed so that they are basically fail-proof. The run-off system is inspected after each major storm and maintenance of the system is completed at that time if required.

The potential run-on from the west is currently diverted by roadside drainage ditches along a private road on the west side of the property. These triangular shaped drainage ditches average about 6 feet wide and 3 feet deep. The capacities of the roadside ditches are 39 cfs each. At the design runoff, the velocity would be about 4 fps (See Appendix H for the Details and Calculations). The ditches are more than adequately sized to handle the runoff flows. The ditches are constructed in graded silt to cobble soils, which have a recommend 5-fps maximum velocity to prevent scour. Therefore additional erosion control measures will not be need in these ditches.

The calculated peak runoff from the largest 2-acre landfill slopes is 1.3 cfs for the 24 hour 25 year event. The capacity of the runoff ditches is 4.2 cfs each (See Appendix H for the Details and Calculations). At the design runoff, the velocity would be about 3.3 fps. The ditches are more than adequately sized to handle the runoff flows. The ditches will be constructed of native soils capped with topsoil, which has a recommend 2.5-fps maximum velocity to prevent scour. Therefore erosion control measures will be needed in these ditches. Coconut erosion control blankets will be placed in the runoff ditches.

The runoff control ditches on the perimeter of the landfill will serve the dual functions as runoff control and fire breaks. In areas where the slope is great enough to cause scour concerns, the ditches will be constructed with a terracing effect and rip-rap placed to create rock dams at selected intervals that will reduce the velocity of the runoff water and any potential for scour. On the interior of the landfill, the runoff ditches will be lined with the coconut erosion control blankets to prevent scour as discussed previously.

1.4.6. Alternative waste handling

It is anticipated that the only equipment items that have the potential to breakdown and cause the landfill to be inoperable would be the bulldozer and the scales. When the bulldozer fails, a rental unit will be obtained for use until the City's bulldozer can be repaired. A replacement bulldozer can be obtained within a day. The landfill has a dual set of scales (one set for incoming and one set for exiting). If one scale became inoperable, the second set could be used. If both scales become inoperable, loads of waste will be required to present a weigh bill from a commercial scale in the area before being allowed to dump at the landfill. It is expected that the maximum time the scale would be down would not exceed one week.

1.4.7. Equipment Maintenance

Landfill equipment will be maintained in accordance with vendor recommendations for the commercially procured items. The landfill site and installed systems will be maintained in conformity with good landfill practice. All maintenance performed at the landfill will be logged on the landfill maintenance log sheet (see appendix C, page C-5).

1.4.8. Vector Control

The daily compacting and soil cover of the deposited waste will control disease vectors. Keeping the open working face small and thoroughly compacting and covering the waste with soil at the end of each day has been effective in preventing disease vectors from becoming a problem at the landfill.

1.4.9. Exclusion of Hazardous Wastes

Payson City has established strict acceptance standards for non-hazardous solid waste streams. The landfill employees will supervise the unloading of all waste into the cell. Random inspections for hazardous waste, bulk liquids, used oil, automotive batteries, and any other prohibited waste will be conducted on approximately 10% of the loads. Any inspection form is completed for each inspection. (See inspection form in Appendix C, Page C-9)

Acceptance of Regulated Hazardous Waste

The landfill will not accept regulated hazardous waste, including PCB wastes. Wastes that are prohibited from being deposited at the landfill include the following:

- A. Listed wastes (Subpart C, 40 CFR part 261)
- B. Exhibits Hazardous Characteristics (Subpart C, 40 CFR Part 261)
- C. A mixture containing a “listed” waste.
- D. Wastes containing PCBs.

1.4.10. General Training Plan

Each landfill operator will receive the necessary training and safety orientation before being permitted to work in the landfill. Local seminars that are provided by SWANA will be used for the majority of the training. Bi-monthly supervisor and operator safety meetings will be held to keep safety issues current. These meetings also allow for an exchange of information between the landfill operators and management.

1.4.11. Recycling Programs

The Payson City landfill does not currently operate any recycling programs.

1.5. Financial Assurance Plan

1.5.1. Cost Estimates for Closure and Post-closure Care

1.5.1.1 Closure Cost Estimate

Payson City has budgeted money for the final closure of the landfill. Payson City is a municipality and will remain solvent and therefore will be capable of providing the closure and post-closure care of the landfill. The estimated cost for closure is \$550,675. This amount is based on the largest area that would require cover at closure, approximately 32 acres. Closure will include an 18-inch layer of a clay material with a hydraulic conductivity of 1×10^{-7} cm/sec or less, covered by a

Payson City Class V Landfill
Permit Renewal Application March 2015

APPENDIX C

Landfill Operating Records

C-1	Pre-operation Checklist for Bulldozer
C-2	Ground Water Monitoring
C-3	Methane Sampling Log
C-4	Landfill Inspections
C-5	Landfill Maintenance
C-6	Sample Sheet of Operating Logbook
C-8	Asbestos Waste WSR

PRE-OPERATION CHECKLIST D7H BULLDOZER

Instructions: Please indicate with a check that the items identified below have been completed. If the item is not in the normal or operating range, indicate corrections taken or needed, to the right of the statement. List all maintenance performed and any comments you have in the sections provided.

1. _____ Check engine oil level.
2. _____ Check hydraulic system oil level.
3. _____ Check coolant fluid level.
4. _____ Check air filter.
5. _____ Lubricate at all grease fittings.
6. _____ Inspect belts and hoses.
7. _____ Inspect track, blade, ROP rails, and ripper for loose fasteners, damage, lodged waste, etc.

Maintenance Performed: _____

Comments: _____

GROUND WATER MONITORING

Instructions: Please fill in the requested information. Indicate in the comments section any abnormal conditions or events that occurred during the sampling process. Also note any maintenance or repair that may be needed.

1. Depth to static water level: _____

2. Approximate volume of water purged before sampling: _____

Purged Volume	pH	Temp. (OC)	Specific Conductance (mS/cm)	Observation

3. Control Number on sample bottle.

1. _____

3. _____

2. _____

4. _____

4. Laboratory to which sample bottles were sent for analysis:

Name: _____

Address: _____

Contact: _____

5. Method of sample shipment: _____

6. Comments: _____

PAYSON CITY CORPORATION
CLASS V LANDFILL

Date: _____
Operator Signature: _____
Probe #: _____

METHANE SAMPLING LOG

Instructions: Please fill in the date, number of the probe being sampled, and time sample was taken. List the sample results in the area provided. In the comments section, list any abnormal items found during the sampling or maintenance that needs to be completed.

Sample results: _____

Comments: _____

Date: _____
Inspectors: _____

LANDFILL INSPECTIONS

Instructions: Please fill in the requested information as outlined and check appropriate boxes. If changes in operation practices or maintenance are required, notify the Superintendent upon completion of the inspection. Schedule a follow up inspection after the time changes or repairs are to be made.

1. Type/area of inspection
- | | | |
|---|--|---|
| <input type="checkbox"/> Scales | <input type="checkbox"/> Routine | <input type="checkbox"/> Other (specify) _____ |
| <input type="checkbox"/> Groundwater | <input type="checkbox"/> Scalehouse | <input type="checkbox"/> Run-on, run-off system |
| <input type="checkbox"/> Access Roads | <input type="checkbox"/> Methane Gas | <input type="checkbox"/> Blown litter |
| <input type="checkbox"/> Soil cover stockpile | <input type="checkbox"/> Fire Breaks | <input type="checkbox"/> Gates/Fences/Signs |
| <input type="checkbox"/> S. Side | <input type="checkbox"/> Topsoil stockpile | <input type="checkbox"/> N. Side |
| <input type="checkbox"/> NE Corner | <input type="checkbox"/> E. Side | <input type="checkbox"/> W. Side |
| <input type="checkbox"/> NW Corner | <input type="checkbox"/> SE Corner | <input type="checkbox"/> SW Corner |

2. Results or findings of inspection: _____

3. Recommendations: _____

Payson City Corporation
439 W Utah Avenue

Ticket No :25888
Date :2/28/15
Phone :(801)465-5230

Payson, UT 84651

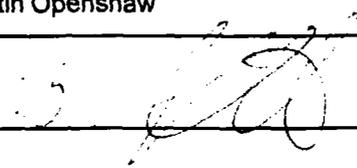
Customer: S134
Business Decision DBA
P.O. Box 1156

Salem, Utah 84653

Truck : S45 South Valley Roll Off 15 Yd
Gross : 18780 lb Scale 1 In 10:46 am
Tare : 16700 lb STORED Out 10:45 am
Net : 2080 lb
1.040 tn

Weigh Master: JUSTINO Justin Openshaw

Driver:



Remarks: Thanks

Material \$ 21.47
Delivery \$ 0.00
Misc \$ 0.00
Tax \$ 0.00
Total \$ 21.47

MATERIAL	QTY	UNIT-\$	DELIVERY-\$	MISC-\$	TAX-\$	TOTAL-\$
CD	1.040 tn	20.640				21.47
						\$21.47

Generator	1. work site name and mailing address RAYLOC, 700 N. 500 E., Payson, UT 84651	Owner's name RAYLOC	Owner's telephone no. (801) 465-4841
	2. Operator's name and address		Operator's telephone no.
	3. Waste disposal site (WDS) name, mailing address, and physical site location PAYSON CITY LANDFILL WEST MOUNTAIN AREA, PAYSON, UTAH 84651		WDS phone no. (801) 465-9709
	4. Name, and address of responsible agency STATE OF UTAH DEPARTMENT OF HEALTH DIVISION OF ENVIRONMENTAL HEALTH	1950 WEST NORTH TEMPLE P.O. BOX 16690 SALT LAKE CITY, UT 84116-0690	
5. Description of materials ASBESTOS BRAKE LINING AND DUST GRINDING	6. Containers No. 23 Type Lining	7. Total quantity m ³ (yd ³) 5100 LBS	
8. Special handling instructions and additional information			
9. OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations.			
Printed/typed name & title JOHN PETERSON, PRODUCTION SUPERINTENDENT		Signature <i>John Peterson</i>	Month Day Year 5 3 95
Transporter	10. Transporter 1 (Acknowledgment of receipt of materials)		
	Printed/typed name & title RAYLOC (801) 465-4841 Address and telephone no. 700 N. 500 E., Payson, UT 84651	Signature <i>John Peterson</i>	Month Day Year 5 3 95
	11. Transporter 2 (Acknowledgment of receipt of materials)		
Disposal Site	Printed/typed name & title		
	Signature		
	Month Day Year		
12. Discrepancy indication space			
13. Waste disposal site owner or operator: Certification of receipt of asbestos materials covered by this manifest except as noted in item 12.			
Printed/typed name & title DAVID L. RAFFERTY, Operator		Signature <i>David L. Rafferty</i>	Month Day Year 5 3 95 (Continue)

Figure 4. Waste Shipment Record

Attachment 3

Closure and Post-Closure Plans

DRAFT

twenty-four-inch soil layer and a six-inch layer of top soil (for a total of 30 inches on top of the clay). The final fill profile will be constructed on a 3:1 slope. Once the clay layer and topsoil are in place, the topsoil will be seeded with a range grass mixture that is indigenous to the area. The cover surface of the landfill will be graded in such a manner as to prevent runoff from eroding the topsoil cover (See Appendix H Dwg. No. P-LF-EC. Costs associated with final closure are as follows:

<u>Description</u>	<u>Cost</u>
Place and compact clay material	\$193,600
Place and spread top soil	\$280,075
Provide erosion control	\$38,000
Fertilize and seed with grass	\$32,000
Certification by registered engineer	<u>\$7,000</u>
Total Cost	\$550,675

1.5.1.2 Post closure cost estimate

Once the final cover has been placed on the landfill, periodic groundwater and methane gas samples will be taken. These samples will be taken on a semiannual basis, unless test results indicate a need for more frequent sampling. The costs for post-closure will be those associated with the maintenance of the run on/off systems, ground water and methane monitoring, and final cover stabilization, including residual settlement repair, erosion control or re-seeding. Yearly costs for these activities are estimated to be as follows:

<u>Description</u>	<u>Cost</u>
1. Ground water monitoring	\$41,000.00
2. Methane monitoring	\$4,000.00
3. Run on/off system	\$10,000.00
4. Final cover stabilization	<u>\$13,800.00</u>
Total Annual Cost:	\$61,800.00

1.6. Financial Assurance Mechanism

Payson City Corporation is using the Utah Public Treasurer's Investment Fund for their Financial Assurance Mechanism. A PTIF statement is included in appendix B

1.7. Closure Plan

1.7.1. Final Cover

The final cover for the landfill will be an 18" layer of clay material with a hydraulic permeability of less than 1×10^{-7} cm/sec. The clay material is being excavated from the Class 4 landfill cell and stockpiled for use as closure of the Class V landfill takes place. Samples of the clay have been analyzed at the laboratory and results indicate that permeability is less than 1×10^{-7} . A 30" thick layer of soil with the upper portion of that layer being topsoil that will be suitable to sustain low growing grasses will cover the

clay material. Topsoil that was removed when the cell was opened has been stockpiled and will be used. After the clay layer and topsoil layer have been placed over the waste, the soil will be fertilized and seeded with range grasses that are indigenous to the area. Runoff collection ditches will be strategically placed to prevent erosion of the final cover.

1.7.2. Capacity of Site in Volume and Tonnage

The current landfill cell has a capacity of 1,626,471 cubic yards of waste, or 569,265 tons, (calculated at 700 lbs. of waste per cubic yard).

Listed below are the capacities of the landfill at each 10' elevation.

<u>Elevation</u>	<u>Tons</u>	<u>Elevation</u>	<u>Tons</u>
4850	5,105	4940	26,445
4860	76,970	4950	19,780
4870	78,260	4960	14,620
4880	75,680	4970	11,395
4890	66,220	4980	7,955
4900	55,255	4990	7,095
4910	46,655	5000	4,730
4920	37,840	5010	3,225
4930	32,035		

1.7.3. Projection of Time Intervals when Closure Will Occur

Closure will occur as each 10' elevation is filled. The clay material and soil will be placed and the grasses seeded. Projections for the amount of waste to be received at the landfill are based on the population projections that have been determined by the Mountainland Association of Governments – December 2012. This report indicates that projected growth rates for Payson City will be approximately 2.0% per year for the period 2010-2050. Estimates for wastes generated were based on actual waste received in 1998 and increasing that amount by 2.03 percent each year thereafter. With the opening of the Payson City Class 4 Landfill in June of 1995, waste received into the Class V Landfill has been reduced by nearly 65%. A chart indicating the amount of cumulative waste received at the landfill is included in appendix D. The chart shows waste received at the projected growth of 2.0% and a growth rate of 5%.

The estimated time of closure is based on the filling of each 10' elevation. Based on the higher rates discussed above, closure at the various levels would occur according to the following schedule:

<u>Elevation</u>	<u>Year of closure</u>	<u>Elevation</u>	<u>Year of closure</u>
4860	2020	4920	2048
4870	2027	4930	2049
4880	2034	4940	2050
4890	2040	4950	2051
4900	2044	4960 to 5010	2052

1.7.4. Closure Cost Estimates

Closures cost estimates for the landfill have been based on using the clay materials and topsoil that are at the site for closure. The cost of closure will be for placing and spreading the materials. Currently there are 4000 tons of stockpiled clay soil and 4050 tons of stocked piled topsoil on-site. We are of the opinion that there is a sufficient supply of cover soil on-site and that there is no need to import/export soil to/from the sites. The inventorying of the stockpile quantities will be included as part of the quarterly inspections.

We estimate needing:

34 acre x 18 inches clay = 83,000 cubic yards clay

34 acre x 24 inches soil = 110,000 cubic yards soil

34 acre x 6 inches topsoil = 27,000 cubic yards topsoil

Clay material that is being excavated at the Class 4 landfill will be used for the cover layer of the Class V landfill. Samples have been taken and permeability has been analyzed. Hydraulic conductivity of the clay material is less than 1×10^{-7} cm/sec. This clay material will be placed to a depth of 18 inches. Approximately 83,000 cubic yards of the clay material will be required for closure. Estimated cost for placing the clay material is 83,000 yds. X \$2.50/yd= \$207,500.

After the clay material has been placed, it will be covered with a 30-inch layer of soil with the top 6 inches being top soil. Topsoil that has been stockpiled on site from when the cell was initially opened will be used for this cover. Approximately 137,000 cubic yards of soil will be required. Estimated cost for placing the topsoil layer is 137,000 yds X \$2.50/yd= \$342,500.

With the concurrent operations at the Class VI C&D Landfill, we will be able to generate the materials needed for the cover. The C&D landfill is a cut/fill terracing operation which generates large quantities of cut material that can then be used as cover material for both landfills. The average soil profile for the C&D site consists of 1-2 feet of Topsoil underlain by 5-10 feet of clay over sandy gravel and rock. The 5 cells will produce approximately 500,000 cubic yards of soil cover material, 200,000 cubic yards of clay material and 40,000 cubic yards of topsoil. The C&D Landfill will require about 83,000 cubic yards of cover soil and 20,000 cubic yards of topsoil. Additional topsoil if needed will be scalped off the adjoining 18 acres to the south of the land which is set aside at this time for future expansion of the Class VI landfill.

Grading of the cover layer and installation of strategically located storm water collection ditches will be provided to prevent erosion. The ditches will be coconut mat lined to prevent washout and damage. Estimated cost for erosion control is 32 acres X \$1,187.50/acre= \$38,000.

At the completion of all earthwork and installation of erosion control measures, the topsoil will be fertilized and seeded with range grasses that are indigenous to the area. Estimated cost for this work is 32 acres X \$1000.00/acre= \$32,000.

Closure Inspections

Closure activities will be inspected and certified by a third-party engineer, who is licensed to practice in the State of Utah. Estimated cost: Closure certification - \$7,000.

Final Inspection by Regulatory Agencies

At least 60 days prior to implementing the closure plan, Payson City will notify the Executive Secretary of the Division of Solid and Hazardous Waste that closure activities will begin. Once final closure has taken place, the Executive Secretary will be notified and regulatory personnel can inspect the landfill and verify proper closure.

1.8. Post Closure Plan

1.8.1. Groundwater Monitoring

Groundwater monitoring at the landfill will be continued through the post-closure period until conditions are such that it is no longer needed. Sampling will be conducted in accordance with the ground water monitoring plan. Sample results will be analyzed for significant changes since the previous samples were taken.

1.8.2. Gas Monitoring

Quarterly explosive gas monitoring at the landfill will be conducted in accordance with R315-303-3(5)(a) UAC. The sample results will be kept in the operating log.

1.8.3. Maintenance

Closure of the landfill will be completed so that additional maintenance during the post-closure period will be kept to a minimum. The ground water and gas monitoring systems will be maintained to enable satisfactory samples to be taken and analyzed. The scale house facility will most likely be utilized for a new cell that will be developed to the west of the current landfill site.

1.8.4. Final Cover

The final cover and run-on/off systems will receive any needed maintenance twice yearly or more frequently if required. Any settlement in the final cover will be filled and the area re-seeded with grass. The run-on/off systems will be cleaned of any debris or materials that would prevent them from functioning as designed. Repairs that may be needed due to erosion will be completed. Scheduled maintenance will occur semiannually, during the first week of April and October of each year.

1.8.5. Time Intervals for Post Closure Activities

The majority of the post-closure care of the landfill will be completed twice yearly. Scheduled maintenance will take place during the first week in April and October

of each year. Ground water and gas samples will be taken and the final cover and run-on/off systems will be inspected and maintained. Periodic inspections of the landfill will take place monthly, and the run-on/off system will be inspected after each major storm to ensure that it is working properly and is in good repair.

1.8.6. Changes to Title

Notification will be made by the City to the Division of Solid and Hazardous Wastes of any changes to record of title, land use, and zoning restrictions of the landfill site.

1.8.7. Post closure care cost estimates

It is estimated that the cost of post-closure care of the landfill will be approximately \$61,800 per year. Funds will be withdrawn from the Utah Public Treasurer's Investment Fund as needed to cover these costs.

1.9. Class V Landfill Market Information

1.9.1. Proven Market

Evidence that the commercial facility has a proven market of non-hazardous solid waste.

- A. Payson Landfill provides a disposal area for the commercial waste haulers in the Southern Utah County area as well as the municipal waste collected within Payson City. The other disposal areas nearest to the city are the transfer stations located at Springville and Goshen. Commercial wastes deposited at the Payson Landfill average approximately 4,000 tons per year. Tipping fees for commercial waste is \$36.84 per ton. Municipal wastes collected by the City average approximately 6000 tons per year. Asbestos wastes collected from Rayloc industries amount to approximately 62 tons per year. Asbestos wastes tipping fees are \$105.25 per ton.
- B. As stated above, the Payson Landfill is used for waste disposal for the south Utah County area and does not compete for regional or out-of-state business.
- C. There are no other commercial waste facilities located directly in the Payson area.

1.9.2. Public Benefits

Description of the public benefits of the facility:

- A. The Payson City Landfill provides a much-needed service for the residents of Payson City and the residents of the surrounding rural areas. Without the Payson City landfill, waste would have to be taken to either Springville or Goshen.
- B. There are no known energy or other resources recoverable by the proposed facility.